The Development of a
Materials Training Framework
for
English for Academic Purposes

Thesis submitted for the Degree
of
Doctor of Philosophy
at the
University of Leicester

by

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School of Education
University of Leicester
January 1997

UMI Number: U086868

UMI

Dissertation Publishing

ProQuest®

Abstract

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There seems to be a significant gap in research on how teachers develop EAP teaching - learning materials and the various types of problems they encounter when developing these materials. This is regardless of whether the teaching is for English for General Purposes or English for Academic Purposes(EAP).

This study explores how training in EAP materials development might be improved, and it sets out:
    (1) to develop a task-based materials Framework and then
    (2) to explore its effectiveness with trainees in the context of a Malaysian
          university (Universiti Pertanian Malaysia [UPM]).

In devising the Framework, guidance was sought from task and content-based approaches to language teaching, genre theory, Bloom's Taxonomy of educational objectives, a needs survey and various other sources. The Framework was trialled with Malaysian teachers studying at various British universities and further revised.

To evaluate and explore the effectiveness of the Framework an intact group or within - subjects design and workshop procedures were used. A materials design course already exits at UPM and hence the method taught could be compared with the use of the Framework. One hundred and seven pre and in-service TESL teachers participated in this comparison and they designed materials by the existing method, and then using the Framework. The attitudes of the teachers, their perceptions of the Framework, and the materials produced, were compared and analysed using a variety of qualitative and quantitative methods. These included questionnaires before and after the experience, a 'Materials Evaluation Checklist' and a collaborative progress log which the teachers kept.

The results show a significant improvement in the materials produced, and in the attitudes, beliefs and perception of the teachers, when the Framework is used.

The work has implications for future teacher education programmes in materials design for Malaysia, where the focus is on English for Academic Purposes.

Acknowledgements

Table of Contents

Chapter Three
An Overview of ESP/EAP: Materials, Teacher training and Content-based

Chapter Five

Application and Workshop Principles of the Framework

Chapter Six
Research Design and Methodology of Main Study

Chapter Seven
Qualitative Analysis

(Note: All appendices for this thesis have been bound separately. Please
see bound copy entitled APPENDICES)

List of Figures and Tables

Tables

CHAPTER ONE

Introduction and Objectives

1.0 Introduction

This chapter highlights several concerns which relate to the research study. Background information with regard to the English Language teaching and learning situation in Malaysia is used to contextualise the research problems and to justify the development of an EAP materials training framework. Then the purposes and objectives of the study are set out, its significance and scope are delineated and the structure and methodology are outlined. Finally definitions of some key terms and abbreviated forms used in the thesis are listed.

1.1 Background Information on English in Malaysia

Malaysia is a multi-racial , multi-lingual country comprising three major ethnic groups of Malays, Chinese and Indians with a total population of 19.0 million. In 1993 there were 9.22 million Malays, 4.77 million Chinese and 1.51 million Indians not including the indigenous groups. The population is projected to grow by 2.3 percent per annum (KPMG Peat Marwick, 1995).

Malaysia is centrally located in the high growth Asia Pacific region. It is considered a modern and vibrant nation, heading fast towards industrialisation. The government envisages that by the year 2020, Malaysia will be a fully developed nation.

The official and national language of Malaysia is Bahasa Malaysia, but English is widely used, particularly in commerce and industry. Other languages spoken are Chinese, Tamil and local indigenous languages.

After Malaysia gained independence from the British in 1957, English remained the national language of the country. However, from 1971, Malaysia began to place a heavy emphasis on the use, acquisition, learning and teaching of Bahasa Malaysia (BM) as the new national language with the ultimate purpose of achieving national unity. This changed the role of English to that of a second language.

The role of English in Malaysia today has changed dramatically from its earlier status as the "prestige language" of the colonial era and of several decades after World War Two. This significant change was primarily due to the implementation of the Education Enactment Bill of 1971. In accordance with this act, the official language policy instituted a common educational system for all, using BM as the medium of instruction up to the university level (this transition was completed in 1982), replacing English throughout the public sector with BM and eventually in the private sector as far as was practicable.

Bahasa Malaysia (or Malay as it is sometimes called) is defined not only as the National and official language but also as the main medium of instruction at all levels of the educational system (Omar, 1995). Malay is taught as a compulsory language and a student needs to have a pass (preferably a credit) in the language in order to obtain the Sijil Pelajaran Malaysia (SPM) certificate which marks the end of the secondary schooling. Without such a pass in Malay, even if the student has done exceptionally well in all other subjects, a certificate will not be issued. However, English, although considered a compulsory subject for students, does not have the same weighting as Malay. Students do not have to pass the English language paper in order to obtain the SPM certificate. A student can in fact fail the English paper and still be awarded the certificate. Nevertheless, English proficiency is still a requirement for certain types of jobs in the private sector (ibid).

1.2 The Changing State of English in the Educational System

According to Omar (1991,1995), English is the second most important language in Malaysia as outlined in the objective of the National Education policy. This does not give English the strong role of being a second language as in the neighbouring countries of Brunei or Singapore where English is the medium of instruction.

In Malaysia, English remained as the medium of instruction in secondary schools until 1979 and in institutions of higher education until early 1982. There was a language conversion programme to facilitate the change over to BM; this was completed in 1980 at the Form 5 level (the end of secondary schooling). Yet because the English language is considered to be a major language for the acquisition of knowledge, it is retained as a subject at all levels in the Malaysian New Integrated Curriculum for primary schools (KBSR) and for secondary schools (KBSM). In the universities and colleges, English is also taught but the type of course, aims, objectives and goals vary from university to university. The emphasis is on English For Specific Purposes (ESP) whereby English For Academic Purposes (EAP) and English For

Occupational Purposes (EOP) strands seem to be the main focus. The EAP programme provides students with access to the language skills they will require to function and study in the academic setting, with the main focus being on reading and writing skills. EOP on the other hand, provides the skills and training required to function in job related situations. It should be stressed here that all institutions of higher education design and develop their own English language programmes in accordance with their own language policies and objectives.

1.2.1 Malaysian School Syllabus

The Malaysian English language syllabus for both primary and secondary schools is compiled and produced by the Curriculum Development Centre (CDC) of the Malaysian Ministry of Education. It is aimed at:

> *building and extending upon the proficiency of the students from the lower secondary school level so as to equip them with the skills and knowledge of English to communicate in certain everyday activities and certain job situations; and also to provide points of take - off for various post secondary school needs (1989a:1)*

According to the syllabus, at the end of their secondary schooling the students should be able to:

> *(1) listen to understand spoken English in the school and in real life situations;*
>
> *(2) speak effectively on a variety of topics;*
>
> *(3) read and understand prose and poetry for information and enjoyment;*
>
> *and*
>
> *(4) write effectively for different purposes* (ibid.)

The syllabus for Form 5 spells out the objectives of all the four skills. The reading specification is stated thus :

> *The component on reading outlines the skills required to develop comprehension and study skills, and to help students build up their vocabulary. These skills include those of skimming, scanning,summa-rising, inferring and interpreting. These skills enable students to read and understand material both for information and for enjoyment. (PPK, 1990)*

The syllabus also states that certain sub-skills need to be combined and taught together with the main skills where appropriate. The reading sub-skills are those of comparing, classifying, predicting, determining relevance, using contextual clues, inferring, differentiating fact and opinion, generalising, summarising, distinguishing fact and fiction, relating content to student's own experience, understanding different

language registers, interpreting information and data, and understanding and using an index, glossary and bibliography (ibid).

The writing specification is stated as follows:

> *The component on writing requires students to write clearly and relevantly, and to organize materials logically. Students will be introduced to the techniques of writing, so that they are able to write coherently and cohesively in a manner suitable to the audience and the purpose intended. These skills will enable students to spell, punctuate and use grammar correctly. Attention is to be given to the processes involved in writing which are planning, drafting, revising and editing. (PPK, 1990)*

As in reading, certain sub-skills need to be combined and taught together with the main skills of writing where appropriate. These include the development of spelling techniques (root words, prefixes, syllabification); recognising and applying different genres; forms and formats; using the dictionary; thesaurus and reference texts; paragraph building - topic sentence; relevance of details; singleness of purpose; maintenance of consistent point of view; developing coherence - unity of ideas; thoughts and reasoning; using registers; and summary writing - outlining and paraphrasing (ibid.).

Each of the skills of listening and speaking, reading and writing, are presented and taught systematically from Forms 1 to 5 with the syllabus mapping out the topics to be covered by the teacher (Appendix A1.1). All the macro skills and sub-skills are built up cumulatively and treated in a spiral manner so that repetition and constant use will maximise learning (PPK, 1990).

The CDC also conducts inservice courses to ensure that teachers are keeping abreast with the latest ELT techniques in the teaching of all the four skills. However, despite a well structured syllabus and inservice training, the standard of English continues to fall as a continuing result of the language conversion policy.

The language conversion policy has affected the amount and the quality of English being taught and used. At the same time, the abolition of English as the medium of instruction has been associated with a decline of the status, role and importance of the English language not only in education but also within the public and private sectors.

English in its present state cannot therefore, be considered as a second language in applied linguistic terms; for a majority of young Malaysians, English is a foreign language. This situation is compounded by the fact that English is taught only as a subject which students do not need to pass. Therefore, for many young Malaysians English does not play an important role. The students' exposure to the language is limited to the classroom and its wider relevance is greatly undermined.

1.3 Declining Standards of English

Many language teachers, academics and prospective employers consistently bemoan the fact that young Malaysians are no longer proficient in the language, and that the standard of English is on the decline despite the fact that Malaysian children learn English for approximately 11 years (The Star,1988, 1991; Samuel,1995).

Comments have also been made about the deteriorating proficiency level of Malaysian teacher trainees whose levels of English are sometimes poor but who still graduate and become English language teachers. A head of an English language department commented about the quality of trainees being trained:

> *I observed trainees who used atrocious English in class but had sailed*
> *through their examinations and are now English "specialists,".........*
> *unfortunately owing to a shortage of teachers, especially English teachers,*
> *it has become a joke in the staff room that anyone who can speak English*
> *qualifies as an English teacher. Nothing can be further from the*
> *truth.......unless the ministry of education upgrades the quality of the*
> *intake of English trainees and weeds out the incompetent English teachers,*
> *all efforts to improve English proficiency among students will be futile.*
> *(Helen,C.C.K, June, 1995)*

Such a situation should not arise because the Ministry of Education had set up a committee in 1991 to identify ways of improving the standard of English in teacher training (Sunday Times, 1991). The Ministry obtained help from the British Council towards this effort (Goh, 1991) and also improved the selection criteria for future intakes, trained more teachers, provided better training facilities, generous staff development programmes and inservice education both locally and overseas through the Sixth Malaysia Plan (Government of Malaysia, 1991:176). However, in spite of such elaborate moves by the government, the problem still persists.

Secondary school students and university graduates who have been learning English throughout their education, still need to continue their English language lessons. After gaining employment, many of them enrol on English language courses with private institutions and language centres like the British Council's Language Centre

(Cracknell, 1991). This indirectly indicates the declining standards of English in Malaysia since students still feel a need for more training and exposure in using English for a variety of purposes even after learning English for so many years.

Private industries have also complained about the declining standards of the English language among their employees. They consider the order of importance for these skills as follows:- speaking, writing, reading and listening (Goh & Chan, 1991). Goh and Chan (1991,1993) in their survey of the use of English in the commercial sector of the Malaysian economy stated that advanced proficiency (51.5%) is most desired by employers for reading technical or specialised materials related to their (the graduating students') jobs. Their study also confirms that there is a relationship between the skills of reading and writing in terms of proficiency levels. The companies involved in their survey said that their employees need to have advanced proficiency for writing business reports (56.2%) and writing about technical or specialised topics related to work (54.7%). Petronas, the national petroleum company of Malaysia (which functions both in English and Bahasa Malaysia) prefers to employ graduates with good analytical and thinking skills as well as a high level of English language proficiency. Prospective employees must be able to read and understand correspondence, proposals etc. quickly because everything is in English (Khairi et al. 1993). A report by the Technical and Vocational division of the Ministry of Education revealed that only polytechnics and vocational school graduates who could communicate effectively in English, are able to gain promotion to supervisory and managerial positions at their places of work (Ministry of Education, Malaysia, 1993:73). All this clearly indicates that there is a need to have EAP based courses and a need to train the English language teachers to teach EAP in the context of the students' discipline of study.

1.4 English: A Future Medium of Instruction

Between December 27 - 28, 1993, the Malaysian media publicised the following news headlines:

"ENGLISH TO BE MEDIUM OF INSTRUCTION IN SOME SUBJECTS"

The Prime Minister of Malaysia announced the government's decision to allow the use of English as the medium of instruction in some subjects at universities and colleges. In June 1995 all universities were told that they could with immediate effect use English as a medium of instruction to teach Science and Technology. This resulted from the realisation that in pursuing knowledge in Science and Technology it

is necessary to be highly competent in English (Bernama News, 1995). According to the present Minister of Education, Datuk Seri Najib Razak, the government had made the decision because there is a lack of BM books in the fields of Science and Technology, and that Dewan Bahasa dan Pustaka [DBP, the research and publication centre for the study and development of Bahasa Malaysia] could not cope with the increasing quantity of translation of technical and scientific books written in English. This situation inevitably affects the quality of students who graduate because their knowledge of English determines access to texts in many disciplines as evident in the following statement:

> *The quality of the books translated was poor and this showed from the*
> *quality of students who graduated...............to be a global player the*
> *government recognizes the importance of English and the role it plays in*
> *moulding better students (NST 1995).*

Many lecturers (both subject specialist and English Language instructors) welcomed this move because this would mean providing the learners with a wider use of English. As Ismail (1996) explains *'we should not blame the students if they are weak in the English language because the environment does not foster and is not conducive for learning the language'*

On December 2nd. 1994, the Malaysian Prime Minister was quoted as saying that:

> *.....the government was exploring ways to improve the teaching of English*
> *in universities as this was essential in stimulating the nations growth*
> *...........an approach had to be formulated to improve proficiency in*
> *English while at the same time upholding the dignity of the National*
> *language to achieve the nation's vision of attaining development.*

From the above it is evident that a policy change is beginning to emerge in accordance with the aims of "Vision 2020." This Vision, named after a widely quoted speech in 1991 by the Malaysian Prime Minister, Dr. Mahathir Mohamad, is in fact a national plan for Malaysia to become a totally industrialised nation, achieve the status of a fully developed country and a leading nation in the region by the year 2020 (Mahathir Mohamed, 1991). Such a vision necessitates a change in the role of English to realise these aspirations. This would be a step toward making English a second language in terms of being the medium of instruction for some subjects. Such a situation would inevitably re-orient the teaching of English in schools, universities, colleges, polytechnics and especially in the training of TESL teachers and English language instructors.

The teaching of English for Academic Purposes especially reading and writing skills for study purposes in Malaysian institutions of higher learning will depend to a great extent on the educational policies of the government and the opportunities for using English in conjunction with other subjects. These will determine the future development of the training of teachers of English as a Foreign language (EFL) / English as a Second language (ESL).

1.5 The Current Problem : EGP or EAP / ESP ?

It is not surprising to note comments in the Malaysian press about the drastic decline in the level of English proficiency among students. But what is of greater concern is the decline in proficiency among English language teachers and also teacher trainees. It is not only their level of proficiency in the English language which is causing concern but also their attitude and motivation levels. Dr. J.Samuel (NST,June 1995) stated that :

> ......*but if a large number of English teachers in our schools are*
> *themselves not proficient in English and do not have the skills to teach the*
> *language, the education ministry must look into this immediately..............*
> *my casual discussions with teachers lead me to believe that the lack of*
> *dedication and motivation among teachers, together with their attitude*
> *have also contributed to the decline of the level of English proficiency in*
> *our schools, but it appears that our teachers have to be motivated to do*
> *their job with dedication.*

A high level of proficiency is essential among English language teachers if they are to become innovative and effective teachers, producing students with a much higher level of proficiency and learning skills. These students need to use English not only to communicate in certain everyday situations, but also to use it for academic purposes.

The Malaysian English language curriculum for secondary schools states that:

> *English is a means of communication in certain everyday activities and*
> *certain job situations. It is an important language to enable Malaysians to*
> *engage meaningfully in local and international trade and commerce. It*
> *also provides an additional means of access to academic, professional,*
> *and recreational materials. The English language programme thus aims to*
> *provide the basis for these needs.(PPK,1990).*

The ability to read and write in academic situations seems to be a problem area for many students who enter Malaysian institutions of higher learning in spite of the fact that the syllabus stresses reading and writing as prerequisite skills.

The reading and writing syllabus for secondary schools appears to cover a variety of important sub-skills. Yet a great number of students entering universities and colleges still need to attend intensive and supporting English language courses to enable them to cope with their academic work. These students are taught English by English language instructors who are trained in English for General Purposes (EGP) and who themselves have often been teachers in schools and have taught the Malaysian syllabus at some point. Many of these teachers are not trained to teach or to prepare materials for special or academic purposes, therefore very often they either rely heavily on commercially produced ESP / EAP books or use the same method of designing materials as they do for EGP. The end result is that many students still fail to acquire adequate levels of English or study skills required for reading and writing in their academic discipline.

Since 1992 pre-and in-service teacher training programmes at the undergraduate level have been conducted jointly between several British universities and the Ministry of Education Malaysia. Part of this programme involves some trainees specialising in ESP/EAP at the College of St. Mark and St. John of the University of Plymouth and the University of Birmingham. These two institutions train ESP teachers for Malaysian Polytechnics, technical and vocational schools (Nordin, 1994). In 1990 English language teaching in all polytechnics, vocational and technical schools was reviewed based on the 1990 Shettlesworth Report. As a result of this report, in 1991 ESP was introduced to all these institutions with the retraining of their English language instructors (Ministry of Education 1993; Nordin, 1994). All these changes are in accordance with the directive of the Malaysian Prime Minister and the Education Minister to teach some subjects in English at all institutions of higher learning, to improve the quality of graduates to meet the needs of Vision 2020 and this directive may soon be extended to all secondary schools.

1.5.1 A Need for EAP Instruction

A consideration is given here of why instruction of English for Academic Purposes is necessary. As previously stated, although students in Malaysian schools study English for approximately 11 years before entering institutions of higher learning, many still have problems in reading and understanding academic texts and also encounter problems in listening , writing and speaking. There are several reasons for

such problems. Students have only a few hours of English lessons in schools and universities per week and therefore have limited exposure to the language. They have few opportunities to practise and or use the language beyond the classroom. Some may use the language to speak to friends and family members who speak English. Any other contact with the English language may be through the media. Despite this, they still need to read the latest books, journals, manuals and magazines in science and technology and in other fields of study. While reading they need to take notes, and depending on their lecturer's requirements, they may need to write academic assignments in English. Hence, the students require not just reading and writing skills but also study skills and the ability to think critically and analytically in their academic discipline to enable them to extract salient information in order to complete a variety of academic tasks. Therefore, the students needs have changed. Instead of receiving teaching to communicate in different everyday situations, they require ELT in reading and writing for English for Academic Learning Purposes (EALP).

Omar (1991) has stated authoritatively that:

> *regardless of how other people perceive Malaysia in the light of her national language policy, Malaysia implemented the communicative syllabus in the 1970's in the schools, as the aim was to produce students who could communicate in English. However, during that period, at the university level there emerged another objective, and that was reading comprehension of academic texts. The students had to be taught this particular skill to enable them to read their textbooks and reference materials.*

This led to the development of reading skills programmes in a number of universities and colleges. Malaysian universities attach great importance to the student's ability to read effectively so as to enable them to acquire specific and general knowledge independently. This is because in the context of university or college study, students read for the purpose of learning. Dubin (1986: 147) explains that "despite the importance of background knowledge in reading comprehension, everyone at times must read texts for the purpose of learning from them". Hence reading is viewed as a critical skill needed by second language students to achieve academic success. Grabe (1986:35) argues that extensive reading provides the means for what he calls a "Critical Mass of Knowledge" of the English language and of world background knowledge. The assertion here is that both content needs and student needs require both independent reading ability and greater proficiency in other language skills.

Malaysian subject teachers often bemoan the fact that their students are unable to understand and discuss complex issues arising from their reading texts. Many students prefer to "wait" for their teachers to provide simpler explanations or B M versions on handouts. This is widely practised in Malaysian universities because approximately ninety per cent of the text books and reference materials in all institutions of higher learning across the country are in English (Omar, 1991). Therefore, the language centres of all the universities in Malaysia have begun to restructure their English language service programme. This restructuring is either in the form of 'general' technical courses using a common - core approach such as 'Technical English', EAP, 'English for Technical Communication' as advocated by Hutchinson and Waters (1987) or EGP based courses but using ESP/EAP texts or materials to teach reading comprehension. Practical considerations due to the difficulties of preparing content or subject specific materials for the diverse subject areas coupled with the ESP teacher's lack of knowledge in (and reluctance to move into) the students' content areas pave the way for a common-core approach (Khairi et al, 1993). Today many institutions are slowly moving towards greater specificity. The University of Malaya is currently ahead of other institutions in breaking away from common-core courses to greater specialisation following changes in Malaysia where the 'clients' are making increasing demands for more relevant tailor -made courses within fields of specialisation, the influence of research and the dissatisfaction among Malaysian ESP practitioners themselves with the lack of relevance of 'general technical' English. While some ELT practitioners may argue for a common core approach to EAP instruction and materials, doubts still exist as to whether such materials would help the learners to transfer skills obtained through common-core materials to content-specific academic settings. Research into the effect of specialised background knowledge on reading comprehension (Carrell, Davine and Eskey, 1988; Alderson and Urquhart, 1984) suggests that the processing of specialised texts is content or discipline specific.

It can thus be argued that within the academic milieu the common core approach as suggested by Hutchinson and Waters (1987) may only be applicable at pre-EAP levels and would not be effective enough to meet the specialised academic needs of most university students in the EFL context.

The University of Malaya's English for Special Purposes Project (UMESPP) was the first large scale ESP project in Malaysia which to a large extent adopted the common -core approach. This was a research based project which led to the production of materials for teaching reading comprehension in the academic field, under the banner *Skill for Learning* (Omar, 1991; ELT Documents 1980). Therefore, English was

taught only as a means of helping students to cope with reference materials in their subject areas and little more. However, from the late eighties onwards, the University of Malaya, Universiti Kebangsaan Malaysia and Universiti Teknologi Malaysia began to look towards developing discipline specific materials to enable the students to not only make references but also to be able to read to learn. But this strong focus on reading comprehension brought another problem - an imbalance in the acquisition of skills in English, particularly between reading and the productive skills of writing and speaking.

The above discussion indicates that graduates from institutions of higher learning are not satisfying industry needs in terms of English language ability and that this situation needs to be addressed complementary to "Vision 2020." It is suggested that the main problem stems from teacher's inability to develop appropriate EAP materials for academic learning needs through the medium of English for students with varying levels of language abilities, skills and interests.

1.6 Teacher Training for EAP / ESP

In Malaysian institutions of higher learning teachers of English for Academic Purposes are almost always teachers of 'General' English who have unexpectedly found themselves required to teach students with special purposes. In most cases the 'general' English language instructor/teacher at these institutions may require a great deal of psychological adaptation, flexibility and initiative particularly if the teacher is teaching students of science and technology. Many of these teachers find it very difficult to cope with the complexity of the subject texts they teach in addition to their own language competence. Many, (like their own students) opt for "safe" approaches or responses, that is formulaic thinking and expressions of opinions(Grabe, 1986:35). In addition to these already seemingly enormous problems is the fact that most of these teachers are not equipped with appropriate skills and knowledge to prepare and develop EAP materials or for teaching Science and Technology students who need different approaches from EGP students. Many may also have a strong "anti-science" bias, as Ewer (1975) states, an emotional reaction against the scientist's way of looking at the world. They may not have the necessary skills to cope with such reading texts as they have had similar learning experiences as their own students. For example Chong and Singh's (1993:173) study on reading habits of teacher trainees in a Malaysian Teacher training college, revealed that English language teachers do not read many English reading materials (academic

or otherwise) and that their reading is not up to expectations of future English language teachers.

Phillipson (1992 : 263), believes that teachers/staff teaching ESP should be "trained in an adequate, **critical, and theoretically valid-way** for EAP". Bowyer (1994: 193) follows a similar line and maintains that teachers need more training in EAP.

>.........*there needs to be more training for the EAP teacher. Their task is often formidable and they also sometimes operate under considerable constraints. Many are unaware of moves in the field of ESP and **have little access to the results of research into tertiary education** which could help them with the planning and delivery of their programs.(emphasis added)*

In the context of Malaysian universities, the English language instructors at the Language Centres struggle to cope with the large number of students who need a great deal of help at basic levels. The small number of language instructors does not help to ease the situation very much. They therefore work under considerable constraints and as Bowyer (1994) points out, these instructors may also have little access to research into tertiary education which could help them improve their teaching. This, coupled with the fact that a large number of part-timers are employed to meet the shortage of English language instructors at the university, makes it difficult to achieve adequate levels of quality teaching and success in acquiring the language. Datuk Hajjah Maznah, the registrar of Universiti Sains Malaysia observes that English language instructors from universities in Kuala Lumpur and Selangor do part-time teaching in each others' universities due to the shortage of man power (Personal communication, Birmingham, 1993). The University of Malaya (U.M), Universiti Pertanian Malaysia (UPM), International Islamic University (I.I.U), and Universiti Kebangsaan Malaysia (UKM) all employ additional part-time staff to meet the shortage of English language instructors. Such a situation affects the undergraduates at these universities as overworked language instructors are unable to perform to the best of their abilities and part-timers may be less committed to teaching these students. As mentioned earlier, a large majority of the language instructors (particularly those who come directly from schools with no training in EAP / ESP) may not be equipped with relevant knowledge and skills to prepare and develop EAP materials, may not have access to current research and are unaware of the importance of acquiring both study/learning skills and language skills in the teaching of EAP. As Khairi et al (1993:66) explain "many teachers evolve their methodology from experience, intuition and (what one teacher terms) a series of 'trial and error' ". This is not surprising as many Malaysian ESP teachers are still waiting or looking for an appropriate methodology. Materials design is a major

concern among them. Currently, commercially prepared texts are commonly used but many ESP / EAP teachers are beginning to see the irrelevance and futility of pre-packaging ESP /EAP materials. Thus, in Malaysia, most institutions design their own materials. The exercise in ESP materials production undertaken by the Technical and Vocational Division of the Ministry of Education in 1991 (Ministry of Education, 1993:74) and the ongoing materials writing courses conducted in collaboration with the British Council (Nordin, 1994) in getting vocational school teachers and polytechnic lecturers together to prepare subject -specific instructional materials are both clear indications of the direction that ESP/EAP materials design and teacher training could take in the near future.

Malaysian English language teachers therefore need to be trained to bridge the gap between EGP and EAP. None of the Faculties of Educational Studies in the universities in Malaysia which train teachers to teach English as a Second language under their B.Ed. TESL programme [namely Universiti Pertanian Malaysia (UPM), Universiti Malaya (UM), Universiti Kebangsaan Malaysia (UKM), and Universiti Sains Malaysia (USM)] include in their present curriculum a component for training teachers in the area of EAP/ESP. It is assumed that if one is trained as an EGP language teacher one would be able to teach, design and develop materials in EAP/ESP. A related theoretical problem is the question of whether there is a set of defining characteristics in ESP methodology or even whether there is any distinction at all between ESP and EGP. A collection of papers in the ESP journal (1983) on the issue of teacher training in ESP suggests that some differences do exist and that there is a justification for such training.

Another option that seems quite feasible to address the problem of qualified academic staff in ESP /EAP, is to employ graduates from the sciences and train them to teach English. One university that tried this was Universiti Kebangsaan Malaysia. During the recession in Malaysia between 1987-1988, the Ministry of Education embarked on a short term project to train some graduates in the sciences to teach English. These graduates attended a nine month Diploma in Education course specialising in TESL. No study has been carried out to evaluate the outcome of such a scheme.

1.7 EAP Instruction

As mentioned earlier, there is a move by the Malaysian Ministry of Education towards the teaching of ESP in polytechnics (Nordin, BPTV 1994). This

strengthens the need for all the universities to give specific training to teachers in EAP.

Yet moving towards EAP instruction is problematic. A crucial problem is the fact that the features of EAP courses are still being assessed for their workability, suitability, overall and cost effectiveness. At the same time there is a real need for EAP / ESP purpose designed materials across a variety of courses and for continued up-dating of training and research in EAP materials design and development. These developments are necessary because teachers need to design and adapt materials to meet specific situational requirements. The relationship between levels of students' ability, text types, learning strategies and the development of EAP task-based materials are still not very clear and research in this area needs to be developed and addressed.

The use of the term EAP with content area materials itself develops confusion, anxiety, scepticism in the minds of English language instructors and English language teacher trainees: some may consider it a trap to their professionalism if they are not well trained in the area. This creates further problems if these teachers try to avoid using appropriate materials to improve students learning abilities because the teachers themselves feel uncertain about content , terminology, text structure etc. This would therefore make the training of teachers for EAP methodology, materials design and assessment more problematic: there is, so to speak, a shifting target.

This shifting target may be seen as a selective one. At UPM, and at other Malaysian Universities and institutions of higher learning, students do not need to function in English all the time: 80% of all lectures and assignments are conducted in Bahasa Malaysia. The students' basic need regarding the English language is to be able to read subject and reference books in English, make references to texts in English and write in English where necessary. The teachers therefore need to be adequately trained to equip the learner with such skills through subject matter materials.

Thus, given the inadequacy of trained English language instructors in the field of EAP, more research studies in the area of EAP teacher training needs is required. This is particularly so in the area of EAP materials design and methodology, in order to help in the enormous task of producing capable EAP instructors who can function across disciplines with ease and confidence. There is therefore a need for a *framework* to train and assist teachers to develop EAP materials utilising existing principles of materials development and which embodies current ELT theories, thus directly or indirectly train the teachers for EAP teaching.

1.8 Justification and Rationale for the Development of an EAP Materials Training Framework

Little attention has been paid to the development of teacher skills in the area of ELT materials development, although considerable attention has been given to learner variables concerning learner needs and the use of different tasks, methods, approaches or materials (Cunningsworth, 1984, 1995; Nunan, 1988, 1989, 1991; Larsen-Freeman and Long 1991, McDonough and Shaw, 1993; Crookes and Gass, 1993; Ellis, 1994). Textbooks seem to endorse such research findings regarding learners, either implicitly or explicitly in their introductory pages or in their general approach. However, since there is little research into teachers' views, these are not considered systematically. Further, there seems to be an absence of published guidance for teachers to design materials themselves.

There are guidelines for selecting, adapting and evaluating materials and these are often introduced and used on ELT teacher training courses, commonly using checklists (Madsen and Bowen, 1978; Cunningsworth,1984, 1995; Dougill, 1987; Hutchinson, 1987; Littlejohn and Windeatt, 1989; Skierso, 1991). Hence it is not surprising if, when teachers design their own materials, there may be a tendency to copy or adapt examples from published texts. Thus, EFL teachers tend to rely on textbooks both directly in using them in the classroom and indirectly as a source of ideas. This over reliance on commercially produced books often has the effect of 'deskilling' teachers (Block, 1991; Littlejohn, 1992; Richards, 1993). On the other hand in training courses, teachers are frequently asked to design materials, tasks and exercises, and in EAP situations in particular they have to do so since published materials are rarely appropriate for many specific purposes.

At the same time a number of recent developments in Applied Linguistics and Education which have great potential relevance for materials design have apparently not yet been fully used. Such developments include Genre studies (Kress, 1989; Swales, 1990; Bhatia, 1993; Cope and Kalantzis, 1993; McCarthy and Carter ,1994); learning strategies and styles (Chipman et al, 1985; Dansereau, 1985; Weinstein et al, 1988; O'Malley 1987,1990, Oxford, 1990) ways of easing bilingual learners' access to the curriculum drawing on Mohan's knowledge framework (Mohan, 1986,1990), and Cummin's Model (1984, 1986,1992); and uses of visuals to enhance text understanding (Mohan, 1986; Rewey et al, 1989; McGagg and Dansereau, 1991; White and Gunstone, 1992; Burgess, 1994; Rowntree, 1994, Cortazzi and Jin, 1996).

All this points to the need for a framework for teacher development which will have a range of functions: to raise awareness of issues in EAP materials design, to give practical guidance in assessing but particularly in making materials, to integrate current theoretical developments which can be applied to the design of EAP/ESP materials, tasks and exercises.

Such a framework is probably best developed in response to specific situations through an exploratory study based on a needs survey. The framework was developed for university teachers of EAP in Malaysia. Thus, the needs survey had to be based on EAP/ESP students, academic staff, subject specialist and English language instructors. This needs survey was carried out at Universiti Pertanian Malaysia(UPM)[see chapter two] and was supplemented by a content analysis of widely used textbooks(see chapter 4 and appendix A4.3).

The framework was evolved through four stages of action research in interaction with the needs survey, an on going review of current literature, response to feedback and suggestions from the pilot studies carried out with Malaysian teachers in five institutions of higher education in Britain (see chapter, Two and Four) and a final large scale trialling at UPM Malaysia (see chapter six, seven and eight).

1.9 Aims of the Study

The aim of this exploratory study is to develop a task-based materials framework for teacher education in English for Academic Purposes, and to evaluate the effectiveness of the framework by examining:
1. The differences in the materials developed through the use of the task-based framework and those produced based on the existing materials course at UPM.
2. The subsequent effect the framework has on materials design, teacher trainees' attitudes and beliefs and their ability to design better EAP Task-based materials, and
3. The problems the teachers encountered in designing the materials.

1.10 Purposes of the Study

This main purpose is to address issues pertaining to non-native (NN) EFL /ESL teachers' ability to design EAP task-based materials for university undergraduates in the context of teacher training needs, learning strategies and processes, learner needs and the design and development of task-based materials according to levels of ability which includes the notion of bands/rating profiles to materials design.

In the context of introducing the EAP component into future B. Ed. TESL programmes and proficiency courses in Malaysian institutions of higher education, additional purposes of this exploratory study are to:

(1) develop a materials design framework which is task-based for teacher training in EAP particularly with reference to the context of UPM,

(2) determine the effect of the framework on the way EAP materials are designed by Malaysian teachers,

(3) identify the kind of problems faced by the teachers in developing EAP materials,

(4) identify and discuss the differences between both the pre-and in-service teachers' performance, attitudes and perception towards the framework .

1.10.1 Research Questions

More specifically answers to the following questions are sought:

1. How does the design of materials based on the EAP framework differ from those based on the existing method in terms of the trainees' understanding, applications and attitude?

a. To what extent will the framework help teacher trainees to understand and create better teacher made EAP task based materials?

b. What are the teacher trainees' attitudes towards the usefulness of the EAP framework?

2. What differences will there be in terms of the trainees' ability in understanding, applying and interpreting the concept of "Task-Based" materials between the design of materials based on the framework and those based on the existing approach.

a. To what extent do the task-based activities produced by the teachers reflect their understanding and interpretation (definition) of the concept of "task".

b. To what extent has the training in the use of the framework influenced the trainees' concept of "task" and the way they design task based materials.

3. What differences, if any, will there be between preservice and inservice trainees in terms of overall understanding, problems encountered, applications and attitudes about the usefulness of the framework.

Thus, the study will be examining teacher trainees' use of the framework and the development of materials from the framework.

1.10.2 Research Hypothesis

The research hypothesis can be stated as follows:

1. The materials training framework will have a positive effect in raising the teachers' awareness and understanding about developing EAP task based materials.

2. The materials training framework will have a positive effect on the teacher trainees' attitudes and perception towards the development of EAP task-based materials.

1. 11 Significance of the Study

In 1995 the media (refer to section 1.4) highlighted the Malaysian government's view of the importance of English language proficiency in Science and Technology. It is argued that a good command of the English language is necessary for the acquisition and advancement of knowledge in industry, and to achieve "Vision 2020". Such an argument has brought about new challenges for language instructors in universities and colleges in Malaysia. Language instructors need to have a good command of the English language and a well developed critical approach to teaching thinking skills. They also need to combine pedagogic language skills with the ability to teach study skills to help Malaysian students to read and write well in the academic setting. If there is a lack of skills or experience of the teachers, a lack of theoretical and practical guidelines, models or frameworks, and other related support resources (such as adequate teacher education programmes) this poses significant problems to realise the aims of "Vision 2020".

This exploratory study is significant in that it sets out first to identify the academic reading and writing needs of the university students and the problems faced by the language instructors in designing EAP based materials. Then it seeks to develop a framework for training teachers to design EAP task -based materials. The framework is broad - based and is evolved from theories and research concerning the application of the notion of profiling of ability (in bands), genre theory, task and content- based language teaching, and use of visuals and learning strategies for the teaching of both the reading and writing skills. Further, it analyses problems faced by EGP trained teachers in designing and developing EAP based materials. Finally, it outlines future research areas and training programmes.

The study will suggest clear ways to improve UPM's teacher training strategies in EAP materials development. It is hoped that the trainees' understanding of the theories and strategies of language learning processes, and of evaluation procedures, would help enhance their ability to develop materials, particularly for limited proficiency learners and at the same time teachers would be able to experience the strategies themselves.

The framework will be useful in training English language instructors and part-timers attached to UPM's Language Centre in developing EAP materials. It may also be used by other universities involved in the training of teachers. Ultimately, it is hoped that the research will promote the possibility of UPM being a regional centre for training pre-and in-service teachers of EAP/ESP. For example, the Malaysian polytechnics may find the framework useful in helping their language instructors to learn to design better EAP based materials for their learners.

Furthermore, the period of conducting this study coincides with the introduction of a new EAP programme planned and designed by UPM's English language department of the faculty of Modern languages known as the English for Academic Purpose (EAP) Project. This project was developed and sponsored by the British Overseas Development Administration (ODA) through consultations with ESP experts from the University of Warwick, England. In view of these changes, it is hoped that the present study will not only benefit the trainees in the B.Ed. TESL programme but also those in all the other universities and teacher training institutions. More importantly, this study may be regarded as a step forward in the field of EAP materials design in relation to the training of non-native teachers of English in an EFL situation.

1.12 Scope and Limitations of the Study

Any study of this kind has limitations. This study is limited in its scope for the following reasons:

1. The research is localised, in that the framework is designed specifically for the Malaysian context. It is designed to look into the EAP materials training needs of University Pertanian Malaysia (UPM), B.Ed. TESL teacher trainees' problems in designing EAP reading and writing materials for engineering undergraduates, using content area materials/texts.
2. The study also looks at the problems of bridging the gap between English For General Purpose (EGP) and EAP among students who find themselves in an

academic setting and among teachers trained in EGP but who have to teach EAP.

3. The lack of research studies in the area of EAP in ESL in Malaysia restricts the inferences which might be drawn since there is little research and no generally accepted model of EAP, ESP or materials design for Malaysian research to relate to.

4. The results of the study will apply directly only to the respondents and educational institutions that are immediately involved in the investigation. Generalisation to other teachers and institutions should be made only if the populations are similar to those who participated in the study.

5. It is expected that the teacher trainees involved in the study would have varying backgrounds including different professional training and different teaching experiences.

The framework may, however, prove useful in other South Asian contexts. It may also have applications further afield, with appropriate adaptation to local circumstances. At the very least, it should be suggestive of the kinds of elements and considerations which would need to be taken into account by later architects of improved frameworks.

1.13 Structure of the Study and the Thesis

The following is a brief account of how the study was executed and the resultant structure of the thesis.

1.13.1 The Study

The study for the thesis followed a number of specific steps, consisting of the initial ideas in the field of interest, which were then evaluated against the specific needs of Malaysian students in higher education and relevant literature. This led to an outline of the topic which was reviewed and evaluated against the literature. The process was repeated in an iterative manner until a final topic was selected, from which the design of the study could be established. The design of the study consisted of the evaluation of the objectives, contents and research methodology. The process as illustrated in figure 1.1 was based on the framework suggested by Collins (1995).

This led to a further review of research methodology in order to identify the most appropriate method(s) for such a study. Based on the review, it was decided that a needs survey, action research and quasi experimental methods would be used.

A three phase study was thus deemed necessary. Phase 1 would involved conducting a small scale needs survey in order to establish the content(s) of the EAP Materials Training framework (henceforth referred to as the framework); Phase 2 would utilise action research to trial and evaluate the framework through pilot studies and Phase 3 would involve a large scale trialling of the framework against the existing UPM method. Phase three is considered a Main study as it would trial the framework on a larger scale. Phase 1 of the study is discussed in chapter two, phase 2 in chapters four and five and phase 3 is discussed in chapters six, seven and eight.

1.14 Action Research

Phase two of the study was carried out through action research. The essence of action research can be characterised as 'an action taken to improve practice.' It begins with the identification of a problem or an issue from the researcher's own practice and attempts to produce findings through action, which requires the involvement of the researcher (or a group of researchers) usually in their own educational or social situation (Kemmis and McTagget, 1982; Nunan, 1990; Allison, 1993; Crookes, 1993; Cohen and Manion, 1994; Somekh, 1995). This approach has been regarded as an opportunity to make a contribution to the researcher's professional development and leads to reflection on practice (Schon, 1987) which could produce effective innovations in the particular field under investigation. Kemmis and McTagget (1982) explains that:

> ......action research is trying out ideas in practice as a means of increasing
> knowledge about the curriculum, teaching and learning

The action research approach to be used in phase two of this study, is designed to assess the framework strands and specifications as perceived by the teachers, to gain feedback and other suggestions for further improvement to the framework. Thus each stage of the action research in trialling the framework will involve modification and additions as described and discussed in chapter four and five. Figure 1.2 presents the cycle of action research undertaken in the development of the framework.

Zuber-Sheritt (1992:15) cited in Allison (1993) specifies that one of the main features of action research is its 'spiral of cycles of planning, acting, observing and reflecting,' thus emphasising the close relationship between research and action. It

could be suggested that the overall study involves the method of action research to diagnose a problem through analysis of data, formulating a hypothesis, planning, evaluating and further developing a cycle of research actions. This process is expected to validate the reliability of the study and reveal data which could be used as the base for further research.

The **final phase- Phase three** will be the final action to put the framework into practise to relate it to the real world situation on a wider scale. This would enable the researcher to trial the framework and to evaluate its usefulness as a training tool against the existing UPM materials training method.

1.15 Organisation of the Thesis

The organisation of the thesis was established as presented in figures 1.1 and 1.2. It followed an iterative process in terms of the organisation of the content and overall structure. This thesis makes use of charts, tables and diagrams to summarise areas of literature review, pilot studies and the teachers' journals. There are several reasons why these are presented in tabular format. Firstly, to save space (although all references are given); but also to allow a synthesis of information from various sources and instruments. Secondly, since the thesis is about drawing up a practical framework which inherently involves visual elements, it would be a contradiction not to use some visual elements in the exposition about this framework. This would aid the reader to enter the frame of mind of the general approach which the researcher is adopting for EAP materials design as an academic writer. From this perspective such charts and tables are not just illustrations but they are, in fact, text.

Chapter One, as an introductory chapter, has presented the background to the study, has basically discussed some problems in English language teaching and learning , teacher training which are linked to EAP. It has delineated the rationale for a framework, the aims, purpose, research questions, limitations and scope of the study and finally the significance of the study. It has introduced the action research methodology of the stages in the development of the framework and provided an overall view of the methodology of the whole study and the structure of the thesis. A definition of terms and abbreviated forms used throughout the thesis is also provided.

Chapter Two presents a brief literature review of needs surveys, describes the methods and the instruments used in the survey carried out at UPM Malaysia, discusses the findings of the needs survey, and the decisions made based on the outcome in planning the content of the materials training framework.

Chapter Three presents a literature review in the context of EAP, discusses and presents global issues, definitions, relevant theories and studies in relation to the development of the framework. It includes discussions of the scope and definition of EAP, theories and principles of materials development in EAP, the current state of EAP materials, teacher training in EAP, content based approaches and theories and principles of teaching the reading and writing skills. Finally the chapter concludes by linking the global issues to chapter four which presents and discusses the literature involved in the different stages in the development of the framework.

Chapter Four introduces the three stages in the development of the framework which led to the development of framework 1, 2, 3 and 4 as a result of the three pilot studies. Stage 1 presents the drafting and formulating of the learner's profiles. Stage 2 presents the drafting of Framework 1 which discusses the four strands of bands/profiles, types of texts, tasks and learning strategies and the feedback from the first pre-pilot study. Stage 3 presents Framework Draft 2 which introduces and discusses three additional strands: genre (textual patterns), knowledge structures and visuals and the feedback from pilot study 2A. Finally it discusses the final feedback on Framework 3 based on pilot study 2B and the final formulation of Framework 4.

Chapter Five presents and discusses the theories and principles used in the design and development of the materials training framework, the stages and processes in the development of the framework, the working principles of the 'Final' Framework in its present form at this point of the study.

Chapter Six presents and discusses the research design and methodology of the Main Study , workshop design and procedures, and process of data collection. It describes the instruments used in gathering the data and methods used for analysing both the qualitative and quantitative data for both methods 1 and 2.

Chapter Seven presents and discusses the findings of the qualitative data. These include, analysis and findings of the trainee teachers' accounts in the progress logs about developing EAP materials, their perceptions of the concept of "tasks".

Design of Study

Outline of Topic to be studied

Objective of Study
What is to be achieved ?
(What is desired and feasible?) ?

Why & how to study this topic ?

Contents of Study
What are the major subdivisions ?
(i.e. what will the thesis contain?
How many chapters?
Organisation of chapters & thesis)

Institutional & Country Needs
What is of interest?
Significance ? Relevance ?
What data: is available,
is accessible ?

Own Needs
Values ? philosophy ?
career developments ?
time ? commitments ?

Academic Literature
Are there relevant;
concepts, models,
frameworks ? Are there
relevant methods?
Is the literature available ?
How relevant would it be?

Literature Review

Context of topic.

Content of topic.

Mode of studying it.
& presenting it

Methodology
(Principles of Methods)
Quantitative /
Qualitative ?

Scientific methods ?
Quasi-experimental ?
Which design would be
most suitable?
Subjective material ?

Methods
(Research Techniques)
Population/ sample
data collection

What kind of
instruments would be
suitable for collecting
data?
Analysis
Statistical or
Content analysis ?
Synthesis:
Presentation:

Initial thought and scanning of literature

Identification of specific project

Iterative Process

Detailed design of Study

OUTCOME

Figure 1.1   Structure of Project Planning Framework. Modified. Collins (1995).
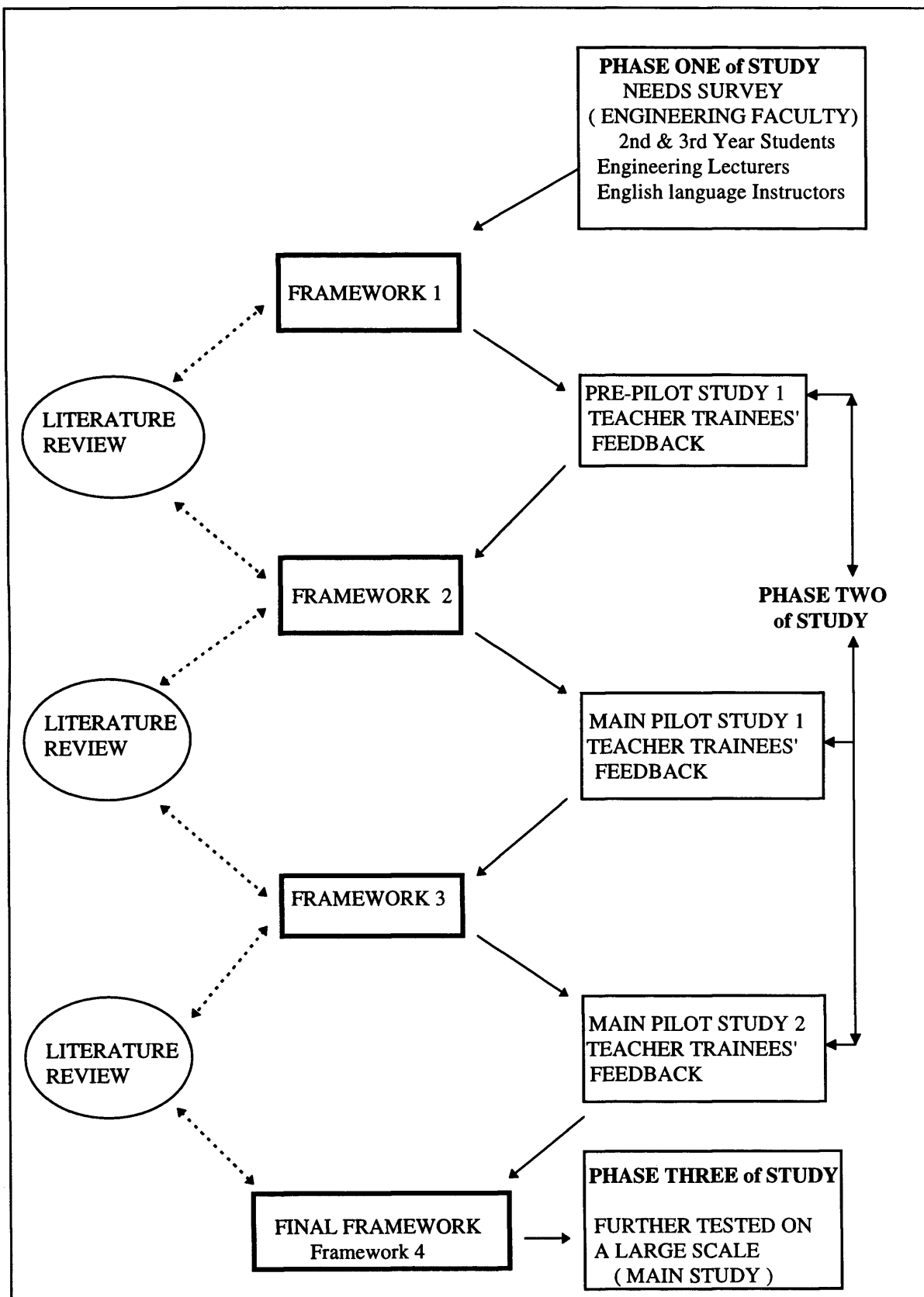
Figure 1.2   Stages in the Evolution of the Framework

Chapter Eight presents and discusses the findings based on the quantitative data. These include, analysis and findings of the questionnaires, materials evaluation checklist and the interrater reliability of the evaluation of the materials.

Chapter Nine presents the theories and implications arising out of the study, the conclusions, implications, recommendations and further research based on the findings of the study.

1.16 Definition of Terms and Abbreviated Forms Used.

A list and explanation of important definition of terms and any commonly abbreviated forms used throughout the thesis is provided below.

EAP TASK-BASED MATERIALS TRAINING FRAMEWORK- often referred to as simply the _FRAMEWORK_ in the thesis. It is a framework which was developed to provide suggestions for training in developing EAP materials.

TEACHERS- used throughout the thesis to refer to the teacher trainees or trainee teachers (both pre- and in-service teachers) the subjects of both the pilot studies and the main study.

TYPES OF TEXT as used in the framework - refers to the different types of materials, articles etc. (sources of materials) used for teaching English.

KNOWLEDGE STRUCTURES as used in the framework- refers to Mohan's (1986) knowledge framework or knowledge structures, commonly used throughout the curriculum in this study . Such knowledge are the _thinking skills_ required in order to process and understand a text. In the context of this study it also includes **grammatical components or language skills**, terms sometimes used.

COLLABORATIVE GROUP- a group of 4-5 teachers working together to achieve a common goal through shared knowledge.

GROUP (COLLABORATIVE) PROGRESS LOGS- A form of guided collaborative journal entry which the trainees kept as a collaborative group to provide an account of how they designed their materials, problems encountered etc. when using both Method 1 and Method 2. Since the trainees designed materials as a group project it made sense for them to provide a group account.

GENRE - in this thesis genre refers to the rhetorical discourse patterns commonly found in different types of texts

METHOD 1 - UPM Existing Materials Training Course

METHOD 2 - Use of the EAP Task -based Materials Training Framework

SPM- Malaysian Certificate of Examination marking the end of secondary schooling upon completion of form five in the secondary schools (equivalent to GCSE).

STPM- Higher School Certificate marking the end of Sixth Form (equivalent to 'A' levels).

KBSM- The New Integrated Curriculum for Secondary Schools in Malaysia

KBSR- The New Integrated Curriculum for Primary schools in Malaysia

UPU- Central Processing Unit for University intake in Malaysia- functions like the UCAS in the U. K.

DBP- A Malaysian Organisation, analogous to a Language Academy which monitors the use of Bahasa Malaysia in the country, is also the National Publishing house, is responsible for all translated work from other languages into Bahasa Malaysia.

PPK- Curriculum Development Centre (CDC) in Kuala Lumpur Malaysia

NNS -Non-Native Speaker of English, a term used descriptively not as evaluation

NS- Native Speaker of English

CHAPTER TWO

NEEDS SURVEY

2.0 Introduction

This chapter briefly reviews the literature on needs analysis, describes the research design of the first phase of this study including details of the study sample, instrumentation, data collection procedures, methods of analysis and findings of the needs assessment survey carried out in Malaysia between July 1993 - December 1993. The findings of this survey were used as a guide for developing the materials training framework and can be considered essential preliminary work for the main area of this research, which is the framework itself and its application. The findings of the questionnaire surveys are presented first followed by the findings of a proficiency test.

2.1 Needs Analysis

Needs analysis is regarded as an essential aspect of ESP. It is required to make decisions about syllabus design, type of content and materials for any course which is to be implemented: all courses and training programmes are based on a perceived need of some sort. There are a number of different meanings of needs as discussed by Berwick (1989); Brindley (1989); Mountford (1981); Widdowson (1981); Hutchinson and Waters (1987). Robinson (1991: 7-8) summarises five different types of needs. Needs can refer to:

1. students' study or job requirements. Such needs are considered to be a goal-oriented definition of needs (see Widdowson (1981:2). They can be more appropriately described as "objectives". (Berwick, 1989:57).

2. what the user-institution, society or future employers on the whole regards as necessary or desirable to be learnt from a programme of language instruction (Mountford, 1981:27).

3. what the learner needs to do to actually acquire the language. This is a process-oriented definition of needs and relates to transitional behaviour, the means of learning (Widdowson, 1981:2).

4. what the students themselves would like to gain from the language course. This view of needs suggests that students may have personal aims in addition (or sometimes even in opposition) to the requirements of their studies or jobs. Such personal needs 'may be (and often are) devalued 'as mere wants or desires' (Berwick, 1989:55).

5. "lacks" or what the students do not know or cannot do in English (see Hutchinson and Waters, 1987: 56).

Such diverse interpretations make it difficult to find a usable and operational definition of "needs" in the context of second language teaching. Richterich (1983:2) emphasised that:

> *The very concept of language needs has never been clearly defined and remains at best ambiguous.*

This indicates that needs statements are subjective in nature, are "open to contextual interpretations and certain value judgements. They do not have of themselves an "objective reality" (Brindley, 1989:65), and as Lawson (1979:37) explains, "what is finally established as a 'need' is a matter for agreement not discovery." It can be deduced that what follows in terms of approaches to 'needs' would depend on the analyst's practical experience, personal philosophy and perceived role. Any needs projects will usually be influenced by the ideological preconceptions of the analyst (Robinson, 1991:7). West (1994), also notes this subjectivity among different ELT practitioners (e.g. Dickinson, 1987; Holliday, 1984,1994; Nunan, 1988; Coleman, 1988). He demonstrates that over the years since Munby (1978), both the focus and scope of needs analysis have changed (West,1994:1). It now includes learning styles and strategies, learners, language audit, means analysis and culture (see Allwright, 1982; Hagen, 1988; Oxford, 1990; Jordan, 1993).

2.2 Opposing Views of Needs

Views of needs as perceived by learners, teachers, authorities or institutions are rarely in agreement. Conflicts frequently arise: students may perceive their language needs from a different angle from that of their teachers or others; discrepancy may occur between students' specialist course of study and the one which they would prefer. In such cases one might expect students, authorities, teachers or institutions to have different and possibly conflicting views of the goals and content of the ESP course (Robinson, 1991:8). Brindley (1989: 103-12) draws attention to the fact that conflict can also develop between learners and teachers in relation to 'a number of different facets of the learning process' including learning activities, strategies and materials and language content. In general, it is the teachers, authorities or institutions who will perceive the objective needs and the learners will perceive the subjective needs.

In conducting a needs survey, the terms product and process have a wide application. 'Product' can be equated with a target view of needs and 'process' with a learning view. It is important that both the product and process view of needs are considered as they

complement each other. Therefore one should try to carry out both a target situation analysis (TSA) and a present situation analysis (PSA).

2.3 Target Situation Analysis (TSA).

TSA's are any form of needs analysis which has a central focus on the learners' needs at the end of a course. A most thorough, seminal work on this type of needs analysis is Munby's (1978). However, Munby's framework is not wholly applicable in all situations because the analysis is based on linguistic features of the target situation. At the same time it is rigid and complex . It has been critically viewed by Swales (1980: 68-69); Coffey (1984:7); White (1988:88-89); Nunan (1988a :24); Coleman (1988: 155-169). In an EAP context there is much more to needs than a listing of linguistic features (Hutchinson and Waters (1987); Berwick (1989); Swales (1989)). There are, however, aspects of it that can be utilised in spite of its short comings. As West (1994:9) explains, "subsequent developments in needs analysis have either been derived from Munby .....or a reaction to the shortcomings of Munby's Model."

Target needs also include necessities, lacks and wants (Hutchinson and Waters, 1987:55). In the context of this study, the concern in EAP is with the needs of particular learners within a set situation. There is not only a need to know what the learners know already, what type of texts they need to read, how much reading or writing they have to do but also what their present proficiency level or ability might be, in order to decide what the target should be. In this case, a test or series of tests can be administered or such information can be obtained from the teachers.

Identification of learners wants and views can be achieved through questionnaire and interview methods. There is also a need to identify learners' lacks, necessities and wants from the perspective of the teachers, departments or of even the institution. The learners' perceptions may well be in conflict with those of the teachers' or institutions. There is no clear answer to such a situation. It is important to be aware of such differences and to take account of them in materials, methodology and training programmes. Thus a TSA analysis should be complemented by a present-situation analysis (PSA).

2.4 Present Situation Analysis (PSA)

A PSA can be used to establish the students' strengths and weaknesses at the start of their language course. Work carried out by Richterich and Chancerel (1980) provides

the most extensive range of devices for establishing PSA. They propose three basic sources of information (ibid:10).

1. The students themselves;
2. The language-teaching establishment;
3. The user-institution.

Items 1 and 2 were adapted for use in establishing and developing the needs assessment survey for this study. The survey's objective is to guide the development of a training framework for teacher training in EAP materials development. Therefore a large and comprehensive survey was deemed inappropriate

For this study, a combination of both TSA and PSA needs analysis was considered appropriate. The methods used for gathering information are as follows:-

1. Questionnaire Survey
2. Text Book Review (presented and discussed in chapter 3 and 4)
3. Proficiency Test of Reading and Writing

The structure of the survey (Phase 1 of Study) is outlined in Figure 2.1 below.

2.5 Assessment Survey : Research Design - Phase One

Phase one of the research consists of a survey specifically designed to be descriptive in nature to obtain information about the following:

1. Engineering undergraduate students' needs in terms of Reading and Writing skills.

2. The students' assumed underlying ability in Reading and Writing.

3. Engineering subject specialist's (lecturers) perceived view of what the students needed in terms of reading and writing skills.

4. English Language Instructors' perceived view of the students' language needs for both reading and writing; the instructors' own views of how they design their materials and any problems they encounter.

2.5.1 The Study Sample

The subjects for this stage of the study consisted of :

1. 241 Second and Third Year Engineering undergraduates of UPM 1993 /94 academic year.

2. 22 subject specialist (lecturers) of the Engineering Faculty

3. 16 English Language Instructors from the Proficiency Unit of the Faculty of Modern Language Studies.

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            ┌─────────────────┐
            │   PHASE ONE     │
            │   of Study      │
            └─────────────────┘
                     │
            ┌─────────────────┐
            │  NEEDS SURVEY   │
            │    at UPM       │
            └─────────────────┘
                     │
        ┌────────────┼────────────┐
┌───────────────┐ ┌───────────────┐ ┌───────────────┐
│  Engineering  │ │Subject Specialist│ │English Language│
│ undergraduates│ │               │ │  Instructors  │
└───────────────┘ └───────────────┘ └───────────────┘
        │                 │                 │
   Questionnaire      Questionnaire      Questionnaire
      Set 1              Set 2              Set 3
        │
  Proficiency Test of
  of Reading & Writing
                ┌──────────────────────┐
                │  Analysis and Findings│
                │   identify key issues │
                └──────────────────────┘
                ┌──────────────────────┐
                │Formulate Baseline for framework│
                └──────────────────────┘
                ┌──────────────────────┐
                │ Develop Outline & Decisions │
                │  for content of framework   │
                └──────────────────────┘
                ┌──────────────────────┐
                │Develop Drafts of EAP Training Framework│
                └──────────────────────┘
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Figure 2.1 Structure of the Needs Survey Phase One of the Study

2.5.1.1 Engineering Students

The Engineering students selected for the survey were second and third year undergraduates from the faculty of Engineering, UPM. They were undertaking either a Diploma or Degree in Engineering .

33

The Faculty of Engineering was chosen because firstly, the researcher had already established a rapport with the academic staff of the Faculty through a previous project. Therefore, access to the students would not be a problem. Secondly, a large number of the students fail to graduate .

The second and third year students were considered appropriate subjects for the tests and the survey because they have undergone at least one year of English for university study purposes. They were presently taking similar subjects and are to this extent a homogeneous group. First year students, on the other hand, come from a variety of settings and officially come from different study backgrounds. They follow the National Education Curriculum but come from High schools all over the country and do not need to obtain a pass in the English language in the SPM in order to get into a university. However, at the university they are required to attend English language classes and must obtain a pass in order to graduate. Therefore, indirectly second and third year students know that they need to have a good level of proficiency to enable them to study at the university.

2.5.1.2 Subject Specialist (Engineering Lecturers)

The subject specialists were from several different departments within the Faculty of Engineering and are all graduates with M.A's and PhD's from universities in Malaysia, Britain and America. A total of 22 lecturers participated in the survey.

2.5.1.3 English Language Instructors

The English Language Instructors were mainly from the Proficiency Unit of the Language Centre, Faculty of Educational Studies when this study was carried out. It is now known as the Proficiency Unit of the English Department, Faculty of Modern Language Studies. Part-time English language instructors who participated in the study were all secondary school teachers. These instructors provide English language support teaching to all the faculties in the university. In addition they teach ESL to all undergraduates and when necessary to post-graduate students. Many of these language instructors started out as English language teachers in schools before joining the university. A total of 16 language instructors participated in the survey.

2.6 Developing and Designing the Instruments

A survey method of data collection and a general proficiency test of reading and writing were used to gather relevant information at this stage. Three sets of questionnaires were designed to obtained information from the Engineering students,

subject specialist and English language instructors. It was also necessary to review a number of different published reading and writing texts.

2.6.1 Designing the General Proficiency Test of Reading and Writing.

The proficiency tests of reading and writing was designed to identify students' assumed underlying ability and problems in reading and writing in English. Only assumptions of the probable problems could be made from this test given the time constraint to design a comprehensive battery of tests for this purpose. Using a validated test of reading and writing would have been easier but the test reviewed- International English Language Testing System (IELTS) was considered unsuitable for this project. The test is for learners who wish to study in an English speaking context. The IELTS test was at the time being revised to include only one test for all candidates regardless of their intended field of study rather than a series from different disciplines (Personal Communication, Nick Charge,1993). This was because the IELTS committee (led by Charles Alderson) had observed that it did not matter which discipline the students were going into, what is being tested is not their knowledge of the subject but their proficiency in reading. Clapham (1996:201) suggests that it is fairer for students if they take a single academic reading module than to try to give students test modules that are close to their own academic discipline in assessing predictive reading ability.

The (IELTS) test specifications were used as a guideline and controlling factor for designing test specifications and test questions as they have been validated (Alderson & Clapham, 1992). The test was divided into two different sections: Section 1 and 2. Section 1 was on Reading Comprehension and consisted of 80 questions. Section 2 was on Writing and consisted of two writing tasks (see appendix A 2.1)

2.6.1.1 The Reading Test

There was a need to consider the different departments within the Faculty of Engineering to identify suitable texts and tasks for the test. This was because the faculty consists of five departments: Department of Field Engineering; Mechanical Systems Engineering; Power and Machinery Engineering; Electronic and Computer Engineering; Process and Environmental Engineering and Civil and Environment Engineering.

Since students were specialising in any one of the different disciplines, it was decided that general texts should be used. The text would be semi scientific and semi -technical in nature to gauge students' assumed or perceived underlying reading comprehension

ability because at the time of the test construction students were only studying English for General Purposes (EGP), and all their lectures were being conducted in Malay.

The following specifications were outlined before the construction and selection of texts and tasks were done. Listing the specification in this way is, in fact, a preview of applying the principles of design behind the framework to materials(see chapter 4 and 5): the specifications below are a mini-framework from which the test was constructed.

2.6.1.1.1 Academic Tasks

The test should sample the candidates' ability to perform the following tasks. (It is not implied or assumed that these can or must be tested in isolation or independently of each other.)

Suggested Question Types

i   Identifying structure, content, sequence of events and procedure.

ii   following instructions

iii   finding main and supporting ideas

iv   identifying the underlying theme or concept

v   identifying ideas in the text and relationships between them e.g. solutions, cause, effect etc.

vi   identifying, distinguishing and comparing facts, information, opinions, implications, definitions.

vii   interpreting information from linear text and transferring information from linear to non-linear texts.

viii   differentiating statements, information that is true, false , not stated or implied

ix   drawing logical inferences.

2.6.1.1.2 Source and Audience

The text will be selected from various sources. The audience would be the mixed engineering undergraduates within the faculty of engineering and the text selected should be of a type that is reasonably familiar to the students.

Stimulus Materials

1)   Level:-   A range of materials to be selected with an average difficulty level, Band 4 - 5 on the "Assessment of Reading Proficiency" profile adapted and prepared from several sources:

i) Universiti Teknologi Malaysia's English Language Proficiency Rating System (ELPRS) 1989.

ii) IELTS Overall Band Scores, 5/91/ups/5208

iii) UCLES/RSA Certificates in Communicative Skills in English in Communicative Language Testing (Weir, 1990).

2) Texts :-   There should be at least four reading texts with one text outlining a sequence of events and a non-linear text.

As far as possible the text should be "neutral" that is, not belonging to any one specific discipline within the faculty of Engineering and selection should consider the fact that the English language is outside the university's main curriculum.

3) Length:-   2500-5500 words in total, depending on the number of figures and diagrams embedded in the text.
Maximum time available :- one and a half hours.

4) Structure:-   Where possible, the reading passages should be sequenced in order of increasing difficulty.

2.6.1.1.3 Item Type

The total number of questions is approximately between 60-100. The procedure for assessing comprehension may include the following item types:

- choosing from a "heading bank" a heading appropriate to identify sections of the text;
- copying words, phrases etc. from the text;
- information transfer;
- labelling or completing diagrams, tables, charts, graphs or illustrations;
- matching;
- true, false, questions not stated (implied);
- multiple choice questions;
- sorting events into the correct order;
- classifying;
- gap filling activities;

2.6.1.2 The Writing Test

Test Focus

a) Band Levels: The Primary focus for writing in this test should be in the range of bands 5-6 of the IELTS Global band descriptions.

b)   Academic Tasks: The writing test tasks should be constructed to allow the candidates to demonstrate their ability to perform the following tasks (not necessarily in isolation.)

     i   organising, interpreting and presenting data;

     ii   listing the stages of a procedure;

     iii   describing an object, a process, events or sequence of events;

     iv   explaining how something works;

     v   presenting the solution to a problem or providing arguments related to a problem or findings;

     vi   presenting and justifying an opinion or assessment, either directly or by implication;

     vii comparing and contrasting information, opinions or implications;

     viii evaluating and synthesising ideas, facts or data provided.

c)   Audience

The appropriate readers are:

     i   the examiner(s);

     ii   The course instructor.

d)   Stimulus Response

1) Level:-   Where completion of the writing task depends on reading, the reading should not require proficiency greater than band 5 of the IELTS Global Band. Where possible, the task(s) should not be based on readings.

2) Texts:-   Stimulus materials may be textual, diagrammatic or graphic. Graphs and tables should be simple to interpret and be fully labelled. Texts must be realistic but may be authentic, modified or constructed.

3) Length:-   The time required to understand stimulus materials should not be more than 10 minutes.

4) Time:-   Task I - 20 minutes

            Task II - 30 minutes

A further 10 minutes would be given for reading the tasks and questions.

5) Test Tasks:

     There should be two writing tasks, each of which should generate enough writing to provide sufficient information for the answer to be

assigned to a band level. Both tasks should provide enough informa-
tion for students to write sufficiently and to demonstrate the ability to
present ideas well.

The writing tasks should as far as possible be tasks which students would normally do in
their language classes and would be applicable to their academic courses bearing in mind
that these students are studying English as a Foreign Language and the medium of
instruction for their academic courses are in Bahasa Malaysia (Malay).

6) Task I :-   Requires students to study a sequence of pictures describing a
                 procedure or process
                 - minimum input is provided.
                 - students to write about 100 words.

   Task II :-   Requires students to study a table comparing two different
                 machines.
                 - students are required to write a report based on the input given
                   but must provide their own recommendations and reasons for
                   supporting their choice.
                 - students to write about 150 words.

2.6.2   Evaluation of Writing Tasks

The written tasks would be evaluated using impressionistic marking as well as band
descriptors adapted from Universiti Teknologi Malaysia's English Language Proficiency
Rating System (ELPRS) 1989 and the IELTS Academic Modules Profile Band
Descriptors.

2.6.3   Scoring the Reading test

The test would be marked manually using an answer sheet as a guide and a score in
terms of percentages will be given for each candidate. The percentages will then be
converted to band scales using the Universiti Teknologi Malaysia's ELPRS conversion
scale.   The test specifications and evaluation procedures are diagramatically illustrated
in Table 2.1A and 2.1B.

2.6.4   Discussion

This test was designed not primarily to assess students from the point of view of testing,
or to give a score whether band scores or numerical scores, though this was carried out.
Principally it was designed to enable the researcher to use the test outcome as a needs

base. It is a means of identifying areas in which the student may have problems and also to gauge the assumed underlying level of the students' overall reading and writing ability. This assumed underlying ability is profiled according to levels (levels 1-7) by converting the scores received to a band level as established by Universiti Teknologi Malaysia's validated English language Proficiency Rating Scales (ELPRS,1989). Such profiles allow specifications to be drawn for the development of task based materials and for teacher training purposes.

Bearing in mind the constraints of constructing and implementing the tests, the selection of texts and the test items had to coincide with what would be feasible for the students to achieve within the time limit. Since the test was to be administered to students of the Engineering Faculty at UPM permission had to be obtained for the second and third year students to take the test.

2.6.5 Piloting the Tests

The reading and writing tests were piloted with 15 Malaysian students studying at Leicester and De Montfort University. They were a mixture of undergraduates and graduate students. Most had previously achieved a band 5 or 5.5 on the IELTS tests. The number is small because there were problems in getting a larger number of students to volunteer their time to take the tests. It was appropriate to pilot the tests with Malaysian students because their background is similar to that of the subjects in the survey. Ideally, it would have been better to pilot the tests in Malaysia, but due to time and logistical constraints this was not possible.

The test were vetted by five TESOL trained native and non-native speakers of English to identify any ambiguities or problems. The 15 students who took the test were also asked to mark out or indicate any problems they had in understanding the rubrics, the stem (questions) double answers and any other problems in the answers, distractors, texts or questions. Feedback received from all the volunteers was reviewed and some changes were made to the test.

Table 2.1A ENGLISH LANGUAGE GENERAL PROFICIENCY TEST OF READING SPECIFICATIONS

INPUT	SECTION I		SECTION I	
Textual/features/text input, size, range	**Part 1** Reading passage - oil spills - (approx. 300 words)		**Part 2** Flow chart	
	Task I	**Task ii**	**Task a**	**Task b**
Discourse - features/complexity of skills.	Inferencing , synthesising, scanning for specific points	Understanding relationships between sentences, identifying contextual clues.	transferring -information from linear to non-linear text. Summarising, synthesising, skimming for main and supporting points	Using contextual clues, analysing inferencing from discourse
Question - type	True/false/not stated questions	short answer referential questions	labelling and filling in a flow chart	multiple-choice item type, vocabulary in context
Remarks				
Number of questions	6	3	9	6

Table 2.1A Reading Test Specifications continued

INPUT	SECTION II		SECTION III		
Textual features/text input size, range	Reading passage -memo report -(approx. 350 words)		**Part one** Reading passage; table of information. - earthquake measurement - some major twentieth century earthquakes - (approx. 300 words)		
	Task a	**Task b**	**Task a**	**Task b**	**Task c**
Discourse - features/ complexity of skills	Skimming for major points; scanning for specific points; paraphrasing, synthesising, Differentiating facts from opinions	Skimming for main and supporting points. Scanning for specific points. Identifying implied information. Analysing Synthesising.	Scanning for specific points	Inferencing, scanning for specific points. Distinguishing stated statements from implied statements	Identifying sequence of events. Predicting, identifying relationship between sentences, distinguishing major points and supporting points; drawing logical inferences.
Question type	Short answer multiple choice quest type	multiple choice question type	short answer filling in the blank type question	true/false, not stated questions	identifying and sequencing events
Remarks					
Number of questions	3	6	5	5	1 (set of 7 events)

Table 2.1A Reading Test specifications continued

INPUT	SECTION III	SECTION IV	
Textual/features test input-size, range	**Part two** Semi- cloze passage (approximately 124 words)	**Additional text** Reading passage -energy conservation -approximately 1000 words **Note** - section to be used for further discrimination purposes and to identify specific problems.	
	Task 1	**Task A**	**Task Bi and Bii**
Discourse features/text input-size, range	Identifying content words and structural words distinguishing relationship within and between sentences. Using contextual clues.	Skimming for main points and supporting points. Synthesising, identifying main ideas, underlying theme.	Analysing information. Scanning for specific points/ideas. Comparing facts, information. Synthesising, identifying - underlying theme/concepts. Structured summary of main points.
Question type	Filling in selected gaps with appropriate content/ structural work	Short answer questions - matching main ideas to relevant paragraphs	Multiple choice type questions
Remarks			
Number of questions	10 (blanks)	8	8

Table 2.1A   Reading Test Specifications continued

INPUT	SECTION IV (CONTINUED)		
Textual features/text input size, range			
	Task (C)	**Task (D)**	
Discourse features/complexity of skills	Using contextual clues to identify author's attitude Identifying and distinguishing statements	Identifying and classifying information identifying major points Identifying underlying theme/concepts.	
Question Type	Short-answer multiple choice type question	Completing a table on classification	
Remarks			
Number of questions	7	3	

*Notes on scoring/evaluation of test

1. Questions will be answered on specially prepared answer sheets.
2. A score will be given in terms of percentages.
3. The percentage received will be pitched against a suitable band (performance band) by using the conversion scale below.

Conversion Scale: (ELPRS, UTM, 1989)

    Level 7 - 100-94
    Level 6 - 93-86
    Level 5 - 85-76
    Level 4 - 75-62
    Level 3 - 61-48
    Level 2 - 47-32
    Level 1 - 31-0

* Further adjustments will be made once test has been marked and analysed.

Table 2.1 B   ENGLISH LANGUAGE GENERAL PROFICIENCY TEST OF WRITING SPECIFICATIONS

TASK 1 (100 words)	TASK 2 (150 words)
Written Task Focus (i) listing and describing a procedure/process of making a mouse-trap from pictures. (ii) Explaining how something works. (iii) Using discourse markers to show steps or stages of process/procedure. (iv) Organising ideas and using short sentences to fully describe the written task.	**Written Task Focus** (i) Organising, interpreting and presenting data. (ii) Presenting and justifying an opinion, or assessment either directly or by implication. (iii) Comparing and contrasting information, opinions or implications. (iv) Evaluating and synthesising facts or data provided.
Remarks (i) Task to be evaluated using impressionistic marking/holistic evaluation and band scales / profiles (ii) Written ability would then be pitched against a suitable band (performance band).	**Remarks** (i) Task to be evaluated using impressionistic marking/holistic evaluation and band scales / profiles (ii) Written ability would then be pitched against a suitable band (performance band).

2.6.6 Problems

The tests were sent back to Malaysia at the end of July 1993 and were first scheduled to take place on the 29th of September 1993. As the turnout was poor, the test was postponed. It was finally administered on the 1st of October 1993 to 241 students. The researcher was informed that the students had taken the test from 7.30 pm to 11.30pm. This is hardly an appropriate time and how it affected the students' performance is unclear.

2.7 Developing the Questionnaires

Three types of questionnaires were designed to elicit various kinds of information from the:-

1   Engineering students

2   Subject specialist (Engineering Lecturers)

3   English Language Instructors

The information obtained would hopefully provide details about students' needs, interests, exposure and background. This information, together with that of the tests, would be used to design a framework to train teachers to develop EAP task-based materials.

2.7.1 Engineering Students Questionnaire 1

Questionnaire 1 was designed to elicit information about the engineering students' English Language needs in the skills of reading and writing. The questions in the questionnaire were designed using guidelines provided by Richterich and Chancerel (1980); Chitravellu (1980); Richterich (1983); Hutchinson and Waters (1987); Nunan (1988); Brindley (1989); Berwick (1989); Swales (1989). The questionnaire was the Likert scale type with both open and closed questions included and consisted of 34 questions (see appendix A 2.2).

2.7.2 The Engineering Lecturers (Subject Specialist) Questionnaire 2

The same guidelines used in questionnaire 1 were used to formulate the Engineering lecturers questionnaire. A number of sections in this questionnaire were similar to that of the Engineering students to enable the researcher to identify similar views. The questionnaire consisted of 20 questions (see appendix A 2.3) and contained both open and closed questions.

2.7.3 The English Language Instructors Questionnaire 3

The English Language instructors questionnaire consisted of mainly 18 open- ended and closed questions (see appendix A 2.4). Open ended questions were considered appropriate as they would allow the instructors to provide more information about materials design. It would also allow the researcher to identify comments that can be linked to the design of the framework.

2.7.4 Piloting the Questionnaires

The questionnaires were piloted on a small scale. The student's questionnaire was tried out for flaws and ambiguities on the same 15 students who did the pilot test. A few minor changes were made.

The English Language instructor's questionnaire were vetted by three native post-graduate students and two academic staff, and the engineering lecturer's questionnaire were vetted by 2 Malaysian PhD engineering students. Minor changes were made based on feedback received.

2.7.5 Implementation

The questionnaires were mailed back to be administered to students and lecturers at UPM in mid June 1993 but it was not until early January 1994 that the researcher received all the instruments back.

2.8 Method of Evaluation and Analysis

a) The Questionnaires

All the responses from the questionnaires were analysed using descriptive statistics. Frequency counts were considered to be the most appropriate method for tabulating the questionnaire responses.

b) The Test of Reading

The reading test was not strictly multiple choice type. Therefore, there was a need to design a strategy for analysing a mixed response type test. The researcher marked all the 241 scripts manually using a marking scheme. A coding system was devised to enable the data to be entered into the computer for frequency counts and to check for internal consistency of the test items.

The responses were coded for right and wrong answers and were later statistically computed using the Statistical Package for Social Sciences for Windows (SPSS)

Version 6.0. To estimate which profile a student might fit into, the Universiti Teknologi Malaysia's ELPRS (1989) conversion scale was used to compute the probable level. This enabled the researcher to establish a profile for developing a framework for materials design at this exploratory stage. This was not a test as in testing for achievement but was data to help make decisions about the kind of profile needed to help design and develop a materials design framework. It was therefore deemed necessary to determine the reliability of the test items used for this purpose.

2.8.1 Reliability of the Reading Test

Reliability can be defined as the stability of test scores. A test cannot measure anything well unless it measures consistently (Harris, 1969:14; Weir, 1990:31).

In the case of the test which was used for the purpose of a quick way of identifying possible problem areas in reading for EAP purposes, a Test - Retest Method or Parallel Test Method to check or estimate reliability was not possible. The Criterion Reference reliability measure was not used as it would have constituted a research study by itself. Instead, the Internal Consistency Method of Norm reference testing was used. According to Hatch and Lazaraton (1991: 535):

> *Internal Consistency Methods are used when it is not*
> *convenient to collect data twice or to use parallel tests.*

There are three classic methods for calculating reliability from the internal consistency of a test (Hatch and Lazaraton , 1991:535). They are the split-half method, Kuder - Richardson 20, and Kuder - Richardson 21. In estimating the internal consistency of the tests used in this survey the split -half method was considered to be appropriate as the number of test items was large enough. Although the internal consistency measures are considered to be less valued measures than the test -retest or the parallel test methods, it can nevertheless be use to check on the reliability estimates of the test items (Hatch & Lazaraton, 1991: 538 - 539). To enhance the estimate of internal consistency of the test, especially as specifications of test items were spelt out to identify students' assumed underlying ability (predicted ability), the Cronbach Alpha Coefficient test of reliability was also used.

2.8.2 Scoring the Writing Test

The 241 writing scripts consisting of Task 1 and 2 of the Written Proficiency Test were marked by five raters, all of whom were experienced English language teachers. Like

the test of reading, it had to be scored quickly.

A seven band rating scale was devised by adapting several different band scales (see chapter 4) and used as a standard marking profile (see Appendix A 2.6). This profile would allow for a quick overall impressionistic marking with guidance.

In order to maintain consistency in scoring, the raters attended a three hour briefing and practise session to help moderate the scoring and to clarify any disagreements or problems. All 241 scripts were marked over a period of four weeks. The first two weeks were used to rate task 1 and the second two weeks for task 2.

The final scores were tabulated and tallied on the SPSS version 6.0 and frequency counts were used determine the number of candidates falling into the various seven band scales. This would then indicate the aspects to be included in the framework for materials design.

An interrater reliability test was carried out to determine the confidence level of the band scale used by the five raters. Such measures would help to establish confidence in the ratings of such subjective scoring of writing scripts as well as the band scale used [(Hatch & Lazaraton, 1991: 533) see section 2.10].

2.9 Analysis and Discussion of Findings of the Survey

The analysis of all the three questionnaires are presented and discussed first. It is then followed by the test analysis.

2.9.1   Engineering Student's: Questionnaire Set 1

Out of the 241 questionnaires distributed only 176 questionnaires were returned. Of these 120 were males and 56 were females. One hundred and ten students were in their second year and sixty - six were in their third year. One hundred and sixteen were studying for a degree and sixty were studying for a Diploma.

The Malay students were the largest group followed by the Chinese, Indians and other indigenous groups from East Malaysia and were enrolled in five different degree/diploma programmes within the School of Engineering as shown below.

Table 2 .2   Programme of Study

PROGRAMME	NUMBER
1. Mechanical Systems Engineering	28
2. Electronic and Computer Engineering	38
3. Civil Engineering	15
4. Agriculture Engineering	35
5. Diploma Agriculture Engineering	60

On average the students have been studying English for more than ten years.

Questions 8 and 9   were designed to elicit information with regard to the grades obtained in the English language by the students in the two national examinations. The first examination is taken at lower secondary level (Form 3) known as the SRP examination (Lower Certificate of Education) and the second is taken at upper secondary level (Form 5) known as the SPM (Malaysian Certificate of Education) equivalent to GCSE. A comparison of the students English grades revealed some interesting results about their level of proficiency.

Table 2.3 Comparison of SRP and SPM scores

GRADE	SRP (Number of student)	SPM (Number of students)
A1	50	21
A2	38	20
C3	40	39
C4	13	11
C5	14	16
C6	5	29
P7	13	25
P8	3	14
F9	-	1

At the lower secondary level a large number of students obtained 'A' grades but at the upper secondary level the number dropped. Most of the students obtained grades in the B- (C4 - C5) C and D (66, P7, P8) range. A glance at the secondary school syllabus indicates that students are required to demonstrate understanding of the different rhetorical modes in writing and reading and more demands are being made on them at the upper secondary level. The English language syllabus is more complex than at the lower secondary level. One can therefore conclude that students' level of proficiency was not adequate enough to cope with these more complex demands. This could be significant for the background of this study, since the demands for English at university are clearly even more complex. Since only 176 questionnaires were returned, these results would not necessarily be a true representation of the entire 241 sample population.

Interestingly, question 10 revealed that *none* of the respondents (who all had to sit for the UPM English Language Placement Test) *were exempted from any of the English Language courses at UPM.* They were all taking English Language courses and only the level of their initial course differed. This suggests that the students had not fared

very well on the whole in the UPM English Language Placement Test as no exemption was recorded and that their level of proficiency was still low.

Responses to question 11 showed that the respondents come from all over Malaysia and neighbouring countries like Singapore and Indonesia. The sample population is coincidentally highly representative of the general student population of the country.

Table 2.4 Distribution of origins of subjects

	PLACE	NUMBER
1	Wilayah Persekutuan (Kuala Lumpur)	12
2	Selangor	20
3	Perak	26
4	Penang	14
5	Kedah	13
6	Perlis	4
7	Kelantan	14
8	Trengganu	7
9	Pahang	14
10	Negeri Sembilan	7
11	Melaka	5
12	Johor	19
13	Sarawak	11
14	Sabah	7
15	Singapore	1
16	Indonesia	2

Responses to questions 12 -33 are tabulated in table 2.5

Table 2. 5 Analysis of Engineering Students' Responses - Q.12 - 33

Question	Always	Very often	Sometimes	Seldom	Never
Q.12. How often do you speak English at home ?	3	7	43	51	72
	10	(5.7%)	(24%)	123	(70%)
Q.13. How often do you speak English at the University?	3	19	73	67	14
	22	(12.5%)	(41.5%)	81	(46%)
Q.14. How often are your lectures given in English?	5	107	62	1	1
	112	(64%)	(35.2%)	2	(1.13%)
Q.15. How often do your lecturers use both English and Malay?	91	83	1	1	-
	174	(99%)	-	-	
	All of it	Most of it	Some of it	Very little	Don't understand at all
Q.16. If a lecture is in English, how much of it do you understand?	8	25	99	44	-
	33	(19%)	(56.2%)	(25%)	
	Always	Very often	Sometimes	Seldom	Never
Q.17. How often do you have to read any reading materials in English?	20	54	75	26	1
	74	(42%)	(43%)	27	(48%)

Table 2. 5 continued

	Always	Very often	Sometimes	Seldom	Never
Q.18. How often do you read the following texts in English?					
a) Academic textbooks	52	57	40	24	3
	109	(62%)	(23%)	27	(15.3%)
b) Journals and Journal articles	8	14	49	67	38
	22	(12.5%)	(28%)	105	(60%)
c) Magazines (related to your discipline)	11	44	84	35	-
	55	(31.3%)	(48%)	(20%)	
d) Newspaper Articles	37	51	69	19	-
	88	(50%)	(39%)	(11%)	
e) Lecture notes, handouts (photocopied or otherwise)	19	57	68	25	-
	76	(43%)	(39%)	(14.2%)	
f) Thesis or Research Papers	-	11	42	-	61
		(6.25%)	(24%)		(35%)
g) Past years examination papers	-	35	66	44	23
		(20%)	(37.5%)	67	(38.1%)
h) Manuals - laboratory, computer, workshop manuals etc.	20	28	57	41	30
	48	(27.3%)	(32.3%)	71	(40.3%)

	All of it	Most of it	Some of it	Very little	Don't understand at all
Q.19. How much of what you read in English do you understand?	5	44	103	24	-
	49	(28%)	(59%)	(14%)	

	Always	Very often	Sometimes	Seldom	Never
Q.20. How often do you find it difficult to read books, magazines or any other reading material in English?	68	72	14	19	3
	140	(80%)	(8%)	22	(12.5 %)
Q. 21. How often do you have to write in English at the University ?	1	37	137	1	
	38	(22%)	(78%)		(1%)
Q.22. How often do you find in difficult to write in English?	31	81	55	7	2
	112	(64%)	(31.2%)	9	(5.1%)

	Yes	No			
Q.23. Have you done any practical training?	13 (7.3%)	163 (93 %)			

	Always	Very often	Sometimes	Seldom	Never
Q.24. How often did you have to do the following in English during your practical training?					
a) Reading	5	8	-	-	-
	13	(100%)	-	-	
b) Writing	3	5	5		
	8	(61.5%)	(38.5%)		-

Table 2.5 continued

	Very confi-dent	Confident	fairly confident	Not so confident most of the time	Not confident at all
Q.25. How confident are you of using English (especially reading & writing skills) outside your lecture rooms (i.e. within the university)?	4	17	39	97	19
	21	(12%)	(22%)	116	(66%)
	All of them	Most of them	Some of them	Very little	Don't like any of them
Q.26. How much do/did you like the textbooks or materials your English Language lecturers are/were using ?	8	-	63	65	40
	(5%)		(36%)	105	(60%)
	Always	Very often	Sometimes	Seldom	Never
Q.27. Did you find the materials / texts in your English language lectures interesting and motivating?	3	1	86	69	5
	4	(2.3%)	(49%)	74%	(42%)
	Strongly Agree	Agree	Undecided	Disagree	Strongly Dis-agree
Q.28. How far do you agree that the English Language Course at UPM need better materials or texts?	89	58	28	1	-
	147	(84%)	(16%)		
Q.29. In your opinion, do you think that since studying English at UPM your English has improved?	13	6	69	50	38
	19	(11%)	(39.2%)	88	(50%)
Q.30. How far do you agree that both the reading & writing skills are important skills to master?	130	38	8	-	-
	168	(95.5%)	(4.5%)	-	
	Excellent	Good	Fair	Poor	Very Poor
Q.31. What do you think of your own English language ability for each of the following skills? a) Ability to read	4	32	62	71	-
	36	(20.5%)	(35.2%)	(40.3%)	
b) Ability to write	1	11	49	73	42
	12	(7%)	(28%)	115	(65.4%)

Table 2.5 continued

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Q.32. Do you think that it is necessary to have a good command of the English Language as students of the Faculty of Engineering?	98	54	23	1	-
	152	((86.4%)	(13.1%)		
	Very Confident	Confident	Fairly Confident	Not So Confident	Not confident at all
Q.33. How confident do you think you will be in using the English language (especially reading & writing skills) when you graduate ?	10	29	41	62	34
	39	(22.2%)	(23.3%)	96	(55%)

It can be observed from question 12 and 13 that a large proportion of the students use the English Language minimally. This influences how they perceived their need to acquire the use of the language.

According to the students their lectures are often given in English and that frequent code switching by lecturers often occurred (see question 14 &15). At the same time it can be deduced from question 16 that more than 60 per cent of the students had problems understanding lectures given in English. Given the frequent use of English by lecturers (Q. 14 & 15) such problems could be serious and could lead to problems in understanding reading materials. This might also explain the constant code switching.

Question 17 shows that the students do need to do a substantial amount of reading in English. However, question 18 revealed some very interesting information about the type and frequency of reading they did. The students read academic textbooks, lecture notes, newspaper articles and magazines related to their discipline very frequently. But they do not read journal articles and hardly ever read manuals written in English. This is a cause for concern.

Questions 19 and 20 indicated that the majority of the students (> 60%) clearly have some problems understanding reading materials in English. This problem is acknowledged by the subject specialist (section 2.9.2) and the language instructors (section 2.9.3). A large number of students clearly have problems reading English texts (see test analysis section 2.10.2.1). The findings from responses in Q.18, 19 and 20 suggests that there may be a need to consider introducing genre and its application to

materials design. This would help students to understand different text types and perhaps make reading complex texts an easier task.

It is observed from questions 21 and 22 that students do not have to write in English frequently and more than 64 percent have problems with writing. This needs to be interpreted in the light of the fact that they only sometimes have to write in English and are given a choice because written work in English is optional (see section 2.9.2). If they often had to write in English it would depend on who their lecturers are.

Questions 23 and 24 were intended to enable the researcher to gather information about the students' reading and writing requirements in English while out on practical training. At the time of the study only thirteen students had done some practical training and the rest were going only in the following semester. The findings show that the 13 students had to read and write frequently in English. This confirms the views expressed by prospective employers in industry (see chapter 1).

Question 25 revealed that more than sixty percent of the students had little confidence in reading and writing in English. In addition it is observed from Questions 26 and 27 that most students did not like most of the materials used in their English language classes. The students did not find most of the materials interesting or motivating enough. The indication is that there is a need to consider the type of reading materials used. It is however, an open question, how often materials can be motivating if they are to be used for learning language through content materials. Interests can never always be met. Use of subject related materials in university language classes needs to be seriously considered.

Question 28 showed most students expressing a need for better materials. As a student said:

> everyday I need read my subject book, tapi saya tak faham (but I
> don't understand). Pergi class Bahasa Inggeris masih tak faham.(I go
> for English classes but I still cannot understand). If English teacher
> use kuliah(lecture) book mungkin saya boleh belajar (may be then I
> will learn). I don't like go my English class.

Does such a remark indicate that language instructors should begin to look into the use of content area materials as used in University Malaya for example? This study proposes the use of content area materials for training English teachers to prepare EAP based materials.

It is observed from question 29 and 30 that the majority of the students (>70%) felt that their English had not improved very much since studying at the university. Thus indicating that the students perceived a serious problem with their levels of English attainment. Indirectly this hampers their academic studies. At the same time the majority of the students agreed that both the reading and writing skills were skills that they needed to master. This is probably because they are aware that they have to read in English and that at some point they will have to write in English as well.

Responses to question 31 had most students (>50%) indicating that they were not very proficient at reading. On the whole, most of the students (>60%) perceived themselves as being poor at writing in English than in reading. Many students have low self-perceptions of their ability in English and this therefore undermines their own ability to learn.

Question 32 shows that on the whole the students (> 80%) agreed that they needed to have a good command of the English language in order to study at the university. Only a few were undecided. The students do see a need to have a good command of the language. As one student commented:

> *All our engineering subject books is in English. When we go*
> *for practical, the firm make us read stuff that in English. The*
> *manual also in English. So all the time we must reading in*
> *English. My lecturer always say that if we cannot understand*
> *English than all the building we build will fall down.*

In response to question 33 more than fifty- five percent of the students maintained that they were not very confident of using the English language when they graduated. Less than thirty percent felt that they were confident enough. Thus, the majority of the students are not confident of using the language once they go out and work. This clearly indicates that there is a need to develop their skills not only through general reading materials but also through content area materials.

2.9.1.1 Summary findings: Questionnaire 1

The findings from the student survey strongly suggest that there is a need to develop students reading and writing skills within the academic context. The indication is that there is a need to use their subject material. Students suggest that perhaps better materials are needed. They are of the opinion that the current materials in use for their English language classes need to be revised. They liked reading a variety of texts but preferred technical and science oriented texts.

Students perceived themselves to be weak at and lack the confidence in reading and writing in English, in spite of the fact that they have been learning English for more than 10 years. Moreover most of them rarely ever speak English at home or even within the university environment. They often have to read academic texts and are required to read and make references for certain assignments and project work although they do not often have to write in English. The indication is that as the students have to deal with more and more complex texts their problems in reading and writing begin to escalate. At the same time their lecturers use both English and Malay to deliver their lectures. Most students indicated that they had problems understanding lectures in English even though they are attending English language classes at the university. They are required to read and write in English during their industrial training. The overall indication is that there is a need to look at not only their language problems but also their learning problems. Therefore, it might be necessary to look into the use of content area materials and the development of materials for academic learning purposes, and to profile the learners according to their probable ability allowing them to progress at their own pace with materials of different levels.

2.9.2 Subject Specialist :Questionnaire 2

Only 22 Engineering lecturers returned the questionnaires out of a total of 30. The findings are presented in tabular form and discussed below. Where necessary comments by the lecturers are presented as summaries.

The respondents were from five different departments in the Faculty of Engineering as shown in table 2.6.

Table 2.6 Distribution of staff according to departments

Department	Number (N=22)
1. Electronics and Computer	6
2. Civil and Environmental	4
3. Mechanical Systems	4
4. Power and Machinery	4
5. Field Engineering	4

On average the lecturers had approximately 7 years of teaching experience and teach a combination of years and programmes. This would mean that the lecturers should know their students language ability quite well.

Table 2. 7 Analysis of Subject Specialists' Responses (Q. 4, 5, 7, 8, 10, 11, 12, 15, 16, 18, and 19)

Questions	Always	Very often	Some-times	Seldom	Never	Optional
Q. 4. How often do you teach in English?	2	3	15	2	1	
	5	(23%)	(68.2%)	3	(14%)	
Q.5. How often do you teach in Bahasa Malaysia(B.M/Malay)	2	13	6	1	-	
	15	(68.2%)	(27.3%)			
	Excellent	**Good**	**Fair**	**Poor**	**Very Poor**	
Q. 7. Generally speaking, what do you think of your students' English language ability?	-	-	9	13	-	
			(41%)	(59%)		
	Very Well	**Quite Well**	**Fairly Well**	**Not So Well**	**Don't Need to Read Well at All**	
Q.8. How well do you expect your students to read the following in English: a) Academic Textbooks	2	10	9	1	-	
	12	(54.5%)	(41%)	(4.5 %)		
b) Manuals (laboratory, computer or workshop)	2	10	7	3	-	
	12	(54.5%)	(32%)	(14%)		
c) Journals and Journal Articles	4	10	5	3	-	
	14	(64%)	(23%)	(14%)		
d) Related course magazines, newspaper articles	-	13	8	1	-	
		(59.1%)	(36.4%)	(4.5%)		
e) Printed or photocopied lecture notes / handouts	1	13	8	-	-	
	14	(63.6%)	(36.4%)	-		
	Always	**Very Often**	**Some-times**	**Seldom**	**Never**	**Optional**
Q.10. How often do your students have to do the following in English : a) Writing Project Papers	-	1	15	2	3	1
		(4.5%)	(68.1%)	5	(23%)	(4.5%)
b) Writing Reports	-	5	10	-	2	5
		(22.7%)	(45.5%)		(9.1%)	(22.7%)
c) Writing Examination Answers	-	1	6	1	5	9
		(4.5%)	(27.3%)	6	(27.3%)	(41%)
d) Making Notes	-	7	9	1	5	-
		(31.8%)	(41%)	6	(27.3%)	-
e) Taking Notes	-	6	9	1	3	3
		(27.3%)	(41%)	4	(18.1%)	(13.1%)
f) Thesis / Final Project Paper	-	3	7	-	2	10
		(13.1%)	(32%)		(9.0%)	(45.5%)

Table 2.7 continued

	Strongly Agree	Agree	Undeci-ded	Disagree	Strongly disagree	
Q. 11. How far do you agree that the reading and writing skills in English are important skills for your students to acquire?	14	8	-	-	-	
	22	(100%)		-		
Q.12. How far would you agree that 50% or more of your students have problems reading (comprehending & understanding information) and writing in English ?	11	7	3	1	-	
	18	(82%)	(14%)			
	Very Confident	Confident	Fairly Confident	Not So Confident	Not Confident At All	
Q. 15. On the whole, how confident do you think your students are in reading and writing in English?	-	-	3	19	-	
	-		(13.6%)	(86.4%)		
	Strongly Agree	Agree	Undeci-ded	Disagree	Strongly Disagree	
Q.16. How far would you agree that the UPM English Language Instructors teaching your students, should be specifically trained to handle materials related to your discipline?	8	11	3	-	-	
	19	(86.4%)	(13.6%)		-	
Q.18. How far would you agree that your students' ability to do well during the course of their studies is dependent on their English Language ability?	4	9	6	2	1	
	13	(59%)	(27.3%)	3	(13.6%)	
Q. 19. How far would you agree that as students of engineering, your students need to be competent at reading and writing in English for future employment purposes?	15	4	3	-	-	
	19	(86.4%)	(13.6%)	-		

It is clear from question 4 and 5 that most of the lecturers (> 68%) sometimes teach in English and that they very often teach in Malay. They used English to reinforce and clarify points or to make explanations clearer as it is difficult to find equivalent expressions in Malay. Malay is used because all the students understand Malay. One lecturer provided reasons that summarised the common perceptions:

...... I am teaching both in Malay and English. I use all technical terms in English.
My reasons are: 1) all or most of the references - text/materials - 90% are in English.
2) it is difficult to find technical words in Malay. 3) It makes my job easier. 4) No
problems for students to pick up the technical words. 5) They (the students) need to

know the English terms for engineering subject in order to be able to cope when working in the future.

Those who preferred to use English did so because *"It takes a lot of effort in searching for the right terms to use and to express oneself."* The general view is that lecturers prefer to use both languages with some feeling more comfortable with the English language. Thus creating problems for the students.

Q.6   When and why do you use English and when and why do you use Bahasa Malaysia (BM/Malay)?

a)   English

Table 2.8A When English is used to deliver lectures

When and Why
Main lecture
During lectures
When certain points, words, etc. cannot be explained clearly in BM
When it is impossible to get a good translation from English to Malay also there are no similar or equivalent words / phrases in BM.
Non-Malay students ask questions
Describing technical terms, expressing certain points which are easier to do so in English
When it is necessary to clarify points, etc.
When explaining important aspects of engineering, particularly use of terminology
When the students attending the lectures understand English and prefer lectures in English

b)   Bahasa Malaysia

Table 2.8 B When lectures are delivered in Malay

When and Why
Introduction and conclusion of the lecture.
Most of the time during main lectures.
Main lectures - with some groups only - particularly diploma level.
Describing, operating principles.
It is the, national policy and the university requirement and also majority of the students can only understand lectures in Malay.
It helps those who are very weak in English to follow lectures better.
Only when the lecturer is well prepared in Malay and if students for the lecture are those who do not understand English.

Question 6 shows that the lectures were conducted in English or Malay based on the students' ability or when it was considered necessary due to the content of the lecture.

Responses to question 7 (table 2.7) indicate that the lecturers perceived their students language ability to be poor. This is clearly reflected in their preferences for using the English or Malay language and the reasons behind it. On the whole, it can be concluded from question 8 that the lecturers wanted, or rather required their students to read reading materials in English well. The following are some of the reasons provided by the lecturers for their preferences:

- *"The main reason why I expect them to read well is because I expect them to do a lot of further readings to enrich their studies and not just depend on a few hours of lectures and lecture notes/handouts only."*

- *"I expect them to be able to read well and understand what they read as well. This is because it can be very disastrous in some instances (e.g. in labs/ workshops) or even if having to fix something, etc. (electronic circuits, etc., machinery parts, etc.)"*

- *"Basically, I expect my students to read fairly well but where journals are concerned, they need to be able to read quite well as journals are more difficult to understand."*

Q.9 - How often do you give your students: (a) a reading assignment in English;   (b) written assignments in English?

Table 2.9A   a) Reading Assignment.   b) Written Assignments

Number of Times	Number (N=22)	Number of Times	Number (N=22)
Once a week	10	Once a week	7
Twice a week	1	Twice a week	-
3 times a week	3	3 times a week	-
More than 4 times a week	1	More than 4 times a week	3
None at all	1	None at all	5
Others	6	Others	7

The lecturers who marked *others* either gave readings once a month or got their students to read 3-4 articles per semester. Most of the lecturers (10) indicated that they provided a reading assignment once a week. Various reasons were given for the frequency of such reading assignments:

- *"Do not want to over-burden the students."*

- *"the students need to know more than what is provided during lectures. They cannot be engineers if they are not doing enough reading. Besides, the references are all in English and they can also improve their English."*

- *"I feel that a reading assignment once a month is adequate enough as, if I give them too many, they are not going to read them because most of them have poor command of the language."*

There is a clear indication that lecturers wanted their students to do a fair amount of reading in English for various reasons. But what is clear is that they perceived a real need for their students to understand what they read in order to do well in their courses.

It can be deduced that the lecturers also perceived a need for their students to write well. They provided written assignments in English to not only provide the students with additional practise but to indirectly force them to see the reality of the situation. This can be gleaned from the following comments:

- *" whether the students were following lectures and were able to solve or deal with problems. At the same time this would give them some practice in writing within the engineering context."*

- *"if we give them a major writing assignment once a month they are forced to read, as relying on their lecture notes alone won't be enough to even get them a 'C' grade".*

Some provided no writing assignments at all because:

- *"Most of the students cannot write well in English and there would be too many grammatical mistakes."*

Question 10 (see table 2.7) clearly indicates that students need not write in English often and only did so sometimes. Reports are usually written in English. The following reasons given by the lecturers as to when or how often students did written work in English give a clear picture about the situation:

- *"Basically, students are given a choice as to whether they want to write in English or Malay. We are not allowed to force them to write in English."*

- *"Except for reports (essays) students cannot be coerced into writing in English only, so I have to give them a choice."*

- *"It's optional - to write in English or Malay. Those who choose to write in English are those students who are good and feel more comfortable with English - about 10% of engineering students."*

- *"Students are free to decide whether to write in English or Malay. Most write in Malay but I do get written work in English."*

Clearly although students are encouraged to write in English whether they do so or not would depend on their confidence level. What is interesting is that they have to write reports in English. This thus shows that the students still have to write in English. On the whole it can be observed that written work in English is not compulsory and largely dependent on lecturers' preferences.

Responses to question 11 clearly suggest that the lecturers are in agreement that the reading and writing skills in English are crucial skills to acquire. Some of their reasons are:

- *"Most of the texts and references are in English, so there is no doubt about the importance of comprehending what is read ,because most of the important information relating to engineering is in English."*

- *"They need it, especially for reading and expanding their knowledge and to keep abreast with current work, etc. It is important particularly when they go out to work, they need to write reports and also for writing up projects/theses."*

Eighty -two percent of the lecturers agreed that more than fifty percent of their students were weak at reading and writing: For example:

- *"It shows when I ask them to do certain reading or writing. They produce poor work."*

- *"Their reluctance to read references in English tells that they are not competent to tackle English texts and the fact that many chose to write their work in Malay also shows their lack of confidence. When I do get them to write in English - the work that is turned in is terrible."*

Q.13 What percentage of the approximately 250 students in years 2 and 3 are considered to be very good at reading and writing in English?

Table 2.9B   Percentage of students good at reading & writing

Percentage	Number (N=22)
Less than 30%	5
Less than 10%	4
About 10%	9
About 25%	4

On the whole, less than 30% of the students are considered to be very competent at reading and writing in English.

Q.14 Please outline or briefly describe your students' specific problems in:
a)   Writing in English.

1. Poor ability in expressing ideas.	2. Unable to develop a piece of writing
3. Unable to discuss, elaborate and clarify points	4. Poor grammar, vocabulary, spelling & punctuation

b)   Reading in English.

1. Cannot understand what they read without support	2. Can only handle text written in simple English
3. Struggle to understand complex structures	4. Lack interest in reading in English to gain knowledge
5. Do not seem to be able to understand very basic, simple words	

As a lecturer commented:
- *"Comprehension is the biggest problem. Many students simply cannot understand what they read without support. In many instances the reading*

problem is not too apparent. It only surfaces when the students have to answer questions and fail to address the questions. From my own experiences the students appear to be able to handle text written in simple basic English but not advanced materials like complex texts and journal articles. ..... don't seem to even understand very basic, simple words. Getting them to understand even a short paragraph of an engineering article or chapter is an effort!! Very often they struggle to understand complex structures."

Responses to question 14 provided clear indications of lecturers' perception of problem areas in English among the engineering students: that the students are weak in all aspects of reading and writing. Reading comprehension appears to be the more crucial and pressing problem. Question 15 indicates that on the whole the lecturers perceived their students as not being so confident in reading and writing in English. This is consistent with the views expressed in Q.14.

With regard to question 16, most of the lecturers agreed that the English language instructors should be specifically trained to teach their students English within the engineering context. This reaffirms that students need content area materials and that there is a need to train teachers to develop such materials within the EAP context. For example:

- *"This is important because the style and way each discipline's texts are written makes use of certain phrases, sentences and jargon which a pure English teacher may not understand. Often in our field, texts are written differently where recommendations are offered first, etc....."*

- *"The needs and usage are certainly different from reading for pleasure or for general information. It is more complex and most of the time not written in straightforward, plain English. Perhaps not to understand engineering, but the language of engineering."*

- *"Need to study engineering texts and writings to be able to produce teaching materials that would guide the students with the engineering content, and therefore can train the students to convey correct/right meanings".*

Q.17 What suggestions would you propose to an English language instructor to help your students further develop their English language skills?

Most of the lecturers made several similar suggestions about what aspects to cover in helping their students to understand the language.

- *"Need to understand how English is used in the profession.. Develop better reading skills of analysing, evaluating, criticising, etc. and better writing skills according to engineering/science style. I also feel that language instructors need to put in more effort toward training the students to have better reading skills."*

- *"Need to develop in the students an understanding of how to write and express thoughts and ideas clearly. Provide the students with plenty of practice in how to extract important points from text and summarising techniques of reading materials. Use engineering/science subject matter and perhaps use some of our own lecture notes, etc. Work with engineering lecturers to sharpen both academic ability and language skills like at UCLA in US."*

In response to question 18, more than 50 percent of the lecturers felt that their students ability to do well in their studies depended on their English language ability. A few were not certain because no previous study has been carried out. Most of the lecturers (>80%) agreed that their students needed to be competent in reading and writing in English for employment purposes. The reasons provided confirms the findings by Goh and Chan (1993 Chapter 1, section 1.3).

- *"Main employment prospects are almost totally from private sector, which conducts most of its business in English."*

- *"They need to keep in touch with new knowledge and be able to link it to old information for design work, planning and consultancy. There will be a need to write technical reports, proposals, etc. and to communicate in writing in English within and outside the country."*

Q.20   Other Comments.

The following comments by the lecturers provide a useful insight in planning a materials designs framework for teacher training. They provide very clear specifications that need to be considered for language development programmes.

- *"I feel that most students do not have a good English language foundation before they enter the university for further studies. Therefore they need a different kind of approach to cope with the language at tertiary level."*

- *"Students really need immediate intensive language learning skills for reading and writing to cope with university academic work. The problem is that they come to the university with a very weak foundation in English. At the same time I do not think that the current language support programme at UPM is much help - sorry!"*

- *"Students have not been trained and guided properly to read and write in English from the beginning. Don't blame them; blame all those so-called English teachers who are not well equipped to impart English language skills to students. They need proper training themselves. Give them a complex text and see if they can read and understand it!!"*

- *"Need to produce materials to train students to problem-solve in English, sharpen their analytical skills in English, etc."*

2.9.2.1 Summary of findings of Questionnaire 2

The findings of this questionnaire indicate that the subject specialists had a good knowledge of the students problems based on their teaching experience. They indicated

that they used both English and Malay to deliver lectures. Malay was used most of the time in accordance with the national language policy of the country and because most of the students understand Malay better than English. English was used only when they had to clarify points or when there are no equivalent expressions in Malay.

Most of the subject lecturers perceived their students as being weak at reading and writing in English. Generally they indicated that they expected their students to read academic texts, journals and other related materials very well. This is because they quite frequently gave their students reading assignments which are in English. They are aware that their students have a great deal of difficulty in reading and writing in English and that they do not read because they cannot understand what they read. They do not give many written assignments in English because they follow the policy which does not allow them to make students write in English except for reports. On the whole they feel that their students have no confidence in English.

The subject lecturers believe that the language instructors needed to understand their subject area and develop materials using their content. It is also suggested that language instructors should work with them in developing materials which included higher order thinking skills.

The analysis of questionnaire 2 has provided very useful information which can be used to make informed decisions for the development of a training module for EAP materials design. It also supports the need for training in specialised EAP materials writing in order to help students to learn through the medium of content materials.

2.9.3 English Language Instructors' Questionnaire 3

Only 16 English Language Instructors participated in this survey. They were 7 full time English language instructors, 3 tutors and 6 part-timers.

On average the instructors had more than 3 years teaching experience and this would suggest that their views are based on experience. Most had a first degree which ranges from a B. Ed. TESL degree to a degree in economics. Six of the language instructors are college trained teachers with a Malaysian Teaching Certificate; they are part-timers,

presently completing a degree. Others obtained their Bachelor's degree mainly from local universities and one from the US. In addition, four of the full time instructors had completed a further Diploma in TESL in New Zealand, RELC, Singapore and locally. Three of the full-time language instructors had an MA/MSc in Applied Linguistics TESOL or MA in English. It can thus be deduced that the English language instructors are, on paper, highly qualified and have varied training experiences.

Q.5 What aspects of the English language do you teach at UPM?

Table 2.10 Aspects of English courses taught

Subjects	Number (N-16)
Reading skills	4
English Language Proficiency	4
Writing Skills	4
Report Writing	1
Business Writing	2
Reading Comprehension for Science Matriculation	1

It can be seen that most of the language instructors are already involved in teaching the basic skills.

Q.6 How much training did you have in preparing materials for EAP/ESP students?

All the instructors indicated that they had not received any training in EAP/ESP materials design. However, some of the instructors gave a brief idea of the amount of training they had received in materials preparation:

- *"No training in EAP/ESP both at college and university level........ At the degree level there was very little practical training. It was basically theoretical. I have no knowledge of EAP/ESP."*

- *"Materials preparation was only a part of teaching methodology course work - .... So generally very little training. There was no practical training."*

- *"EAP was not one of the components in my one year inservice course in TESL."*

Their comments are further reinforced through question 7 below.

Q.7 What type (sort) of training did you get in materials design and development?

The instructors training was basically in EGP. Many said that this training was based on theory with few opportunities to practise developing materials. For those trained in

Malaysia, any training with regard to materials is explicitly linked to the Malaysian school curriculum. This is reflected in the instructors' comments:

- *"Some training in selecting - but basically only theories. No practice in actually selecting. A little practice in adaptation (for school syllabus) but not developing materials."*

- *"Mostly training in materials selection and adaptation from newspapers, magazines, etc. We had to interpret the KBSM syllabus (form 4, secondary school syllabus) and adapt the materials to suit the syllabus as a class project."*

- *".........we did not have much training in developing materials."*

- *"... no formal training. What I picked up was through "on-the-job. Self-taught. No formal training."*

- *".......I wouldn't call it training. It was a self-exploratory kind of 'training' with comments and suggestions for every material written. There was no clear model to follow, so it was always through trial and error."*

- *"...... more focus on theory and adaptation than developing - and all geared towards the KBSM syllabus."*

Table 2.11 Analysis of questions 8, 10, 11, 16 and 17

Questions	Always	Very Often	Sometimes	Seldom	Never
Q. 8. How often do you develop or design your own materials?	-	2	5	5	4
	Very Confident	Confident	Fairly Confident	Not So Confident	Not Confident At All
Q. 10. How confident are you in developing ESP/EAP reading & writing materials?	-	1	3	8	4
	Yes	No	Yes/ No		
Q. 11. Do you prefer commercially produced text / materials for your teaching purposes	11	1	4		
	60%	70%	75%	80%	Uncertain
Q.16. What percentage of your students do you consider as having major problems in reading academic texts and in writing essays / project work in English?	3	2	3	3	5
	Yes	No			
Q. 17. On the whole, do you think that language instructors need on-going training in materials development?	12	4			

In response to question 8 (table 2.11), it can be deduced that the instructors hardly ever develop their own materials. Below are some reasons for developing or not developing their own materials:-

Negative statements:

- *"Being a part-timer, no time to develop materials. So I use the materials provided as they 'appear' to be applicable - so there is no need to develop my own materials."*

- *"I don't develop any materials. It is too time-consuming. I prefer to use the handbook/text book which is often provided."*

- *"I don't like developing materials. It is too difficult. I prefer to use professionally designed text books." "I always used ready made materials or text books. It is difficult to design own materials due to lack of experience."*

- *"I don't design my own materials because of time constraints - no incentive and low morale. Besides it involves too much thinking and planning. Using a published book is so much easier as you do not need to think."*

Positive Statements:

- *"The course book is not enough. I try to develop some materials but I think it might be easier if there is some procedure to follow."*

- *"I don't develop but I adapt materials. Some books provide good materials, so just need to adapt them to my students' needs."*

- *"...... I feel the exercises in the text books are not appropriate, I will design my own materials for extra class exercises, assignments, exams, etc."*

Taken together, Q.6, Q.7, and Q.8 show that the instructors had very little practical training in materials development, and had little knowledge of EAP / ESP materials development. This was a major factor which prevented them from developing their own materials. Other constraints include the lack of time and reliance on existing published materials.

Q.9   Describe (briefly) how you consider your students' learning needs when designing reading and writing materials.

Most of the instructors (13) indicated that they considered factors such as interest and proficiency levels as important. Others considered factors like; gender, topic or subject

area, command of vocabulary and linguistic features, language needs and future language requirements. For example:

- *"By getting relevant information about students' proficiency in reading and writing in English, interest and work culture."*

- *"Interests, topic/subject area, gender (male, female will have different preferences)."*

- *"I consider their command of vocabulary and linguistic structures"*

- *"Consider what they are expected to produce - language requirement."*

Responses to question 10 (table 2.11) show that on the whole most of the instructors indicated that they were not very confident in developing materials. This is consistent with their training experiences as seen in Q.6 and Q.7 and is not surprising, given their lack of training in this area (see Q.6 and Q.7); this emerges from their comments:

- *"I feel that I do not have adequate skills or knowledge on how to design materials appropriately."*

- *"I take it as a 'trial and error' effort in search of effective methods of developing materials. Lack of training - not sure how to or where to begin. There is no clear model to follow."*

- *"I still need further training in ESP/EAP before claiming to be confident, I also need to study the specific fields of study students are engaged in."*

- *"Basically, I have not gone through any course in developing and designing EAP/ESP materials. I am not confident of even designing EGP materials."*

- *"I have on-the-job training and use my common sense ."*

- *"I would appreciate training in EAP/ESP as these are more specialised materials and would be useful even for EGP. I cannot depend on trial and error techniques all the time. There must be some kind of focus"*

On the whole, the instructors have had no formal training or exposure in developing ESP/EAP type materials and this thus indicate that there is scope for developing training programmes in EAP / ESP teacher education.

Basically the instructors indicated that they preferred commercially produced materials. This is not surprising (see Q.11 table 2.11). There were a few who said yes and no. For example:

YES:

- *"Saves a lot of the teachers' time. Because materials production takes up a lot of time, and one may not be teaching the same subject or a similar group of students in the following semester."*

- *"It is professionally designed by the experts in the field and published by creditable publishers. There is quality of production, low distortion, and at the same time authentic whenever necessary."*

NO:

- *"because commercially produced materials or texts are not written for specific location or situation and are always never appropriate."*

YES/NO:

- *"Yes, if the materials are good - that is, well developed. It'll also be well-graded and the content/activities in line with teaching and learning theories. No, because sometimes the materials are not suitable for certain situations and need a lot of adaptation."*

- *"Commercially produced materials save on preparation and could be judiciously selected and adapted for the class. But, however, they may not always be suitable for a given situation or context or even groups of learners."*

Q.12 If you are using any text books for the teaching of writing or reading, please state the names of the books and your reasons for using them.

The instructors' responses can be classified under three categories as presented below.

No Particular Texts (N= 5)	Prepare Own Materials (N= 2)	Department Modules (N= 3)	Specific Texts (N=3)
1. Don't use a standard text. Several texts are used and handouts prepared for the students. This is easier.	1. Prepare own materials as textbooks do not match learners' level or background.	1. Use English language department's module for English skills level 1-3.	1. English for Science (Zimmerman). It is easy to follow but have to prepare handouts as students do not have the book.
2. Prepare own handouts with materials taken from various sources. Less problematic then preparing your own.	2. Prepare own materials as one can have more variations and can be easily changed	2. Use the modules because students already have them.	2. English for Science Matriculation . Simple to follow and students also have them.

Generally, the instructors prepare their own materials by selecting materials from various sources. There appears to be no standardisation. An interesting finding is that the instructors prefer to use commercially produced books because *they are easy to follow and use.*

Q.13 Please describe the manner or steps in which you usually prepare, adapt or supplement materials for the teaching of reading and writing.

Many of the instructors did not want to respond to this question because they felt threatened by it. Responses from those who responded are categorised according to the approaches they use.

Objectives / Purpose	Students' Needs	Teaching Points
1. Depending on the objective or purpose of the lesson. Start by flipping through books, magazines, etc. Once something interesting has been identified, start to modify or adapt it for class use. Does not follow any particular model, but use common sense in developing the materials.	1.Analyse students' needs and list them. Next study materials for strengths and weaknesses. Then select better or supplementary materials or select alternative ways to approach the materials (content).	1. Select materials relevant to teaching points based on students' proficiency level.
2. Look around for materials that may interest the students and, if possible, relate it to students' discipline. Re-write the materials to suit the objectives of the course as well as the students' proficiency level by removing irrelevant ideas, anything not suitable for local context, and adding in more points if necessary to develop the materials further.	2. Look at the materials carefully. Make necessary changes, i.e. to simplify, change cultural context or situation to suit students' needs.	2. Identify the main topic and select and interesting text based on the topic, paraphrase text if vocabulary is too difficult.

Reluctance in answering question

"I can't describe how I develop materials. It is too personal and complicated."

"Not applicable as I do not prepare or develop materials."

"Too complicated to describe here."

On the whole the instructors do have a fair idea of the approaches involved in developing and adapting materials.

Q.14 Which or what would you consider to be the most crucial factor(s) in designing and developing EAP/ESP materials?

Different factor (s) were put forward by the instructors which clearly indicates that not all of them consider the same things as crucial factor(s).

- The text / materials used - whether it is authentic or not. (5)
- The students' interests and objective of the lesson that the teacher would like to achieve. (2).
- The purpose of the EAP/ESP course or materials (3)
- Level of proficiency and learning needs. (2)

- The linguistic needs of the students. (1)

- Appropriateness of vocabulary as the most important element.(1)

- Level of proficiency and discipline-related materials. (2)

Q.15 List the problems that your students have in:-

a) Reading	b) Writing
1. Problems in comprehending language of text	Developing and expanding ideas.
2. Comprehending and understanding content of texts.	Expressing ideas clearly and exemplifying them.
3. Don't know how to read critically; seldom aware of the implications of what they have just read.	Poor grammatical ability.
4. Failure to identify main ideas and subordinating ideas. Pre-occupied with the bottom-up strategy, i.e. vocabulary, to the expense of understanding / comprehending of text.	Write without thinking about the effects or implications of what they have written.
5. Difficulty in comprehending texts which are more complex in structure.	Poor vocabulary knowledge, therefore choice and use of appropriate and a variety of words is poor
6. Inability to read in chunks, unable to identify main points. Poor command of syntax structures. Lack ability to use skimming and scanning skills.	Poor command of sentence structure.
7. Lack of ability to analyse, infer and most often cannot differentiate main idea from supporting idea.	Lack of coherence and cohesion in writing.
8. Lack of vocabulary knowledge and inability to understand text of more than 500 words.	Problems in getting started
9. Inadequate strategies used in tackling complex texts. Example, do not know how to make notes or outline information or even summarise in point or in diagrammatic form.	

The instructors' views about their students problems in reading and writing mirrors that of the subject specialists. The instructors are very specific as to the areas of weaknesses which is not surprising at all. Their views are reinforced by the findings of the proficiency tests and also students own views about their reading ability.

Q.16 What percentage of your students do you consider as having major problems in reading academic texts and in writing essays/project work in English?

Five instructors abstained from answering this question as they indicated that they could not tell or were uncertain (see table 2.11). Most of the instructors perceived that most of the students have major problems in reading and writing. Again this reaffirms the students' and the subject specialist perceptions.

Q.17 On the whole, do you think that language instructors need on going training in materials development?

Twelve instructors indicated that there should be a uniform format for designing materials within an institution (see table 2.11). Generally most of the instructors agreed that there was need for on going training. Four of the instructors felt that there should

be ample practical training in developing materials and that they should be encouraged to pool their resources, develop materials as a team and not as individuals. According to them, at the moment most materials are developed by individuals. For example:

- *"There is a need to have proper training devoted to materials development. Presently, training seems to be short and lasts only 2-3 weeks. This is not enough. Therefore ongoing training is necessary. Trainers too have to be good at the job. Not just providing theory, but also providing clear methods and examples through demonstrations and practice."*

- *"Materials development is an art. It is not something that you can do and definitely not by 'self-teaching-training' or 'on-the-job' training, especially in the case of EAP/ESP. It also is the same for EGP."*

- *"Ongoing training is necessary if not crucial - materials should be developed as a team effort and not as individuals so that resources can be pooled."*

2.9.3.1 Summary findings of Questionnaire 3

The findings show that the language instructors have a variety of training experiences. The instructors have had no training in EAP/ESP materials development. Some did not even know what EAP/ESP teaching involves. They had only received basic training in selecting and adapting materials in ELT (mainly linked to the Malaysian National Curriculum), based mainly on theories. They maintained that they designed materials based on trial and error techniques and common sense: they are self-taught. They rarely design materials because it is time -consuming, requires too much thinking and is difficult. They lack a model to follow. It is not surprising that they prefer to rely on commercially published books by reputable publishers. According to them, the books are easy to follow and use. They need not think too much. They are however aware that dependence on such books is not ideal. They are aware of the principles and criteria of materials preparation. They had little confidence in designing materials and agreed that there was a need for on going, specialised training. The instructors were of the same opinion as the subject lecturers about the students' ability to read and write in English. Generally they maintained that the students are poor at writing and have a major problem in reading and comprehending texts.

The findings thus raise the issue of materials development for EAP teachers - appropriate academic learning materials are required.

2.10　Analysis and findings of the Reading and Writing Tests

The findings of the reading and writing tests were subjected to different types of statistical analysis to determine the reliability and validity because it was developed by the researcher. The findings of the written test are presented first followed by those relating to the reading test.

2.10.1　Analysis and Findings of Writing Task

The 241 writing scripts consisting of Task 1 and 2 of the Written Proficiency Test were rated by five raters using a standard rating profile. The findings of the raters' scores or preferred profiles are presented and discussed below.

Table 2.12 A　Spread of scores for Task 1.　　　**Task 1: N = 241**

Band Profile	Rater 1	Rater 2	Rater 3	Rater 4	Rater 5	Total	Percentage	Cumulative Percentage
1	6	11	6	0	11	34	2.82	2.82
2	60	62	69	61	58	310	25.73	28.55
3	90	87	93	73	87	430	35.68	64.23
4	60	48	54	59	45	266	22.07	86.30
5	21	26	16	30	32	125	10.37	96.67
6	4	4	3	17	8	36	2.99	99.66
7	-	3	-	1	-	4	0.33	100.00

The spread of scores for task 1 clearly indicates overall consistency of scoring by the raters. 64.23% of the students were between bands 3 - 1 and 86.3% of the students were of bands 4 and below. Only 35.77% of the students were in bands 4 and above., The mode is band 3 with 35.68% of the students being placed in band 3 (see appendix A 2. 6 for a description of band 3 profile).

Table 2.12B　Spread of Scores for Task 2.　　　**Task 2　N = 241**

Band Profile	Rater 1	Rater 2	Rater 3	Rater 4	Rater 5	Total	Percentage	Cumulative Percentage
1	4	4	7	4	26	45	3.73	3.73
2	41	70	77	62	64	314	26.06	29.79
3	112	90	84	83	80	449	37.26	67.05
4	56	47	52	48	41	244	20.25	87.30
5	24	16	18	38	21	117	9.71	97.01
6	4	14	3	4	9	34	2.82	99.83
7	-	-	-	2	-	2	0.16	100.00

The spread of scores for task 2 is not very different from that of task 1, and there is also a clear indication of consistent scoring by the raters. 67.05% of the students were between bands 3 - 1 and 84.3% of the students were bands 4 and below. Only 32.95%

of the students were in bands 4 and above. The mode is again band 3, with 37.26% of the students being placed in band 3.

2.10.1.1   Interrater Reliability

An interrater reliability test was carried out to determine the reliability of scoring the two writing tasks. The Pearson Correlation Coefficient and the Alpha Tests were used. The Pearson Correlation Coefficient test indicated that the reliability in scoring the tasks among all five raters was high. It is at the 0 .7 and above level. The Alpha reliability test also produced the same results: reliability was again above 0.7. This is highly significant and shows a strong agreement among the raters and indirectly suggests that the writing profile for evaluation purposes is reliable.

From the distribution of scores for both the tasks it can be clearly discerned that most of the students were in the band 2-3 range, and therefore do have problems in writing well. This confirms the questionnaire findings that students have great difficulties in writing in English.

2.10.2   Analysis and Findings of the Reading Test.

The reading test was marked for only right and wrong answers. A right answer was given a code of 1 and a wrong answer a code of 2. This enabled the researcher to identify the frequency of occurrences in terms of right or wrong answers on the different sections of the test.

It is acknowledged that the frequency counts would provide deducted and not absolute assumptions about probable problem areas. These were then used in developing and amending the reading and writing profiles further. It will be recalled that the test was not to measure achievement, but to try to identify what might be problem areas for materials development. This was part of a needs identification process.

Ideally, under normal circumstances, a battery of different reading tests would have been appropriate to obtain a better perception of the learners' needs in reading in EAP. Due to time constraints and distance, this was not possible but should be considered for similar research in the future.

2.10.2.1 Frequency Distribution Based on Different Sections of the Test

The frequency distribution is based on 241 cases. 153 second and third year engineering undergraduates were undergoing a 4 year degree course. Another 88 students in their second and third year were completing diploma level courses. The frequency distribution

(in terms of right and wrong answers) for each section is presented and discussed according to the test specifications outlined in section 2.6.1.1 (See appendix A2.1).

Table 2. 13 A   Section 1: Part 1, A and B.

Question	Part One (A)						Part One (B)		
	1	2	3	4	5	6	7	8	9
Right	151	149	163	149	122	144	100	97	91
Wrong	90	92	78	92	119	97	141	144	150

Section One, Part One A shows that most of the students were able to make single, simple logical inferences based on a short, simple text. A large number of students, however, seem to have problems with questions in part B, which required students to identify what *"the words/phrases in the passage refer to. "* This indicates that they have problems with reference-type questions or not explicitly stated information.

Table 2. 13B   Section 1, Part 2 A.

Question	Part 2 (A)								
	10	11	12	13	14	15	16	17	18
Right	109	97	134	99	143	87	92	96	188
Wrong	132	144	107	142	98	154	149	145	53

Responses to part 2 (A) of section 1 revealed alarming results. The questions were based on a "non-linear text."   Students had to fill in a flow chart based on their under-

standing of the text. Out of the 9 questions, only two questions - 14 and 18 - seem non-problematic. An examination of the flow chart indicated that question 18 was easily identified and question 14 seemed quite straightforward as well. A number of interpretations can be tentatively suggested. One interpretation is that the learners may have problems dealing with non-linear texts if their classroom exposure to such texts is limited.

Table 2.13C   Section 1, Part 2 B.

Question	Part 2 B					
	19	20	21	22	23	24
Right	136	138	118	139	114	96
Wrong	105	103	123	102	127	145

Part 2B required the students to deduce meaning in context. Out of the six questions, three posed problems for the learners. Since the test was trialled for clarity and sufficient meaning in context, it was felt that there was enough text information to infer the meanings of the target words. It can be seen that a large number of students do have problems with low frequency words.

Section 2.

Questions on section 2 were based on an in-house office memo report.

Table 2.14A   Section 2A

Section 2 (A)			
Questions	25	26	27
Right	141	52	112
Wrong	100	189	129

Part A required students to differentiate between facts and opinions. It can be discerned from the above table that most of the students have problems in distinguishing facts from opinion.   Question 25, which was a straightforward statement, seemed to be less problematic, but questions 26 and 27 were more of a problem for the students. Question 26 had phrases like *"If we want..., it looks like... is the best, even though...".* Question 27 had phrases like *"is perhaps... the most".* Such phrases may be the cause of confusion.

Table 2.14B Section 2B

Section 2 (B)						
Question	28	29	30	31	32	33
Right	*119	99	**139	99	98	97
Wrong	122	142	102	142	143	144

Part B of section 2 required the students to answer WH-type questions on the report. They were all multiple-choice-type questions. Question 28 and question 30 seem to be less problematic: answering the two questions was found to be quite straightforward. However, questions 29, 31, 32 and 33 seem to be problematic - learners had problems in analysing, deducing and synthesising information. It can be concluded that the learners have problems with implied statements.

Section 3

This section presented students with tabulated information and a short passage in tabular form. They were also required to organise information into the correct sequence and to complete a semi-cloze passage based on the same theme.

Table 2.15A   Section 3B, Part 1

Section 3, Part 1 (B)				
Question	34	35	36	37	38
Right	185	181	*121	*124	*123
Wrong	56	60	120	117	118

Questions 34 and 35 were clearly recall-type questions that needed very little complex thinking. The answers to questions 36, 37 and 38 indicate that a large number of learners were having problems. It is unclear whether the problem was because the questions were not phrased directly (for example, "what...", "where..."), or whether there was a problem in interpreting information in tabular form. The researcher had not anticipated difficulties with this part, but the results show otherwise, even though some students were giving correct answers.

Table 2.15 B Sequencing of Events

Section 3 (C) Sequencing of Events		
Questions	44	
Right	108	44.8%
Wrong	133	55.2%

Section 3(c) required students to organise events into the correct sequence based on their understanding and analysis of the table. This question synthesises the information in the table in a story form. Marking of this question was at first problematic, until it was decided that if the candidate had one event wrongly sequenced, the whole question would be marked wrong.

It is deduced that 55.2% of the students could not get the overall sequence correct. With such questions it is quite difficult to say why learners were having problems without talking to them about it, but perhaps identification of markers and possible text structure could be a problem.

Table 2.16 Section 3 Part 2

Section 3, Part 2									
Question	45	46	47	48	49	50	51	52	53	54
Right	181	102	82	*182	105	*177	*173	*172	*177	*167
Wrong	60	139	159	59	136	64	68	69	64	74

In a sense, part 2 was quite difficult to analyse as the semi-cloze passage required students to fill the missing answers with either structural, function and content words. Although content and structural words do pose a problem for most of the learners. It is difficult to decide what the real problem is.

Section 4

Section 4 of the test was based on a longer and more complex text.

Table 2.17A Section 4A

Section 4 (A)								
Question	55	56	57	58	59	60	61	62
Right	153	*77	*108	167	*123	133	*116	*113
Wrong	88	164	133	74	118	108	125	128

Section 4 (A) required the learners to match a list of headings with the correct paragraphs. Students would have to identify key words, scan for relevant information, and identify main ideas in each paragraph in order to identify the correct paragraphs; in some instances they would have to deduce the information then match it to the correct heading. Responses to these questions revealed varied ability. Many learners may have problems determining the main ideas in a paragraph.

Table 2.17B Section 4 B (i)

Section 4 (B)			
Questions	63	64	65
Right	118	119	100
Wrong	123	122	141

Section 4B(i) required the students to reason, analyse and then interpret the statements provided to explain what they mean. These were multiple choice-type questions. The responses show that most of the learners have a problem with interpretation, reasoning and analysis-type of questions.

Table 2.17C Section 4 B (ii)

Section 4 B (ii)					
Question	66	67	68	69	70
Right	115	109	112	111	128
Wrong	126	132	129	130	113

This section required the students to understand the overall text, reason logically, summarise key ideas and group information. The results indicate that learners may have a problem in identifying key information, reasoning logically and summarising key ideas, and need help in this direction.

Section 4(C)

Questions in this section are based on the ability to analyse the writer's expression and implied tone.

Table 2. 17D   Section 4C

Section 4 (C)						
Question	71	72	73	74	75	76	77
Right	134	129	103	132	116	114	59
Wrong	107	112	138	109	125	124	182

This section required the students to state whether the writer was 'in favour' or 'against' certain statements in the text. The students had to be able to identify the tone of the information provided, identify words or phrases used by the writer as well as analysing the interpretations, whether directly or indirectly implied. Analysis of the responses revealed that students had problems and were probably having problems making decisions due to language difficulties.

Section 4(D)

Table 2.17E   Section 4D

Section 4 D			
Questions	78	79	80
Right	83	60	51
Wrong	158	181	190

Section 4D required learners to classify information (implied classification) based on their understanding of the content.   They would need to be able to summarise information and differentiate main ideas from subordinating ideas and synthesise the information by re-categorising them. As can be seen from the above table, there were major problems with these questions. Being able to determine whether the information belonged to the Industrial sector, Transportation sector or Residential/Commercial sector would require the students to understand the statements in terms of the underlying meaning of the statements, analyse and compare information and identify key examples or issues.

The analysis of the reading test indicate possible problems areas and this is consistent with the perception of not only the students but also that of the subject lecturers and the language instructors.

2.10.2.2 Summary findings of the Proficiency Test

The findings of test indicates that most of the learners are within the lower bands for both skills. They find it difficult to deal with complex texts and are better at coping with simple texts as indicated by their performance in answering questions on the different types of texts. They also had a variety of problems in writing and were generally unable to develop their writing through the use of more complex structures. There is therefore

a need to develop effective learning strategies. A summary of probable specific problems identified from the test performance is presented in Figure 2.5 of section 2.12. based on these results a baseline for an EAP materials development framework for training purposes is now possible (see figure 2.2-2.6) in section 2.12.

2.10.3 Validity and Reliability of the Reading Test.

a) Validity.

A test is said to be valid if it measures accurately what it is intended to measure (Harris, 1969; Hughes, 1989; Weir, 1990; Bachman, 1990). In the case of this proficiency test, the test apparently has content validity as it was developed based on a set of specifications which were drawn from various relevant sources. It also has face validity as it appears to measure what it set out to identify.

b) Reliability.

To assess the reliability of the test used as a tool for needs identification, a reliability test using the SPSS version 6 was used. Since this is a single administration, a split - half procedure was used (Harris, 1969; Hughes, 1989). A test of internal consistency was also used to determine the consistency of the test. However it must be borne in mind that test reliability can be affected by a number of different factors. They can be classified as follows (Harris, 1969; Hughes, 1989):

1. Adequacy of the sampling of the task. "...generally speaking, the more samples of students' performance we take, the more reliable will be our assessment of their knowledge and ability" (Harris, 1969:14).
2. Conditions under which the test is administered also affects the reliability of the test.
3. Poor student motivation, tiredness, illness, etc. can affect the temporal stability of a test.

The following are the findings of the reliability analysis:

Table 2.18 Reliability Analysis of Reading Test

Reliability Analysis - Scale (SPLIT) N = 241		
Reliability Coefficients	-	80 items
Correlation between forms	= .5560	Equal length Spearman Brown = .7146
Guttman Split-half	= .7121	Unequal - length Spearman -Brown = .7146
Alpha for part 1 40 items part 1	= .6489	Alpha for part 2 = .7758 40 items part

The split method indicated that the Spearman-Brown test indicated a reliability coefficient of 0.7. So did the Guttman test. The Alpha readability coefficient for Part 1 indicated a reliability coefficient of 0.6489 or 0.65, and for Part 2 a reliability coefficient of 0.7758. It can thus be concluded that as a needs identification tool, the test was fairly reliable, given the fact that it was a single administration. However, it will be recalled that it was not administered by the researcher, but by colleagues at UPM, whereby the test conditions are not completely known.

A reliability coefficient of 0.65 and above can be considered as acceptable for this exploratory study. A reliability coefficient of 1.00 would indicate that a test is "perfectly reliable" and zero would indicate a complete absence of reliability. According to Harris (1969), it is difficult to say precisely how high a reliability coefficient should be before it may be considered as satisfactory. This is because a lot depends on the kind of decision one wants to make based on the test results.

Harris (1969:17) points out that "home-made tests will have lower reliability coefficients in the .70's or .80's" and Hughes (1989:32) explains, "the reliability coefficient that is to be sought will depend also on other considerations, most particularly the importance of the decisions that are to be taken on the basis of the test."

In the case of this reading test, the researcher used the test to ascertain problem areas in order to develop a scaled framework. The framework would provide information for selecting and developing EAP materials for teacher training courses. With reference to the table, it can be seen that the correlation between forms is 0.5560, based on 40 items for each form. This indicates a genuine association between Part 1 and Part 2 at the 5% level (0.5 is much less than one in a hundred). Based on a two-tailed distribution, it is less than 5 times in a hundred. It is therefore significant ($p < 0.05$). A reliability analysis using the Alpha Scale indicated a reliability coefficient of 0.8331 on all 80 items measuring internal consistency. However, the split procedure seem to provide a clearer picture of the test reliability.

2.10.4 Break down of student scores on overall test.

The total number of correct responses are tabulated in table 2. 19 and table 2.20. The majority of the learners were scoring between the range of 40% - 49%; 50% - 59% and 60% to 69%. A small number had scores between 20% - 29% and 80% - 84%. An assumption could be made about their overall assumed underlying ability: the learners will probably need a great deal of guidance and practise to improve their reading ability

in EAP, particularly when using content-based materials from various genres and with various rhetorical patterns.

Table 2.19 Distribution of Students Scores   N - 241 cases.

Total Number of correct response (80 items) %	Number of Cases	Total Number of correct response (80 items) % continued.	Number of Cases
21	1	56	7
24	1	58	6
25	3	59	8
26	3	60	5
29	1	61	6
30	1	63	9
34	4	64	4
35	5	65	7
38	5	66	4
39	13	68	4
40	12	69	2
41	11	70	5
43	11	71	5
44	8	73	4
45	7	74	2
46	14	75	2
48	8	78	3
49	13	79	1
50	6	80	1
52	3	81	2
54	2	82	1
55	9	84	1

The above results can be summarised as follows:

Table 2.20 Spread of range in Percentage

Percentages	N = 241
1. 20% - 29%	9
2. 30% - 39%	28
3. 40% - 49%	84
4. 50% - 59%	52
5. 60% - 69%	41
6. 70%- 79%	22
7. 80% - 84%	5

Based on the above scores, the learners were placed according to a seven level band profile. The scale used is one which is currently in use at UTM, Malaysia. It has been validated (UTM, 1989) under a project led by Prof. Heaton of the University of Liverpool. The conversion scale is outlined in table 2.21.

Table 2.21 Conversion scale from Percentage to Bands

Conversion Scale	N = 241
Level 7 - 100-94	-
Level 6 - 93-86	-
Level 5 - 85-76	9 students fell into level 5
Level 4 - 76-62	48 students fell into level 4
Level 3 - 61-48	84 students fell into level 3
Level 2 - 47-32	90 students fell into level 2
Level 1 - 31-0	10 students fell into level 1

Most of the learners were placed in levels 2 and 3 and only 5 were in level 5 (high intermediate) and none in levels 6 or 7. Forty-eight students were in the intermediate level - level 4, and 10 students were considered to be at very basic level - level 1. This correlates closely with the results of the writing tasks where the learners were basically in the band 2-3 level.

There can be a number of arguments about categorising the learners in this manner. The use of rigorous statistical methods, graphs, etc. may be proposed, but in reality teachers have very limited time available to use such methods. If they are not trained to use statistical methods or do not have the means to use computer statistical packages, they would not want to analyse results manually - which is totally impractical.

A simple conversion scale like that of the UTM (1989, ELPR Scale) which was validated over a two-year period and has been in use since then, would serve the purpose of rapidly placing students into levels based on their test scores. Besides it was developed for Malaysian learners. This enables teachers to make decisions about the kind of materials they need to develop or about what type of texts to select and how to adapt materials.

2.11 A Survey of Text Type

In order to develop the framework and as part of the needs survey, an analysis and survey of ESP /EAP textbooks for the teaching of reading and writing in use and published by several reputable publishers was carried out (see chapter 3, 4 and appendix A4.3). This aspect was considered important as it was necessary to establish not only the content of the texts but also the kind of strategies, activities and tasks used in designing different types of reading and writing activities. It would also help establish the common genres or topic types (textual patterns) as commonly used. This would

guide the researcher to refine the framework and to determine what other aspects to consider. The development of the framework is discussed in detail in chapter 4.

2.12   Summary and Implications of Finding of the Needs Survey

Complementary to the above summaries in sections 2.9.1.1, 2.9.2.1, 2.9.3.1 and 2.10.2.2 several key issues are highlighted as follows:

1. Most of the engineering students perceived themselves as being very weak in both the reading and writing skills and maintain that they find it difficult to read and understand academic books and other related academic readings in English. Their performance on the proficiency test confirms their problems as most of the students were profiled between bands 2-3.

2. The students also stated that they had to read academic references in English frequently and were not confident in using the language.

3. Subject specialists maintain that less than 30% of their students are competent at reading and writing in English and this was confirmed by the English language instructors.

4. Subject specialists maintain that they require their students to be able to read well in English and provide a reading list (mainly consisting of English textbooks) frequently.

5. Subject specialist are of the opinion that the language instructors should use subject area materials and should learn to understand the language of their texts. They maintain that the language instructors should be trained to work with subject related materials.

6. Language instructors maintain that they have no training in EAP /ESP and are not competent in designing and developing materials. Most agree that there should be on-going training for materials development. Many say that they lack the skills and necessary experience in developing materials. The implications raised by the above issues are as follows:

1. It would be appropriate to profile learners' perceived ability according to band scales which are widely used in assessment but rarely for materials development. This would encourage the development of materials along the continuum of the scale according to levels of proficiency. Such methods may motivate and develop confidence in students if they are able to begin working with materials within their scope and slowly progressing up the ladder.

2. Content area materials should be used for training teachers in developing EAP based materials and for language teaching in the universities with the ultimate aim of working

together with subject specialists.

3. Task -based approaches and activities would perhaps be more applicable as they can be structured according to different proficiency levels and are cognitive in nature.

4. Consideration for incorporating learning and study strategies in EAP materials should be made. This is in response to the comments made by the subject specialist and language instructors that the students appear not to have proper strategies for learning.

The implications and findings of the survey are summarised in diagrammatic form and is self explanatory. Figures 2.2-2.6 present the key aspects to be taken into consideration when developing the EAP framework which is discussed in chapter 4. Figure 2.6 summarises the key elements to be used in formulating the EAP training framework.

Figure 2.2 to figure 2.6 presents the gist of the findings based on the small scale survey. Using the findings as a baseline, the contents of the materials training framework were structured and further developed. The first draft framework would consist of five strands; Learners' profile, types of texts, task types and learning strategies. Modifications and addition to Framework 1 would be based on feedback from various pilot studies with both pre- and in-service teachers. These are presented and discussed in chapter 4.

A review of ESP and EAP principles of materials selection, adaptation, teacher training models and the application of content based language teaching for the teaching of reading and writing in relation to the development of the framework is discussed in chapter 3.

Figure 2.2   Learners' Problems and Needs

LEARNERS

PROFICIENCY LEVEL

Between low & intermediate ability with most within the lower bands

Findings indicate that there is a need to read frequently in English. but need not have to write in English that often

many indicated that they had problems reading English texts

most indicated that their writing ability is poor & this was further validated by the raters

Come from different parts of Malaysia   + Singapore + Indonesia

Have Studied English For more than 10 years   BUT....

Prefer a variety of reading texts/materials

most agree that both the reading & writing skills are important skills to master

Use English minimally at the university & hardly ever use it at home

Do not like the materials used by the English language instructors

Practical training experiences suggests that students need to be quite competent in both the reading and writing skills

Lack the confidence in using English both at university & outside

Most agree that there is a need for better materials

Need to be prepared for both the working and academic world

Figure 2.3 Subject Specialist Views & Perception About Their Learners' Language Ability

Subject Lecturers

Provide students with reading list in English quite regularly

Use both English & Malay to deliver lectures

Most agreed that their learners had major problems understanding reading materials

Most maintain that the students cannot write well & have major problems in writing. Therefore, they avoid giving them writing projects in English except for report writing

Many prefer to deliver their lectures in English

Most are of the opinion that the English language instructors need to be specifically trained to teach their learners English using engineering materials & to help them read & write well in English

Frequency & type of writing varies And written work in English is optional. Most students prefer to write in Malay

Most agreed that both the reading & writing skills are important skills to acquire for academic purposes & for for the working world

Most are of the opinion that less than 30% of their students are very competent in both the reading & writing skills

Most agreed that students' academic success is dependent on their language ability (in this case English)

Figure 2.4 Language Instructors Views & Perception of Materials Development & Students' ability

```
┌──────────────────────────────────────────────────────────────────────────────────────────────────────────┐
│                                                                                                            │
│   ╭─────────────────────╮        ┌──────────────────────┐              ┌──────────────────────────────┐   │
│   │ Language Instructors │───────▶│ No training in EAP/ESP│─────────────▶│ No training or hardly any in │   │
│   ╰─────────────────────╯        └──────────────────────┘              │ developing                   │   │
│            │           ╲                                                │ own classroom  materials     │   │
│            │            ╲                    ┌─────────────────────┐    └──────────────────────────────┘   │
│            ▼             ╲                   │ Agree that most of their│                  │               │
│   ┌──────────────────────┐╲  ┌───────────────┤ students are weak in    │                  ▼               │
│   │ Prefer to use        │ ╲ │ Some training │ reading and writing in  │  ┌──────────────────────────────┐│
│   │ commercially         │  ╲│ in EGP        │ the academic context    │  │ On the whole most of the     ││
│   │ produced texts book  │   │ Materials     └─────────────────────┘     │ instructors do not like to   ││
│   │ and or materials.    │   │ design        │                           │ develop  their own materials ││
│   │ Less time consuming  │   └───────────────┘                           └──────────────────────────────┘│
│   │ & do not need to     │        │                                                      │               │
│   │ think about          │        │                                                      │               │
│   │ developing materials │        ▼                                                      ▼               │
│   └──────────────────────┘  ┌──────────────────────────┐               ┌──────────────────────────────┐ │
│            │                │ Little experience &       │               │         Reasons:             │ │
│            ▼                │ training in selecting,    │               │  *  Time consuming           │ │
│   ┌──────────────────────┐  │ and adapting materials.   │               │  *  Too difficult            │ │
│   │ Short training stints│  │ Exposure mainly           │               │  *  Lack exposure &          │ │
│   │ in materials design  │  │ theoretical in nature     │               │     confidence               │ │
│   │ with very little     │  └──────────────────────────┘               │  *  Do not have adequate     │ │
│   │ practical experience.│        │                                     │     skills & knowledge       │ │
│   │ The focus was mostly │        ▼                                     │  *  Do not know where or how │ │
│   │ on the theories and  │  ┌──────────────────────────┐               │     to begin                 │ │
│   │ principles of        │  │ All training tied up to   │               │  *  No proper guidelines to  │ │
│   │ materials design     │  │ KBSM / KBSR school        │               │     follow                   │ │
│   └──────────────────────┘  │ syllabus and the national │               └──────────────────────────────┘ │
│            │                │ curriculum                │                                                 │
│            ▼                └──────────────────────────┘                                                 │
│   ┌──────────────────────┐                                                                               │
│   │ When they had to     │                                                                               │
│   │ prepare, select,     │  ┌──────────────────────────────────────────┐  ┌─────────────────────────────┐│
│   │ or adapt materials   │  │ E.g. of some factors taken into           │  │ There appears to be no      ││
│   │ would use different  │  │ consideration :                           │  │ standardisation of any      ││
│   │ factors / criteria.  │──▶│ interests, proficiency level,            │──▶│ materials or texts used -   ││
│   │ Each of the          │  │ socio-economic status, topic:             │  │ commercially published or   ││
│   │ instructors preferred│  │ subject area, gender, vocabulary, text,   │  │ otherwise                   ││
│   │ their criteria. If   │  │ authenticity of of text or materials,     │  └─────────────────────────────┘│
│   │ any materials are    │  │ objective or purpose of lessons etc.      │                                 │
│   │ designed,they are    │  └──────────────────────────────────────────┘                                 │
│   │ done so based on     │                                                                               │
│   │ intuition or use of  │                                                                               │
│   │ common sense         │                                                                               │
│   └──────────────────────┘                                                                               │
│                                                                                                            │
└──────────────────────────────────────────────────────────────────────────────────────────────────────────┘
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Figure 2.5 Interpretation of Students' Problems in Reading and Writing (Based on Survey Findings)

Problems identified in Reading and Writing from (a) Students' Reading Test; (b) Writing Test; (c) Language Instructors Views

Possible Problems in Reading Academic Texts	Possible Problems in writing for academic purposes
• Inferencing skills (at higher level or more complex level)	• Lack the ability in expressing ideas and information
• Reference type questions (Reference skills); link words	• Problems with sentence construction
• Interpreting, analysing, summarising information from linear text to non- linear text	• Lack the ability to write cohesively and coherently
• Interpreting, analysing, summarising information from non- linear text to linear text	• Lack vocabulary knowledge
	• Poor grammatical knowledge impedes clear sentence construction
• Differentiating facts from opinion	• Unable to use appropriate discourse markers
• Analysing, synthesising, evaluating and deducing information in text	• Lack ability to organise information
	• Unable to expand writing based on guided tasks beyond that which is provided
• Unfamiliar with discourse structure of text (problems with discourse markers)	• Lack knowledge on how to write different types of writing based on different genre or discourse type
• Differentiating main ideas from supporting ideas; key points/words	
• Struggle with complex sentence structures	• Poor skills in developing and contextualising ideas
• Vocabulary and identification of contextual clues	• Unable to develop writing in answering examination questions or assignments
• Distinguishing stated statements from implied statements	
• Predicting information	
• identifying and sequencing events	
• Understanding and identifying relationships between sentences	

Figure 2.5 continued

• Unable to cope with and understand complex texts • Unable to follow content of text • Unable to synthesise information • Have problems in identifying writers intention • Have problems in following the argument or discussion of a text • Unable to analyse information for classification purposes	• Writing is confined to the very basic and simple level • Unable to develop guided writing tasks • Unable to develop argument for and against in writing task

Figure 2.6 Proposed Content Outline for Development of an EAP Materials Training Framework (Key considerations based on a synthesis of all the findings)

Learners' Profiles of assumed underlying ability in terms of hierarchical structure of skills and knowledge (Application of Bloom's Taxonomy of learning

Different Types of texts is necessary for introducing different genres

Visuals / graphics will help to illustrate, elaborate, information in texts. To help in understanding complex text structures

confidence building

Alternative Choice

GENRE and Discourse Knowledge

variety of visuals

EAP READING & WRITING MATERIALS

Knowledge Structures Includes: Constituent components of discourse knowledge (Thinking skills & language skills

LEARNERS / TEACHERS

additional training on top of the existing one

grammar

Communication Relationships

Task Types & skills to be practised. Different types of task to practise relevant reading & writing skills

For language learning and transfer of this knowledge to content learning

Learning Strategies

Direct Strategies
*Memory strategies
*Cognitive strategies
* Compensation strategies

Indirect Strategies
* Metacognitive strategies
* Affective strategies
* Social strategies

Overlaps in terms of tasks & levels will occur to reinforce learning

Dotted lines indicate the relationship between all the suggested components

93

CHAPTER THREE

An Overview of ESP/EAP : Materials, Teacher Training and Content-Based Learning

Section One

3.0 Introduction

This chapter consists of five sections and presents the more global issues identified from the needs survey involved in the development of the Materials Training Framework. It introduces and examines some key issues pertaining to ESP and EAP, materials design and development and their role in teacher training or development. It briefly discusses reading and writing skills and the principle components of the content based approaches. Other relevant components of the framework such as Task, bands / profiles, genre, learning strategies in EAP, use of visuals in relation to task development are discussed in chapter four and five.

3.1 English For Specific Purposes (ESP) - Definition and Historical Review

Some brief discussion on the historical perspective of ESP in order to understand some of the principles of the framework is necessary. A detailed discussion on this subject is not possible therefore only salient developments are presented.

Today ESP has become an important aspect of English Language Teaching (ELT). Over the years it has passed through various stages of development (Strevens, 1970) and now encompasses areas in education, training and practice and draws on three areas of knowledge: language, pedagogy and students' specialist area of interest (Robinson, 1991: 1)

ESP is defined as a language teaching area which 'requires the careful research and design of pedagogical materials and activities for an identifiable group of learners within a specific learning context' (Johns and Dudley-Evans, 1991:298). ESP is thus made up of such categories as Academic Englishes (English for Science and Technology (EST), English for Graduate Teaching Assistants), "General" English for Academic Purposes (GEAP) and Occupational Englishes (English for Business, English at the Work Place).

3.1.1 Historical Review

Since its beginnings in the 1960s, ESP has undergone six distinct phases of development (Johns and Dudley Evans, 1991; Hutchinson and Waters, 1987). **The first phase** in the early '60s was influenced by the then emerging view of register analysis largely associated with Halliday et al (1964). The aim was to identify the grammatical and lexical features of registers (see Hutchinson and Waters, 1987; Robinson, 1991 and Tickoo, 1994). Halliday et al's work paved the way for a second phase.

In phase two the focus of research shifted to research above the sentence level as ESP became more closely involved with the emerging field of discourse or rhetorical analysis typified by the work of Lackstrom, Selinker and Trimble (1972), Widdowson (1981), and Trimble (1985). The research focus centred around the identification of organisational patterns in texts (see Robinson, 1980, 1991, Johns and Dudley-Evans, 1991; Tickoo, 1994). Such research assisted researchers and curriculum designers to identify levels of discourse within texts. For example, Swale's (1984,1990) work on genre analysis (G.A) has similarly led other researchers to examine sections of texts (e.g. introductions) in various disciplines in order to identify the type of discourse moves or steps required.

A third stage in the development of ESP is the emergence of Needs Analysis - particularly Target Situation Analysis (TSA). Needs Analysis was initially seen as a simple process exemplified by Munby (1978) which provided a more systematic way of designing a syllabus in ESP based on the learners' needs. However Munby's needs profile was found to be inadequate. This led to new directions in needs assessments which have grown increasingly sophisticated as materials developers become aware of the problematic nature of their task (Johns and Dudley-Evans,1991:299). See West, (1994) for an excellent discussion on needs analysis.

The fourth stage in the development of ESP focused on the thinking processes that underlie language use. The focus was on developing reading skills in the field of applied linguistics exemplified by contributions from Grellet (1981), Nuttall (1982), Alderson and Urquhart (1984) the National ESP Project in Brazil and the University of Malaya ESP Project (1980). This led to the development of a skill-based syllabus approach which paved the way for the development of cognitive and language skills (Robinson, 1991:37 and White, 1986:68).

The fifth phase is the stage that advocates the learning - centred approach also known as the Method-Based Approach (Breen, 1984, 1987; Candlin, 1987; Hutchinson and

Waters, 1987; Robinson, 1991; Long and Crookes, 1993). For a critique of this see Tickoo (1987, 1994:31-32).

A sixth phase is the emergence of the content-based syllabus and the situationally - based syllabus (Wilkins, 1976; White, 1988; Robinson, 1991). Finally, all the previous developments in ESP have revived the role of rhetorical discourse approach which is gaining strength and meshes with the genre -based approach. It is the **latest stage** in the nineties typified by contributions from Halliday(1973), Swales (1990), Bhatia (1993), Halliday and Martin (1993), Connor (1995). Its role in materials design should be seriously considered and will be discussed in chapter four. A more detailed view of the historical development of ESP is summarised in table 3.1.

3.2 English For Academic Purposes (EAP)

The historical development in ESP led to the development of EAP and decisions about the content of EAP has been drawn from works in ESP.

3.2.1 Definitions and Scope

EAP is an important area of English Language teaching(ELT) and is often considered to be a branch of *ESP*. It is an integral part of the language programmes in most institutions of higher learning around the world which use the medium of English as a second language or which offer support to international students.

EAP involves academic study needs and is goal directed because learners study English not simply because they are interested in acquiring the English language but mainly because they need English for study or learning purposes (Robinson, 1991: 2). Thus, EAP involves not only learning a language but it also entails the learner developing academic study skills as well. The learner's prime goal is to study some discipline other than English. This is a common programme in many institutions of higher learning in countries like Britain and the USA where courses are designed to help international students who are non-native speakers of English (NNS) to cope with their academic studies. In Malaysia, and other non-English speaking countries where English is not the medium of instruction, EAP is designed to help NNS to cope with understanding materials, texts, and information in English. In other countries only part of the learners course is conducted in English and skills are differentiated.

96

Table 3.1 Stages in the Historical Development of ESP

Phase/ Stage	Key Characteristics	Date / Period	Key Text or Article	Researcher / Writer & Date
One	**Register Analysis** Focus - on lexis and structural analysis Identification of grammatical & lexical features of different registers at sentence level	1960's and early 70's	1.*The Linguistic Sciences and Language Teaching* 2.*A Course in Basic Scientific English* 3. *A source and reference book for the development of English for science and technology.* 4.*Writing Scientific English*	Halliday, Strevens and McIntosh (1964) Ewer and Latorre (1969) Barber (1962) Swales (1971)
Two	**Discourse or Rhetorical Analysis** Linguistic analysis above the sentence level. Focus centred around organisational patterns in text and the writers' purpose. Marked an important move in linguistic analysis Landmark- Trimble's Rhetorical Process Chart	1970's to late 80's	1. *Grammar and Technical English* 2. *English for Specific Purposes: Criteria for course design.* 3. *Reading and Thinking in English (ed.)* 4. *Explorations in the Function of Language* 5. *Scientific and Technical Writing: The Choice of Tense* 6 .*EST: A discourse approach* 7. *On the use of the passive in two Astrophysics journal papers*	Lackstrom, Selinker and Trimble (1972) Widdowson (1981) Widdowson (ed.); Moore (1979, 1980) Halliday (1973) Selinker and Trimble (1976) Trimble (1985) Tarone, Dwyer, Gillette & Icke (1981)

Table 3.1 Continued

Phase/ Stage	Key Characteristics	Date / Period	Key Text or Article	Researcher / Writer & Date
Two (cont.)			*8. English for Academic and Technical Purposes: Studies in honor of Louis Trimble*	Selinker, Tarone & Hanzeli(eds.) (1981)
			9. On the use of informants in discourse analysis & language for specialised purposes	Selinker (1979)
			10. Technical Rhetorical Principles & Grammatical Choice	Lackstrom, Selinker & Trimble (1973)
Three	**Needs Analysis** 1. Target Situation Analysis (TSA) Focus on Linguistic components 2. Present Situation Analysis (PSA) Focus both on aspects of TSA and more on learners 3. Language Audit Focus on the current state of language needs in job sectors/industry 4. Means Analysis 5. Ethnographic principles	Late 70's through the early 80's	*1. Needs communication processor model* *2. Identifying the Needs of Adults Learning a Foreign Language* *3. The Language Audit* *4. An Ecological Approach to ESP*	Munby (1978) Richterich and Chancerel (1980) Pilbeam (1979) Holliday & Cook (1982) Bhatia (1994) Ramani, Chako, Singh & Glendinning (1988)

Table 3.1 Continued

Phase/ Stage	Key Characteristics	Date / Period	Key Text or Article	Researcher / Writer & Date
Four	Thinking processes Focus mainly on reading skills	Late 70's and the 80's	*1. Developing Reading skills* *2. Teaching Reading skills in a Foreign Language* *3. University of Malaya ESP Project* *4. Skills for Learning*	Grellet (1981) Nuttal (1982) Chitravellu (1980) Walton on Thames and University of Malaya Press (Authors Unknown)
Five	Learning-Centred Approach (Method-Based Approach) Focus on the process of language learning	Mid' 80's to late 80's	*1. English for Specific Purposes* *2. Process syllabuses for the language classroom* *3. Syllabus design as a critical process*	Hutchinson and Waters (1987) Breen (1984) Candlin (1984)
Six	Content-Based Syllabuses 1. Focus on language form, language notion and language function 2. Focus on topics and situations (mainly in the context of EOP)	Late 70's to early 90's	*1. Notional Functional Syllabus* *2. Nucleus English for Science and Technology* *3. English in Focus Series* *4. English for Computer Science* *5. English for International Trade* *6. Earth Sciences, Agriculture (EAP Series)*	Wilkins (1976) Bates and Dudley -Evans (1976) Allen and Widdowson (1973) Mullen and Brown (1984) Radice (1981) Yates (1981,1989)
Seventh	Revival of Phase 1 and 2 Genre Analysis Focus on text types, topic types and the discourse communities	Late 80's to present	*1. Genre Analysis* *2. Analysing Genre: Language Use in Professional Settings* *3. Writing Science: Literacy Discursive Power*	Swales (1990) Bhatia (1993) Halliday and Martin (1993)

In Malaysia it can be argued that by far the most important need is for university students to read text / materials in English as 90% of their reference texts are English whereas their lectures and examinations are through the medium of Bahasa Malaysia (BM) which is the national language.

These situations indicate that the main purpose of EAP is to meet students' need for a quick and economical use of the English language to follow a course of academic study (Coffey, 1984:3). It also leads to different types of emphasis in EAP programmes.

3.2.2 Variations in Emphasis in EAP

There are a number of other interpretations, shades of meaning and emphasis (Jordan, 1989: 151) within the field of EAP. For example, Coffey (1984:4) distinguishes common core from subject-specific EAP. If it is common core, the emphasis will be on general academic language focusing on study skills. If it is subject-specific the emphasis will be on examining the language features of particular academic disciplines or subjects (content-based) at the same time incorporating study skills e.g.:- Engineering, Medicine, Social Sciences and Economics. Coffey's description of EAP has been further interpreted by Blue (1988) as *English for General Academic Purposes* (EGAP) and *English for Specific Academic Purposes* (ESAP). The latter can be seen in research work in North America, particularly in Canada known as *Content Based Language Instruction* (Brinton et al: 1989, Cantoni - Harvey; 1987; Crandall: 1987, Mohan: 1986).

EAP is thus viewed as being flexible and general in scope. For example, the same syllabus and materials can be used with students from a wide variety of academic disciplines. However, some general courses include components aimed at students from specific disciplines (see McDonough, 1984; Kennedy and Bolitho, 1984; Hutchinson and Waters 1987; and a collection of articles in Adams et. al, 1991; Hewings and Dudley-Evans 1996, for a further discussion).

It can be concurred that 'Study Skills' is seen as an important component in EAP. A review of some EAP based texts such as:- Yorkey's *Study Skills for Students of English,* (1982); Sonka's *Skilful Reading* (1981); Forman et al's *Campus English* (1990); Harman, et al, *Reading skills for the social Sciences* (1988); Glendinning and Holmstrom, *Study Reading* (1992); Smith and Coffey, *English for Study Purposes Part 1 and 2* (1982); Trzeciak and Mackay, *Study Skills for Academic Writing* (1994) confirms the importance accorded to study skills in EAP and is used for students about to enter university, either at undergraduate or graduate level. Although there are those who regard study skills as being one of the major components of EAP courses, there are also other components of

EAP (as proposed by Mohan (1986) , research on learning strategies and current work in genre analysis) which could be incorporated into existing approaches.

3.3 EAP and English Language Teaching

An important and central issue in EAP is whether what is taught and covered is specific to the English language or is it in fact universal? As Robinson (1991:100) ask 'is it the case that academic activity is the same or at least broadly similar around the world, whatever the language.'

Some practitioners argue that the concerns of EAP are not specific to English. Many students are aiming at a higher level of academic excellence and achievement through English than they have achieved in their first language. These students are learning some academic strategies for the first time through English and they may subsequently try to apply what they have learnt to operations in their first language (L1) (Robinson, 1991:101). There are many explanations behind this argument but it is not possible to present such arguments here. For a detailed discussion of this issue (see Kennedy and Bolitho, 1984, McDonough , 1984; Reid, 1987; Cortazzi, 1990; Jin, 1992; Jin and Cortazzi, 1996).

What is clearly needed is a broader conceptual model or definition of EAP within a NNS context in which common-core and content/subject specific approaches are merged to provide for wide angled learning rather than narrow learning, for example English for Academic Learning Purposes(EALP) . This would suggest the need for a deeper understanding of EAP materials development and design, of the teachers who would be involved in such processes and of the factors which would need to be taken into consideration when designing such materials for different types of learners. This is discussed in the following sections and in chapter four and five.

Section Two

3.4 Materials: An Introduction

Materials for language teaching can be defined as any published or unpublished input in any medium or collection of media that is used for the purpose of language teaching and learning. There is no doubt that materials are an important element within a curriculum or any teaching situation as Nunan (1991:208) explains: 'while the syllabus defines the goals and objectives, the linguistic and experiential content, instructional materials, can put flesh on the bones of these specifications'.

Richards and Rogers (1986) argue that instructional materials can provide detailed specifications of content of any lesson without the presence of a syllabus. And Wright (1987) suggests that materials can define the roles of teachers and learners within the instructional process. If teachers are trained to produce teaching- learning materials, rather than merely to adapt them, this would not only enhance their role in focused professional development but also that of their learners since teachers can be trained to get their learners involved in the process either directly or indirectly.

McDonough (1993: 46 -61) suggests that components such as learner strategies, study skills and language processes, are considered design principles and 'cannot have equal and universal applicability: as different teaching situations have different requirements and expectations.' Therefore in the field of EAP it is necessary to produce materials to meet not only an institutional need but also the needs of a particular school or faculty. Designing and developing materials is a highly specialised skill, a skill that requires time, practice and perhaps training (Dubin and Olshtain 1986; Dubin, 1995). Dubin and Olshtain (1986 :167) believe that:

> *Creating materials through which people can effectively*
> *learn new languages is a highly specialised craft, one that*
> *seems to be perfected through immersion in the activity*
> *itself.*

A common activity in teacher training courses involves examining existing materials guided by a checklist. However, this activity may not necessarily help teachers write or create materials for the language classroom. In practice, teachers seldom use evaluation guidelines to make decisions about whether to use or not to use a particular book. In some countries or institutions, one person, or a department or a ministry makes the decision for everyone (for example, Malaysia). Most teachers are not part of the decision-making processes which lead to the choice of textbooks or materials. In some EFL contexts, some institutions may require more specialised or discipline based materials. Teachers who find themselves in this situation would have no alternative but to design their own materials. Adopting a book written for use in an English speaking situation would not necessarily meet the needs of the students in countries like Malaysia. Adaptation may not be feasible or appropriate.

Most ELT language pedagogy courses emphasise the use of text books. The focus is on criteria for selecting and evaluating the books and adaptation of existing work is recommended if they are not in line with the teaching -learning situation.

3.5 Studies in Materials Development

The design and development of English for Academic Purpose (EAP) texts and teaching materials are crucial for the success of EAP programmes if they influence students' learning. In the context of this study, teaching material refers to different types of reading texts and teacher made materials which are content-based and within the learners' own discipline of study.

Much has been written by scholars and practitioners in the field of Applied Linguistics, ESP, EAP and EGP giving suggestions or guidelines on how to select, adapt, design and develop teaching materials (Cunningsworth, 1984, 1995; Hutchinson and Waters, 1987; Breen and Candlin 1987; Sheldon, 1988; Littlejohn and Windeatt, 1989; Skierso, 1991; McDonough and Shaw, 1993) . There are also reports on course design and materials development carried out with the help of the British Council, for example the King Abdul Aziz University and the University of Malaya ESP projects, the Moroccan, Bulgarian and Namibian textbook projects (Tomlinson, 1995) and the development of an EAP course for postgraduate students in Ecuador (Blyth, 1996). However, there appears to be little research on how teachers or teacher trainees working in the context of English as a foreign language (EFL), or English as a second language (ESL) select, adapt, design and develop teaching materials for different language teaching purposes. There seems to be very little interest in assessing or investigating EFL/ESL teachers' and teacher trainees' ability and problems in selecting, adapting, designing and developing materials. This lack of research and teacher training regarding materials development is distinctly odd, given the huge amount of research into learner variables (Long and Porter, 1985; Pica and Doughty, 1985; Long and Crookes, 1987; Pica, 1987; Pica et al, 1987,1993; Chaudron, 1988; Ellis, 1994; O'Malley and Chamot, 1990; Oxford, 1990; Larsen-Freeman and Long, 1991; Rubin and Thompson, 1994) the findings of which have shaped and influenced pedagogy (Van Els, 1984; Nunan, 1988, 1991; Celce-Murcia, 1991; Allwright and Bailey, 1991). The teacher variable in materials development on the other hand, remains an important but neglected factor.

Most of the literature about the teacher variable is centred around methodology [the role of the teacher and students in the classroom, lesson planning, managing learning (Howatt, 1984, Richards and Rogers, 1986; Wright, 1987; Nunan, 1991, 1992; Richards, 1990; Murphy, 1993)]. Even the abundance of recent literature on teacher development (Richards and Nunan, 1990; Flowerdew et al, 1992; Li et al, 1994, Nunan and Lamb, 1996; Freeman and Richards, 1996) does not address the problem of teacher training in

materials development. This lack of such studies is a cause for concern since materials remain the means by which language is taught and learn. As Masuhara (in press) argues:

> *teachers can even be said to be the central figures in materials development -*
> *for they are the ones who select materials (or, at least, have some influence in*
> *the selection process), who actually teach the materials and who sometimes*
> *have to re-write the materials. The students come and go and so do materials*
> *but a large number of teachers tend to stay*

To address the problems in research in materials design and development, an International Materials Development Association (MATSDA) was formed to encourage exploration, innovations and research into materials development. This strongly confirms practitioners perceptions that materials play a very important role in language teaching and learning. It also encourages more research into teachers', teacher trainers', teacher trainees' ability in designing and developing teaching and learning materials. As Bolitho (1990:29) argues, "the teacher who understands the principles of syllabus design and learns how to write materials is not only better equipped to respond to immediate classroom needs, but is also far better able to evaluate critically and productively, any syllabus or materials she/he is asked to work with." Such activity develops greater confidence in the teacher. It could be a key to their professional development.

The teacher trainer must additionally be trained in designing and developing materials, because in materials development it is necessary to know what to do, what is involved and how to overcome problems if they arise (Kiely, 1996:59). The trainer must be able to demonstrate through practical exercises the merging of both theory and pedagogy in materials development not just merely providing principles and criteria without practice. This is where principles, criteria and guidelines to select, adapt, evaluate and develop materials play an important role for training purposes.

3.6 Principles, Criteria and Guidelines for Materials Selection, Evaluation and Development

Henrichsen's (1983) survey into what American EFL/ESL teachers wanted from their training revealed that training in TESL materials selection and evaluation was the second most important item. More interestingly, is that this item ranked as the most important amongst non American respondents. The survey did not explore the reasons for such ranking but it is not difficult to guess a major one. Richards et al (1992), after a Hong Kong survey, report that commercial textbooks are the major teaching resources used by teachers; further confirming that selecting, adapting and evaluating materials or texts is a very common pattern in EFL teaching.

3.6.1 Principles, Guidelines, Criteria and Evaluation Checklists

Cunningsworth (1984:74) argues that 'professional judgement, founded on understanding of the rationale of language teaching and learning and backed up by practical experience, lies at the base of the evaluation procedure'. This point seems to be particularly valid for experienced teachers because evaluation and selection of text and materials are often based on intuition, experience with particular learners and an understanding of the theories and principles of language teaching and learning. Further, books or materials need to be judged on their own terms (Dougill, 1987). Dougill adds that 'personal perceptions will thus necessarily remain the key element in evaluation. In the final analysis then, the art of evaluating turns out to be by no means so obvious' (Dougill, 1987:34-35). This comment also applies to the task of developing materials as personal perception and intuition are frequently involved. This was revealed by the language instructors involved in the needs survey (see chapter two).

Presently there are a number of published lists of criteria or guidelines for materials selection, adaptation and evaluation but most do not focus on materials writing with the exception of a collection of articles in Byrd (1995). A close study of a significant range of this published literature (Madsen and Bowen, 1978; Hilferty, 1978; Bruder, 1978; Tucker, 1978; Cunningsworth, 1984; Dubin & Olshtain, 1986; Dougill, 1987; Hutchinson, 1987; Breen and Candlin, 1987; Yalden, 1987; Littlejohn and Windeatt, 1989; Nunan, 1988; Sheldon, 1988; Skierso, 1991; McDonough and Shaw, 1993) reveals that they provide a wide spectrum of guidelines and principles for consideration in selecting, adapting and evaluating materials. Examples of such considerations are listed in table 3. 2 below.

Besides the criteria presented in table 3.2, other criteria for evaluating and developing materials also exist. For example, Breen and Candlin (1987:24-27) propose seven features when developing materials; they are concerned with materials which are designed to exploit the social nature of the classroom learning context and that the learners are the central focus (Breen and Candlin, 1987:24).

Littlejohn and Windeatt (1989:156) propose six areas which relate to general or subject knowledge, views about knowledge and what it involves, opportunities for the development of cognitive abilities, role relationships in classrooms and values and attitudes.

Table 3.2 Some main criteria for selecting, adapting and evaluating materials

1. Practical: organisation of text; bibliographical data; author's background; cost	2. Linguistic : presentation of language forms and structures, lexis; sequence and grading; reinforcement	3. Content: authenticity; adaptability; exploita-bility; size and density; relevance; manner of presentation	4. Task / Activity: Variety; selection; sequencing; gra-ding; evaluating; motivating; challenging; relevance;
5. Learners: age, gender; level of proficiency; interests; preferred learning styles	6. Teaching-learn - ing context: syllabus; language policy; examinations; objectives; aim	7. Cultural: content accuracy; cultural sensitivity etc.	8. Approaches/ methodology: type of approach (es) desired or is appropriate based on teaching context
9. Time-Frame: amount of time involved in teaching particular units/ tasks etc.	10. Language Support: quantity and type of supplementary materials etc.	11. Reinforcement: amount and type of practice activities; recycling of tasks / activities	12. Evaluation: kinds of evaluation procedures; purpose; objectives

The different types of suggestions, guidelines and evaluation checklists for teachers to select, adapt and evaluate textbooks or materials can only provide data of limited usefulness. There are no perfect guidelines, checklists or criteria. There is, however, an important use of such criteria, guidelines and checklists in designing materials for language teaching which is rarely mentioned: they have the potential for influencing the ways or manner in which teachers operate and think. This training function goes beyond teaching teachers how to evaluate materials. Checklists and guidelines can be the foundation or base for the teacher's thinking about development or design of specific materials.

Hutchinson (1987:42) maintains that materials evaluation and selection can develop the teacher's awareness in several ways. He argues that teachers must be trained to carry out in-depth analyses of their own presuppositions as to the nature of language and learning. Teachers also have to decide which criteria are the more important ones and this, in turn, would encourage them to establish their priorities concerning teaching procedures. By training teachers to select, adapt and evaluate materials they will be guided into seeing materials as an integral part of the whole teaching-learning situation.

It can thus be argued that guidelines, criteria and suggestions for selecting, adapting, designing and developing materials have a professional development function: they help teachers and teacher trainees to think and to use skills and theories methodically. Systematic use of guidelines or checklists involves teachers, teacher trainers and trainees alike in a cognitive process by encouraging different levels of thinking, reasoning and application of conscious and sub-conscious strategies. Only then can good materials which encourage use of a variety of strategies and thinking processes be developed for effective learning of the language.

The objective of designing materials in an EAP context is to address the problem that inadequate published materials do not meet particular needs. Paradoxically, teachers' perceptions of inadequacy increase as a consequence of materials design projects. As Alderson (1980:134) states, 'as more materials become available, potential users become increasingly discriminating and more and more aware that increased variety is not the solution for their particular situation....... materials design projects increase as teachers realise the inadequacy of published materials to meet their own particular needs'. Alderson points out that the use of "home-made" material is probably due to an increase in commercially available materials. Tickoo (1994) argues that ESP courses, programmes and materials developed for a particular situation and context in one country may not necessarily be applicable to another. This recalls Robinson's (1980) definition of Quintessential ESP: ' materials produced for use once only by one group of students in one place at one time.'

Since ESP is so specific, guidelines or a framework for materials design are increasingly a vital tool for practising teachers and for teachers in training. Such guidelines can be categorised into two groups. The first are guidelines or criteria for selecting, adapting and designing materials. The second are guidelines for evaluating texts or materials. Both can be used interchangeably and seem to be popular in most ELT courses. But how adequate are they? Thus far, there have been no studies on the adequacy and effectiveness of using guidelines for materials selection, adaptation and evaluation. There has been a tendency to accept them at face value.

It is therefore crucial that teachers of EFL are well trained in the area of materials design. This training, together with insight into second language acquisition processes may lead to better understanding of the learners' minds and would lead to not only consciousness raising but also awareness of the development of language, skills and strategies and better teaching techniques. As Richards (1993:7-8; see also Shannon, 1987; Block, 1991; Littlejohn, 1992; Apple and Jungck, 1990) states, over reliance on commercially

produced texts can bring about the deskilling of teachers. This is described as the process in which " there is a lowering and reduction of the level of cognitive skills involved in teaching resulting in a level of teaching in which the teacher's decisions are largely based on the textbook and the teacher's manual" (Richards, 1993:7). In developing the EAP Materials Training Framework, this researcher attempts to apply current knowledge to meet pedagogical needs within an Asian context by encouraging teachers to use and to apply higher order thinking skills.

Clearly a number of applied linguists see the need for a deeper understanding of not only materials evaluation but also of the design of materials by teachers. Therefore, if teachers are trained to use criteria for selecting, developing and evaluating materials, and are encouraged to reflect on theories of language teaching and learning related to materials design, their awareness of the complex nature of materials can be raised.

3.7 The Present State of EAP Materials

Currently there are many published texts for ESP or EAP teaching at both the school and university level. Most of the published texts deal with study skills and some are subject or discipline-specific. Other ESP-based texts which are not specifically designed for EAP are often used as EAP materials, particularly when they include content specific materials.

Many published EAP texts have similar patterns of presentation and are almost always written for ESL teaching in English speaking countries. Examples of some of these are presented in tables 3.3 and 3.4 below.

This brief review of selected current materials shows how different beliefs and approaches are being put into practice. Published materials or texts, seem to range from those which concentrate on language skills, study skills, task-based, structure-based and discourse/rhetoric-based with general texts to others with content-based texts using a variety of approaches. It is therefore not surprising that the question of whether to write their own materials, to adapt existing materials or to even purchase commercially produced materials is every EAP/ESP teacher's nightmare. Littlejohn (1992) and Richards (1993) noted that there is no need for teachers to consider what to teach or how to teach because the book and the teacher's manual does all the thinking for them. The manner in which materials or books are structured and written depends largely on the writer's or author's beliefs and theoretical orientations. Often it seems that the authors have no clear picture of the real situation of the learners or of the competency levels of the teachers who teach them. The solution may lie in the development of a bank of materials Jones

(1990) for different types of learners with varying levels of proficiency. Such specific materials can be developed by teachers from different teaching situations and who have been specifically trained to prepare them using various guidelines, frameworks, evaluation checklists and samples from commercially produced EAP texts. They can be recycled, tried out, monitored, evaluated and re-designed from time to time.

Table 3.3 EAP Reading Texts

Title	Author / Date	Features
1. English for Study Purposes Part 1 and 2. 2. Study Reading 3. Reading and Thinking in English: Discovering Discourse and Discourse in Action	J. Smith & B. Coffey (1982) Glendinning & Holmstrom (1992) Moore (1979)	-Covers Study Skills - Presents a wide variety of rhetorical discourse genres - Presents tasks / activities with high levels of cognitive processing skills - Makes good use of both linear and non- linear texts - Visuals are well exploited - Assumes that teachers are very competent
3. Reading (English For Academic Study Series)	McGovern et al (1994)	- Introduces Study skills - Provides practice with a wide variety of discourse / rhetorical functions - Attempts to incorporate high levels of thinking processes - Tasks could be more varied - Visuals are not well exploited - Assumes that teachers have a good knowledge of learning strategies
4. Interface: Academic English in Context	Burgmeier et al (1985)	- Introduces Study Skills - Covers a variety of rhetorical functions -Visuals are not well exploited - Does not provide tasks with high levels of cognitive and thinking skills - Is not demanding on the teacher

Table 3.4 EAP Writing Texts

Title	Author / Date	Features
1. Study Writing: A Course in Written English for Academic and Professional Purposes 2. Study Skills for Academic Writing	Hamp-Lyons and Heasely (1987) Trzeciak and Mackay (1994)	- Introduces and provides a wide range of expository discourse / rhetorical functions - Writing activities linked to reading tasks - Assumed that teachers have good knowledge of the language - Excellent variety of visuals, well exploited - Little overt attention to the teaching of language - Focus on the acquisition of meta-language through gradual familiarisation - Approach emphasises discoursal and cognitive aspects of writing - Assumes that teachers are highly competent
3. Writing	White and McGovern (1994)	- Introduces a fair amount of expository discourse - Students provided with checklists to monitor, structure and cohesion - Visuals are not well exploited - Linguistic & rhetorical form introduced only when students know how to formulate & evaluate own ideas - Adopts the process approach to writing
4. Writing for Study Purposes	Brookes & Grundy (1990)	- Covers a variety of discourses - Fail to present explicit types of visuals - Advocates process related approach - Is more of a teachers resource book -Provides choice for self-expression

110

Section Three

3.8 Teacher Training and the EAP/ESP Teacher

In the last 10 years, teacher training programmes in ESL/EFL have multiplied around the globe. They can be found in many guises - Teaching English as a Second or Foreign Language (TESL/TEFL), Teaching English to Speakers of Other Languages (TESOL), and Teaching English for Specific Purposes (TESP). Training programmes range from pre-service certificates and degree courses to advanced postgraduate courses for experienced teachers.

Apparently, it seems that the training of English language teachers in the field of ESL/EFL or EGP is quite clear. The teacher's role is also clearly defined. However, in the area of Language for Specific Purposes (LSP) or ESP/EAP this is not so. The role of the ESP/EAP teacher is viewed as problematic (Ewer 1983; Kennedy, 1983; McDonough, 1984; Robinson, 1991; Grabbe, 1994) and there does not seem to be a simple solution for these problems.

There are few clear definitions of the kind of qualities an EAP/ESP teacher needs; about whether courses need to train teachers specifically for EAP/ESP; or provide them with the basic theories and principles of English Language teaching in ESL/EFL or EGP and an additional component for tackling an EAP/ESP based course. Whose model would we use: Ewer's (1983), Kennedy's (1983), or Waters's (1994) ? Do we take the stand of Roe (1993:10), who argues that research can 'take the guesswork out of ESP' or Johns's (1993:8-9) who maintains that the "guesswork cannot and should not be taken out of our research and pedagogy......... There are many things that will force us to guess as long as we are ESP practitioners.... that's what makes ESP exciting". Thus, we should train teachers in EAP and study the long term effects.

3.8.1 The EAP/ESP Teacher

Who is the EAP or ESP teacher? Strevens (1988:41) states that 'almost always he/she is a teacher of General English who has unexpectedly found him/herself required to teach students with special needs.' The experience is often a shock- a mixture of the welcome and the unwelcome (Strevens, 1988:42). This shock could be due to many factors. For example, NN teachers of English may fear that they may not cope with their students' area of specialism if content area materials are utilised. This fear is strengthened if these teachers have doubts about their own competence in the language (cf Bolitho, 1990) or the teachers may feel that they lack the ability to develop appropriate teaching - learning materials for specific types of learners.

Ewer (1983:10) identified five difficulties that a teacher would have in teaching within ESP/EAP: (1) attitudinal, (2) conceptual, (3) linguistic, (4) methodological and (5) organisational. Ewer maintains that teachers can be trained to overcome these five problems so that they become positive qualities that an ESP teacher should have.

It seems that the demands made on the EAP/ESP teacher are enormous. However, it can be argued that the EAP teacher's role in fact is one that does differ from the teacher of EGP. The difference lies in the fact that ESP/EAP teachers need to be able to manage both EAP and subject discipline/specific related materials if they are used, and there is a need for the teacher not only to be knowledgeable in many areas (language teaching-learning theories, pedagogy) but also to have the skills and ability to impart such knowledge, skills and practical concerns to learners. The EAP teacher also needs to be a master of materials development - s/he needs to be able to adapt and design in-house materials to meet the changing needs of her/his learners, the demands of the institution and national needs. The EAP teacher needs to have linguistic knowledge to analyse texts and language learning-teaching theories which could be expanded and expressed as practical concerns. These skills need to be incorporated into the materials not only to aid in the language acquisition process but also to assists learning in the academic context.

While the current trend is for the EAP teacher to draw upon the domains of language teaching-learning theories there is also a need to draw on other teaching- learning theories outside the domain of language teaching. For example, much could be learnt from research in the field of education, particularly in the areas of distributed cognition, dimensions of thinking in instructional materials, taxonomies of learning skills and the construction of knowledge. It seems that EAP/ESP has for too long tried to pursue its own specific teaching and learning without drawing on learning from education theories and research. But there is evidence that there is some movement in this direction as pointed out by Dudley Evans (1994).

That the EAP/ESP teacher's role is difficult and complicated could be viewed as a challenge with anticipated innovations and an opportunity to experiment with ideas. This is because the field is continually changing. There is a need to understand the problems EGP teachers might have in dealing with EAP/ESP materials. This can only be done via research studies. The neglect in the area of teacher-training in EAP materials development is probably due to conflicting beliefs about training for EAP/ESP (McDonough, 1984; Khairi et al, 1993).

3.8.2 Teacher Training in ESP/EAP

There are only a few institutions which are known for providing some form of training in ESP or EAP. Examples of some of these are: the universities of Essex, Birmingham, Aston, Lancaster and the College of St Mark and St John in Britain, the Universities of Michigan at Ann Arbor, and Texas at Austin in America and the University of Chile. In Malaysia, there are no such training programmes at undergraduate level but the University of Malaya's Language Centre teaches a specialist course in ESP at the Masters level.

The well known teacher training programme in ESP developed by Ewer in Chile, was taught for the last time in 1980 (Boys, 1983:7). Ewer (1983:15) sets out his training course under two headings: theoretical and practical considerations. They are inter-related. The training course is designed around a number of 'nerve centres' dealt with in sequence. The principal components are: language variety, need: relationship needs/ language; training requirements; syllabus design; methodology; errors evaluation and administration. This leads to the gradual building up of an 'integrated conceptual network'. Practical sessions dealt with reading assignments using EST subject-matter, language and concepts as well as microteaching components. Theoretical sessions provided students with a working knowledge of the teaching of EST as a complete system of its own (see Appendix A3.1).

Kennedy (1983) proposes a different model. He argues that "what is of fundamental importance in the training of teachers is the role of language (a specific variety of the language) in that training"(ibid: 75). This is because a teacher who is not linguistically or conceptually well prepared may react in a number of predictable ways, all counterproductive, to texts that he or she cannot understand. Kennedy (1983:73-74) maintains that the teacher variable, the training of ESP teachers and the training of General Purpose teachers as an ESP activity have all been neglected. Kennedy puts forward a model which consists of five levels [course content; course format; course methodology; discourse structure of texts and formal structure of texts (Kennedy, 1983:79-82)] for looking into the teacher's needs with regard to not only language teaching but also language training which is similar to that of the learner (see Appendix A3.2)

Grabbe (1994:1) proffers another idea which might be adopted for teacher training: 'the challenge for the EAP/ESP teacher is to manage learning in which there are more dimensions at play than in the average general purpose course.' He adds that 'the

teaching problem is solved within a learning paradigm - a view of what has to be done in order for language learning to occur'. The proposed paradigm contains perspectives on what language is and on what language learning is. It is argued that paradigms are not clear-cut or self-contained units (Grabbe, 1994:4). Nevertheless, several applied linguists have distinguished two principle paradigms and adhere to one or both (Mohan, 1986; White 1988, Breen 1987, Long and Crookes, 1991, 1993).

A brief discussion of Grabbe's (1994:4-6) paradigm is given here since the present research, in particular in its use of the categories of task, genre and learning strategies, has a place in Grabbe's paradigm.

The first paradigm is the *content learning paradigm* which focuses on textual description (structures, functions etc.). This paradigm postulates that learners should understand the structures and functions of the text in order to produce language text themselves (cf Ewer, 1983; Kennedy, 1983). Work in this area is largely associated with Trimble (1985), where the description of content is developed through description of rhetorical functions in scientific text, and Swales's (1990) recent work in genre analysis which foresees a description of academic genres. In the 1980s there was a tendency to move away from this view as some practitioners felt that the learning principles of this paradigm were not well articulated. The late '80s onwards, however, has seen a revival of this view (Johns, 1986, 1988; Dudley-Evans, 1986, 1987; Swales, 1990) and as Grabbe points out "the language awareness movement and information processing models of language learning have given a fresh rationale to content descriptions" (Grabbe, 1994:4-6).

The second paradigm is that of *task-based learning*. It is built around a principle that we learn language through the process of communication. This is achieved through the use of 'task'. Where content-learning seems to emphasise linguistic description, task-based learning emphasises the psycholinguistic aspects and is more concerned with pedagogic aspects. Where the first paradigm presents the learners with a description of the language so they will understand it, the second paradigm makes the learners communicate so that the learners will develop the language. The focus has been on language learning principles.

Grabbe significantly observes that 'the principles of each paradigm are not necessarily incompatible - both ways have validity with different learners at different times' (Grabbe, 1994). Grabbe maintains that his own paradigm will form a common organisational platform on which the other two paradigms might operate. This

paradigm is developed specifically around the learner-teacher roles with a problem-solving perspective. He calls it *the management of learning paradigm* because it views the learners or teacher trainees 'as having an important stake in the learning process and therefore manage it' (ibid: 5).

This is similar to the process-based approach (Breen, 1984, 1987; Clark, 1989) which embodies the negotiated syllabus. Grabbe is not concerned with the negotiated syllabus, but is more attuned to achieving the goal of 'fostering the ability of students to problem-solve within an almost conventional curriculum' (Grabbe, 1994:5). He adds that 'a development within a paradigm on the management of learning is associated with work in the area of learning strategies. The description of strategies that people can use for language learning is a useful resource in developing autonomy' (ibid.). Materials do not show much sign of working to this management paradigm nor do many teacher education courses prepare teachers to deal with it. Figure 3.1 is an interpretation of Grabbe's paradigm:
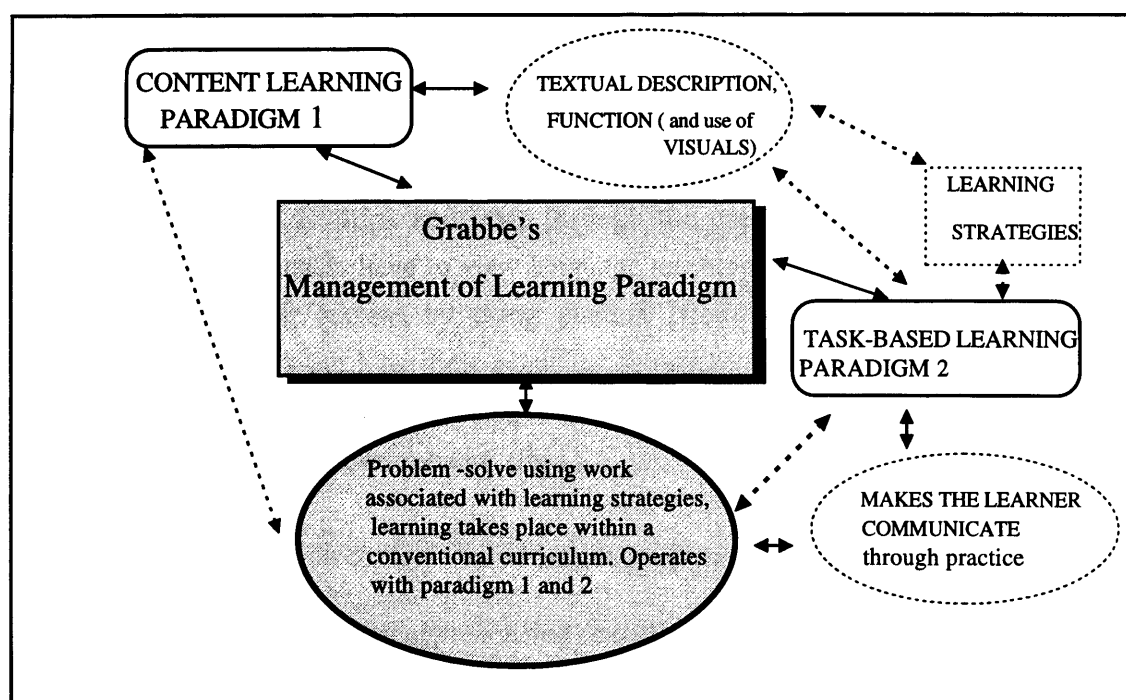
Figure 3.1 An Illustration of the Management of Learning Paradigm and its Content

Another training model within the ESP teaching-learning process is advocated by Waters (1994), which is first concerned with training in materials evaluation and then moves on to needs analysis; these are theoretical inputs to curriculum design, syllabus specifications etc. (Waters, 1994:6-7).

The four different approaches on teacher training in ESP / EAP materials are different but share some similarities. In order to develop other training models it will be necessary to find a balance since arguably materials form the basis of any instruction. Therefore, this study takes as its central theme the training of teachers in the area of EAP task-based materials by synthesising Ewer's, Kennedy's, Waters's and Grabbe's training models and integrates it with content-based approaches in the development of a training framework for developing EAP reading and writing materials.

3.9 Content - Based Approaches to Language Teaching (C.A.)

One of the most important modes of skill integration is known as content based instruction/ learning [CBL] (Brinton, Snow & Wesche, 1989; Cantoni-Harvey, 1987; Crandall & Tucker, 1990). It has been used for a very long time in ESP or EAP programmes at tertiary level (Mohan, 1986; Brinton et al, 1989; Crandall & Tucker, 1990).

Crandall and Tucker (1990:83) define CBL as " an integrated approach to language instruction drawing topics, texts, and tasks from content or subject matter classes, but focusing on the cognitive academic language skills required to participate effectively in content instruction". This implies that in the CBL approach the activities of the language class are specific to the subject matter being taught. The activities are geared to stimulate students to think and learn through the use of the target language. An implication is that teachers have to view language teaching from the perspective of truly conceptualising their lessons by using content (from sciences, engineering, social sciences, mathematics etc.) as their point of departure (Brinton et al, 1989: 2). By adopting such a view, the teachers are "almost certainly committing themselves to materials adaptation and development' (ibid.).

In his pioneering work on content -based language learning, Mohan (1986:1) argues:

> *Any educational approach that considers language learning alone*
> *and ignores the learning of subject matter is inadequate to the needs*
> *of these learners ....What is needed is an integrative approach*
> *which relates language learning and content learning, considers*
> *language as a medium of learning, and acknowledges the role of*
> *context in communication.*

3.9.1 Goals of Content -Based Language Instruction

The importance of subject matter and content for language learning is now generally acknowledged in second language research. The goal is to achieve learning not just through language but with language. Thus, in CBL the language teacher's primary goal

is to help students develop the ability to use the language effectively, appropriately and accurately in a variety of settings; in this context, the academic setting. The primary goal requires the use of authentic communicative language which presupposes the integration of the four main language skills and the subsidiary language skills (Mohan, 1986; Brinton, et al 1989; Scarcella and Oxford, 1992). The secondary goals are concerned with the introduction of concepts and terminology which are relevant to a particular subject area, in order to reinforce content-area information learned elsewhere, and to teach other specific learning strategies (O'Malley and Chamot, 1990; Oxford, 1990) for writing, reading, or general study through the means of relevant and appropriate content(Mohan, 1979, 1986; Cantoni-Harvey, 1987; Brinton et al, 1989). Snow et al (1989) refer to such goals as content - obligatory language: language which is essential for understanding content and content - compatible language : language which links almost naturally with a given concept or content area.

Both Mohan (1986) and Collier (1989) suggest that content-based, integrated -skill academic instruction should begin while ESL students are mastering basic language skills. This would ensure that students are well prepared to work on very demanding cognitive tasks when they are confronted with them. This is consistent with Cummins (1979) who makes and important distinction between basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP). According to Scarcella and Oxford (1990), Swales's (1990) work on genres in content-based writing supports Mohan's and Collier's suggestion.

3.9.2 Models of Content-Based Language Instruction and EAP
There are three different models of content - based instruction. Theme-based, Adjunct and Sheltered. Only the theme-based and adjunct based models will be discussed here (ee Brinton et al (1989) for a thorough review) and these will be compared to EAP as these models can be adapted and elements integrated for use in the Malaysian context.
Theme -Based Models are structured around topics or themes which are almost always authentic. The content material provides the basis for language analysis and practice (Brinton et al, 1989; Wesche, 1993). The materials should consist of themes which will engage the students' interest and provide a rich context for language skill development. This choice of theme is difficult in mixed - discipline EAP classes. Adamson et al (1989) also point out that it can also provide university students with an introduction to discipline content drawn from regular academic courses. A fine balance between language and content must be maintained.

Adjunct Models on the other hand are structured in a different way. Students are enrolled concurrently in two linked courses - a language course and a content course. The model integrates the language curriculum within the academic language demands placed on students in their other courses. However , the content course is an existing one for the native speakers of the target language and thus it is only appropriate for advanced L2 speakers. The link between the two courses lies in the sequence of rhetorical modes or discourse modes/ genres (Wesche, 1993) presented and it is not based on a needs survey as in ESP/EAP. Instead the materials are selected according to learners' course content. The content instructors identify the content and assignments and the language instructors work on the language components to enable the students to learn via the medium of language. The rationale for this is that linked courses will assist students in developing academic coping strategies and cognitive skills. Much of the language instructor's time is spend developing materials. The manner in which the course is structured and materials are developed differs from that of EAP.

English for Academic Learning Purposes Method (EALPM) aims to link study skills with language acquisition to develop academic coping strategies and language competence through the use of either content-based materials or common - core materials. The linguistic terms, skills and methods are based on a needs survey. Content instructors and language instructors very rarely work together. Language instructors select materials on their own using their own judgements. There have been attempts at encouraging team teaching in ESP in Britain (see Johns and Dudley-Evans, 1980; Chamberlain; 1980; Henderson & Skehan, 1980; Jackson & Price, 1981).

Many EAP based courses use content materials in the teaching of reading. Thus such courses use approaches that are similar to reading in the content area [RICA](Mohan, 1986:16). This would allow for the combining of techniques from both approaches.

The study skills approach which is common in all EAP courses analyses the learning tasks that students might face in the content areas. Once the learning or study tasks have been identified, general techniques required to teach them are worked out. Thus study skills in ESL are important in understanding and learning subject matter. This is not disputed because they are taught in combination with ESP and RICA. What is lacking is a unifying framework linking all three (Mohan, 1986). Without a unifying framework it would be difficult for students to integrate the work in their language classes and content classes without clear guidance. As Mohan (1986:18) explains, "what for teachers is simply difficult , may prove impossible for students." A comparison of the

features of the three types of instructions is necessary and are presented in table 3.5, discussed above.

What then can be learned from CBL models in terms of materials development for EAP? CBL places importance on subject matter materials(depending on which model is ascribed to). Rhetorical functions or modes are emphasised, which is conducive to the application of genre theory. The basic skills which are emphasised are reading, study skills, and writing skills. At the same time academic learning, thinking skills and cognitive strategies are incorporated to enhance both language competence and mastery of subject matter.

A large selection of materials or texts are recommended; ranging from general based texts in the discipline, such as reports, lab manuals, magazine articles, journal articles to more specific texts. Grammatical knowledge and functions are to be taught within the context of the materials to enhance understanding of the texts concerned and to be applied to writing skills as well. The principles of CBL can thus be adopted and adapted for use within an EAP context in an EFL situation, as in the context of this study. This is because the Malaysian university students require language competence in order to understand references and reading in English. It is hoped that this method may also help the students to acquire the study skills, thinking and cognitive skills which could promote their academic success. These skills are also transferable to other learning / non-learning situations. This is an important move because as Hudson (1991:77) argues:

> *Developers of ESP materials are frequently called upon to develop language materials for narrowly defined fields of study. Too often the language of the "target" texts is viewed as a product which the learners must master rather than as a stimulus for a complex set of interacting learner strategies and tasks embedded in the learning process.*

This is true in many ESP / EAP situations. To a certain extent, the above statement reflects a view that texts are linguistic objects rather than vehicles for the presentation of information (Johns and Davies, 1983). With the former view, reading passages are considered to be objects representing organisational or syntactic structures to be studied and mastered by students. What is needed is pedagogical balance where the text is the vehicle for advancing both language learning and the academic learning process.

Table 3.5 A Comparison of the TBM, AM and EALPM

	TBM	AM	EALPM
Aim	Develops L2 language competence	Develop L2 language competence and mastery of content. Equal weight is given to both.	Develop L2 language competence and to a lesser degree develop comprehension strategies/coping strategies through either content or general materials.
Students	Students do not share the same occupational or educational goals	Both native and non-native speakers attend the same programme of discipline. But native speakers attend different language support. Non-native speakers attend parallel programme	1. Native and non-native speakers attend same programme of discipline in native speaking context. NNS attend language support classes. 2. Non-native speakers attend same programme or discipline within a non-native speaking context & attends language support classes to enable them to read reference books in English and to sometimes work on assignments in English. Support provided based on an individual discipline. 3. Non-native speakers from mixed disciplines attend same language support classes.
Courses	Language course has a content orientation. Suitable at secondary school level and pre - university level.	Integration of language and content courses where both are linked mutually through co-ordinated assignments. Suitable for university level students.	Language courses may or may not have content orientation depending on institutional needs and beliefs. Language and content classes are not mutually linked.
Texts	Texts must be highly exploitable and of interest to students. Text selected should have a range of language functions and structures.	Text not specifically generated for language learning purposes.	Text selected generally for language teaching purposes and not for mastery of content.

Key: TBM- Theme Based Method;   AM- Adjunct Method;   EALPM- English For Academic Learning Purposes Method.

120

3.10 Implications of Differences for Materials Development and Teacher Training

What is noticeable about all three approaches is that language competence is considered important either for mastering content or for understanding content. The difference lies only in the design and emphasis on the content orientation. However, the differences imply different approaches to curriculum design, materials development and teacher training. A balance of all approaches could perhaps be created as illustrated in Figure 3.2.

It is therefore clear that a pedagogical balance (as shown in figure 3.2) where the text is the vehicle for advancing language learning and the learning process is needed. This could perhaps be further reinforced by applying genre theory through the teaching of reading and writing skills. At the same time learning strategies and visuals could help enhance the learning process. These will be discussed in chapter four.

Section Five

3.11 READING IN EAP

It is suggested in section four that reading in EAP through content materials requires complex reading and processing skills. Thus implying that interactive reading approaches would be most appropriate.

3.11.1 Interactive Approaches to Reading in EAP

Interactive approaches to reading involve both bottom-up and top-down processes. It is not within the scope of this study to dwell on the top-down and bottom -up processes. For a detailed discussion of these see Rumelhart, (1977); Carrell, (1981, 1982, 1983a, 1883 b; 1984, 1988) and Carrell et al.(1988).

Advocates of these approaches suggest that people synthesise incoming information based on several knowledge sources at any one time. Various reading sub- skills operate in a compensatory manner and the skilled and hence unskilled readers will process a text differently. Skilled readers constantly shift their method of processing (between bottom-up and top-down), depending on the demands of a particular text and a particular reading situation, however, less skilled readers may tend to over-rely on processes in one direction, producing damaging effects on comprehension (Spiro, 1979).
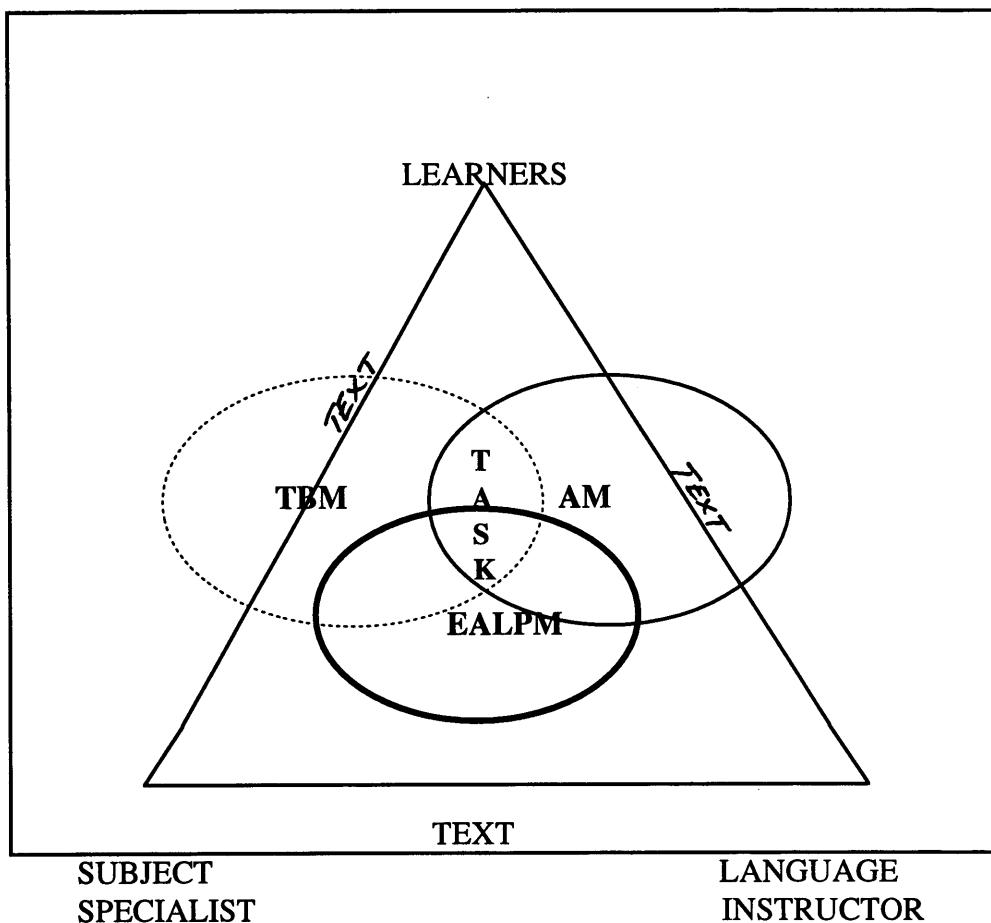
Figure 3.2 An Integration of the TBM, AM and EALPM

Key : TBM   -   Theme Based Method
      AM   -   Adjunct Method
      EALPM -   English For Academic Learning Purposes Method

Since this study relates to students whose aim is to be skilled readers, it draws on the interactive approach to reading comprehension within the schema-theoretical framework where "text comprehension/reading comprehension, is characterised as involving an interaction of text-based processes and knowledge-based processes" [reader's existing background or schemata] (Carrell, 1988:101).

In an EAP NN speaker's context such as Malaysia, learners frequently need to read specialised texts within their own specific discipline at college or university level. The amount and type of reading they will do largely depends on which type of EAP situation they are in. In the present context of this exploratory study, the setting is that of an EFL situation where the medium of instruction at university level is in the National

language but a large number of reading texts are in English. Some lectures are conducted in English and therefore some examinations, project work and assignments have to be done in English. If lectures are conducted in Malay, readings are still assigned where the texts are usually in English. It is therefore not difficult to visualise the two-fold kinds of problems these NNS of English may have. Firstly, they are thinking in Malay and have to read and process texts in English, and secondly, they have to translate information in English back to Malay in order to function within the immediate needs of their discipline (for example, when writing reports and assignments). Their first basic problem would be understanding English texts. This situation in Malaysia can be schematically represented as follows in figure 3.3

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┌─────────────────┐
│  READING IN EAP │
│  in MALAYSIA    │
└─────────────────┘
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(1) CONTEXT	(2) PURPOSE	(3) PROBLEMS
1. EFL situation.	1. Reading to learn.	1. Reading at a new academic level (Tertiary education).
2. Reading Texts Basically in English - very few translated versions	2. Reading to improve language proficiency.	2. Thinking in the National language but have to read and understand & process texts in English.
3. Some lectures conducted in English - therefore reading assignments, project work and examinations are in English.	3. Reading to acquire new knowledge and to relate to old knowledge.	3. Notes taken while reading in English need to be translated into the National language(processing of texts is therefore at 2 levels - English and the national language in order to follow lectures, complete projects etc.).
4. Most lectures conducted in the National language but most of the time reading texts and reading assignments are in English. Project work and exams are in Malay	4. Reading to write project papers and to support information in reports etc.	
	5. Reading to be critical and analytical	

Figure 3.3 Reading in EAP in Malaysia

The above situation implies that EAP teachers need to be trained to develop materials that not only propagate the learning and acquiring of reading skills, but also strategies to learn within the academic discipline.

The focus should not be only on understanding technical vocabulary/terms, nor should it be mainly on just acquiring reading skills and comprehending surface structures or information. Cohen et al (1988: 152) point out that experience has indicated that students who have a mastery over technical terms eventually become frustrated in reading technical English.

Research by Todd-Trimble, Trimble and Drobnic (1978), revealed that it is not so much the technical vocabulary that impedes comprehension, but rather it is non-technical terms in technical writing which, most of the time, give students the most difficulty. Therefore it is the structure of the writing which poses difficulties for the students. Carrell (1983b) argues that learners need access to both formal schemata and content schemata in order to understand a text. In order to comprehend a text, a reader needs to possess background knowledge about rhetorical organisation, for example of the different structure of different text types (genre). At the same time, the reader also needs to possess background knowledge (content schemata) about the content area of the text.

Carrell and Wallace (1983) in their study found that ESL readers may not be effectively utilising knowledge -based processes; specifically they may not be utilising contextual information they are given, to facilitate comprehension. Problems with comprehension processing could be due to any of the following reasons: schema availability, schema activation, skill deficiencies (this includes deficiencies in reading skills and linguistic deficiencies), misconceptions about reading in a second language and individual differences in cognitive styles.

Shih (1992:289) proposes that "study reading, reading for in-depth comprehension and learning" should be seriously considered within an EAP context. This aspect of reading to learn should be taught alongside the traditional methods currently used in EAP, that of developing reading skills and exercises for comprehension checks and expansion of linguistic competence (ibid: 289-290). According to Shih (1992:289) "Study-reading, reading for in-depth comprehension and learning, is a special type of reading, demanding a different type of processing (in terms of focusing of attention, information-encoding and retrieval) than reading for enjoyment or reading for general information." This is in line with Anderson and Armbruster's (1984:657) theory that "Studying is associated with the requirement to perform identifiable cognitive and/or procedural tasks... [to meet] the criteria on tasks such as taking a test, writing a paper, conducting an experiment."

Thus, there is a need to balance learning to read with reading to learn. This calls for a shift from a skills-based approach to that of a content-based approach while including a cognitive academic learning approach. Knowledge of how texts are structured gained from reading experiences would help learners in their academic writing.

3.12 Academic Writing

Academic writing is considered to be an important writing skill: nearly all assessment depends on writing. An ability in comprehending different text structure through the reading of various text types could lead to better control in writing (Zamel, 1992; Grabe and Kaplan 1996).

3.12.1 Model-based

Traditionally, the teaching of writing focused mainly on language. The emphasis was on accuracy and copying of models. This resulted in controlled somewhat rigid writing exercises (Rivers, 1968). The need to get students to write extended discourse led to the belief that controlled composition was not enough; that writing was not just building grammatical sentences and that there was a need to bridge a gap between controlled and free-writing (Silva, 1990:13). This led to a shift in interest in rhetoric. Silva (1990:13) refers to this as current-traditional rhetoric, because it combined the basic principles of current-traditional basic principles of Native-speaker composition and that of Kaplan's (1967) theory of contrastive rhetoric. The focus of this approach was on logical construction and arrangement of discourse forms. Attention was given to the paragraph focusing on topic sentences, support sentences, concluding sentences and transitions and other options such as development through illustration, exemplification, comparison, contrast, partition, classification, definition, causal analysis. The other focus was on the development of the essay. The learners are taught the organising principles of the text, for example: description, exposition and argumentation. As far as this approach was concerned, the focus was on accuracy and correctness, following structured models rather than providing room for expression of thoughts (see Silva, 1990 and White, 1988). White refers to the above process as the procedural model or model-based approach and represents it as follows:

Study the model ⟶ Manipulate elements ⟶ Produce a parallel text.

Figure 3.4 Model based approach (White, 1988:5).

Within the field of EAP, the model-based approach still remains popular in spite of the appearance of the process-based approach to writing. One reason for this is the fact that EAP writing is very product-oriented and "that conventions governing the organisation

and expression of ideas are very tight," White (1988:5). The learner has to be familiar with these conventions and needs to learn to write within them. It therefore appears that adopting the model-based tradition to teach students such conventions would be the solution. This situation is presently compounded with the appearance of genre analysis and its widespread use, particularly in areas of language across the curriculum (LAC). This makes the role of the model even more important. However, there is another way to expose learners to writing using models, by adopting and adapting the use of the process approach to writing.

3.12.2 Process-Approach

The process-approach made its appearance in the field of ELT from the early 1980s onwards. It became the latest ELT innovation within the field of writing. Research into the process approach to writing is very well documented (see Zamel, 1992; Raimes, 1987; Connor, 1995; Grabe and Kaplan, 1996). It is basically grounded in cognitive psychology whereby the writer's mental process is of utmost importance in perceiving, remembering and retrieving information as well as problem solving. Research revealed that the writing process is not linear or segmental but rather recursive or cyclical (Flower and Hayes, 1981).

Therefore, in the context of EAP, the model-based method of teaching writing can be combined with that of the process approach as presented by White, (1988:5).

Task specified → Communicate → Study → Practice → Recycle
as far as   model   as necessary
possible
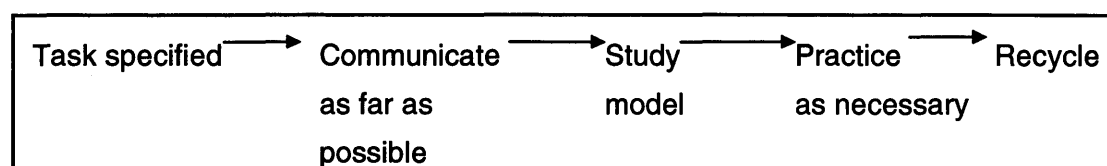
Figure 3.5 Process approach to EAP writing

As White (1988:5) explains, such a model is sometimes referred to as the Deep-end-strategy: "Learners make use of what they already know and what they can already do."

With modifications, both models can be utilised for teaching writing for academic purposes. Since the demands of writing for academic purposes supersede those of writing for general purposes, a balance must be found. The teaching of language forms, rhetorical organisation and discourse modes are still important in EAP as the end product is what counts academically.

Advocates of genre analysis (GA) also propose that there is a need to raise students' and teachers' awareness about text structure and organisation in different genres. Research in genre and text analysis has revealed some relevance in using GA and its importance in ESP and EAP (see Swales, 1990, Jordan, 1980; Hyland, 1990, 1994; Zamel, 1992; Dudley-Evans, 1987; 1994).

Since writing in EAP requires the ability to analyse the structure of written texts as well as the basic mechanics of writing, the researcher proposes a link between reading in EAP and writing in EAP via the content reading text. The proposed approach modelled after White(1988), is as follows:-
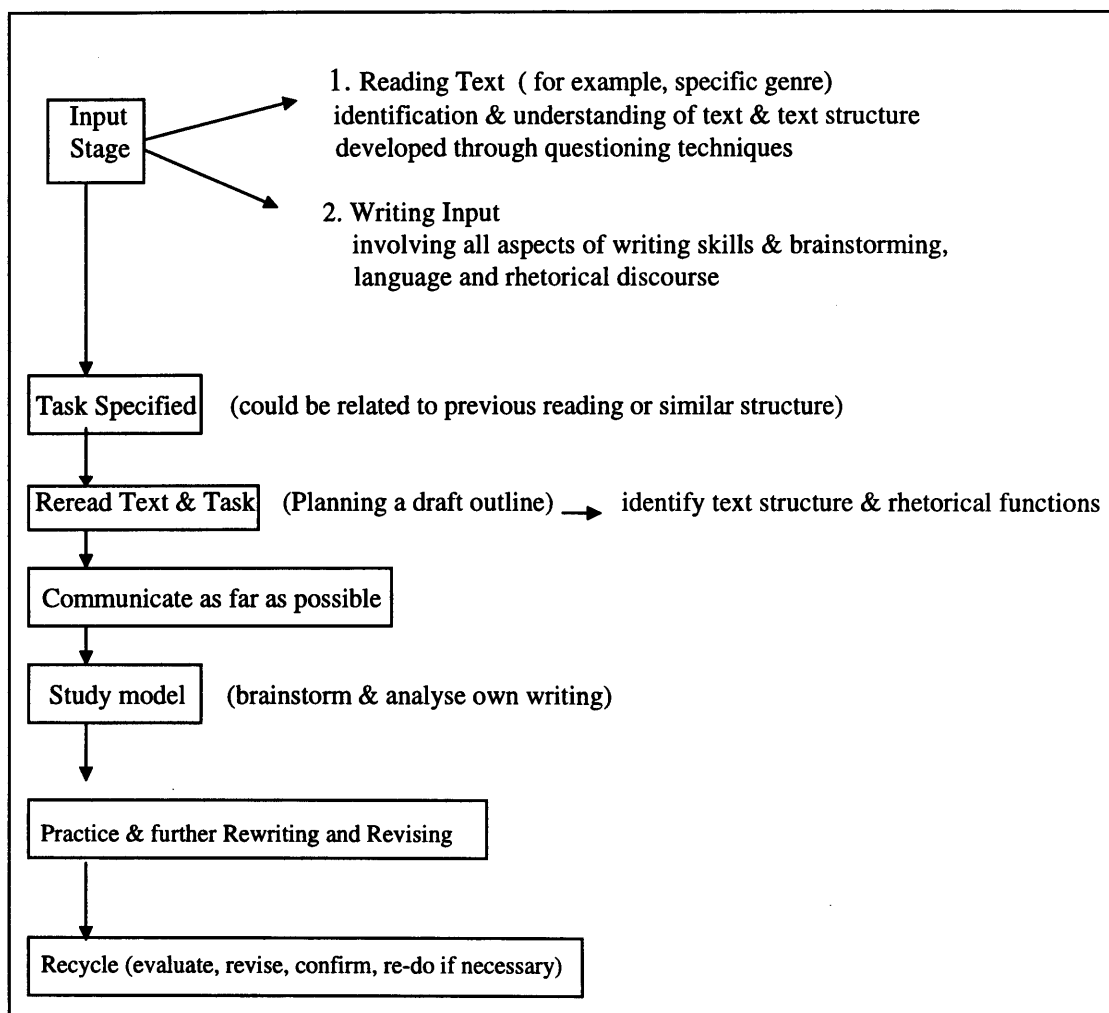
Figure 3.6 Proposed Process Approach to EAP Writing after White (1988)

3.13 Summary

This chapter has discussed five main issues related to the development of the EAP materials framework. It has argued for the need to integrate different paradigms and beliefs in the teaching of EAP and for the development of materials. Problems relating to the need for teacher training in EAP are highlighted. It has outlined the need to consider aspects of discourse, learning strategies, use of content materials/texts, type of tasks and skills to be practised in the training of teachers to develop reading and writing materials for EAP according to varying proficiency levels. All these aspects will be discussed in chapter four and five.

CHAPTER FOUR

THE DEVELOPMENT OF THE FRAMEWORK

4.0 Introduction

This chapter introduces the three stages in the development of the framework which led to the formulation of framework 1, 2, 3 and the 'Final' Framework. The results of the three pilot studies following each stage of the draft framework is presented and discussed. Stage 1 presents the drafting, formulation and discussion of the learners' profiles. Stage 2 presents the drafting of framework 1 which discusses the strands on types of texts, tasks and learning strategies and the feedback from the first pre-pilot study. Stage 3 presents Draft Framework 2 which introduces and discusses three additional strands: genre (textual patterns), knowledge structures and visuals and the feedback from pilot study 2A. Finally it discusses the final feedback on Draft Framework 3 based on pilot study 2B and presents the 'Final' Framework.

4.1 Contextual Setting

The framework was structured with the learners as the central focus taking into account key considerations for task based materials development drawing on current theories in language teaching and learning. The framework is intended as a tool to train teachers to design EAP task-based materials as an extension of the existing course in materials design for EGP at UPM.

The central idea was to structure theoretical knowledge and scaled learner profiles to enable teachers to pool together theories into task based materials design and development. The "band scales" were developed and adapted as the controlling factor in profiling the learners then matching the level of learners with choices in selecting texts, discourse, visuals, tasks and learning strategies.

The framework utilises a task-based approach because the researcher views task as cognitive in nature; it is flexible and structured. A task has an input which generates a process of manipulation, planning, evaluation, thinking, monitoring and feedback as well as an output which is assessable as elaborated in figure 4. 1 for the focused development of skills (see later section on tasks).

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┌─────────────────────────────────────────────────────────────────┐
│                                                                   │
│                        ┌──────────────┐                           │
│                        │  COGNITIVE   │                           │
│   ┌──────────┐         │              │        ┌──────────┐       │
│   │  INPUT   │┄┄┄┄┄┄▶  │  PROCESS     │┄┄┄┄┄┄▶ │  OUTPUT  │       │
│   └──────────┘         └──────────────┘        └──────────┘       │
│        │                      │                     │             │
│        ▼                      ▼                     ▼             │
│   ┌──────────┐         ┌──────────────┐      ┌────────────────┐   │
│   │ provides │         │ planning     │      │ produced through│  │
│   │ planned &│         │ thinking     │      │ different tasks │   │
│   │ structured│        │ manipulation │      │ reflects both  │   │
│   │ input    │         │ monitoring   │      │ strengths and  │   │
│   └──────────┘         │ evaluation   │      │ weaknesses of  │   │
│                        │ feedback     │      │ learners and materials│
│                        └──────────────┘      └────────────────┘   │
│                                                                   │
└─────────────────────────────────────────────────────────────────┘
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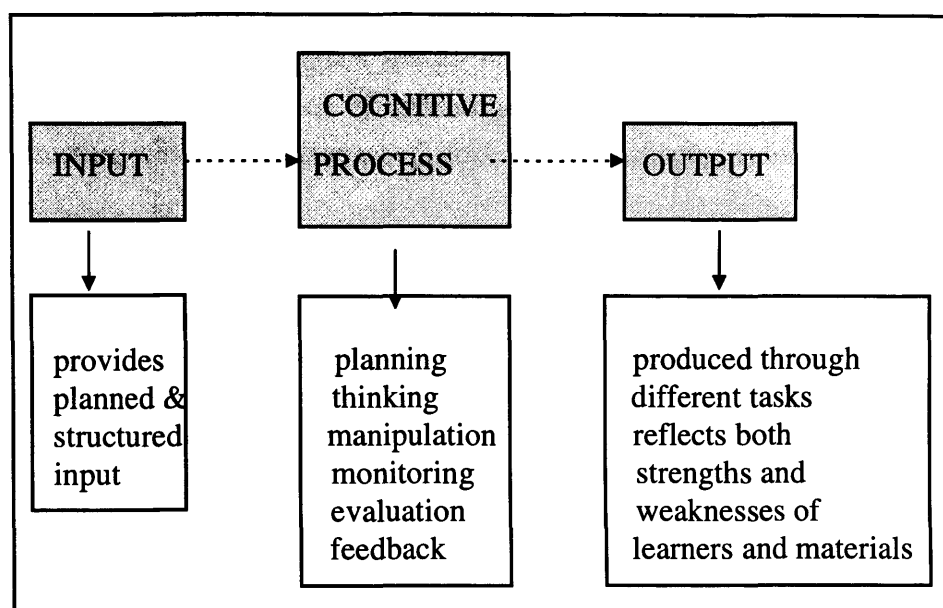
Figure 4.1 An Input - Output Model of Task

Performance bands were adopted not for assessment purposes but rather to give teachers a clearer picture of what is meant by low proficiency, intermediate proficiency and advanced proficiency levels in task based materials design.   The use of bands enables teachers to have a more concrete idea of how to handle common skills problems faced by learners with varying levels of proficiency in reading and writing. It allows for the development of materials along a scale that could match the level of difficulty of the tasks to learners' different levels of ability. It would also facilitate practice from simpler materials to more difficult materials.

Given the need for rapid diagnosis, and the fact that teachers need clear exemplification of what is meant by low, intermediate and advanced learners, the idea of a seven level profile was adopted. Prior to this, a needs assessment survey was carried out which included questionnaires and a proficiency test to help identify objectively skills that may be a problem area for learners and to try to grade them along a performance band profile for ease of developing graded materials (see chapter 2). Learners' profiles were linked to current language teaching and learning theories to ease teachers' understanding and problems of developing and designing task -based materials. The focus is on thinking and study skills but teachers need to be familiar with the processes of learning within the EAP context and to know how to deal with content based materials first before teaching these skills. They need to first experience relevant learning processes themselves.

4.2 Structure of the Framework- An Overview

A framework for materials design has to have a format but it should not be rigid. Therefore a combination of approaches is necessary. A cyclical, spiral and matrix structure was adopted (see wheel cone model in chapter 5) for the following reasons:

Cyclical

- the cyclical format enables the teachers and learners to work with the same aspects more than once, but each aspect reappears at the same or a more complex level. In the cyclical mode, new subject matter is not introduced once and then dropped; rather it is reintroduced in different manifestations at various times in the course.

Spiral

- the spiral format enables the teacher or the learner to move up and down the spiral at any time whenever there is a need as learning is flexible and non-linear.

Matrix

- From the model of a cone - cyclical -spiral format (figure 5.3) a matrix of the strands of the framework is presented to enable the teachers to identify aspects to be covered in designing the task based materials. This gives teachers maximum flexibility to select elements from a table of categories in a sequenced (or random) order within a given level or between levels.

Seven level profile

- Why a seven band level? Bloom's (1956) six level taxonomy of learning for instructional design was applied to the idea of the seven levels from lower order skills (from the more familiar / known less complex aspects) to the higher order skills (higher level thinking, independent, more abstract) and Gagne's (1974, 1985) learning skills hierarchy. The profiles provide a guide in determining the level of difficulty/complexity of the tasks and texts to be used. Having seven levels gives sufficient discrimination in a workable number of levels without being too complex and without having some levels that will rarely be used. This will be further discussed later in this chapter.

Overlaps

There are overlaps within the different bands. Such overlaps might be expected as language learning or other learning is not linear. It has to be consistently reinforced. The profiles are distinct to a degree but the six categories of types of texts, genre, knowledge structure, visuals/graphics, task types and learning strategies do overlap and can be

consistently reintroduced with varying levels of complexity. This provides teachers with a great deal of flexibility.

4.3 Strands and Specifications

The final framework consists of seven strands which are drawn from current ELT and education theories. They are:

1. Learners profile (bands)

2. Suggested types of texts

3. Genre (suggested text patterns)

4. Knowledge structures (thinking skills and language skills)

5. Suggested visuals/graphics

6. Suggested task types and skills to be practised

7. Suggested learning strategies (cognitive and metacognitive strategies)

Each of the strands contains specifications and are not meant to be the exhaustive Munby style but to pin point key elements. The strands are not meant to be used in any fixed order. They provide suggestions and are not meant to be prescriptive. Although the framework appears to be in tabular form it has a cyclical and spiral approach and every category is linked to all others. It embodies the Saussurean concept of 'value' (Culler, 1985) in that the meaning and operation of each category depends on the existence of the others and on its relation to them (see chapter 5).

4.4 Stages in the Development of the framework

The framework evolved over three main stages, each with several steps as shown in figure 4.2 (see also figure 1.2). To ensure that the framework was effectively developed a pre-pilot study one was applied during stage 2; the later pilot studies 2A and 2B during stage 3 correspond to framework 1, 2 and 3 respectively. These pilot studies are briefly introduced and described in their own right followed by a detailed description of the various steps within each stage shown in figure 4.2. The application and working principles of the framework are discussed in chapter 5.

4.4.1 Structure of the Discussion of each Draft framework

The first stage begins with a discussion of the formulation of the band profiles. The second stage begins with the introduction to Draft framework 1, a review of literature of each of the first three strands followed by pre-pilot study one. The third stage introduces Draft Famework 2, a review of literature on each of the three additional strands

followed by pilot study 2A. This is then followed by the introduction of Draft Famework 3, pilot study 2B and the 'Final framework' as outlined in figure 4.2.

PHASE 2 OF STUDY

STAGE 1

Redrafting and Formulating Learners' Profiles
- develop draft profile of learners
- carry out a needs survey
- develop test of proficiency and questionnaire
- redefine profiles based on test specifications
  and findings of questionnaire survey

STAGE 2

Drafting and Developing Key Strands for framework 1
- text types
- task types and skills
- learning strategies

Pre -Pilot Study 1

STAGE 3

Redrafting framework 1 based on feedback from teachers in Pre-Pilot Study 1
- addition of three more strands
- genre
- knowledge structure
- visuals
Leads to Formulation of framework 2
    PILOT STUDY 2A
- Redrafting framework 2 based on pilot study 2A and formulating Draft framework 3

- Pilot Draft framework 3 in Pilot Study 2B
- make minor internal changes to specifications:

- Refine framework 3 and Formulate "Final" framework - framework 4
  Prepare to carry out large scale evaluation at UPM Malaysia

Figure 4.2   An Outline of the Stages of the Formulation of the framework

4.5 General Introduction to Pilot Studies for Evaluation of the framework

In the development of the EAP materials design framework, several trials were deemed necessary. Coolican (1990:7) states that piloting helps the researcher to re-plan and rethink on the basis of new insights. This improves a tool, instrument or experiment to be used. A pilot study helps to highlight snags or ambiguities which allows for adjustments to be made before the actual data gathering process is begun (Coolican, 1990:6-7).

In this exploratory study, the EAP framework had to be piloted several times to establish its usefulness and effectiveness because this was the main focus of the research. It was necessary to highlight and to identify aspects which would help improve the framework further and increasingly satisfy the criteria of reliability, validity and representatives.

4.5.1 Structure of the Pilot Study

A two phased pilot study was planned: A Pre-Pilot Study (Phase 1) which involved two institutions and a Main Pilot Study (Phase 2) which involved another three institutions. The Main Pilot Study (Phase 2) was further divided into two parts - designated as Phase 2A (inservice) and Phase 2B (preservice) teachers. Workshop procedures were used to conduct all the pilot studies. They were all conducted between March 1994 and May 1994.

4.5.2 Subjects

The subjects for the pilot study were 82 inservice (IS) and preservice (PS) teachers from Malaysia, undergoing teacher training in ESL/EFL at British universities. The IS teachers are college trained teachers with a minimum teaching experience of three years and were completing a two-year training programme. The PS teachers were also studying for approximately 2 years in Britain on a twinning basis between selected British universities, the Malaysian Ministry of Education and the Specialist Teacher Training College in Malaysia. These teachers had no teaching experience and had either just completed the Malaysian Certificate of Education (SPM), equivalent to GCSE, or the Higher School Certificate (STPM), equivalent to 'A' levels. The subjects were selected because they were similar to the population to be used in the main study in terms of their background, experiences and academic exposure.

4.5.3 Participating Institutions

Five universities/colleges were selected from a total of nine British universities involved in the training of IS and PS teachers from Malaysia with the help of the Education attaché of the Malaysian students department in London.

The universities were selected on the basis of the number of students in the programme and their location. They were: the Universities of Nottingham, Birmingham (used for the Pre-pilot study) Manchester, Lancaster and the West Sussex Institute of Higher Education (used for the Main pilot study).

4.5.4 Workshop Procedures

It was decided that similar workshop procedures would be used to conduct the pilot studies as the same procedure would be used in the main study. Thus, any problems identified in the pilot studies could be redefined for any future workshops for teacher development using the framework. At the same time the workshops were not only trialling and evaluating the framework, but also eliciting the teachers' conceptions of "task". This is crucial because the framework needs to fit - (yet extend)- teachers' notion of tasks. The workshop procedure for both the pre-pilot (phase 1) and main pilot (phase 2) study is outlined as follows.

a)   A standard guideline is used by the researcher to conduct and sustain each workshop smoothly and consistently.

b)   Participants will work in pairs or groups of not more than four.

c)   Participants will draft materials on transparencies for presentation and discussion at the end of the sessions.

d)   The researcher will provide all the workshop materials.

e)   Allocation of time :-

i) Pre-pilot study:-   Both institutions allowed the researcher a whole day (9.30am -5.30pm).

ii) Main pilot studies:- All three institution allowed the researcher only half a day

4.5.5 Instruments

The instruments used in all the pilot studies are as follows:-

a)   *A Questionnaire*

The Pre-pilot study utilised an open ended questionnaire and the Main Pilot studies utilised both an open ended and Likert type questionnaire which was modified after the pre-pilot study (see appendix A4.5 & A4.6)

b)   *Notecards with specified questions / statements*

135

Pre-pilot study:

> "To me task in language teaching means/is.........

Main Pilot studies:

> "To me task in language teaching means/is........."
>
> " Tasks are important in language teaching because......"
>
> " List six criteria /factors which you consider as important in selecting, adapting and evaluating task-based materials."

c)   The Draft framework 1, 2 and 3 (see Appendix A4.1, A4.2 & A4.4)

d)   A variety of Engineering texts.

4.6   Drafting and Formulating the Learners' Profiles

The first step was to develop a profile of learners based on a seven level "band scale." A comprehensive literature search was carried out in order to identify the different types of band scales or profiles which have been firmly established. Twelve band scales / profiles used in the following geographical areas; Australia, South East Asia, the Middle East, Britain and the USA were analysed. The major functions and uses of such scales / profiles are presented in table 4.1.

4.6.1   Performance Band Scales / Profiles- (An Overview)

The evolution of both the communicative approach and communicative language testing since the 1980s has involved the use of rating scales, or performance bands / profiles (see Carroll, 1980; Brumfit ,1984;   Widdowson,1983; Skehan,1988;   Weir, 1990; Bachman, 1990). Such bands/scales provide the learner and the teacher with a profile of language ability according to several levels on a given skill of listening, speaking, reading and writing. Such bands usually range from a 5 point scale to a nine point scale. These performance bands can be global in nature (e.g. International English Language Testing System (IELTS) or specific in nature (e.g. Australian Second Language Proficiency Ratings (ASLPR)). Such banding is based on criterion references testing and has been heavily promoted in the last few years for its contribution to improving teaching and learning. It makes assessment results more comprehensible and allows students to have positive achievements recognised (Wolf, 1993). Today, there is a common tendency towards the use of rating scales in the assessment and reporting of

language test performance. Many institutions are beginning to use such profiles for additional purposes. These scales define a student as a *Beginner, Lower intermediate, Higher intermediate, Advanced, or Native- like.*

A well known example of a proficiency rating scale is the oral interview developed in America in the 1950s by the Foreign Service Institute [FSI] (Clark & Clifford, 1988, Alderson ,1991). It was used for assessing foreign service officers in foreign languages and has formed the basis of present day profile band development. These rating scales later formed the basis for the development of the InterAgency Round Table (ILR) scales (Clark & Clifford,1988; Child, 1987). The ILR scales description range from 1 *Elementary through 5 Native or Bilingual* with intermediate steps along the continuum. The FSI and the ILR led to the development of other band scales. A summary of known band scales / profiles in use over the years is tabulated as below in table 4.1. The first five scales are well validated.

Table 4.1 Summary of the Different Types of Profiles / Bands in Use.

NAME OF INSTRUMENT DATE, COUNTRY & REFERENCES	NUMBER OF LEVELS	PURPOSE / FUNCTION
1. FSI - 1950's (USA) Clark & Clifford(1988)	5 point scale - native to bilingual speaker equivalence down to the elementary level of performance	Assessing Foreign Service Officers in foreign languages for overseas posting (concern with oral skills)
2. ILR - 1960's (USA) Clark & Clifford (1988) Alderson(1991) Child (1987)	5 point scale 1-elementary to 5 - native or bilingual	similar functions as the FSI: an improvement over the FSI scales & covers all four skills (mainly concerned with oral skills); describes levels of performance; provide guidance for assessors who are rating performance & also used for training purposes
3. ACTFL -1980's (USA) Byrnes et al (1987:15-24) Alderson (1991:71)	9 point scale novice - low to intermediate - mid to advanced- plus to superior	similar functions as the FSI & ILR but covers all four skills & has a much wider application which includes academic study as well; provides guidelines for test constructors(scales act as a set of specification s) of texts, tasks & items that are appropriate for given levels of students.

Table 4.1 continued

4. ASLPR -1980's (Australia) Ingram & Wylie(1984)	9 point scale 0 (zero proficiency) to 5 (native-like proficiency) with pluses & minus at various points	Used to assess ESL students' language ability & proficiency; provides guidance for assessors who are rating performances; rating scales are also used to determine the nature of the tasks that are presented to candidates
5. ELTS - 1980's Later IELTS -1990's (Britain & also Australia) IELTS (1991) Alderson (1991) Clapham (1996)	9 point scale 1 - non-user and 9 - expert user	Used in assessing NNS of English proficiency (for study in British institutions of higher learning) ; for reporting results; covers all four skills
6. The British Ability Scales / Attainment targets (late 80's) * Only the English subject is presented here. (Britain) Elliot (1983) Wolf (1993)	6 point scale 1 (lowest level) to 6 (highest level)	Used in evaluating students' performance at various levels; tasks are constructed based on description of each level and students are assessed at different key stages for their age group
7. The English Speaking Union framework (ESU) -Late 80's (Britain) Carrol and West (1989)	9 point scale known as Yardsticks- it is an examination framework Yardstick range from 1-9	Helps students to determine which examination to take for their own purposes. Provides a profile of the candidates' capabilities. Allows students, teachers and employers to appreciate the significance and value of any examination.
8. UCLES / RSA- 1980's (Britain) Weir (1991:112)	4 point scale 1 (lowest to 4 (highest)	Used in assessing and evaluating users of English as a NN language; used for reporting language ability for all four skills separately. Certificates are also issued.
9. AEB / TEEP (began as AEB and later TEEP) - late 1970's (Britain) Weir (1991:112)	5 point scale 0 - (lowest) to 5 - (highest)	Provides means of reporting individual profiles. Covers all four skills
10. ELPRS - 1988-89; RELP (UTM : Malaysia) UTM ELPRS Project Document (1989) K. I. Abdullah (1994)	7 point scale 1 (lowest) to 7 (highest and native - like)	Used for placement purposes & for reporting of language ability. later used for developing ESP materials under the Reorganised English Language project (RELP). Covers all four skills. Materials developed based on the band scales are currently being piloted.

Table 4.1 continued

11. King Abdul Aziz Univer - sity, Jeddah's Medical School Band description - 1980's (Middle East) McAlpin (1986)	10 point scale Beginning with 3.0 (lowest) to 7.5 (the highest)	Used to describe the type of performance desired at each level; to develop task specifications for each level & for producing materials. Covers all four skills.
12. Singapore Polytechnic Self-Access Centre. (late 1980's) (Singapore) Language & Communication Dept. (1993).	9 point scale band 1 (lowest) to band 9 (highest)	Used to describe what learners can do at each level for each skill. Each level is of a certain difficulty. Covers all four skills.

Key to Abbreviated Forms Used: 1. FSI- Foreign Service Institute Scales; 2. ILR - InterAgency Round Table Scales; 3. ACTFL - American Council for the Teaching of Foreign Languages Scales; 4. ASLPR - Australian Second Language Proficiency Rating Scales; 5. IELTS- International English Language Testing System Scales; 6. UCLES/RSA - University of Cambridge Local Examinations System / Royal Society of Arts Scales; 7. AEB/TEEP - Associated Examination Board Test of English for Educational Purposes Scales; 8. ESU - English Speaking Union framework Yardsticks; 9. ELPRS / RELP - English Language Proficiency Rating System / Reorganised English Language Programme, UTM, Malaysia.

Thus a survey of current types of band scales used around the world demonstrates their wide use and popularity. They are all based on the notion of criterion references assessment. The purpose and extent of their uses varies. Firstly, they serve to describe levels of performance: each level is given a detailed explanatory description which explains what is meant by each level. Test users, employers, teachers and evaluators can thus interpret such scales to assess or judge a candidate's capability. Besides being used for reporting levels of performance, scales also guide examiners or raters in assessing performance. A scale can further be used to identify the tasks which should be used for eliciting specified performance (Alderson,1991).

Three other important aspects that arise out of the use of band scales are: (1) they can be used to design and develop materials and identify texts according to various levels of ability, (2) they help to identify, grade and sequence tasks/activities and (3) they create a profile of different types of learners. These three aspects can be expanded and used to train teachers to identify appropriate texts, develop materials and tasks according to different student profiles or ability. This last point is, of course, a major focus of the present study.

4.6.2 Problems in Using Band Scales

It is argued that band scales are only effective for assessing productive skills of speaking and writing but not the receptive skills of listening and reading (Byrns, 1987; Heaton, 1989; Weir, 1990; Alderson, 1991). Learners' productive ability can be assessed directly and can be clearly seen but in the case of the receptive skills, only indirect measurements can be made. However, such rating scales/performance profiles for assessing the ability of learners are still widely used and the argument is mainly concerned with testing.

It can be argued that if a global performance profile of reading can be drawn up, it can be used quite effectively in making decisions as to what kind of language teaching materials would be effective for the teaching - learning process and what kind of training teachers would require in such a situation. Even if one cannot use a profile to assess reading ability precisely one can still make use of it to establish specifications for syllabus design, content or materials development. It is rather limited to have a profile as only a means of saying what a learner can or cannot do if such feedback is not further utilised for future teaching or teacher training and learning outcomes. Furthermore, such methods can be replicated in another context to determine its strengths and weaknesses.

In this study a seven band profile was adapted from the various sources cited in table 4.1 and further refined through the tests carried out in the needs survey. It provides a description of what the learners can and cannot do for both the reading and writing skills. Based on such descriptions teachers are able to make decisions about text selection and appropriate grading and selection of tasks for language learning and academic learning purposes. Further, the profiles serve as the controlling factor for making decisions about identifying and selecting: texts, rhetorical patterns, tasks, skills, visuals, and learning strategies to meet the needs of students with varying levels of proficiency or problems. Once the bands / profiles are structured it is possible to construct the framework and to formulate the other strands. For a further discussion on "band scales" see chapter 5.

4.7 Developing Framework Draft 1 (Stage Two)

This stage involved the identification of strands which includes specifications of key elements of the framework. These were identified based on the needs survey, current theories and research in ELT which were considered to be important in materials development. At the same time, the strands had to be practical and an extension of the

existing UPM materials selection and adaptation course in order to build on current practice in Malaysia.

At the initial stage three strands were identified to mesh with the strand on the learners' profile. There were altogether four strands:-

1. Specifications for *Levels of Competence / Ability* (the learners' band profile)

2. Suggested *Types of Text* (range, size and complexity)

3. Suggested *Task Type and Skills to be Practised*

4. Suggested *Learning Strategies* - (direct/indirect)

Strand 1 has already been discussed in section 4.6.1 (see appendix A4.1 for a sample of framework 1). Strands 2, 3 and 4 are discussed below.

The first step in stage two of the framework, (see Figure 4.3 and appendix A4.1) began using *seven* bands to profile learners' ability in reading and writing on a scale of one (low) to seven (the highest) with band five as a modest EFL target level. These bands were conceived as horizontal threads through which three vertical *strands* are woven. The first strand was a sequenced list of common types of text used in the sciences for EAP and ESP. This list was drawn up on the basis of a literature search (Appendix A4.3). The next step consists of a literature review of strands 2, 3 and 4 and are discussed in the following sections.

4.8 Suggested Text Types (Range, Size and Complexity) Strand

This strand provides suggestions about the type of text a teacher could use for the teaching of reading and writing along parallel lines. Suggested sources for such texts are provided. Suggestions about range and complexity are provided to guide choices about source and length of texts. At various levels between levels 1-3, suggestions were made as to whether the texts should be authentic, simplified or adapted. The current debate about using simplified texts as opposed to authentic texts was considered and is discussed below.

4.8.1 Simplified, Adapted or Authentic Texts

The term *'authenticity'* has received a number of interpretations and has aroused much debate (see Morrow, 1977; Phillips & Shettleworth, 1978; Widdowson, 1978, 1979, 1981,1990; Woods, 1982; Davies, 1984; Johns,1985,1994; Robinson, 1991; Hutchinson & Waters, 1987; Nunan, 1988; Brinton et al, 1989; Clarke, 1989; Bhatia, 1994).
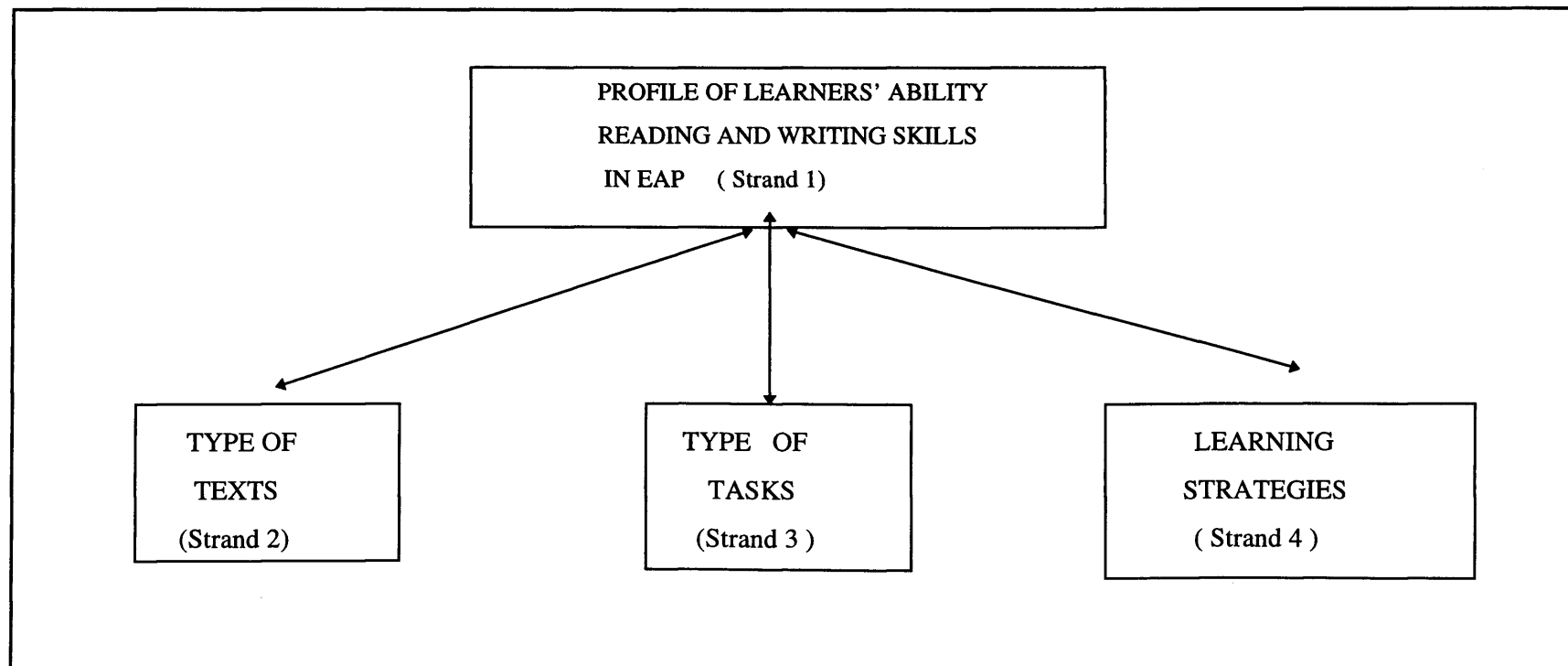
Figure 4.3   OUTLINE OF DRAFT FRAMEWORK 1

When teachers are faced with the dilemma of teaching students with varying levels of proficiency, the difficulty of selecting appropriate texts begins. What type of texts or materials should they select, where do they find the appropriate texts or materials, can the texts or materials be simplified or adapted if the authentic texts are not suitable? Much current literature in ELT strongly suggests that authentic texts should be used. Yet many students cannot even understand simple English yet alone read and understand an unsimplified, unadapted text. If experienced teachers express disquiet about this then inexperienced teachers may have greater problems. Therefore, teachers need to address the dilemma of whether to simplify, adapt or to simply use authentic texts. The literature on this subject is very wide and a comprehensive and exhaustive discussion of the subject would be beyond the scope of this study. The discussion will therefore be confined only to aspects which are considered relevant to this set of specifications.

In many teaching -learning situations simplified or adapted texts are needed for language teaching. In the context of ESP / EAP, most practitioners advocate the use of authentic texts materials drawn from the learners' area of study. Many texts are taken from journals, textbooks, laboratories and related magazines. These materials are not written for language teaching purposes, have specialised vocabulary and are usually written for a particular discourse community. The language found in the text may be too complex for NNS of English (with low language proficiency) to follow, without frequent recourse to a dictionary. Authentic means 'real':

> *an authentic text is a stretch of real language produced by a real*
> *speaker or writer for a real audience and designed to convey a*
> *real message of some sort (Morrow, 1977:13)*

According to this argument, an authentic text is not made for pedagogic purposes. In EAP it is not uncommon to find authentic texts, which have originally been produced for some purposes other than language teaching. Unlike texts which are specifically adapted to meet the limitations of a particular group of learners, the authentic texts may contain a wide range of language features, some of which may be quite unfamiliar. However in the EAP context, selecting a text of interest is not so much of a problem as in the case of EGP, because all the students in a class already have a common interest of studying in the same field or discipline. Thus, in using authentic texts students would be familiar with the subject matter. But, as Morrow (1977:14) points out, authentic texts can pose problems in a teaching - learning situation as the text difficulty level can be a motivation problem (cf. Kennedy and Bolitho, 1984).

The above discussion implies that civil engineering students should be exposed to authentic texts because they will be engineers. Logically, this is so, but Morrow (ibid)

observes that the use of such authentic language for teaching purpose is not suitable because the language presented is always particular to the individual situation. Hence if one uses an authentic text for language teaching purposes and not for the intended manner for which it was written than we are destroying the authenticity of the text.

Brinton et al (1989 :89) define authenticity as texts or materials that are not generated specifically for language teaching purposes. They point out that "the quandary of materials adaptation, ultimately is that any form of adaptation renders the text no longer 'authentic' in the strictest sense of the word" (Brinton et al, 1989:93). But as Johns (1985) argues, if teachers use authentic materials for language teaching purposes, then adaptation is often not only desirable but necessary. A more important point is that less proficient second language speakers cannot deal with real-life language "in the raw", otherwise, they would not need a second language support system. But this does not mean that unadapted or unsimplified texts are not used at all. They should be used as students progress and also for the teaching of compensatory strategies. Ultimately, this debate seems to hinge on the nature of what is meant by 'authenticity': the scholars quoted above rule out pedagogic purposes as not being authentic. This is distinctly paradoxical in a language classroom.

Johns (1985: 105) introduces the notion of "New Authenticity". This term indicates that the authenticity of the situation in which a text is written is not as important for teaching as other text qualities such as its ability to activate learning strategies during the course and to encourage learning beyond the course of instruction. This reflects Widdowson's (1981:6) term "since the aim of such instruction precisely is to develop a capacity to learn, it does not itself realise any special purpose but provides the learner with the potential for its realisation". Johns (1985:105) suggests that texts can be simplified if both linguistic and rhetorical features are considered, thereby maintaining the character of the unmodified text at a number of levels (also see Bhatia, 1983,1993). Genre theory may play an important role towards this end; for if teachers and learners are trained to identify text structures of different genres then modification and simplification of texts may be better done (Woods, 1982). Further, teachers can create better texts through synthesising. Bhatia (1994: 50) argues that authentic discipline - specific texts can be used as input for designing EAP /ESP based teaching materials. As such raising the rhetorical consciousness of the teachers will help combat the problem of poorly reconstructed texts. Simplification seems controversial at the lower level. To simplify or not would depend on what a teacher wants to teach, what the teaching - learning context is and what the learners' proficiency level is.

Within the EAP / ESP context in Malaysian institutions of higher learning there are a large number of students who require a great deal of help in understanding authentic texts. The same students also have problems with basic level English. They need simplified texts. Such texts can be used to teach the basic cognitive and study skills required and at the same time the teacher can help them develop the language skills and text patterns necessary for the understanding of authentic texts. Once the students have gained a basic understanding and are motivated and confident they can slowly work towards authentic texts. It is perhaps more logical to use simplified texts or simple accounts at the beginning level among low proficiency language learners. Alderson and Urquhart (1984: 197) observe that, in the foreign language (FL) context the range of users of simplified texts or simple accounts would be wider, extending from primary school pupils to post-graduate students.

It is therefore important to note that simplified texts should only be used if necessary and only for the purpose of preparing the learner for more authentic texts. There is a need to think about the appropriateness and relevance of a situation when using simplified, adapted texts. The use of simplified texts should not be rejected, instead we should see the purpose it serves (Alderson and Urquhart, 1984: 198).

The second strand in the framework therefore proposes that the teacher selects texts with care and only simplifies or adapts when necessary. The third strand consists of a list of possible types of tasks which was drawn from research on task. It is important to point out that this framework does not use a task-based syllabus but instead uses the notion of tasks for language teaching as tasks are widely used in other disciplines (see Breen and Candlin, 1980, 1987; Breen, 1984, 1987; Kouraogo, 1987; Krahnke, 1987; Prabhu, 1987; White, 1988; Foley, 1991; Long and Crookes, 1993, 1995; Kumaravadivelu, 1993; Sheen; 1994 for a discussion and critique of task-based syllabuses).

4.9 The Strand on Suggested Task Types and Skills to be Practised

This strand is meant to provide broad suggestions on possible tasks that could be used to practise specific skills via content - based materials. It was in no way meant to be a Munby (1978) style exhaustive list of suggestions. Rather it is meant to dissolve possible mental blocks and to provide a sense of direction for the teachers. The tasks provide the means for practising the desired reading and writing skills. To enhance the learning of both language and content material, the idea of incorporating learning strategies by building them into the task was introduced and will be discussed in the next section.

The term "task" is not new in the field of applied linguistics, particularly in the area of second language acquisition (SLA) and learning research. The term has also been widely used in experimental research in various domains of psychology and in education (Crookes, 1986). However, a survey of literature on 'task' reveals that research on 'task' has mainly concentrated on the learner and task variable. The teachers' ability to interpret and understand the concept of task has been largely ignored or neglected. This is shown in the following research studies carried out since the 1980s: Long, 1981, 1985, 1990; Long and Porter, 1985; Pica and Doughty, 1985; Pica et al, 1987, 1993; Crookes, 1989; Plough and Gass, 1993; Duff, 1993; (also see Crookes and Gass, 1993 for a collection of work on tasks and language learning). The more recent work in the 1980s has focused mainly on the discovery of interactional features present in different types of discourse and different task types. The concentration was mainly on information transfer (see Long, 1981; Pica, Varoni and Gass, 1985; Crookes and Rulon, 1985). Such research work formed the basis of task based syllabuses and materials.

Since teacher- designed tasks (using content area materials) form a significant element in the present study, the following sections outline recent developments concerning tasks in relation to language teaching and materials design.

In the content area, task is viewed as a cognitive process. Doyle (1983:160) provides a good example of a psychologically principled system for grouping academic tasks. In his view, the curriculum is seen as 'a collection of academic tasks.' He explains that, the term 'tasks' focuses attention on three aspects of students' work: "(a) the products students are to formulate...; (b) the operations that are to be used to generate the product...; and (c) the 'givens' or resources available to students while they are generating a product" (ibid: 161). The tasks direct and guide learners to focus attention on particular aspects of content and specify ways of processing information thus fostering exploratory behaviour. Doyle (1983:162) adds:

> students learn what a task leads them to do... acquire information (facts, concepts, principles and solutions)... [and] practice operations (memorising, classifying, inferring, analysing) used to obtain or produce the information demanded by the task

Other work that reflects that of Doyle is Mohan's (1986) exploration of how the learning of a second language in Canada can be co-ordinated with the learning of content. Mohan (1986:v) makes the interesting observation that although language teaching can broadly be termed communicative, it lacks a satisfactory understanding of

the context for communicative discourse. As such, Doyle and Mohan's work leads to "task" being viewed as conceptual and involving cognitive and metacognitive processes.

4.9.1 Some Definitions of the Term 'Task'

The term 'task' has been defined in many different ways in ELT. These definitions do not provide samples or examples on which tasks can be modelled. The teacher has to interpret them for use. The definitions presented in table 4.2 illustrate the diversity of emphasis.

Table 4.2 Different Definitions of the Concept 'Task'

1. LONG, M.H. 1985:89	2. CROOKES, G. 1986:1
"a piece of work undertaken for oneself or for others, freely or for some reward. Thus, examples of tasks include painting a fence, dressing a child, filling out a form, buying a pair of shoes, making an airline reservation, ..." "...by 'task' is meant the hundred and one things people do in everyday life, at work, at play, and in between. Tasks are the things people will tell you to do if you ask them and they are not applied linguists."	"a piece of work or an activity, usually with a specified objective, undertaken as part of an educational course or at work."
3. WRIGHT, T. 1987: 48	4. BREEN,M.P.1987:23
"instructional questions which ask,demand or invite learners (or teachers) to perform operations on input data. ...." "...things that are performed by L2 learners in class as a rehearsal for social communication outside the classroom..." "....the defining characteristics of task - based content is that it uses activities that the learners have to do for non-instructional purposes outside of the classroom as opportunities for language learning. Tasks are distinct from other activities to the degree that they have non-instructional purposes.(1987:67)	" a range of workplans which have the overall purpose of facilitating language learning- from the simple and brief exercise type to more complex and lengthy activities such as group problem-solving or simulations and decision-making."
5. CANDLIN,C.N. 1987:10	6. SWALES,J.M. 1990:76
"one of a set of differentiated, sequenceable, problem-posing activities involving learners' cognitive and communicative procedures applied to existing and new knowledge in the collective exploration and pursuance of foreseen or emergent goals within a social milieu."	"one of a set of differentiated, sequenceable goal- directed activities drawing upon a range of cognitive and communicative procedures relatable to the acquisition of pre-genre and genre skills appropriate to a foreseen or emerging socio- rhetorical situation."

Table 4.2 continued

7. NUNAN,D. 1989:10	8. PRABHU, N. 1987:24
" a piece of classroom work which involves learners in comprehending, manipulating, producing or interacting in the target lan - guage while their attention is principally focused on meaning rather than form."	"an activity which required learners to arrive at an outcome from given information through some process of thought, and which allowed teachers to control and regulate that process was regarded as a 'task'."

The diverse emphasis of the above definitions makes it quite difficult for a teacher to apply the concept "task". Without first analysing tasks presented in texts or materials, teachers may encounter difficulties in not only categorising the tasks under the different definitions but also in developing them. The teachers need to understand the rationale of using task- based language instruction on the basis of such definitions.

4.9.2 Task - A Rationale

The current literature on task is rich with varying interpretations. It is difficult to take a clear stand as to what a "task" really is, as different ELT practitioners have different interpretations about its nature (see table 4.2).

This set of specifications (in the strand on task) for task development is by no means exhaustive. Rather, it outlines a pool of ideas from which a teacher can expand and explore his/her own creativity. The specifications are not meant to be in any fixed order. They are meant to be descriptive or suggestive, but not restrictive or prescriptive.

In this study 'tasks' refers to the channels through which language skills and other learning focus are to be incorporated. The other specifications in the framework may dictate the type of task that is devised. It can be a single focus task or a series of smaller tasks within a main task or what the researcher calls task within a task context. Ultimately, the learners dictate the nature of the task and what is incorporated into it as they are the ones who will be involved in using it.

Researchers such as Krashen (1982), Prabhu (1987) and Long (1985, 1989/90) have suggested that learners best acquire language when they are involved in using and understanding it. Most ELT practitioners agree that "task" should be psycholinguistic in nature, that is, it should be psycho -linguistically motivated, cognitive and manipulative. It should promote flexible learning and include task knowledge (Krahnke, 1987; Prabhu,1987; Widdowson, 1990; Breen, 1987; Foley, 1991). Therefore when helping learners to acquire learning skills and acquiring language, tasks play an important role.

Tasks should encourage learners to interact not only with one another but with the tasks themselves to achieve the desired outcome.

Nunan (1989: 48) suggests that there are six elements which should be taken into account when designing tasks. The six elements are goals, input, activities, teacher role, learner role and settings.

GOALS   TEACHER ROLE

INPUT   TASKS   LEARNER ROLE

ACTIVITIES   SETTINGS
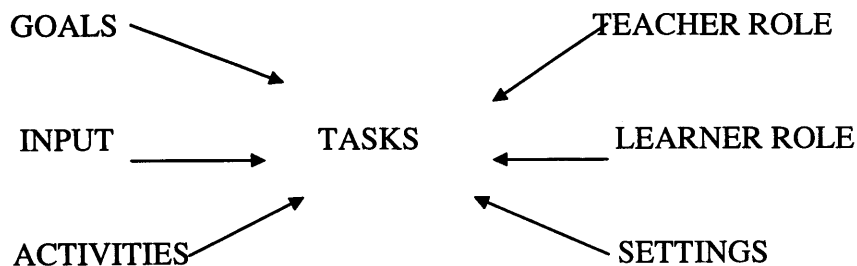
(Nunan, 1989:48)

For the purpose of the development of the present framework certain aspects of Nunan's list were adapted to meet the needs of this study.

The description of the six elements as used in the study and adapted from Nunan(1989)are as follows:

1.   *Goals* means the general intentions behind any task. It can be in broad general terms or it can be in very specific instructional terms, laying out the specific and terminal objective.

2.   *Input* means what goes into the tasks. Input is the data that form the point of departure for the task (Nunan ,1989). The input could range from a paragraph in a text to an article, diagram or even an object. The input is planned based on the goals since the goals (objectives) determine the input. The type of input in turn determines how the goal is to be attained. It provides the necessary information for developing activities in tasks.

3.   *Activities* specify what learners have to do with the input which forms the point of departure for the learning task. The activities can be viewed as language learning skills of reading, writing, listening and speaking, including sub-skills for each. The 'activities' would include other aspects like learning strategies and study skills. The activities define the task(s). Thus, the different types of tasks (e.g. problem - solving, information - gap, reasoning - gap, opinion - gap, decision - making) are determined by the skills embedded within the activities which go to make up the task(s).

In an EAP context the learners are rehearsing or learning within the academic situation. The skills which they practise are transferable within their academic domain. They learn to acquire the linguistic accuracy and fluency needed to succeed within their academic environment. They can apply the same skills outside the academic domain.

Teacher and learner roles refer to the part that teachers and learners are expected to play in carrying out learning tasks.

4.   *The teachers' role* is to act as a facilitator, demonstrator or enabler of learning.   It is the teacher who has to make sure that the students' learning needs are met through interaction with a variety of tasks. Learners progress and problems faced in dealing with the task   particularly language difficulties should be consistently monitored. The tasks in use should be evaluated by getting feedback from the learners.

5.   *The learners' role* is an active and not a passive one. The learners will have to identify the task level to follow and be responsible for their own learning. They will have to utilise all available resources and strategies to process and complete the tasks, manage and organise their own learning by moving on to the levels that they are ready for. They are also responsible in planning and monitoring their progress.   At the same time learners should be encouraged to evaluate the tasks they are working on in terms of suitability with their own specific domains and ability and to provide such feedback to the teachers. In this way they are also contributing towards the development of future tasks by sharing feedback with the teachers.   This is similar to Breen's (1987) and Candlin's (1987) discussion about negotiated tasks and learners' ability to reflect on the task(s) that have been done.

6.   *Setting* in this context means whether it is an ESL/EFL situation; academic or non-academic. Does the environment aid the acquisition of the language?   In the context of this study it includes the question of whether the materials or tasks are discipline based or not. Setting here does not refer to the physical classroom set up as proposed by Nunan (1989).

The six elements discussed above provide the skeleton of what might be considered in developing a task. The input and activities need to be considered further. In this study input and activities are considered to be   'task' as input and activities determines the shape of the task(s). Thus a task has a subject (the contextual setting); conceptual aspects (linguistic skills, thinking skills) and a physical shape in the form of task types. There are a number of task types and interpretation of what is considered a task, and what is not seem rather confusing as *task* can be viewed as an activity as well. Only the more common task types are discussed here.

4.9.3 Task Types

Breen (1987) suggests that tasks can be viewed as work-plans and hence as a learning process. Generally, tasks are work plans which incorporates a variable number of aspects for learning a language and for understanding content. What varies is the level of cognitive processing which is dependent on the number of steps involved, the type of skills to be practised, text processing level, whether divergent or convergent thinking is involved (Wright, 1987), instructional objectives and learners' ability. All these determine the task type to be designed.

Task types refer to how tasks are classified under broad categories. For example:

1. tasks which are classified as problem- solving, interactive, closed, open, informa - tion-gap, shared, guided etc.
2. tasks which are developed according to skills to be practised (i.e. skills or content oriented [Wright, 1987:49]).

Long and Crookes(1993) proposed the use of two-way tasks, planned tasks, closed and open tasks. Two-way tasks are interactive task which involve two participants exchanging information to bridge an information gap (see Long, 1981; Pica and Doughty, 1985; Crookes and Rulon ,1985). Planned tasks (Long and Crookes, 1993; Skehan, 1996) help learners to produce syntactically more complex language by giving them planning time. Closed tasks are said to produce more negotiation work than open tasks as they are structured and more focused. A closed task is semi-controlled in that there is a step by step procedure, whether implicitly or explicitly stated. This is in accordance with the researcher's own notion of tasks within a task concept. Open tasks on the other hand, are said to have no predetermined correct solutions.

If planned direction is provided in the stages of task design, being engaged in open tasks can be a very effective learning experience for the learners, because planning produces more negotiation work and more cognitive processes if the task is designed to do so. An open task can also be a guided one. It is one in which there may not be a single correct answer but teachers could direct students to produce alternatives. This would provide for higher level thinking through criticising, evaluating, analysing or synthesising. Studies on open, closed and planned tasks have mainly dealt with oral communication skills but such task types are also applicable to tasks for developing reading and writing skills.

Nation's (1990) concepts of experience, shared, guided and independent tasks are also applied to this study. He suggests that teachers can help students achieve their learning goals or objectives if the students are given some form of help in task completion. Nation (1990) identifies four types of tasks which are briefly discussed below (for a more detailed discussion see Nation ,1990: 51-63).

1. EXPERIENCE TASKS

A very effective way of making a task easier is to ensure that the learners are familiar with as many parts of it as possible in advance. This has several effects:

a. it makes sure that the learners are not overloaded by having to think about several different things at the same time. Nunan(1989) and Candlin (1987) call this "lightening the cognitive load".

b. it allows the learners the opportunity to focus on the part of the task or skill that they need to learn.

c. it helps the learners perform a normal language activity in a normal way with a high chance of success.

2. SHARED TASK

A task which is too difficult for an individual to complete may be done successfully in a group. Many experience tasks and guided tasks can be done in a group, thus increasing the help potentially available (from other learners). Such tasks can be constructed by considering how the information and input needed to do the task is distributed among the group.

3.GUIDED TASK

A guided task provides a lot of support for the learners while they do the task. This has several effects:

a. The task is narrowed and the learners do only part of the work that would normally be required in such an activity. It is therefore highly structured.

b. It allows grading and sequencing of tasks.

c. There is a high degree of success expected. (If learners make errors in guided tasks this is often seen as a result of a poorly made task, i.e., the guidance was not sufficient).

4. INDEPENDENT TASKS

Independent tasks require the learners to work alone without any planned help. Learners can work successfully on these tasks when they have developed   some

proficiency in English and when they have command of helpful strategies. These strategies can develop from experience, shared or guided tasks.

The task types discussed above encourage both divergent and convergent thinking. Both guided and closed tasks can be structured to develop divergent thinking because it does not mean that divergent thinking is only associated with tasks of the open type (Wright, 1987). If tasks involve cognitive processing then most tasks whether open or closed will involve both types of thinking processes.

In conclusion it can be deduced that the way a task is developed and categorised would depend largely on what skills are to be taught. This is because it is the skills that determined the type of tasks to be designed.

Metaphorically speaking all the above techniques and activities that make up a task are all a small part of a larger tapestry of interwoven activities within the context of a task - based approach. All parts must be effectively interrelated to achieve the desired goal. The discussion on task can be synthesised as follows:
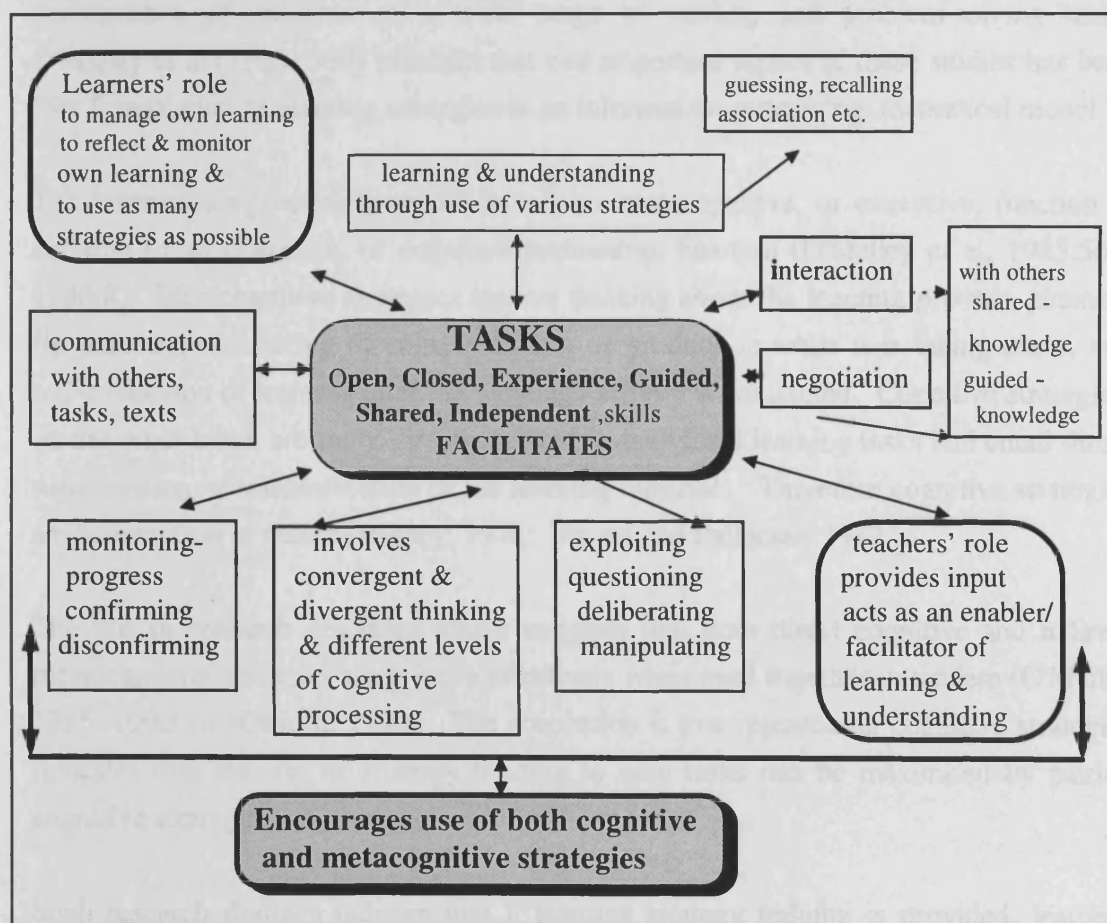
Figure 4.4 A synthesised model of the interwoven aspects of the concept *task*

4.10 Suggested Learning Strategies

This strand is based on a review of research on learning strategies. The specifications are drawn mainly from O'Malley and Chamot (1990), Oxford (1990) and consideration of other related research, as discussed below.

In the context of ELT, studies on learning strategies appeared in the mid 1960s but they were not widely known until the late 1970s. Popular applications first appeared in the 1990s. This shift in interest towards learning strategies in second language learning is drawn from theory and research in the field of cognitive psychology. This literature emerged from a concern to identify effective learners and their characteristics. Early documented research on what makes a "good language learner" can be found in the work of Naiman et al. (1978) and Rubin (1975).

In the field of cognitive psychology, studies of learning strategy applications have concentrated on determining the effects of strategy training for different kinds of tasks and learners (see Wittrock et al, 1975; Chipman et al, 1985; Dansereau, 1985). Findings from these studies generally indicate that strategy training is effective in improving the performance of students on a wide range of reading and problem-solving tasks. O'Malley et al (1985: 560) maintain that one important aspect of these studies has been "the formulation of learning strategies in an information-processing, theoretical model."

The information-processing model includes a metacognitive, or executive, function in addition to an operative, or cognitive-processing, function (O'Malley et al, 1985:560; 1990:8). Metacognitive strategies involve thinking about the learning process, planning for learning, monitoring of comprehension or production while it is taking place, and self-evaluation of learning after the language activity is completed. Cognitive strategies, on the other hand, are more directly related to individual learning tasks and entail direct manipulation or transformation of the learning materials. Therefore cognitive strategies are behavioural in nature (Rigney, 1978; Brown and Palincsar, 1982).

The line of research described above suggests that both direct cognitive and indirect metacognitive strategies work more effectively when used together in tandem (O'Malley 1985, 1990 and Oxford, 1990). The conclusion is that research on cognitive strategies indicates that transfer of strategy training to new tasks can be maximised by pairing cognitive strategies.

Such research findings indicate that if learning strategy training is provided, learners' ability to learn a language can be substantially increased or improved. McKeachie

(1988:3) states that "effective study strategies result in greater learning." In the case of EAP, students would not only need feedback as to what and where their weaknesses are, but also feedback on what strategies would be most useful or helpful in tackling and learning not only subject matter, but also language for long-term improvement and success. It would therefore seem logical to include the use of learning strategies in designing language teaching and learning materials, but not before teachers are trained to develop such strategies.

O'Malley and Chamot (1990:154) argue that the most important issue in implementing the use of learning strategy instruction is "developing in teachers the understanding and techniques for delivering effective learning strategy instructions to students". This is related to developing instructional materials that include learning strategy instructions which are required to meet the needs of particular students, besides taking into consideration the level of language proficiency at which learning strategy training should begin. According to O'Malley and Chamot (1990: 155) their own investigations have revealed that teachers need a great deal of exposure "to the concept of learning strategies as opposed to teaching strategies and repeated practice in designing and providing learning strategy instruction before they feel comfortable with incorporating strategy training in their classrooms." Such practice appears to be lacking in ESL teacher education courses.

4.10.1 Learning Strategies and EAP Based Materials

One model for incorporating learning strategies within an academic language learning context is "The Cognitive Academic Language Learning Approach" (CALLA) by O'Malley and Chamot (1987,1990). CALLA integrates the grading of appropriate content topics, academic language development, and direct instruction and practice in using learning strategies to acquire both procedural and declarative knowledge. Its focus is on the acquisition and use of procedural skills that facilitate academic language and content learning through the integration of both the metacognitive and cognitive strategies as illustrated in table 4.3.

These strategies are introduced through integration with regular lessons and the recommendation is that the training should be both direct and embedded. By training teachers to understand what the learning strategies are, how they work and their functional uses, teachers can incorporate the strategies into their materials to enhance not only language learning, but also learning to comprehend and understand academic content-based materials.

Table 4.3   CALLA   (O'Malley and Chamot, 1990:198-199).

Metacognitive Strategies	Cognitive Strategies
Advance organisation Advance preparation Organisational planning Selective attention Self-monitoring Self-evaluation Self-management	Resourcing Grouping Note-taking Summarising Deduction Imagery Auditory representation Elaboration Transfer Inferencing

Oxford (1990) also proposes that learning strategies can be successfully integrated into language teaching/learning tasks to develop learners' language learning ability. Oxford argues that learning strategy training should be incorporated into the materials/tasks that students use in their usual classroom practice. It is critical that teachers are well trained in using learning strategies in order to help students develop and use strategies in more effective ways.   The learning strategies that are incorporated into teaching materials/tasks encourage both learning and, at the same time, facilitate the acquisition of language skills.   Oxford (1990:15) identifies six interrelated Strategy Groups classified as Direct and Indirect Strategies as shown in figure 4.5. The system developed by Oxford is believed to be more comprehensive than most others (Scarcella and Oxford, 1992:63).
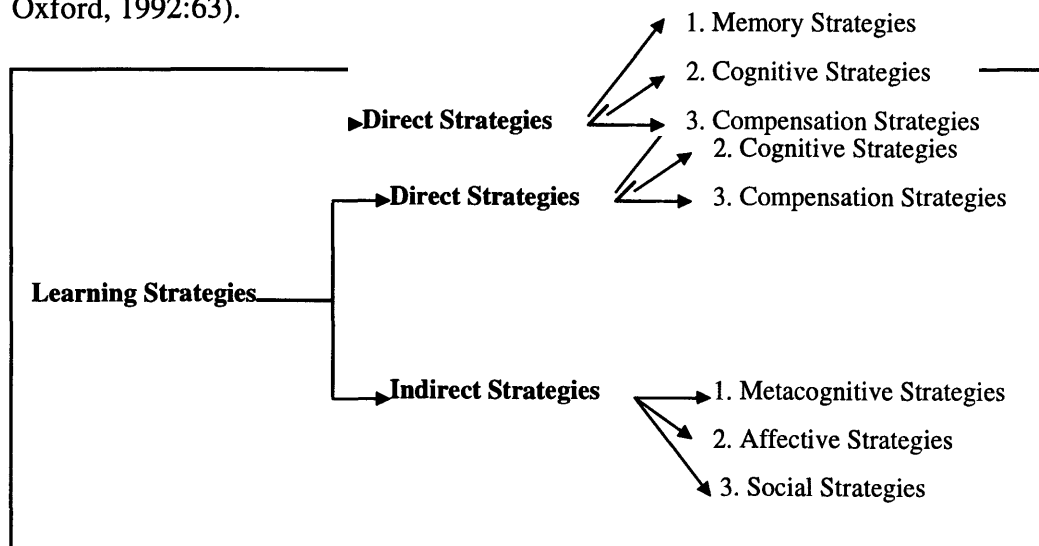
Figure 4.5 Oxford's Learning Strategies Components (Oxford, 1990:16)

4.10. 2   Cognition and Learning Support

In the context of EAP, teachers should not only pay attention to acquisition of the language but also to the learning process. To be self-sufficient, learners have to learn

how to learn through explicit training in both cognitive and metacognitive strategies (Wenden and Rubin, 1987:159). Training in the use of cognitive strategies (*direct strategies*) refers to training in the use of specific skills. These are usually tied to particular learning tasks such as remembering a new word, decoding the meaning of an unfamiliar word or highlighting key words, points or phrases. Specific cognitive strategies are quite focused in their use and can easily be integrated into task construction (Oxford, 1990; Wenden & Rubin, 1987; Wenden, 1991; Scarcella & Oxford, 1992). Metacognitive strategies (*indirect strategies*) are usually associated with general learning skills and they are used to regulate learning. These skills, have a wider application than the cognitive strategies (Wenden and Rubin, 1987: 160). In training students to use metacognitive strategies they can be taught a specific strategy and made aware of the importance of what they are doing. Examples of metacognitive strategies are: planning, monitoring, organising and evaluating. Learners should be trained to use both types of strategies to enhance learning and both should be integrated into tasks or daily learning experiences (Oxford, 1990; Wenden & Rubin, 1987; O'Malley & Chamot, 1990; Weinstein et al, 1988; Wenden, 1991; Scarcella & Oxford, 1992; Ellis & Sinclair, 1989). Learning strategies can therefore be effectively utilised to provide support in language learning and subject matter learning. If the learners are taught explicitly how to use and manipulate these strategies it will not only sharpen their learning and cognitive ability but also raise their awareness about the nature of learning.

If teachers are trained to go through the same processes of using such strategies, they will realise that learning strategies are flexible and that there is no fixed sequence or pattern of using them. At the same time they will learn how to incorporate the strategies into classroom tasks to enhance learning.

The specification for learning strategies is considered important and encourages the exploration of linking learning strategies and study skills in the teaching and learning of reading and writing skills. In this study, Oxford's (1990) and O'Malley and Chamot's (1990) strategy system is employed in training teachers to design EAP task-based material. Such strategies can be easily incorporated into the development of task and visuals for language teaching and learning.

Once all the strands and specifications of Draft Framework 1 had been formulated it was pre-piloted with trainee teachers (here after known as teachers). The findings are discussed and presented below.

4.11 Pre-pilot Study 1

Draft framework 1 which contained four strands of specifications (Appendix A4.1) for EAP materials design was pre-piloted at the University of Nottingham School of Education and at the University of Birmingham's Centre for English Language Studies with 30 Malaysian in- service teachers.

4.11.1 The Workshop

Workshop procedures were used to introduce the framework to the teachers. It was divided into two parts as it was a whole day session from 9.30 a.m. to 5.30 p.m. Part 1 of the workshop introduced the teachers to the concept of task. The teachers were asked to write on note cards a simple definition of what 'task' meant to them.

> "To me *task* in language teaching means/is

This elicited the teachers' perception of the concept *task* and since these trainees were experienced teachers their perceptions allowed the researcher to determine further input in the revision of the framework, teacher's guide and evaluation of task-based materials.

Next the teachers were introduced to some theoretical underpinnings of task-based materials, principles of materials design, definitions and practice activities of different kinds of task-based activities. This aspect was conducted jointly by Dr. Martin Cortazzi and the researcher.

The teachers were introduced to the EAP framework in part 2 of the workshop. Detailed examples were provided on how to use the framework to develop EAP materials. In pairs or groups of four the teachers worked on developing some reading and writing tasks using Draft Framework 1. They were provided with a wide selection of texts to work with. At the same time they noted problems or confusions which they felt should be further clarified further explained or defined. At the end of the session the teachers completed a questionnaire individually.

4.11.1.1 Analysis and Discussion of Teachers Responses

The questionnaires from the teachers at the universities of Nottingham and Birmingham were systematically analysed.

The questionnaire (see appendix A4.5) was designed to elicit information from the teachers about the usefulness of the framework, problems they encountered and suggestions for improvement. It consisted of closed-questions (number 1, 4, 5, 6, 7, 8, 9 and 12) and open-ended questions (number 2, 3, 10, 11 and 13) for teachers to amplify or explain their responses. All 30 respondents from both universities returned the questionnaires.

Since the questionnaire had both open and closed questions, several methods had to be used to analyse the responses. Frequency counts were used to tabulate the responses for the closed questions and where applicable, the open-ended responses. The open questions were analysed qualitatively. Responses were categorised and summarised or grouped together according to similar patterns. This method was also used for the main pilot study, pilot- 2A and 2B. The questionnaire analysis is presented first followed by the analysis of the teachers' perception of 'task.'

4.11.1. 2 Analysis and Discussion of Closed and Open Questions

The findings of the closed questions are presented first followed by that of the open ended questions.

4.11.1.2.1 Closed Questions

The analysis is presented in Table 4.4 and is followed by an analysis of the reasons for responding negatively or positively.

Table 4. 4 Analysis of Closed Questions (N = 30) Pre-Pilot Study

Question Number			Responses	
UNIVERSITY OF NOTTINGHAM + BIRMINGHAM	YES	NO	Undecided	Total
Q.1. - I think I understand the framework	30	-	-	30
Q.4. - The framework helps me to think more critically + systematically about developing and selecting materials.	30	-	-	30
Q.5. - The framework helps me to think about task and task design.	30	-	-	30
Q.6. - The framework makes me reflect and think about my learners and their language abi- lity.	29	1	-	30

Table 4.4 continued

	YES	NO	Undecided	Total
Q.7. - The framework allows me to consider task and learning strategies in materials.	30	-	-	30
Q.8. - The framework's specifications will help me to develop better materials and tasks.	29	-	1	30
Q.9. - Such a framework may guide me to assess my students language development in a progressive manner.	28	1	1	30
Q.12 - I think the framework is too long.	4	22	4	30

The inservice teachers seemed to respond favourably towards the framework. All 30 participants felt that they understood the framework; it helped them to think more critically and systematically about how they develop and select materials. In question 5 and 7, the teachers indicated very strongly that the framework's specification helped them to think about task, task design and learning strategies.

There was general agreement with the questionnaire statements except for minor disagreements with questions 6, 8, 9 and 12. Referring to Q 6 only one trainee partly disagreed and felt that he/she "could only use this framework only as a guide for selecting task according to the students abilities in general". But "it won't help in framing the actual teaching methods in the classroom which I find is equally as important."

In response to Q 8, only one trainee could not decide; "I can't honestly say yes or no, I need more exposure and training on materials development before I can commit myself but the framework has a potential for future use."

Twenty-eight teachers responded positively towards Q 9 except for one trainee who responded negatively: "students variables cause difficulty to assess true language development." The trainee was apparently unable to explain clearly what he meant. In response to Q 12, only four teachers thought that it was too long and four others could not decide. This indicates that in general the framework was about the right length or possibly too long.

Referring to Table 4.4, most of the questions are closed and may have a positive slant to them; the last question, question 12 has a negative tone. This difference in tone may have affected the way in which some questions were answered; that positive questions may get positive responses, but it does not invalidate the question responses. Dillon (1990:115) argues that " positive/negative words present the respondents with a

confusing choice over the negative, while the very dichotomy of choice presents another problem". He adds that more often than not people tend to "shy away from negativeness and towards positiveness." This problem can be overcome by explicitly offering respondents another option such as 'undecided' or 'don't know' Molenaar (1989) cited in Dillon (1990). This according to Dillon (1990: 116) is a good practice, "since providing a middle term proves to make a great deal of difference in the responses". This is clearly evident in the responses provided by the teachers throughout all the pilot studies.

4.11.1.2.2   Open Questions

The aim of the open questions was to provide ample opportunity for the teachers to voice their opinions and ideas without restriction. The six open questions were analysed by identifying similar responses and categorising them into different categories using content analysis. Similar statements were matched, linked, collated and summarised under categories. It was also decided that at least 2 people must have similar responses before they could be categorised under a single category.

The analysis and discussion of the open-questions are presented in question 2 (the number shown in bracket indicates the number of teachers).

(Q.2   I think the framework will be useful for ....)

Six different categories were identified by the teachers as shown in table 4.5. Only the most commonly repeated quotes are given with the number of subjects in brackets.

The teachers generally found the framework helpful for selecting materials and as a checklist for developing materials and tasks. They also found it useful for classifying and identifying appropriate tasks according to levels of ability.

The strand on learning strategies was a new element for the teachers. They were surprised to discover that using it helped to change the structure of the task(s) by providing choices for variety and control of the task(s).

Q2. Usefulness of the Framework (Pre-Pilot Study, Draft Framework 1)

(1) Selecting Materials/Text (s).	(2) Checklist for EAP Materials/ Task Design.
a) Select Materials according to learners' ability. It provides teachers with a wider choice. (8)	a) Checking whether my materials meet the students level of ability. (6)
b) Selecting texts for a heterogeneous group of students. (2)	b) Evaluating task based materials. (4)

Q2. Usefulness of the Framework continued

c) Selecting materials according to levels and exploiting them by creating tasks according to levels. (6)	c) Evaluating materials/tasks for students to develop their skills according to their level of ability. (3)
d) Identifying various types of texts according to a wide range of ability for a mixed class. (7)	d) Checking appropriate task input. (4)
e) Makes selecting materials/text an easier task. (5)	
(3) Designing Tasks with reference to Learners' Ability	**(4) Incorporation of Learning Strategies.**
a) Designing tasks in an EAP environment/ context to meet different needs. (2)	a) Provides choices in the type of learning strategies to be included into the task(s). (4)
b) Task design for both English for General Purpose and EAP/ESP needs. (4)	b) Using and selecting the learning strategies to structure the tasks according to ability. (2)
c) Selecting tasks + designing them according to students' level. (6)	c) The discovery that by incorporating learning strategies the tasks focus can be controlled and can be varied. (6)
d) For determining the most appropriate type of task for various language proficiency needs. (5)	
e) Classifying tasks according to learners' ability to perform. (3)	

Many teachers indicated that the framework provided some guidance on how to adapt materials/tasks according to different levels of ability and learning needs. They said it is applicable in any teaching situation but is particularly useful for teachers who are less sure of what to do.

Q2. continued

(5) Adapting and Designing Materials.	**(6) Other Purposes.**
a) Helps in deciding to what level to adapt a material or task. (7)	a) Very useful for teachers in any situation to select suitable/appropriate materials and tasks for specific learners in terms of their level of proficiency and teachers' objectives. (9)
b) Can use it as a guide to adapt different types of text for the different learning/ language needs of the learners. (4)	b) Teachers who are not sure of what to do and how to develop task - based materials. (6)

(Q.3.   I particularly like ....)

The teachers' responses show that they find the framework's approach accessible because it included sufficient suggestions. Many found the suggestions for text selection most useful as shown in question 3. The specifications for developing tasks and

incorporating learning strategies provided them with ideas which made it easier for them to think.

Q3. Summary of Aspects Liked by the Teachers.

(1) Approach.	(2) Specifications for Text Selection.
a) The way one can approach it. That is, the cyclical nature of the framework. (3)	a) The clear details given on the type of text which might be appropriate, in line with the students level of ability. (4)
b) The built in evaluation approach of the framework. (2)	b) The variety of text types suggested. (4)
c) The inclusion of sufficient suggestions and specifications. (This is what teachers usually look for). (4)	c) The different types of text suggested gives the teacher the choice of text type to be matched with a particular group of learners. (8)
d) The clear representation of the application of the framework to a text. (5)	
e) The fact that the learners' ability is central to all other specifications and the approach has to be one where the teacher looks at the learner first and then moves on and keeps monitoring the materials with the learner's level in mind. (6)	
(3) Task Types and Skills	(4) Learning Strategies
a) The graded levels of the suggested task with reference to ability helps in designing lower or higher level tasks. (5)	a) This specification makes task design easier because the learning strategies give the teacher ideas about how to create tasks which are appropriate for mastering a certain strategy. (6)

(Q.10. The part I felt uncomfortable about or couldn't understand was.......)

The teachers identified two aspects which they felt uncomfortable with and is discussed below.

a. **Suggested length of text**

Eighteen out of 30 teachers said that they felt uncomfortable with this as they thought that it might restrict their choice of texts to be used. Most suggested that this point could be placed in parenthesis as an option.

b. **Specifications for Levels of Competence/Ability**

Six teachers indicated that they had problems with some phrases used in describing the learners' ability. Examples of the phrases are as follows:-

> **"Occasional words and phrases;" "textual features;" "Uncomplicated linguistic structures;" "Not too highly specialised;" "complex and uncomplex texts"**

They felt that the phrases are too general and ambiguous. Suggestions were made that examples or much simpler and straight forward phrases be used.

(Q.11. I think it is difficult to follow because.........)

This question evoked mainly four types of responses as discussed below. Generally the teachers felt that it would not be difficult to follow if they had more exposure and knowledge about materials design.

Q 11. Difficulties in Following the framework

a) It is not difficult to follow   (12)
b) Will be able to follow it better if exposure to using the framework is longer. That is, need more time to completely follow it without problems. (6)
c) Lack thorough knowledge on how to design materials therefore there were problems in understanding some of the terminology used. (7)
d) It is difficult to follow if you do not understand or know all the different linguistic terms(5)

(Q.13. My main comments are ....)

As in question 11, this evoked four categories of responses as shown below. The teachers comments seemed positive.

Q 13 Teachers' Main Comments

1) The whole framework and the workshop was *beneficial* and I/we learned some new things which I/we have never heard of before. (8)
2) *More time is needed* to fully understand the whole idea of the framework. (7)
3) The framework is *applicable as a guideline* and as *a training guide* as it is descriptive and not prescriptive. (6)
4) There is a *potential* for it to be more beneficial and useful in the long run. (5)

(Q.14. I would like to suggest that ....)

Question 14 had interesting responses and added new insight for revising the first draft of the framework. Very useful suggestions were made which guided the addition of further categories to the framework. The suggestions made are categorised as follows.

Q 14 Suggestions for Inclusion in the Framework

a) The suggestions for learning strategies be expanded to include some definitions or examples of what they mean. (7)
b) Discourse patterns - a wide range of genres should be utilised. Perhaps literary and non-literary genres. (9)
c) At least some different examples of materials which incorporate the different aspects of the framework should be provided. (4)
d) Suggestions for incorporating audio visual aids/visuals. (6)
e) The specifications should not be limited to just reading and writing skills but should also include listening and speaking skills as well. (4)

4.11.1.3 Teachers' Perception of 'Task'

An analysis of the teachers' perception of task was carried out based on the teachers' written statements to complete the following.

"To me task in language teaching means/is ----------- ."

For a large number of the teachers, *task* is seen as an *exercise* or *work*. Very few looked at it as an *activity*. Figure 4.6 presents the categorised responses; this aspect is also discussed in Chapter 7.
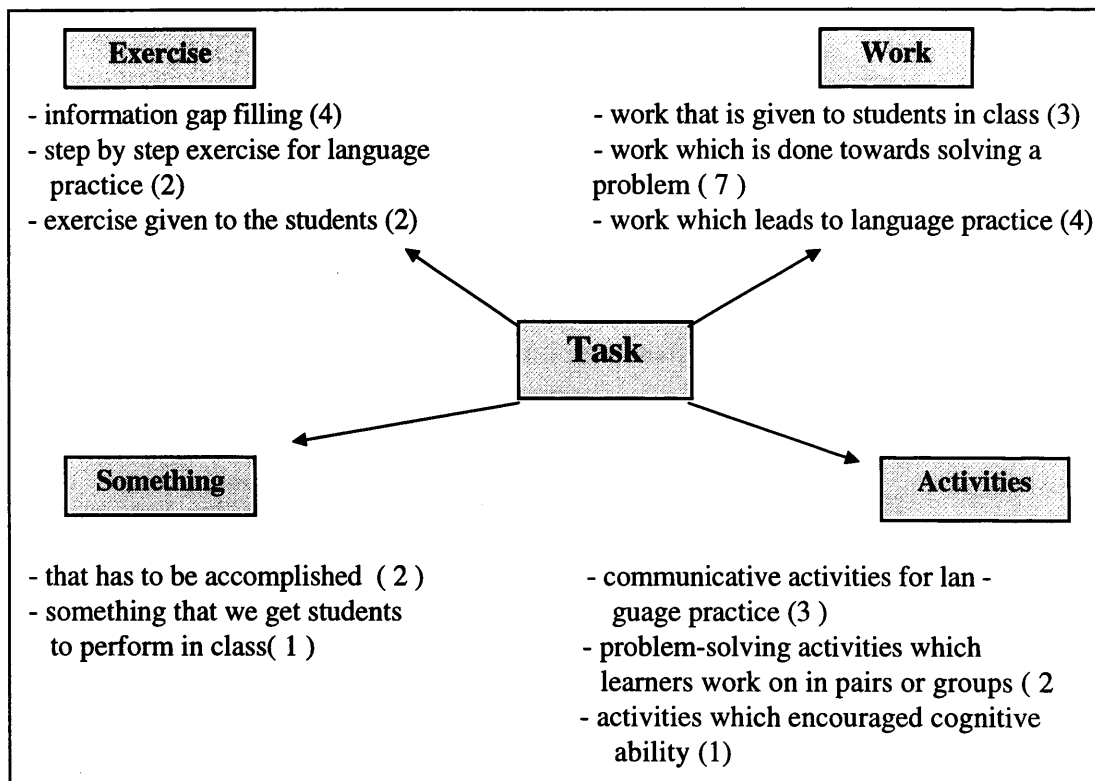
Figure 4.6 Teachers' Perception of 'task'

Basically the teachers did not see *task* as an activity that called on students to use their cognitive ability, nor as complex and highly structured activities, but rather, as simple activities for language practice. Clearly, there is ample scope for the teachers to develop richer notions of *task* more in line with current developments in EFL.

4.11.2 Summary of the Findings of the Pre-pilot Study

This stage involved pre-piloting the first draft of the framework with two groups of Malaysian teachers (N = 30) at the Universities of Nottingham and Birmingham. Feedback was used to review and develop the framework in the light of the teachers' responses, views and comments. The teachers seem to want clear, explicit guidance and a step by step approach. They would like minimal terminology and they require a glossary of terms or explanations with examples. Most importantly they appear to misunderstand the concept and the complexities of task. One of the most significant findings was their proposal to consider the place of *genre* in the framework. An examination of the teachers' materials and feedback from open, informal discussion sessions also revealed the need to look into the use of *visuals* or *graphics* in enhancing the teaching - learning materials. Comments and views were also made about the use of simplified versus authentic texts and the length of texts. Based on this feedback the framework was further developed to include three more strands and major amendments to the entire framework in order to accommodate the teachers' views. After all, they are ultimately the target audience who are going to use it.

4.12 Draft framework 2 (Stage Three): Inclusion of 3 Additional Strands and Pilot Study 2A

This consisted of the redrafting of framework 1 based on the feedback from Pre-Pilot Study One. It involved the inclusion of three additional strands, making a total of seven strands (see figure 4.7). The new additions consisted of:

1. *Genre-* Suggested Text Discourse / Rhetorics
2. *Knowledge and Language Structure / Frame*
3. Suggested *Visuals /* Aids (see figure 4.7 and appendix A4.2)

Minor changes were made to the specifications in the strands on *suggested text types* and *suggested task types* . The strand on *suggested learning strategies* were further revised to include elaborations (see appendix A4.2). Some of the changes were made to accommodate the inclusion of the three additional strands. Each of these are discussed and reviewed below.
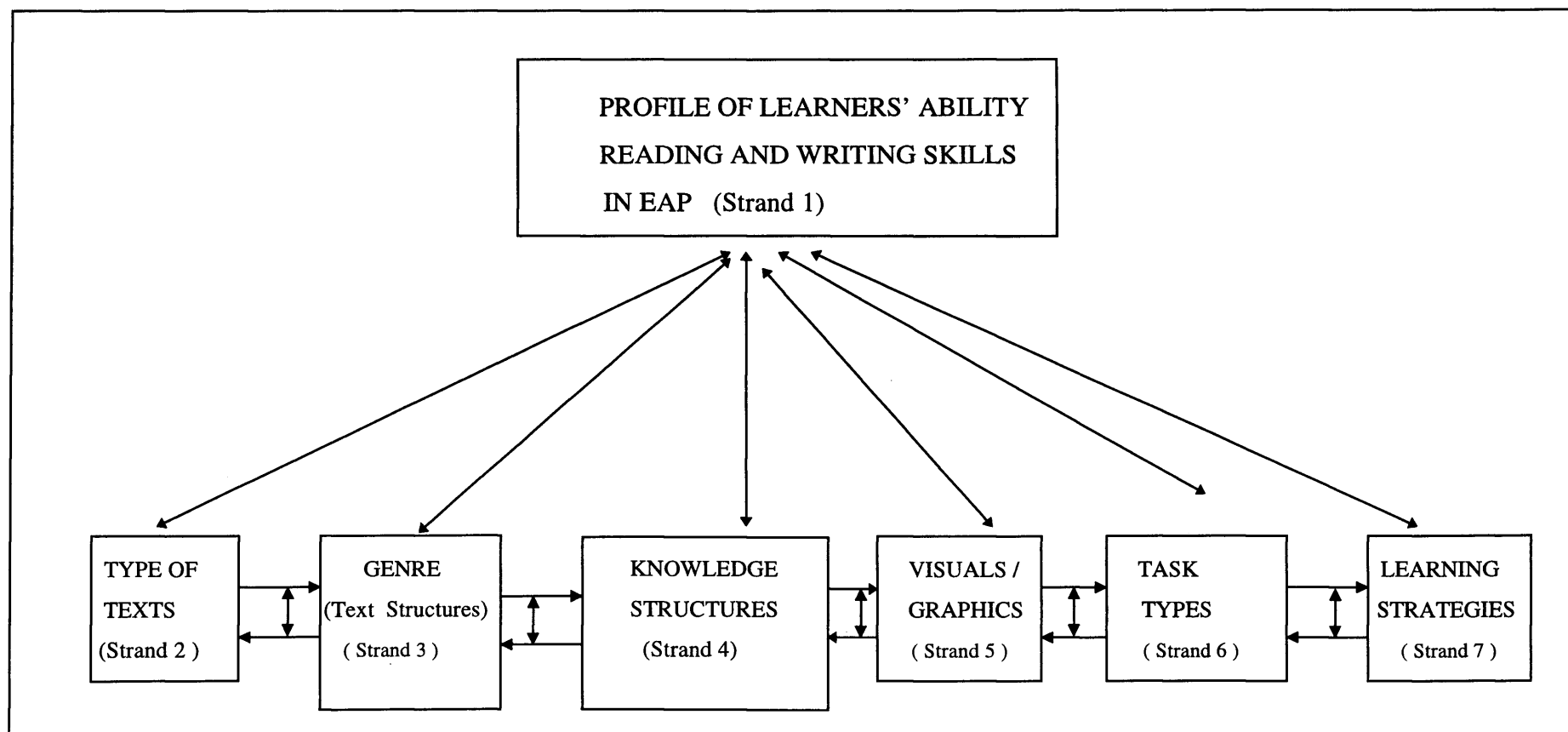
Figure 4. 7   OUTLINE OF   DRAFT FRAMEWORK 2

4.13 Genre-Suggested Text Structure Strand

This strand suggests that aspects of genre, namely rhetorical genres be introduced to teachers for materials design. For the purpose of this research only those aspects of genre that are directly related to the study will be discussed.

4.13.1 Genre: An Overview

In the 1990s applied linguists began to look more closely at "genre" and its pedagogical implications. How would an understanding of different types of genre shape the teaching - learning processes of both first and second language teaching? Is there a strong need for a deeper understanding of discourse for successful understanding of reading text and better control of the writing process? Would this mean going back to teaching and learning language forms? Those who adopt a discourse-based view would probably respond positively to the last two questions. A definition of text discourse is thus necessary before moving on.

The term *discourse* can be defined in many different ways and a representative range of definitions follow. Discourse can be defined as "a stretch of language (written or spoken) consisting of several sentences which are related in some way" (Nunan,1993:5). Crystal (1992:25) defines discourse as "a continuous stretch of (especially spoken) language larger than a sentence, often constituting a coherent unit, such as a sermon, argument, joke or narrative."   Cook (1989:156) defines it as "stretches of language perceived to be meaningful, unified, and purposive." There is a general agreement that discourse is to be defined in terms of meaning and it is this study of meaning within a context of use that is analysed in discourse based approaches. This *discourse analysis* can be defined as "the study of the language of communication- spoken or written" (Hatch, 1992:1). Cook (1989:6) explains that the "search for what gives discourse coherence is known as discourse analysis". Discourse analysis is often linked to genre analysis. They both involve the study of text structure within a specific context. Such studies play a very important part in materials development and teacher training.

For Swales (1990:33) genre "remains a fuzzy concept". Reid (1987) points out that genre "is one of the most contentious topics in curriculum theory today, and practical issues are at stake". Yet it seems crucial that classroom practitioners, especially EAP/ESP teachers, should understand the notion of genre, even though, as Kay (1994: 63) maintains, understanding the notion of genre is no simple task as " a journey through some of the literature on the subject brings us face to face not only with genres, but also with sub-genres, micro-genres, complex genres, text genres and rhetorical genres". The list does not end here.

It is argued that for students to comprehend particular texts then language teaching has to begin with texts (Kress, 1989 :18). To achieve this their teachers must be trained to have an in-depth knowledge of such meanings so as to enable students to recognise in texts the language forms that frame the text meanings. McCarthy and Carter (1994 :1) make it clear that teachers and students need to be aware that linguistic patterns exist across stretches of text. This is because such patterns of language extend beyond the words, clauses and sentences which have in the past been the concern of much language teaching (see Jordan, 1984; Littlefair, 1991; Davies, 1995; Bhatia, 1993,1994; Cope & Kalantzis 1993, Swales, 1990; Hatch, 1992; Connor, 1996). If this is so, then directly or indirectly it means that we would have to take genre theory into consideration.

In the field of EAP, this discourse-based view or the genre approach is very relevant. This is because students in academic settings use authentic texts which reflect subject disciplines written by different people belonging to different discourse communities. Therefore, if teachers and students are trained to study the discourse structure of different types of texts (text types) then students may be able to read and comprehend such texts more efficiently. They can later transfer that knowledge and understanding to their written work and to other text types.

4.13.2 Interpretations and Definitions

The genre or discourse-based view is open to a plethora of different interpretations and is defined in many ways. It is beyond the scope of this thesis to discuss the subject at great length. Thus only brief definitions are provided; some that are directly related to the study are discussed in detail.

Kress (1989) defines genre as kinds of text while Littlefair (1991:10) views genre as a class or category of things. For McCarthy and Carter (1994:35) genre consists of generic blends. For example, a genre of report and the sub-genre of reporting and recommending or reporting and predicting. Wallace (1992) and Cope and Kalantzis (1993:2-7) see genres as social processes. According to Cope and Kalantzis (1993:67), each type of genre presents a social meaning. Callaghan et al (1993: 192) also view genres as a useful way of categorising the social processes that are realised through the use of language as illustrated in figure 4.8 A. They suggest that from a teaching - learning perspective, it is productive to work with genre as a process that leads to a product or text type.

The implications are that teachers need to learn to identify and to become familiar with those text types that are necessary for students to learn. Typical text types can be identified as report, exposition, explanation, debate and so on (Johns and Davies 1983; Davies and Green, 1984; Davies, 1985, 1986, and Kay, 1991).

	DESCRIBE	EXPLAIN	INSTRUCT	ARGUE	NARRATE
P R O C E S S	through the process of classifying and describing things into cultural / scientific taxonomies meaning	through the process of sequencing phenomena in temporal and/or causal relationships	through the process of logically ordering a sequence of actions or behaviours	through the process of persuading readers to accept a logical ordering of propositions	through the process of sequencing people/events in time & space

GENRES
SOCIAL PROCESS THAT

ALL THESE ARE COMMONLY USED IN TEXT TYPES

	Personal descriptions	Explanations of HOW,	Procedures Instructions	Essays Expositions	Recounts personal
P R O D U C T	Technical des-cription Information re-ports Scientific re-ports Defini - tions	Explanations of WHY, Elaborations, Illustrations, Accounts, Explanations essays	Manuals Science experiments Recipes Directions	Discussions Debates Reviews Interpretations evaluations	historical Stories Fairytales Myths Fables Narratives

Figure 4. 8A. A Model for a Process-Based Orientation to Genre Callaghan et. al.(1993:193)

The examples by Cope and Kalantzis and Callaghan et al. can be explained in terms of Halliday and Martin's (1993: 38) Systemic Functional Linguistics (SFS) Model. The concentric model (figure 4.8B) indicates that social context is realised by language; at the level of social context ideology is realised by genre, which is in turn realised by register (Halliday and Martin, 1993:37). Therefore genre is shaped by a number of stratified layers within a social context.
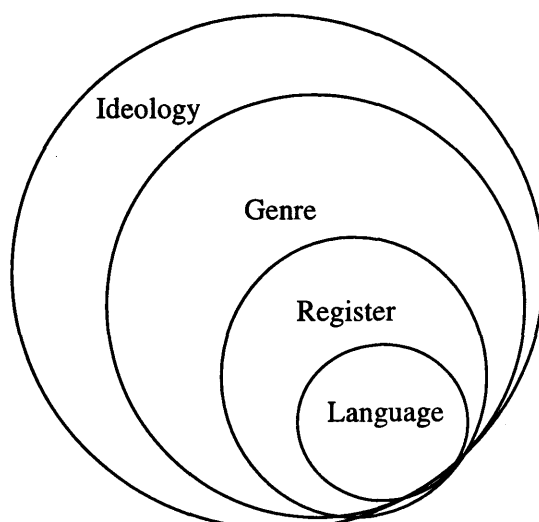
Figure 4.8B Language in Relation to its Connotative Semiotics: Ideology, Genre
and Register (Halliday and Martin, 1993:38)

Yet another influential account of genre, is presented by Swales (1990) whose definition of genre focuses on the communicative purpose. He defines and explains genre as :

> ......*comprising a class of communicative events, the members of which share*
> *some set of communicative purposes* (Swales 1990: 58).

Important in Swales definition is the centrality of a 'discourse community' whose members agree upon the acceptable features of specific genres. For Swales, research articles, presentations, grant proposals, and books all represent different genres. This is because their sets of communicative purposes and their schematic structures are different.

Another definition of genre within the context of communicative events is Bhatia's (1993:16), who states that:

> *Each genre is an instance of a successful achievement of a specific*
> *communicative purpose using conventionalized knowledge of linguistic and*
> *discoursal resources*

Bhatia's definition includes the element of subgenres within genres. It is suggested that subgenres differ from genres because of their different communicative purposes and the different strategies writers use to accomplish these purposes. Swales's, Bhatia's, and McCarthy and Carter's approaches to genre contribute to categorical discriminations among discourse forms.

Hatch makes another slight variation. She uses the term 'rhetorical genres' which she says have long been used by both teachers and students. Rhetorical genres are those that teachers and students will have to analyse in what she calls "rhetorical genre analysis" (Hatch, 1992: 164 - 189). This definition stems from the perspective of rhetorical organisation and is similar to what Davies and Green (1984), call "topic types". The approach is based on the premise that writers make choices at the lexico-grammatical and rhetorical levels in order to achieve a purpose, but in doing this they draw upon the underlying information which they wish to present and over which they have very little choice (Davies and Green, 1984:37-38).

Hatch's definition is formulated from a process view of communication systems within which communication events take place in ways that follow ritual, or social constraints. Thus, written texts help us understand how communicative events have structure. She maintains that from this standpoint, examples of text genres are narratives, descriptive, procedural, argumentative, comparison and contrast etc. Each genre has a slightly different structure, which can be described. In addition, each gives writers and speakers considerable flexibility in structuring text (Hatch, 1992:164). The rhetorical genres are therefore taught as processes.

(A)   GENRES

Narratives   Descriptive Procedural Argumentative   Comparison and Contrast
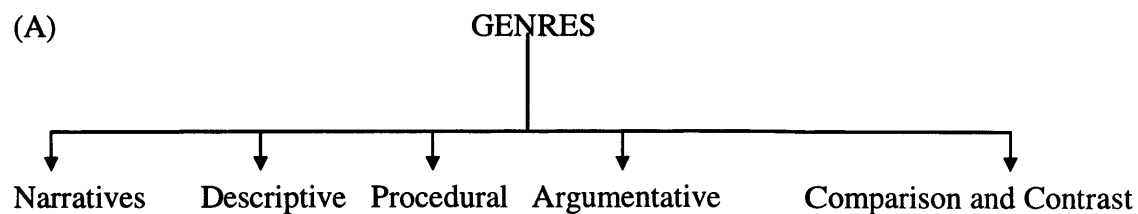
Figure 4. 9 A   Hatch's Rhetorical Genres

The above view is similar to Callaghan's et al's. (1993) description of genre.

Huckin and Olsen (1983 : 179) presents genre in a similar way. They classify the major genres of technical writing as:

(B)   GENRES

Oral presentation   Technical   long informal   formal   feasibility   proposal
report   report   report   report   report   report
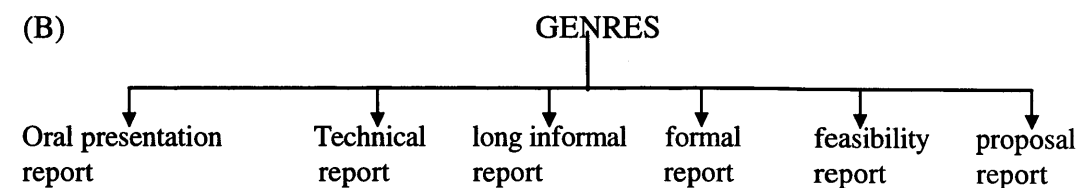
Figure 4. 9B   Genres of Technical Writing

Such a classification may be valid in ESP and EST. Students in Science and Technology disciplines need to read and write a various number of differing reports with different discourse patterns.

Thus both genres and discourses are interrelated concepts; both carry socially determined meanings. Particular discourses are characteristic of particular genres. For the purpose of this study, Callaghan et al's (1993), Hatch's (1992), Huckin and Olsen's (1983) and Trimble's (1985) definitions of genre and discourse are adapted.

Genre analysis is recognised as an important approach to text analysis especially in the field of EAP/ESP (Dudley-Evans, 1994: 219). Thus, teachers of EAP/ESP will need to be trained to analyse the different discourse patterns found in scientific, technical, business, economics, law and other texts. The teachers also need training to produce tasks or materials which are appropriate for their students and which generate understanding of the different textual patterns and the writer's communicative purposes with particular texts.

From the above discussion it is clear that *genre* can be interpreted and defined in many ways. The various classifications and definitions of genre depend on distinguishing particular genres. There are, clearly, difficulties with questions of categorisation, overlaps and distinguishing genres, genre blends and mixes, and subgenres. This can be clearly seen in a number of studies which have been carried out in the area of genre. Examples of these are: in the L2 EAP/ESP context; Swales, 1985, 1988,1990; Dudley-Evans, 1986,1987; Love, 1991; in the L1 literacy programmes mainly in Australia and the UK; Martin, 1989; Christie, 1989; Littlefair, 1991; Winser, 1994; Davies & Green, 1984; Christie and Rothery, 1990. In North America, the Languages Across the Curriculum (LAC) in the L2 context is somewhat similar to the latter; Mohan, 1986; Baker, 1993; Palmer, 1993; Metcalf, 1993). This includes Swales's (1990) work. However, there appear to be no recorded work in the Malaysian context.

4.13.3 Genre and EAP /ESP

Tickoo (1994:31) notes that *a genre-based approach*/analysis is gaining strength as an alternative to ESP. The genre-based approach/analysis used in ESP is defined differently from that used in the Australian model which is used to teach writing in schools (e.g. Martin, 1989). The former approach has received much attention from a growing number of ESP practitioners, particularly in the ESL context.

Genre Analysis (GA) as an alternative approach to ESP / EAP resulted from Swales' desire to search for an exclusive scholarly niche for academic ESP away from the strong influence of ELT (Swales, 1985, 1988). Wu (1992) explains that the teaching of ESP has been a rapidly developing area and the focus of syllabus design and materials production has shifted from needs analysis towards discourse analysis stressing authenticity and communicative content. Some examples of successful research using GA have been reported in ESP literature for more than a decade. Recent work has also emerged showing strength in the use of GA. (Examples are: Dudley-Evans & Henderson, 1990; Hyland, 1990; Humphreys, 1990; Marshall, 1991; Calvet-Tapia, 1991; Weisburg, 1993; Bhatia, 1993; Thompson, 1994; Kay, 1994; Paltridge, 1994, 1995). GA seems to be gaining strength in the 1990s drawing from earlier work in Discourse Analysis (DA). Both DA and GA seem to have influenced recent EAP / ESP research and practice.

GA is not without its problems and in many instances is capable only of serving limited pedagogic needs (Johns; 1992, 1993; Tickoo,1994; Kay, 1994). It will often need support from other disciplines such as education.

4.13.4 Applying Genre Approach in Materials Design for the Language Classroom

Where do we begin, given the many and diverse interpretations of genres? It would be useful to begin with pedagogical aspects rather than the theoretical aspects as they will be more applicable to classroom practice.

Kay (1994:73) argues that at the tertiary level it might be suitable to work "solely at the level of generic structure," a view shared by Swales (1990:18). She adds that at the secondary school level in a wide angled context, it may not be so appropriate to work just at the level of generic structure. Instead she proposes the use of "transgeneric approaches" utilising rhetorical structures or topic types which appear across several genres and disciplines. This concept is also advocated by Davies and Green (1984); Mohan (1986); Johns(1986, 1988); Hatch (1992) and Callaghan et al (1993).

Work on genre can raise teacher's and students' awareness of how texts are structured. Genre can then be used as an organising framework for developing materials, selecting texts and writing processes for different purposes. Flowerdew (1993) suggests that GA can be used for teaching what he calls professional genres. GA could be used in General English language classrooms through the use of an educational and process approach. One can conclude: what is required in terms of EAP teaching, within a non- native speaking contexts is a pedagogical view and use of genre which is simple enough for

teachers to use. There is also a need to raise the teachers' awareness of the power of knowing how to use genres. An attempt is therefore made here to place some of the terms discussed above in perspective. These relate directly to the understanding of the concept of genre being used for the development of the EAP materials framework in this study.

Macro-genres are considered first. These are over- arching genres. Each subsumes a number of more specific genres (or subgenres). At the macro level these are literary genres, expository genres, procedural genres, report genres, news genres and the like.

MACRO GENRES

| Literary | Expository | Procedural | Report | News |
| Genres | Genres | Genres | Genres | Genres |
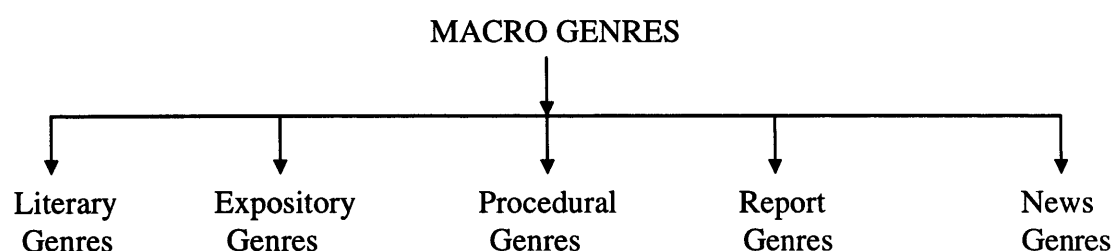
Figure 4.10 A   Macro-Genres

These macro - genres, have *sub-genres,* as shown below in figure 4.10.

LITERARY GENRES   EXPOSITORY GENRES

Fiction Novels Poetry   Argument Evaluation Processes Experi-
                                                                 mental

REPORT GENRES

| Weather | Sport | News | Recommendation | Company |
| Report | Report | Report | Report | Report |
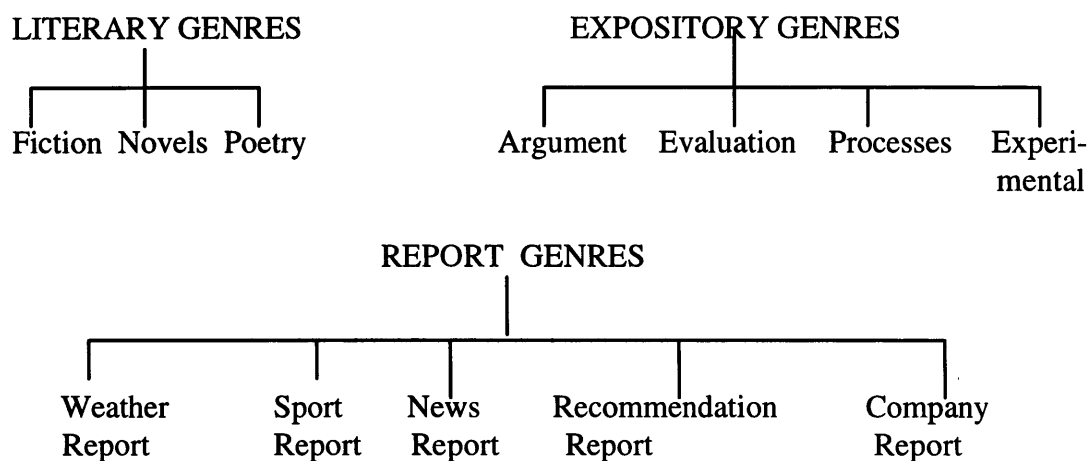
Figures 4.10B Sub-Genres

Next there are the *generic blends,* defined as *Rhetorical Discourse Genre* (RDG) after Hatch (1992) and Davies and Green (1984). RDG can be defined as rhetorical or textual structures embedded in the discourse of texts. They are the processes by which text discourses are structured. RDG therefore conveys the meta - functions of texts and

are at a micro- level. The researcher believes this to be essential for teachers to grasp and recommends that they should be included in EAP materials design. Generic blends are embedded within the sub-genres. So at the micro-genre level there would be the following RDG:

Micro Genre Level	**Description**	**Process / Procedure**	**Problem-solution**	**Definitions**
	↓	↓	↓	↓
Rhetorical Function of Discourse	Functional description Physical description etc.	Description defining explaining sequencing etc.	Description defining classifying explaining exemplifying recommending comparing contrasting etc.	formal definitions informal definitions expanded definitions examples etc.
	▲	▲	▲	▲
	Syntactic and Semantic relations of RDG is identified			

Figure 4.11 Rhetorical Discourse Genre (RDG)

The diagram above shows that the micro genre level is realised through rhetorical discourse functions. At the micro-level there are the various genres which are structured through the different modes of discourse to form different text types (see Callaghan et al, section 4.13.2 and figure 4.8A). For practical purposes it is this level that teachers should be familiar with in order to learn to analyse texts and to understand the structure of particular texts. It would be better to begin with those which are stable and somewhat predictive (Johns, 1994: 24-25). Teachers can be trained first to look at the macrostructure of a text which is fixed before moving on to the micro level and finally identification of the rhetorical functions of the texts or of each macro - structure.

It is this level that is adapted for use in the framework to train teachers to design EAP task-based materials using subject specific texts. This aspect can enhance reading and writing skills. The structures are transferable across subjects and disciplines. This outline of genre can be integrated with learning strategies and reinforced through visuals or graphics.
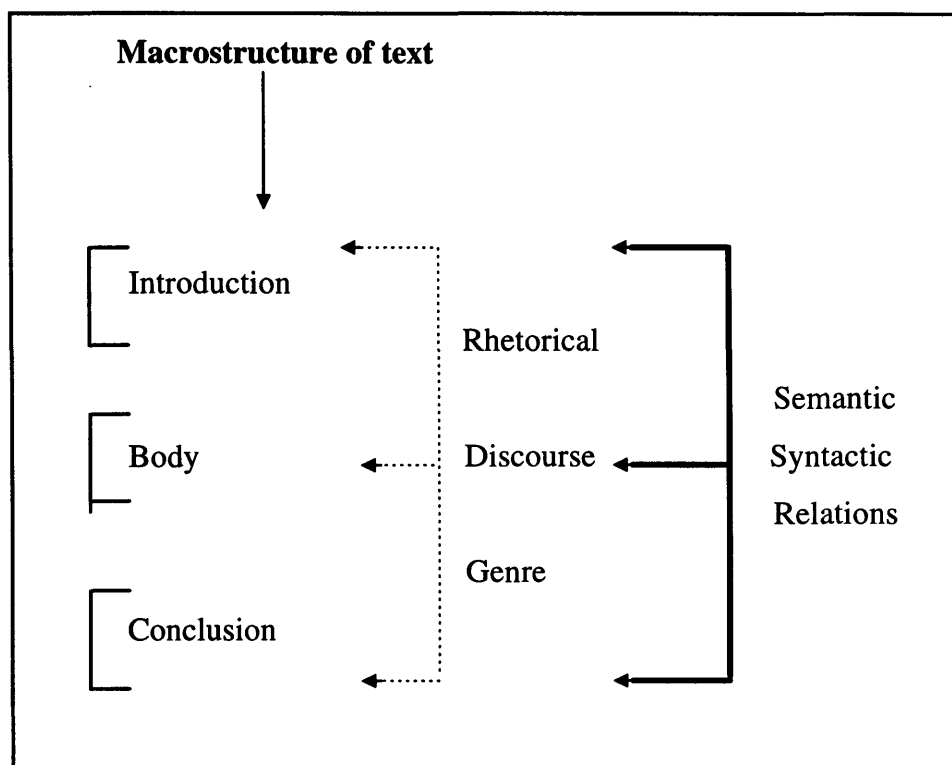
Figure 4. 12   Macrostructure of a text

Decisions on which rhetorical structures to include in the framework were made on the basis of a literature review. A documentary survey of texts in use was carried out and is presented in appendix A4 .3.   Based on this survey a decision was made as to the format and structure of this set of specifications. The structuring and sequence of the rhetorical patterns was influenced by beginning with the more familiar and moving on to the more complex ones implied by Bloom's (1956) taxonomy of learning and Gagne's (1974, 1985) hierarchy of skills learning.   It is also influenced by the findings of the needs assessment survey which strongly indicated the need to begin with the more familiar and less complex . The focus on rhetorical genres is considered important and is in line with current research and beliefs in EF(S)L teaching and learning contexts. In order to be able to process the rhetorical genres in texts, teachers need to be able to understand the knowledge structures of texts.

4.14 Knowledge Structure Strand

This strand provides a listing of patterns of thinking skills and key grammatical elements required or considered essential in developing the ability to process text structure, especially in the context of reading to learn. It also allows teachers to identify other associated grammatical elements needed to develop understanding of the different rhetorical genres and to develop the tasks further. It also incorporates the idea of linking

the development of language skills with developing advanced thinking skills (see De Bono, 1976; Fisher, 1990).

The aim is to train teachers and learners to identify patterns of thinking and to locate the main structure of the content knowledge of a text. This leads to further understanding and association of ideas, sequences, principles, processes, evaluation, analysis etc. Raising the teachers' awareness of the key knowledge structures and sensitising them to those aspects of the language that are critical to understand and express the knowledge they need to know is important. Bolitho and Tomlinson (1990) highlight the need to 'sensitise teachers to develop their own understanding of the way the language works'. Woods and Macleod (1990) and Mohan (1986) also reiterate the need to raise teachers' awareness of how language works in relation to learning from texts. Recent development in task-based grammar instruction (Madden & Rinehart, 1987; Fotos & Ellis, 1991; Loschky & Vroman, 1993; Fotos, 1994) highlight the growing importance of understanding language structures for a variety of purposes.

Mohan (1986:90) maintains that *classification, principles* and *evaluation* are knowledge structures related to thinking processes. It is important to make a distinction between knowledge structures and thinking processes. In the context of this study, *'knowledge structures'* means the patterns of thinking that are necessary in aiding understanding of text structure and content. For example, if a teacher selects or presents a multiframed text where a number of different patterns can be discerned, then there is a need to first identify the thinking skills, then the grammatical elements associated with them, in order to facilitate understanding the overall pattern, that is, the rhetorical genre. The way in which the knowledge structure is put together as discourse is identified, learnt and understood within the context of a given rhetorical genre and not in isolation. Hughes et al (1995: 50-51) maintain that the knowledge structure which is made up of key grammatical elements is seen as an acquisition of a set of skills - language skills which are important in understanding discourse. The thinking skills which are linked to it are what Mohan (1986:75) calls thinking processes, meaning processes associated with understanding a knowledge structure. For example, for Mohan, *classification* is a knowledge structure and the act of classifying is a thinking process of working with classification (ibid). The researcher uses the term "thinking skills" to mean skills or processes associated with the ability to process the different types of text structures or patterns. For example, the rhetorical genre of description requires the thinking skills and knowledge structure to describe the text using the following thinking skills or processes; sequencing, use of nouns and adjectives; and if within the description an operation is being described then there may be a need to use defining and exemplification skills as

well. Therefore, in this case the thinking skills are those of being able to express the description (i.e. describing, defining, exemplifying and sequencing). This is achieved through the identification of the knowledge structure and language skills (consisting of grammatical elements). The above discussion can be synthesised as in figure 4.13. This aspect is lacking in current arguments about materials development and should be considered.

Understanding of text patterns and the application of knowledge structures can be made more explicit through the use of visuals.
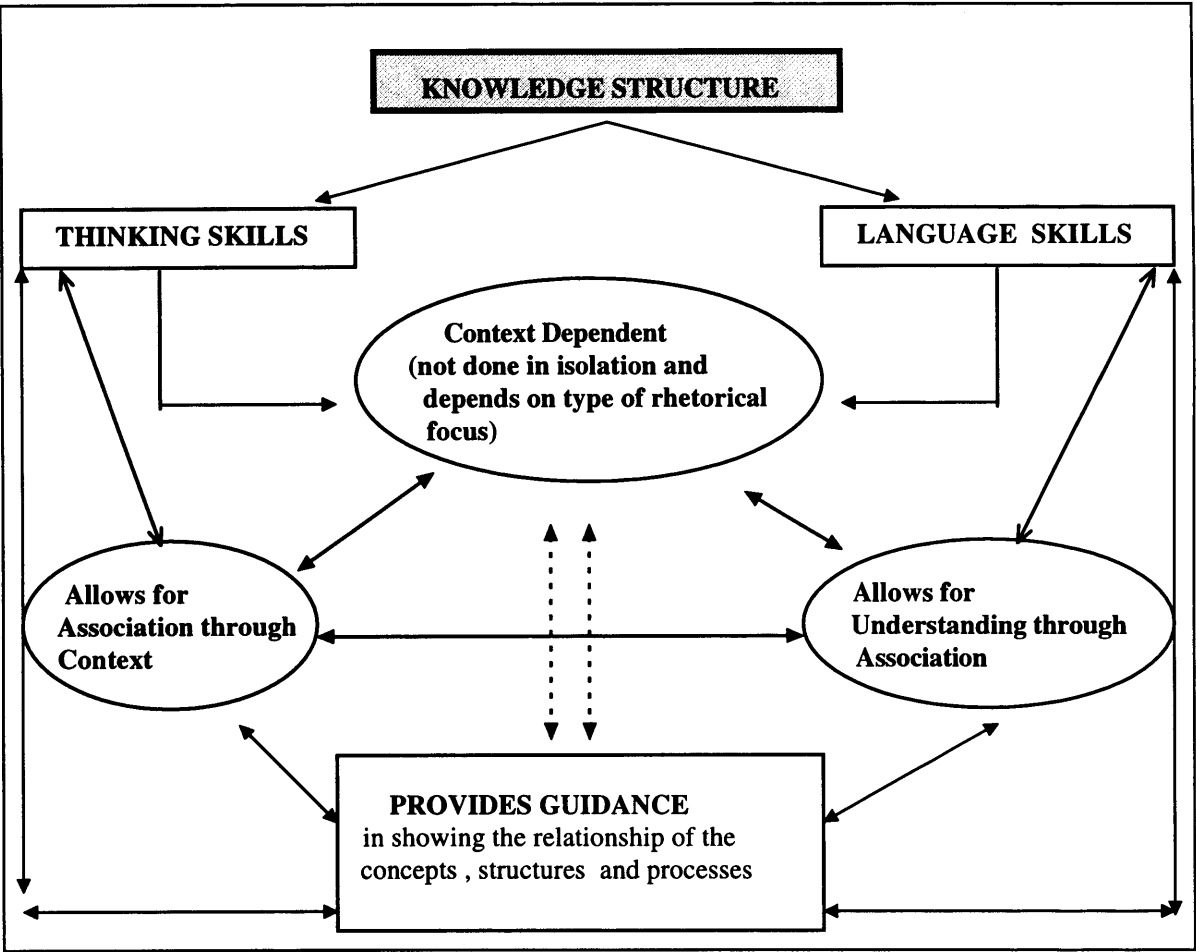
Figure 4.13   A Synthesis of the Working Principles of the Knowledge Structure
                Strand

4.15 Suggested Visuals/Graphics Strand

This strand was developed on the basis of a literature review as discussed below. It is considered an aspect which is somewhat neglected in materials development and teacher

education in ELT. A review of the types of visuals available and their application is essential in developing this strand.

4.15.1 Visual Application

In any materials design course or syllabus, the importance of incorporating visuals should be emphasised for their importance in enhancing learning. Visuals (henceforth used interchangeably with the term graphics), in various forms, play a very important role in aiding comprehension. The effective use of visuals is also a powerful way of developing cognitive and thinking abilities. Visuals help to develop both sequential and lateral thinking (Barlex and Carre, 1985:6-7). Visual presentation or graphics of any style are useful not only for learning languages but also learning in any form (Wright, 1976; Zimmer & Zimmer, 1978; McAlister & Robinson,1984; Block, 1991; Early, 1991; Hewings, 1991; White and Gunstone, 1992; Rowntree,1993; Burgess, 1994; Cortazzi and Jin, 1996).

In content area learning, the function of illustrations, graphics and other non verbal aids are vital in complementing texts to assist learners to understand practical experiences and to aid abstract thoughts. A good graphic has the power to enhance reading , shows meaning and aids in drawing conclusions. It also enhances and develops the understanding of concepts.

For example, demonstration of results, explanation of processes, functions, procedures, can easily be presented in tabular forms by teachers or learners themselves. In this way students show understanding of not only content but also their perception of the coherence of a text, result or diagrams. This will also enable students to show their reconstruction of knowledge and understanding. Practice and guidance in using visuals ultimately enables the learners to extract meaning and show understanding when they have found significant relationships in the material. The graphics used in language and content teaching aid in communicating the structure of knowledge and allows teachers or students to develop probing questions alongside graphics (Mohan, 1986 :87). Mohan maintains that various types of graphics develop not only learners' knowledge but also thinking processes which are part of cognitive ability. Thus different types of graphics can develop different types of thinking skills.

4.15.1.1 Types of Graphics / Visuals

The various types of visuals develop different types of cognitive ability as discussed below.

a) Concept Mapping

A concept map is a good means of developing thinking skills. White and Gunstone (1992: 15) state that the aim of a concept map is to see how a students sees the relationship between things, ideas or people.

Using concept maps in EAP enables the teacher to see how students link ideas and how they see the structure of a topic. Mapping is a means of eliciting the relations each student perceives between the concepts. Besides asking students to draw their own concept maps, teachers can also produce concept maps for students to complete. Types of concept maps vary according to the content of a text / topic and individual interpretation. They can range from simple to complex with a range of variations and are excellent for teaching reading and writing.(Novak & Gowin, 1984; White & Gunstone, 1992; Buzan, 1993; Cortazzi & Jin, 1996). A variant of content mapping is textual mapping. Textual mapping allows a teacher or learner to break down the text into smaller units to ease understanding. Information load can be systematically reduced via textual mapping and through the use of text - cohering links. Such techniques helps increase understanding / comprehension of text content. Using textual mapping techniques enables a teacher or learner to practice ways of simplifying complex information but also to clarify the rhetorical and logical relationship between various sections of a text(See Bhatia, 1987).

b) Drawings

Another method of probing understanding is through the use of drawings. Drawings reveal to teachers and students the ideas held by the student. They can also indicate shifts in views, problems with interpretation and understanding (White & Gunstone, 1992: 99).

c) Fortune lines, Event lines, Line sequence, Time lines

White and Gunstone (1992 : 107 -122) provide a detailed description of what they call 'fortune lines'. These probe learners' understanding of a story, sequence of scenes or events in history by requiring learners to estimate and graph one or more quantities for each scene. Using such techniques allows students to generate ideas, events, progress and stages/steps which can be plotted in graph or tabular form. This seems particularly useful if the learners are presented with texts that contain schedules of experiments, sequences of events and other similar work. Such techniques would sharpen their analytical ability.

d) Tables and Action Strips

i. Tables

Lists and tables are another widely used form of graphics. According to Mohan (1986:85), there are two forms of tables; one is for making judgements on objects, items and individuals and the other is for making judgement on cases, actions and outcome

ii. Action Strips

Action strips are also useful techniques to develop a sense of structure of a text but they are limited in visionary power. However, if used together with other forms of graphics they can increase comprehension and understanding.

e) Flow Charts, Grids and Tree Diagrams

Mohan (1986:58) defines a flow chart as a "device which shows choices and their reasons and which outlines more complex processes in action situations". It is thus considered to be a very useful method of drawing attention to the structure of a situation.

Burgess (1994: 309) maintains that flow charts, grids and tree diagrams are the best models available of how the mind organises ideas in information sets. Flow charts embody temporal or causal sequences and encourage critical and flow thinking. Grids, on the other hand, represent "the attribution characteristics to phenomena, thus developing attribution thinking" (Burgess, 1987, 1994), defined as "managing clusters of ideas that interrelate across two axes (i) the axes of phenomena and (ii) the axes of criteria" (Burgess, 1987).

Tree diagrams, which seem to be popular among teachers, represent highly abstract classification ideas in hierarchies. According to Burgess (1987,1994) tree diagrams develop what he calls "hierarchy thinking" and are a technique of relating ideas to each other in order of generality.

Graphics can be used effectively to highlight the linguistic devices of knowledge structure. This is useful in the EAP context (Tang, 1992). Research findings into the use of visual aids can be discerned from research investigating methods to facilitate science and maths learning (Rewey et al, 1989; 1992; Gunstone & White, 1986). Other research into use of various types of graphics to aid learning and comprehension has been carried out by Novak and Gowin, 1984; Carrell et al, 1989; Ruddel and Boyle, 1989; Amer,

1994; McGagg and Dansareau, 1991; Cortazzi and Jin, 1996. The findings from such research studies indicate that different types of graphics such as knowledge maps, semantic maps, and concept maps are effective tools in both language and subject matter teaching.

Burgess (1994:310) explains that certain schemata can be "usefully expressed as ideational frameworks" through grids, flow charts and tree diagrams. These graphics can be used to "contain and organise the ideational content that language learners are dealing with; in other words, they can function as the medium through which the language is processed, the link between the receptive skills of reading or listening and the productive skills of speaking and writing"(ibid). Graney (1992), Guri - Rozenblit (1989), and Holliday (1975) strongly maintain that such graphics, whether they be "text graphics or maps," should be used in aiding reading comprehension. Celce - Murcia and Hilles (1988) advocates their use in the teaching of grammar.

It is clear from the above discussion that visuals play a key role in learning as a whole. If teachers are trained to use different types of graphics frequently in their teaching - learning materials perhaps students would be able to see how information is presented in a much clearer manner. Through practice, the teachers will also be able to see the relationship between the text-cohering links and to design appropriate materials incorporating appropriate graphics. Therefore if teachers are able to identify text structures and the manner in which the information is presented through genre analysis they may be better equipped to utilise and optimise the use of graphics / visuals in their teaching - learning materials.

The visuals or graphics outlined in the framework are by no means exhaustive. They are considered to be the more common ones as revealed by a review of the literature cited. The different types of visuals are repeated for each band level as each is designed to be used in its own right potentially at all levels. The idea is to get teachers to view their materials in a more comprehensive manner and continually bear in mind that visuals are essential in aiding understanding helping to conceptualise and concretise abstract information.

4.15.1.2 Processing levels in the Development of Visuals

In order to understand how or what part visuals play in learning, teachers have to acquire the skills of exploiting the use of visuals and to think of what visuals or graphics would be most suitable for the understanding of a particular concept, rule, principles, processes or patterns. Visuals or graphics can be viewed as building blocks for cognition

and comprehension of texts embodying abstract information as they aid information processing. Mental processes are also employed in sifting information for graphic formation.

In processing information from a text to develop visuals, teachers and learners may go through the following steps:

1. Quick processing of a text. (Generalising Level)

a. Read and understand the gist of a text by picking out key words.
   Formulate an idea or a rough picture.
   At this stage teachers and students learn to distinguish more important points from less important ones quickly.

2. Identification, Classificatory and Processing level

a. Detailed processing of a text through identification of textual
   patterns or text structure. The next step would be:
   (i). Identification of main ideas and subordinating or supporting
        ideas.
   (ii) Understanding taxonomic and other hierarchical relationships.
   (iii) Understanding principles, processes and sequences.

3. Formulation of links level

Formulate links or connections between ideas (i.e. of i, ii, and iii)
above in graphic or visual form.   This can be done formally or
informally: formally by putting it down on paper (concretising the
idea or concept) through a sketch of the visual representation but at
this stage it is still not fully developed; informally by developing the
idea or visual in the mind (i.e. developing a sketch of the graphical
representation in non concrete terms).

4. | Discrimination level |

   a. Discriminating items or elements or ideas that do not belong to a particular theme or principle to an item or concept that is being visualised

   b. Reformulation of links between discriminated items or elements.

5. | Concrete Representation level |

   Finally representing the discriminated concept or idea in a clear graphical form. Graphics or visuals are more highly and specifically formalised at this stage. At this stage the teacher and or the learner is able to recognise the idea, concept, principle or process as delineated by the text, thus demonstrating understanding at a deeper level (concrete level).

Figure 4.14 summarises the processing levels involved in the development of visuals. It indicates that the mental processing of information can begin at the concrete representation level moving towards the generalisation level or vice versa. Such processing depends on the cognitive processing ability of an individual. It is suggested that developing visuals may take place in this manner. This is linked very strongly to cognitive learning models. The solid arrows indicate a processing movement from the generalising level to the concrete representation level and the broken line arrows indicate a processing movement from concrete representation level to that of the generalising level. Either processing movement may be used as this would depend on the teachers' or learners' cognitive ability and their thinking style.
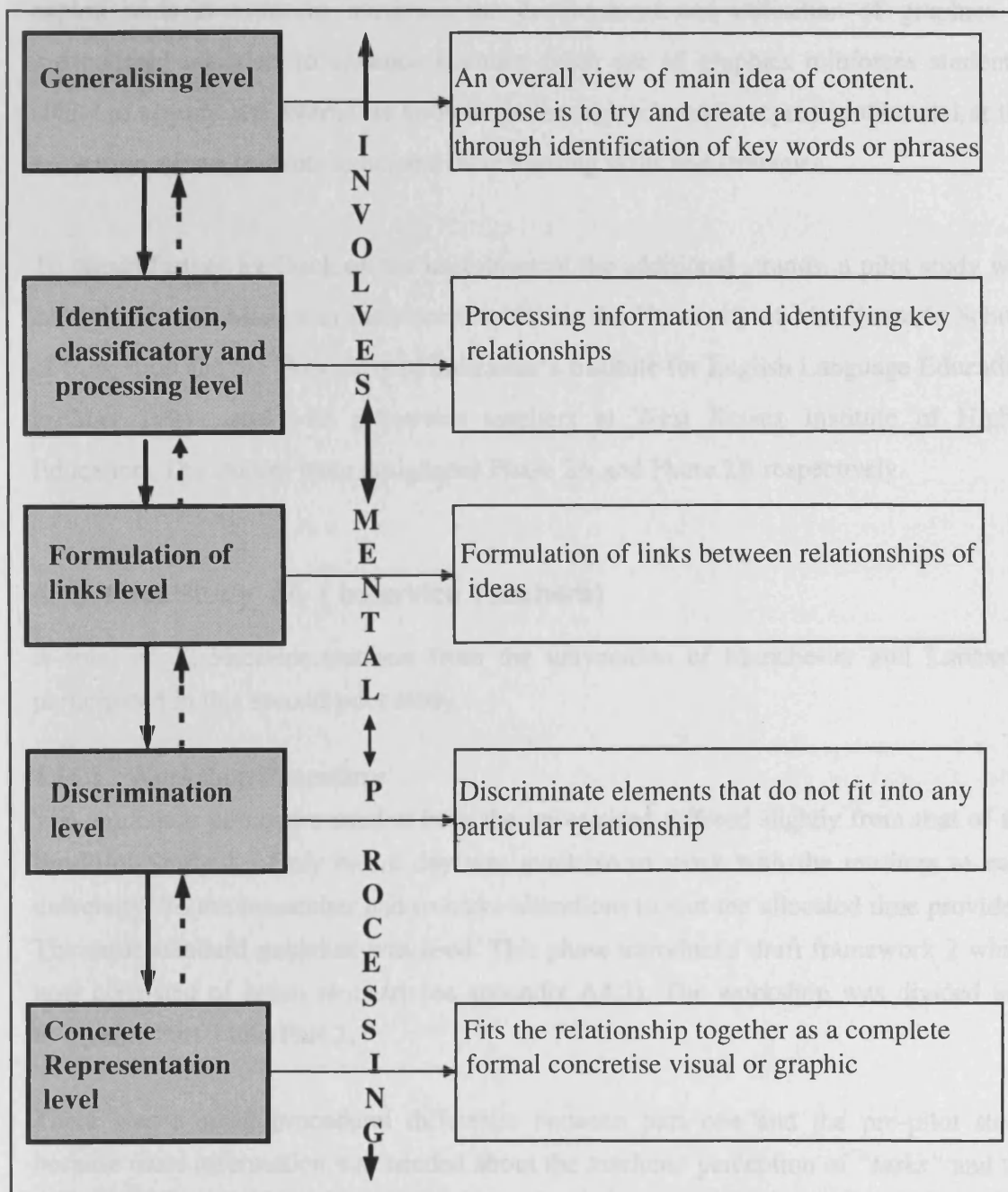
Figure 4.14 PROCESSING LEVELS OF VISUAL/GRAPHIC DEVELOPMENT

Developing visuals whether for language teaching and learning or otherwise, is not as simple a process as many teachers appear to think. It involves a good understanding of the text structure, knowledge of information being presented, ability to associate previous knowledge to that of the current or present knowledge, ability to process relevant and essential information and the manner in which they are presented. It is

therefore imperative that teachers learn to develop strategies that will allow them to exploit texts in order to maximise the development and utilisation of graphics in instructional materials to enhance learning. Such use of graphics reinforces students' ability to acquire and internalise knowledge through schematic representation and at the same time allows students to expand their learning skills and strategies

To obtain further feedback on the usefulness of the additional strands, a pilot study was carried out with Malaysian inservice teachers at the University of Manchester's School of Education and the University of Lancaster's Institute for English Language Education in May 1994 and with preservice teachers at West Sussex Institute of Higher Education. The studies were designated Phase 2A and Phase 2B respectively.

4.16 Pilot Study 2A (Inservice Teachers)

A total of 32 inservice teachers from the universities of Manchester and Lancaster participated in this second pilot study.

4.16.1 Workshop Procedure

The workshop procedure used at both the universities differed slightly from that of the Pre-Pilot Study 1. Only half a day was available to work with the teachers at each university. So the researcher had to make alterations to suit the allocated time provided. The same standard guideline was used. This phase introduced draft framework 2 which now consisted of *seven strands*(see appendix A4.2). The workshop was divided into two parts: Part 1 and Part 2.

There was a small procedural difference between part one and the pre-pilot study because more information was needed about the teachers' perception of *"tasks"* and the criteria they use for selecting and designing task-based materials. This consisted of adding two elements to the questions used for eliciting information about *task* and the criteria used for selecting and designing materials. The questions were:-

(1) To me task in language teaching is/means ....
additional Question :-(2) Task is important in language teaching because ....
(3) In your groups discuss and decide, then list at least 6 factors/criteria which you consider as important in selecting evaluating and designing task-based materials.

Part I of the workshop introduced the teachers to the concept task. The teachers were asked to individually write on note cards a simple definition of what 'task' meant to them and why it is important in language teaching. Next they were asked to list at least six factors which they considered important for selecting and designing task-based materials in a group task.

They were next introduced to the theoretical underpinnings of task -based materials design, definitions and practice activities of different kinds of task - based activities. The teachers were then introduced to Draft framework 2 and detailed examples of how to use the framework to develop EAP materials were provided.

Part 2 of the workshop involved using the framework to design materials. In groups of four the teachers worked on developing two reading and writing tasks for the assigned 'bands.' As in the pre-pilot study, they were provided with a wide selection of texts to work with. At the same time they noted problems or confusions which they felt should be further clarified, explained or defined. At the end of the session the teachers completed a questionnaire individually.

4.16.2 Analysis and Discussion of Findings

The data gathered from this phase of the pilot study were systematically analysed using both qualitative and quantitative methods. The same methods used to analyse the responses in the pre-pilot study 1 were used (see section 4.11.1.1). The analysis of the questionnaire findings are presented first followed by the analysis of the concept task and criteria for selecting materials.

4.16.2.1 Introduction to Questionnaire Analysis

The questionnaire for this phase of the pilot study consisted of some additions which were not used in the pre-pilot study. An additional section was included. Section A included both open and closed questions as in the pre-pilot study. Only minor changes were made to the phrasing of some questions. Section B (a new section) consisted of a five point scale Likert type questions. The questions were drawn from the responses gathered from the pre-pilot study and consisted of 14 questions in Section A and 12 questions in Section B (see appendix A 4. 6). As before, the number in brackets indicates the number of teachers.

4.16.2.2 Analysis and Discussion of Closed and Open Questions

Analysis of the closed questions is presented first followed by the analysis of the open questions.

4.16.2.2.1 Section A

a.   Closed Questions

The analysis is presented first followed by an analysis of the reasons given by participants for responding negatively or positively.

Table: 4.5 Analysis of Closed Questions (Pilot Study 2A)

Question Number			Responses	
Universities of Manchester + Lancaster	YES	NO	Undecided	TOTAL
Q.1 - I think I understand the way the framework works.	31	1	-	32
Q.4 - The framework guides me to think more critically and systematically about developing and selecting materials/ tasks.	31	-	1	32
Q.5 - The framework helps me to think in a more focused way about task and task design.	32	-	-	32
Q.6 - The framework makes me reflect and think about my learners and their language ability.	32	-	-	32
Q.7 - The framework makes me think more deeply about task and learning strate- gies.	31	1	-	32
Q.8 - The framework's specifications will guide me to develop better materials and tasks besides guiding to evaluate them.	31	1	-	32
Q.9 - Such a framework may guide me to assess my students language development in a progressive manner.	26	1	14	32
Q.12- I think the framework is too long.	3	22	7	32

The overall response is similar to that obtained in the pre pilot study questionnaire except that minor disagreements were associated with questions 1, 7, 8, 9 and 12 against questions 6, 9 and 12 in the pre-pilot study. The difference in the response may be due to the emphasis of some of the questions and also the calibre of the teachers. Other specific findings are discussed below.

Table 4.5 shows the teachers responded favourably towards the revised framework. Thirty-one of them indicated that they had understood the framework and that it did guide them to think more systematically about the way they develop and select materials. Only one trainee indicated that he/she had not understood the framework. This person had been a primary school teacher and was only recently being retrained for ESL teaching in secondary schools and felt that there were far too many unfamiliar aspects.

189

Referring to question 4, one trainee could not decide but no reasons were given. All 32 teachers agreed with the statement in questions 5 and 6 and only two teachers responded negatively to questions 7 and 8. These two thought that the framework did not guide them to think about task and learning strategies and that it did not provide guidance for better development and evaluation of materials. This minority felt that it was too time consuming to have to think about materials/task development in this manner, even for training purposes.

In question 9 only one trainee responded negatively to the statement, stating that "methods of evaluation should be included," indicating that perhaps the trainee could not see that the profiling nature of the framework and the progression from "band" to "band" indirectly assesses learners' language development. Most of the 14 undecided teachers indicated that they were not sure how the framework could assess language development without a formal test. The researcher provided examples of how this can be achieved after the workshops, in response to questions during discussion.

Referring to the length of the framework in question 12, only 3 teachers said 'yes' out of 32 - that it would be too time consuming, compared with 4 out of 31, in the pre-pilot study. This indicates an improvement in the framework.

b.   Open Questions

Similar to the pre-pilot study , Section A contained 6 open ended questions which were similarly analysed and categorised using content analysis to establish the strands. The analysis and findings are presented below.

(Q.2   I think the framework will be useful for ....).
Generally, the teachers showed a positive attitude towards the framework. Different reasons for this were provided. Some felt that the framework not only guided the process of selecting texts/materials according to the students' needs matched with textual patterns, but the framework also helped them to select and identify appropriate visuals. They discovered that it could be used as a checklist in developing materials. The framework also guided them towards identifying, planning, formulating and classifying tasks.   The guidelines gave ideas about how texts and materials could be adapted and the suggestions for learning strategies guided them in developing better task(s). On the whole they strongly indicated that the framework was a useful training tool for both teachers and trainers.

Q. 2 Usefulness of the Framework

(1) Selecting Materials/Text(s)	(2) Checklist for EAP Materials/Task Design
a) Selecting appropriate materials according to the learners' level of ability. (5)	a) evaluation of any task-based materials that have been designed: as a feed back checklist. (4)
b) identifying different types of texts for a wide range of language ability with appropriate linear and non-linear forms including visuals. (4)	b) would enable the teacher to clearly monitor if he/she has met the learners needs across the framework when designing the task. (3)
c) guiding the process of selecting texts/ materials with content that meets the need of the different Genre types. (3)	c) checklist to evaluate and monitor the formulation of different types of tasks for different levels of ability. (5)
d) makes selecting materials with the appropriate content and visuals for different language abilities easier. (4)	d) a checklist which will help to maintain a balance of input in the materials/tasks besides ensuring consistency. (7)
e) identifying materials/texts that allows the learners to practice the language with various textual patterns (Genre patterns) beginning with familiar patterns to more complex patterns. (5)	
f) selecting materials by not only studying the learners' profile of ability but also by going across the framework to allow for better and more precise selection of texts. (3)	
g) selecting texts with a variety of clear visuals. (4)	
(3) Designing Task(s) with reference to learners' ability	(4) Adapting and Designing Materials
a) Designing and planning task input for different types of learners. (3)	a) Adapting materials by supplementing visuals or illustrations. (6)
b) formulating task(s) according to learners' ability to perform. (4)	b) Adapting texts to include various genre or text patterns. (4)
c) may eventually provide the teacher with a way of designing tasks according to complexity level. (2)	c) will allow the teacher to adapt the text to include both linear and non-linear text according to the learners' ability. (2)
d) classification of tasks according to genre types/text patterns. (6)	d) Adapting complex tasks to make the simpler tasks more complex by using the framework as a guide for judging what students can or cannot do. (7)
e) The teacher is guided into deciding the most appropriate kind of task for different groups of learners at different points in the band. (7)	

191

Q. 2   Usefulness of the Framework continued

(5) Incorporation of Learning Strategies	(6) Training purposes
a) planning what type of learning strategies can be matched with the task selected or planned. (6)	a) A useful guide for training teachers about EAP materials design and also for teacher trainers. (4)
b) Using the learning strategies specification to develop task(s) and to practice using such strategies. (5)	b) For training in designing syllabus for instructional materials design and adaptation. (2)
c) Linking and developing the strategies within the task(s) and between task(s). (2)	c) for training in instructional materials in general and not only for EAP/ESP. (7)
d) the incorporation of learning strategies will encourage the teachers to design better reading tasks, because then a variety of tasks can be designed instead of just the reading comprehension -"who" type and multiple choice type. (4)	d) encouraging teachers in thinking and reflecting on the way they design materials. (5)
	e) teachers who are not sure of how and why they design instructional mate - rials for certain learning context. (5)
	f) encourages teachers/teachers and trainers to go through a learning process which allows for in depth thinking so that better materials can be formulated/designed rather than shallow materials. (9)

(Q.3   I particularly like ....).

Some of the teachers indicated that they liked the cyclical approach of the framework, the element of learner-centredness and the built- in evaluation aspect. They commented that the different specifications provided opportunities for planning and grading appropriate tasks, although they found that task development needs much planning and thought.

Q3. Aspects of the Framework Liked by the Teachers

(1) Approach	(2) The different specifications in the framework
a) The cyclical approach and built in progress feedback aspect of the framework. (3)	a) The specifications for levels of ability. (Gives a very clear view of what to identify in task design). (8)
b) The systematic way in which guidelines are provided for dealing with reading and writing tasks. (6)	b) Genre - suggested text discourse patterns provides the teacher with the choice of text type to match a particular group of learners. (6)

Q3. Aspects of the Framework Liked by the	Teachers
c) The link between the different aspects of the framework with the learner as the central focus. (3)	c) The suggested learning strategies which helps in appropriate task design and also adds variety to task design.(5)
d) the whole idea of the element of learner centredness as all materials/tasks depend on what the learners can or cannot do. (4)	d) The levels of ability allows the teacher to grade the input in planning and designing tasks which then allow the teacher to monitor across the frame work's specifications. (4)
e) The framework is presented with clear examples of how to use it showing the various relationships of the various specifications at the same time. (5)	e) the different specifications in the framework makes it clear to the teacher that designing tasks/materials whether for general purposes or for EAP needs a great deal of planning and thinking. (7)
f) the element of a looping effect whereby a teacher has to loop back and forth to ensure and monitor that the tasks has been appropriately planned and designed. (8)	

(Q.10   The part I felt uncomfortable about or couldn't understand was ....) .

As a result of the findings in the pre-pilot study the strand on *genre* was introduced in the framework to improve the framework and to evaluate the teachers' exposure to *genre*. It was found that the teachers encountered problems with it because it was new to them as illustrated below.

(a)   **Specifications for Genre: Suggested Text Discourse / Rhetoric**

This new inclusion in the framework proved not only to be of value but also brought to light the teachers' exposure to genre. Twenty teachers from both institutions maintain that they had a   problem understanding its use despite the use of examples and explanations. They were not sure how to apply genre or how to identify different patterns in the text.   Many indicated that they had had no previous training or knowledge in this area. However, they believed that if more time and further training were provided they would probably be able to follow it. Given this lack of previous exposure to genre their fears and problems are not surprising.

(b)   **Specifications of Level of Competence /Ability**

This aspect of the framework posed a problem for some teachers: eight indicated that the description should be more detailed with examples to illustrate each point. 14 confessed they had problems with certain terms used because they had never come across them before. They wanted some phrases to be more specific. Examples of these are presented below:-

> *cohesive devices; explicit markers; textual features; fairly relevant text;*
>
> *types of rhetoric; occasional words/phrases; complex items;*
>
> *needs a great deal of support; no apparent development; linear;*
>
> *non-linear text; complicated linguistic structures;*

The researcher interprets such responses as follows:-

(1) As experienced teachers who have undergone training in ESL the teachers should
be able to understand most of the above phrases.

(2) In spite of their training the teachers still lack knowledge of terminology used in
Applied Linguistics.

(3) The teachers seem to want to be "spoon-fed." They requested examples and
were not prepared to think on their own.

What is interesting is that the inservice teachers are experienced teachers and have been
teaching English for several years, yet they have problems with terminology. It appears
that the framework assisted the teachers in identifying such weaknesses.

(Q.11 "I think it is difficult to follow because ....)

This question revealed five different responses in contrast to four in the pre-pilot study.
It appears that most of the teachers felt that it is not difficult to follow the framework's
specifications but a fair number would have liked a "How To" manual. Overall, the
response was more favourable than the pre-pilot responses and therefore a marked
improvement in the framework.

(Q 11) Difficulties in following the Framework

(a)	*It is **not difficult** to follow [10].*	
(b)	*It is **not difficult** to follow **but a greater understanding** of the various terminology's used is needed. [6]*	
(c)	*It is **all right but more time is required** to digest it further. [4]*	
(d)	*It will **not be difficult** to follow if a "**How to Guide**" is provi - ded, step by step right to the very end. [7]*	
(e)	*The framework is **clear and self-explanatory**. [5]*	

(Q.13 My main comments are ....).

The above question evoked the following responses, summarised and grouped according to five categories.

(Q 13) Teachers' main comments

1)	The introduction and exposure to the framework has been *beneficial.* A lot of new things have been learnt which we have never heard of before.[9].	
2)	The framework's specifications and its approach for use should remain *descriptive* and should never be allowed to become prescriptive. [3].	
3)	*More workshop and training of this kind* should be given in Malaysia for preservice teachers, Inservice teachers and teacher trainers. [7].	
4)	*More time is needed* to fully practise the use of the framework and to experiment with the specifications for designing various types of tasks for various language learning ability. [5].	
5)	It is *not only a useful training guide for EAP* instructional materials design *but also* as a guide to materials design in the *general English Language classroom.* [8].	

Such comments strongly suggest that the framework is very useful to the teachers to improve their teaching methods and learning processes in practical situations.

(Q.14   I would like to suggest that ....).

Suggestions provided by the teachers are listed in table 4.6. They provide an insight into their feelings towards the framework as well as comments that were useful in revising the framework.

Table 4.6   (Q 14)   Suggestions for Inclusion in the Framework

a) *A step-by-step guideline* on how to use the framework be provided together *with at least 2 examples* detailing the framework's application. [12].
b) *Appropriate glossary of terms/definitions be provided* for quick reference with examples where applicable[7]
c) The framework's specifications of the level of competence/ability be backed up with scores or percentages and not just a description of the learners. [3 (9.4%)].
d) *The number of words in a text be used only as an option and just a guide. A word of caution should be included.* The same applies to terms like "simple text" and complex text" etc.[5].

4.16.2.2.2 Section B

a) Analysis of Likert Scale Questions.

There were a total of 12 Likert scale questions ranked as follows : 1 = Strongly disagree, 2 = Disagree 3 = Undecided, 4= Agree and 5 = Strongly agree. Respondents choices were summarised in a tabular format including the distribution of scores and responses to the questions. This is presented in Appendix A 4.7 from which it can be seen that the choices selected were fairly distributed. The findings were then summarised for ease of analysis; thus Scales 1 and 2, and 4 and 5 were collapsed as *disagree* and *agree* respectively and Scale 3 (*undecided*) was unchanged. The analysis is presented below.

(Q 1) Should terminology be reduced?

Question	Disagree	%	Undecided	%	Agree	%	Total
1	14	43.8	4	12.5	13	40.6	32 (100%)

It can be seen that in Q. 1, 43.8% of the teachers disagreed and 40.6% of the teachers agreed that the terminology used should be reduced with a relatively large proportion (12.5%) undecided. No specific reasons were given. There could be an element of a general resistance to terminology or a lack of motivation to learn new terminology by some individuals, but this is an impression rather than hard evidence.

(Q 2) Should definition of key terms be provided ?

Question	Disagree	%	Undecided	%	Agree	%	Total
2	4	12.5	-	-	28	87.5	32 (100%)

The majority of the teachers 87.5% agreed; only a minority 12.5% disagreed.

(Q.3) Should word limits be included for text selection in each band?

Question	Disagree	%	Undecided	%	Agree	%	Total
3	10	31.3	9	28.1	13	40.6	32(100%)

This is a controversial issue in Applied Linguistics and as can be seen 40.6% of the teachers agreed and 31.3% disagreed with 'word-limit.' A sizeable minority, 28.1%, could not decide. The responses made the researcher consider that perhaps a word of caution should be included in the framework.

(Q 4) Is a detailed step by step teacher's guide necessary ?

Question	Disagree	%	Undecided	%	Agree	%	Total
4	-	-	3	9.4	29	90.6	32 (100%)

A resounding majority of 90.6% of the teachers agreed there was a need for a step-by-step teachers' guide as predicted by the researcher; only 9.4% were unsure. This was noted by the researcher.

(Q 5) Will the framework be useful for teachers with little knowledge of EAP
        materials ?

Question	Disagree	%	Undecided	%	Agree	%	Total
5	5	15.6	-	-	27	84.4	32 (100%)

The majority, 84.4% agreed with the statement. Only a small minority of 15.5% disagreed and no one abstained from responding. It can therefore be deduced that they found the framework useful.

(Q 6) Does the framework motivate you to try out ideas ?

Question	Disagree	%	Undecided	%	Agree	%	Total
6	-	-	3	9.4	29	90.6	32 (100%)

A substantial majority of 90.6% of the teachers agreed with the statement. The framework could be a useful teachers' tool for EFL teacher development.

(Q 7) Can the framework be adapted for use in schools?

Question	Disagree	%	Undecided	%	Agree	%	Total
7	1	3.1	-	-	31	96.9	32 (100%)

The majority of the teachers, 96.9% agreed with the statement. This indicates that the framework may be used for general English Language teaching besides the EAP application.

(Q 8) Would the framework help you improve your knowledge and
        ability to design better EAP materials ?

Question	Disagree	%	Undecided	%	Agree	%	Total
8	1	3.1	4	12.5	27	84.4	32 (100%)

A large majority of 84.4%, agreed with the statement on the value of the framework to design better EAP/ESP materials for students. The framework apparently has the potential to improve the process of learning by the teachers and their students.

(Q 9) Would you like to have the framework as part of your teaching kit?

Question	Disagree	%	Undecided	%	Agree	%	Total
9	-	-	1	3.1	31	96.9	32 (100%)

A resounding 96.9% of the teachers would like to have the framework as part of their teaching kit. This is a further indication that the framework is a useful tool in helping the teachers professionally.

(Q 10) Will it change the way you think about EAP materials?

Question	Disagree	%	Undecided	%	Agree	%	Total
10	1	3.1	5	15.6	26	81.3	32(100%)

A large majority, 81.3% , agreed with the statement, again indicating that the teachers are willing to change as a result of using the framework.

(Q 11) Would knowledge about genre & knowledge structures be useful
            for designing materials?

Question	Disagree	%	Undecided	%	Agree	%	Total
11	8	25	6	18.7	18	56.3	32 (100%)

A relatively small minority were undecided and 56.3% of the teachers agreed with the statement. The reason for this apparent indecision is probably a reflection of the teachers' unfamiliarity with the concepts of *genre* and *knowledge structure*.

(Q 12) Will it be useful for training purposes in materials design ?

Question	Disagree	%	Undecided	%	Agree	%	Total
12	7	21.8	3	9.4	22	68.8	32 (100%)

A sizeable majority agreed with the statement, indicating the overall usefulness of the framework for training purpose in the area of instructional material design.

4.16.2.3 Summary Findings of the Questionnaires

The analysis of the questionnaire reveals an overriding acceptance of the framework. Teachers indicated that the framework had a multi-purpose function for them. It was a guide to materials and task design, it could be used as a checklist and was useful for monitoring and evaluating task development. There were problems with the use of some terminology, in following the learners' level of competence specifications, in understanding genre-application to task design and difficulties in following the genre strand. A set of clear and specific guidelines to guide them through the use of the framework is suggested. The problems or disagreement indicated were taken into account when revising the framework for the next stage of the study.

4.16.3 Teachers Perception of Task (Pilot Study 2A)

The findings of the pre-pilot study led to the conclusion that most teachers misunderstood or were unclear about the concept and complexity of task. It therefore became important to investigate the teachers' definition of task in its own right. This

was done by providing the teachers with note cards as was done in the pre-pilot study, but with the additional questions as shown below.

1) **To me task in language teaching and learning is/means** ....

Note: Question 1 remains the same as that asked in the Pre-pilot study.

2) **Tasks are important in language teaching and learning because** ....

Note: question 2 is an additional question.

4.16.3.1 Analysis and Findings of Task Perception and Importance of Task

This aspect of the study was individually analysed based on the responses of the Malaysian teachers at both universities. The responses were categorised systematically. Similar responses grouped under one theme or strand using the criterion that at least two people responded similarly under a single theme. The preliminary findings of the Teachers' Perception of Task and the Importance of Task are presented in figures 4.15 and 4.16 respectively.

Referring to figure 4.15, most of the teachers, 54%, see task as an *exercise*, 22% as an *activity* and 19% as *work*. Hence their perception of task can be categorised under these three themes.

There is no clear and well defined and/ or structured definition of task. This is evident from the analysis of question 2 , *"task are important because......."* as presented in figure 4.16. It can be deduced that there is no single focus among the teachers as to why task is important in language teaching and learning. Individual teachers tend to interpret

```
                              ┌──────────────┐
                              │     TASK     │
                              └──────┬───────┘
          ┌──────────────────────────┼──────────────────────────┐
   ┌──────┴──────┐            ┌──────┴──────┐            ┌──────┴──────┐
   │  Exercise   │            │ Activities  │            │    Work     │
   └─────────────┘            └─────────────┘            └─────────────┘
```

- Exercises for students to work on.
- Exercises that are purposeful and
  is focused on learning.
- Exercises which focus more on
  meaningful use of language.
- Exercises which give clear objectives
  and guides learners to achieve aims in
  a clear step-by-step realistic way.
- Exercises that are student centred.

(59%)

- Activities that help the learners to practise
  and reinforce what they have been taught
- Activities that help teachers to find out the
  weaknesses of teaching and learning.
- Activities that lead on to help achieve the
  goals set by the teacher and to let the students
  enjoy their own learning experiences.
- An activity which is designed to achieve
  objectives of a course and it should be problem
  solving tasks which takes into account the students
  existing knowledge.
- An activity which is used to measure what the
  learners have absorbed so far.
- Activity worked out by the teacher to provide
  the students meaningful and purposeful learning
  stimulus.
- Activity done by the students in order to get
  feedback on what they can or cannot do.

(22%)

- A piece of work that is to be
  completed by the students.
- Work that is done in a group.
- Work that is done to learn a language.
- Work which are communicative,
  pupil centred and authentic.
- Work which is a must in language
  teaching to set the class moving.
- A piece of work for gauging students'
  understanding of a particular lesson.

(19 %)

Figure 4.15   Teachers' Perception of *Task* - Pilot study 2A

```
                                    ┌─────────────┐
                                    │    TASK     │
                                    └──────┬──────┘
          ┌────────────────────────────────┼────────────────────────────────┐
   ┌─────────────┐                  ┌─────────────┐                   ┌─────────────┐
   │  Exercise   │                  │ Activities  │                   │    Work     │
   └─────────────┘                  └─────────────┘                   └─────────────┘
```

- Exercises for students to work on.
- Exercises that are purposeful and
  is focused on learning.
- Exercises which focus more on
  meaningful use of language.
- Exercises which give clear objectives
  and guides learners to achieve aims in
  a clear step-by-step realistic way.
- Exercises that are student centred.

(59%)

- Activities that help the learners to practise
  and reinforce what they have been taught
- Activities that help teachers to find out the
  weaknesses of teaching and learning.
- Activities that lead on to help achieve the
  goals set by the teacher and to let the students
  enjoy their own learning experiences.
- An activity which is designed to achieve
  objectives of a course and it should be problem
  solving tasks which takes into account the students
  existing knowledge.
- An activity which is used to measure what the
  learners have absorbed so far.
- Activity worked out by the teacher to provide
  the students meaningful and purposeful learning
  stimulus.
- Activity done by the students in order to get
  feedback on what they can or cannot do.

(22%)

- A piece of work that is to be
  completed by the students.
- Work that is done in a group.
- Work that is done to learn a language.
- Work which are communicative,
  pupil centred and authentic.
- Work which is a must in language
            teaching to set the class moving.
- A piece of work for gauging students'
  understanding of a particular lesson.

(19 %)

Figure 4.15   Teachers' Perception of *Task* - Pilot study 2A

the concept of task according to either what they think it is or based on their teaching and learning aims. Thus task is seen as either having the characteristics as shown in figure 4.15 and 4.16 or as something to enable the learners to practise the integration of language skills. The teachers' perception of tasks has little sense of a structure denoting processes of cognitive development. Task seems to be viewed as simple, non-highly structured activities which do not consist of any complex processes and yet is easy to manage.

However, the teachers seem to have a strong view about why tasks are important in language teaching and learning as seen in figure 4.16. This can be categorised under five themes. Task:

- provides feedback for the teacher *and not to the learners*
- provides purposeful/meaningful learning for the learners
- it is a learning process mainly for learners *and hardly ever for the teacher*
- it mainly indicates learners' weaknesses
- it allows for the integration of skills for the learners to learn the language

Thus, the teachers' perception of the importance of task is that it is important for the learners (students) but not for the teacher (trainers), in the sense that teachers do not learn from the process of developing tasks. On the other hand learners learn from their interaction with task based activities.

4.16.4 Factors or Criteria for Selecting, Adapting, Evaluating and Designing Task-Based Materials

Complimentary to the study of teachers' perception of task, it was considered important to understand the teachers' perceptions of factors/criteria they consider important in selecting, evaluating and designing task-based materials.

	TASKS ARE IMPORTANT BECAUSE			
Feedback/Evaluation	**Purposeful/ Meaningful**	**Learning/Learning Process**	**Understanding**	**Integration of skills/ practice**
- They represent a form of feedback for teachers.	- They make learning more meaningful and purposeful.	- It allows pupils to be involved in authentic/semi authentic learning.	- To know how far the students understand the topics/skills that the teacher have taught them.	- They help in the integration of the four skills.
- We can evaluate how much our students have learnt.	- They provide pupils the opportunities to use language meaningfully and purposefully.	- It enables students to work out what they have learnt.	- They help the teacher and the learner to understand what is being taught and learnt.	- They enable students to practice the integration of language skills.
- Allow teachers to evaluate lesson taught.	- They provide opportunities for students to use the target language meaningfully.	- It provides the framework for the teacher to focus on the learning of the language.	- They reflect students' understanding and also are a means of showing weaknesses and strengths.	- It helps learners to practice what they have learnt.

Figure 4.16 Importance of *task* in language teaching and learning - Pilot stdy 2A

- It serves as a consoli - dation after going through a certain lesson.	- They provide learners with exercises in using the language purposefully.	- They help the teacher and students through different stages of the learning process.		- Are "rehearsals" / practice for real life situation.
- It helps learners to consolidate and reinforce what have been learned previously.		- It is part and parcel of teaching and learning and it encourages learning among pupils.		
		- It helps the task to be more "communicative" and focuses on the learning aspect.		
		- They encourage pupils to learn give them the readiness.		

Figure 4.16 continued   Importance of *task* in language teaching and learning - Pilot stdy 2A

To obtain this information, during the workshop the researcher requested the teachers in groups to list six factors or criteria which they considered important in selecting, adapting, evaluating and designing task-based materials. The responses are viewed as their collective thinking. The most common criteria are ranked in descending order according to the importance and the number of times the information is repeated. This is presented in table 4.7.

Table 4.7 Teachers' criteria for selecting, adapting, evaluating and designing EAP materials

Manageable	Learners' language proficiency
Realistic /achievable	Learner centred
Progresses from simple to complex	Communicative
Suitability / appropriate	Challenging
Relevant	Meaningful
Practicality	Integration of skills
Cultural values	Purposeful
Authenticity	Enjoyable
Exploitable	
Interesting	

One can conclude that most groups shared almost the same criteria. This may be due to their recent training. The factors or criteria listed in table 4.7 are relevant in materials design in EFL. They are propagated by many applied linguists in the field of instructional materials design (For example: Cunningsworth, 1984; Dubin & Olshtain, 1986; Yalden, 1987; Sheldon, 1988; McDonough & Shaw, 1993).

4.16.5 Overall Summary of Pilot Study Phase 2A

Pilot study, phase 2A was carried out using Draft Framework 2 at Manchester and Lancaster University with Malaysian inservice teachers. Feedback from the studies was generally positive and various suggestions were made. These included suggestions for the provision of a teacher's guide and / or a training guide for teachers, and the inclusion for specific headings and other items to make the framework easier to understand and follow. Based on this feedback the framework was further revised for further evaluation at West Sussex Institute of Higher Education with preservice Malaysian teachers. Details of the revised framework and pilot study phase 2B are discussed below.

4.17 Framework 3 and Pilot Study 2B

Framework 3 was given the title 'Procedural Framework For Developing EAP Task-Based Materials'. Some of the headings and specifications for each strand were further revised (see figure 4. 17 and appendix A4.4) as follows:

1. Specifications for *Learners' levels of competence / ability*
   (reorganisation of profiles and the inclusion of more details)

2. Suggested *Types of Texts* (Range, size and complexity)
   (some changes made to the recommended specifications)

3. *Genre* - Suggested Text Structure (some of the recommended
   structures for different levels were reorganised.

4. *Knowledge Structure- language skills* (reorganisation and addition of
   more specifications and thinking skills)

5. Suggested *Visual aids / Graphics*(addition of more visual types)

6. Suggested *Task Type and Skills to be Practised* (reorganisation and
   addition of more specifications)

7. Suggested *Learning Strategies-Direct Strategies*(changes made only
   to the heading)

Once these modifications were completed, Framework 3 was further evaluated in Pilot
study phase 2B.

4.18 Phase 2B (Preservice Teachers)

Phase 2B of the main pilot study involved 20 preservice teachers aged between 18 and
20 years old and in their second year of study at West Sussex Institute of Higher
Education. They had had no teaching experience and were being exposed to teacher
training in ESL for the first time. Therefore the analysis and findings are carried out and
presented separately from those obtained from that relating to the inservice teachers.

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┌─────────────────────────────────────────────────────────────────────────────────────┐
│                        ┌───────────────────────────────────┐                          │
│                        │  PROFILE OF LEARNERS' ABILITY      │                          │
│                        │                                    │                          │
│                        │  READING AND WRITING SKILLS        │                          │
│                        │                                    │                          │
│                        │  IN EAP              (Strand 1)    │                          │
│                        └───────────────────────────────────┘                          │
└─────────────────────────────────────────────────────────────────────────────────────┘
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| TYPES OF TEXTS Strand 2 | GENRE (DISCOURSE PATTERNS) Strand 3 | KNOWLEDGE STRUCTURES (Language Skills) Strand 4 | VISUAL AIDS / GRAPHICS Strand 5 | TASK TYPES Strand 6 | LEARNING STRATEGIES Strand 7 |
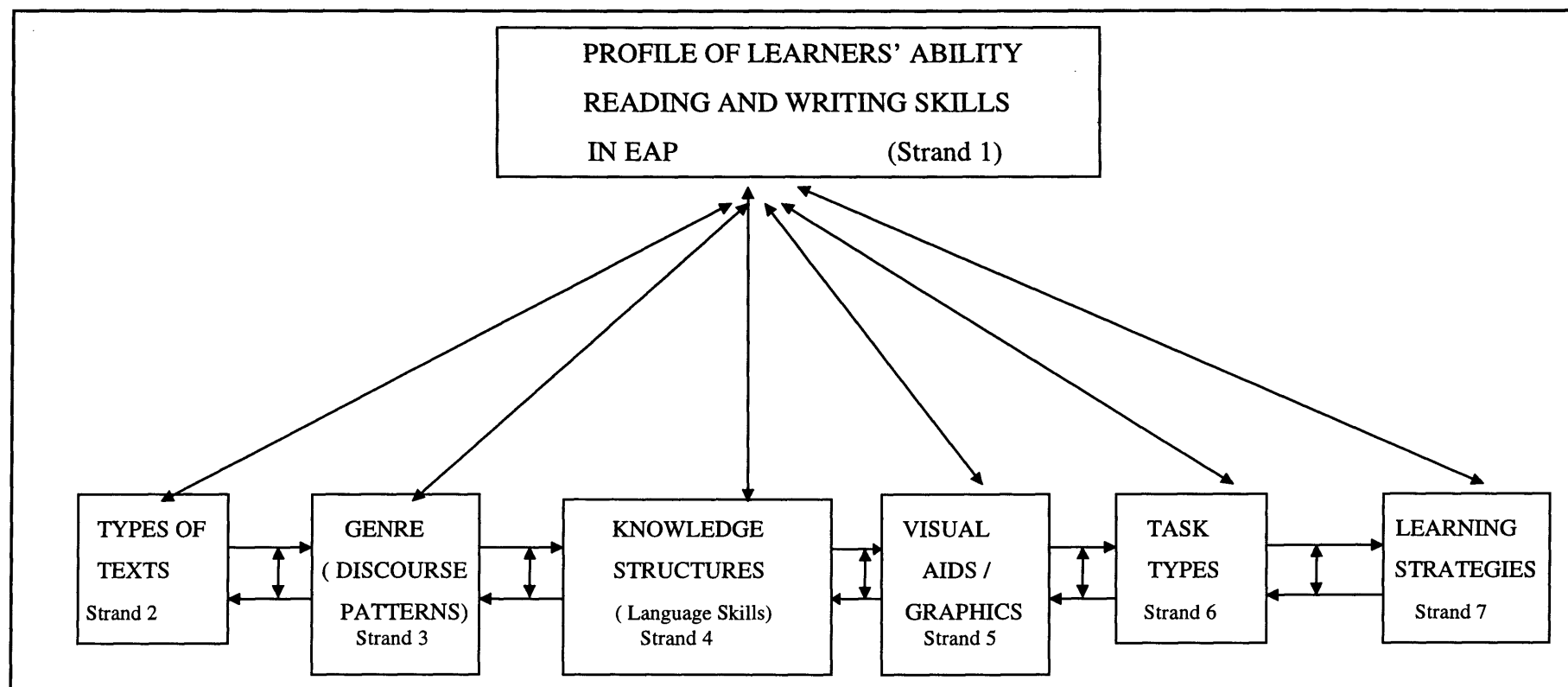
FIGURE 4 .17 OUTLINE OF DRAFT FRAMEWORK 3- A Procedural Framework For Developing EAP Materials

206

4.18.1 Workshop Procedure

The workshop procedure carried out in Phase 2B was exactly the same as that of Pilot Study Phase 2A. No changes or additions were made except to the framework. The framework used for this phase (Draft Framework 3) contained all the same components with only some very minor modifications and rearrangement of specifications within the strands. The same instruments were also used to elicit data and responses from the teachers.

4.18.2 Analysis and Discussion of Findings -Pilot Study 2B

The data gathered were systematically analysed using both qualitative and quantitative methods similar to that of phase 2A. The data gathered from the preservice students were analysed separately to determine whether their responses are any different from the experienced teachers.

4.18.2.1 Introduction to Questionnaire Analysis

The questionnaires, their administration, analysis and presentation were carried out in the same manner as in Phase 2A.

4.18.2.2 Analysis of Closed and Open Questions

The findings of the closed questions are presented first followed by that of the open questions.

4.18.2.2.1 Section A

(a)   Closed Questions

The following are the findings of the responses from the preservice teachers.

Table 4.8 Analysis of Closed Questions (Phase 2 B)

Question	Responses			
	YES	NO	Undecided	Total
Q.1. - I think I understand the way the framework works.	20	-	-	20
Q.4. - The framework guides me to think more critically and systematically about developing and selecting materials/tasks.	19	1	-	20

Table 4.8   continued

	YES	NO	Undecided	Total
Q.5. - The framework helps me to think in a more focused way about task and task design	17	2	1	20
Q.6. - The framework makes me reflect and think about my learners and their language ability.	19	1	-	20
Q.7. - The framework makes me think more deeply about task and learning strategies.	19	-	1	20
Q.8. - The frameworks specification will guide me to develop better materials and tasks besides guiding to evaluate them.	18	-	2	20
Q.9. - Such a framework may guide me to assess my students language development in a progressive manner.	16	1	3	20
Q.12 - I think the framework is too long.	5	13	2	20

The above analysis revealed that there were relatively small differences between the views of the inservice and preservice teachers. In this case, relatively speaking (as the number was 20 subjects compared with 32) there were more undecided and negative views expressed to the same questions but more positive views to question 12. Minor and limited negative views were expressed regarding questions 4, 5, 6, and 9 compared with questions 1, 7, 8 and 9 obtained from the inservice group findings and the pre-pilot study shown in section 4.8.4.5. Differences between the two groups were expected because the preservice groups were inexperienced, younger and probably have different attitudes to teaching.

Referring to question 4 only one (5%) teacher disagreed and said that frameworks of any kind are more of a hindrance rather than a help. In answer to question 5, two teachers did not see how it helped them to focus on task design as there were too many elements to consider. One teacher disagreed with the statement in question 6 and also with question 9; no reasons were given. As for question 6, nineteen of the teachers stated that they were made to reflect on their learners and their language ability. One person disagreed without giving reasons.

In all cases the undecided teachers indicated that they need more time and practice before they could be sure. It is interesting to note that during all the phases of the study as a whole there was overall 98% agreement with the statement in question 1 and over 70% with the statement in question 12, which is a general reflection of the acceptability of the framework.

(b) Open Questions

Similar to the pre-pilot study 1, pilot study 2A, Section B contained 6 open ended questions which were analysed and categorised using content analysis in the same manner as previously to establish the strands. The analysis and findings are presented below.

(Q 2. I think the framework will be useful for..............)

The teachers indicated that the framework is useful for selecting texts and tasks according to different levels of ability. It is also useful as a checklist in monitoring the development of the tasks in the planning stages. It acts as a guideline for planning tasks and materials for inexperienced teachers. They indicated that the framework provided useful suggestions for constructing tasks. It enhances task construction through the incorporation of learning strategies. They suggested that the framework is generally useful for training teachers to learn through the practice of developing complex materials for the EAP and EGP context. This was a significantly different and more positive perception than that of the inservice teachers.

(Q2) Usefulness of the Framework

(1) Selecting Materials/Texts	(2) Checklist for EAP Materials/Task Design
a) selecting different types of tasks for different proficiency level / language abi - lity. (8)	a) We can use it to help us to monitor and check our materials or task at the planning stage. (10)
b) selecting tasks to introduce appropriate discourse pattern gently from level to level. (2)	b) would enable a novice teacher to evaluate his/ her tasks based on the specifications provided. (7)
c) Choosing texts or materials which are relevant to the students level of proficiency. (4)	
(3) Designing Task(s) with reference to learners's ability	(4) Guidelines
a) constructing and developing task-based activities according to different levels of proficiency. (8)	a) acts as a guideline for teachers who are not sure of how to develop good tasks according to levels of ability. (7)
b) guiding teachers to design reading and writing tasks for students with different abilities or students in a mixed ability classroom. (5)	b) helpful as a guideline for teachers who do not know or have very little knowledge and understanding of the nature of task/materials design. (4)
	c) it is useful as a guideline for planning task based activities and for "fine-tuning" the task(s). (2)

(Q2) Usefulness of the Framework

(5) Incorporation of Learning Strategies	(6) Training Purposes
a) Matching task with learning strategies in a more systematic way. (6)	a) For general teacher training in materials design. (3)
b) Transforming learning strategies into task, that is, the task itself is a learning strategy. (2)	b) Training beginning teachers to create task-based materials for different purposes. (5)
c) Using the task as a base for enhancing the learning by incorporating the learning strategy into the task. (4)	c) Training teachers to learn through the practice of developing complex materials to aid in the teaching learning process. (3)
	d) Training teachers in instructional materials design not only for EAP but also for EGP where the teacher is trained to adapt its use. (7)

(Q.3   I particularly like ....) .

The teachers mentioned that they liked several aspects of the framework. For example, the different specifications directed them to look for specific materials easily, identifying specific content for developing materials according to levels of ability. They also liked the overall organisation of the framework.

(Q3)   Aspects of the Framework Liked by the Teachers

1) The different specifications in the framework.	2) Presentation and lay-out
a) The suggested text types as it directs the teacher to look for specific materials without wasting time thinking about it too much.	a) The systematic manner in which the specifications are presented. It makes it easier to follow.
b) The description for levels of competence because it gives a description of the type of learner and the level not just low, intermediate or advanced proficiency. It is more specific.	b) The systematic ways in which the different aspects relating to task-based materials are categorised. It gives a clear idea for teachers;especially beginners.
c) The grading according to levels which makes it easier to ensure that no one task is of the same level.	c) The organisation of the matrix which shows the link between activities levels and skills etc.
d) The knowledge structure as it gets the teacher to think and to assess the content and language structure of the text.	d) The way in which levels are divided into seven bands and the categories under each band are labelled with information/suggestions.
e) The flexibility of using the specification across the board because it is like "a menu" - you pick and choose and therefore design the task accordingly.	
f) The notion of developing materials based on the levels of competence/ability.	

(Q.10   The part I felt uncomfortable about or couldn't understand was ....)

It is interesting to note that the preservice teachers have similar problems with terminology and genre as the inservice teachers. These are discussed below.

(a)   The Use of Terminology

Nine of the teachers indicated that use of certain terminology and phrases posed a problem for them. The main reason given was that they were new to ESL and were still under training. Although they said they were doing a great deal of reading, their reasons are understandable. Some of the phrases mentioned are the same as those cited by the inservice teachers. For example:

1)Text, Types, range, complexity; 2) textual features;

3) rhetoric;   4) linear, non-linear;   5) text discourse

It was suggested that a glossary of terms should be provided followed by examples to exemplify them.

(b)   Specifications for Genre: Suggested Text Structure

Twenty of the teachers mentioned some doubts, problems or uncertainty about the concept of genre (the same problem was mentioned by the inservice teachers in Pilot study 2A). They had heard of it, especially in literature, but are not sure how it fits into EFL or EAP. Their recent materials development course had not exposed them to this aspect. (Coincidentally, the teachers had just completed a course on materials development.) Although 8 of the teachers said the workshop exposure had helped them to grasp the basic concept and its application, they still needed more practice and training. The remaining 12 teachers indicated that they really lack knowledge of this concept and its application. They suggested that more training and practice would help them as they could see its importance and relevance in materials development. Only 2 aspects of the framework were mentioned in response to question 10.

(Q.11   I think it is difficult to follow because ....)

As in pilot study phase 1 and 2A, this question highlighted several different responses. These are categorised as follows.

a)	Although it is *not difficult to follow* and use, **some terminology may create problems or confusion.** (3).
b)	It is *not difficult to follow but* it is **still something new and would need time to comprehend** and to fully exploit the framework.(5).
c)	It is *not difficult to follow* at all *but* **a step-by-step guideline would be very useful.** (9).
d)	It is *a bit difficult to follow because* we are **not equipped with the background knowledge.** (3).

Generally the teachers felt that the framework was not difficult to follow but strongly indicated that step-by-step guidelines and further training would help. This is very similar to the inservice findings but more positive, yet it demonstrates further the lack of experience by the preservice teachers.

(Q.13 My main comments are ....)

The responses to question 13 are categorised systematically according to similarity of responses.

(Q13) Teachers' main comments

<table>
<tr><td>1)</td><td>It has to be made clear to teachers that the specifications are descriptive (suggestions) and not prescriptive. (2)</td></tr>
<tr><td>2)</td><td>A step-by-step guideline would be very useful (especially for beginning teachers) with examples highlighting major features of the framework.(10).</td></tr>
<tr><td>3)</td><td>It is useful and it would be better that long term training is provided to enable teachers to fully comprehend it.(8).</td></tr>
</table>

The above comments are not very different from the inservice teachers, and reflect a need for guidance in using the framework by the preservice teachers which is complimentary to the findings of Q. 13 pilot study 2A and hence, further considerations were required.

(Q.14 I would like to suggest that ....).

Many of the suggestions provided mirrored those in question 13, therefore only different responses will be presented together with those which are different from those of the inservice teachers' responses.

Table 4.9 (Q 14) Suggestions for Inclusion in the Framework

<table>
<tr><td>a)</td><td>A glossary of terms should be provided with explanations of the terms and clear examples to illustrate them further. (6).</td></tr>
<tr><td>b)</td><td>More training workshops be given and a longer training period should be planned. (9).</td></tr>
<tr><td>c)</td><td>It would be more useful if listening and speaking skills are catered for. (5).</td></tr>
</table>

To improve the framework, suggestions (a) and (b) above will be taken into careful consideration for future revisions to the framework and workshops. However (c) was not within the scope of the framework and therefore will not be considered at present.

4.18.2.2.2 Section B

Analysis of Likert Scale Questions

The same procedure and method was used to analyse the questions as in Phase 2A Section 4.16.2.2.2. This is based on the results presented in Appendix A4.9, which shows the distribution of responses obtained during this part of the study.

(Q 1) Should terminology be reduced ?

Question	Disagree	%	Undecided	%	Agree	%	Total
1	8	40	4	20	8	40	20 (100%)

The data in the table above clearly indicates a split in opinion. 40% of the teachers agree and another 40% disagreed with the statement. The undecided 20% tended to feel that while there is a need for terminology, this may make the framework more complicated to follow. Those who disagree, 40% feel that it is good to have such terminology and that teachers should not shy away from it. This seems to indicate that these teachers are willing to meet challenges. This trend did not arise with the inservice teachers, even though the split was approximately the same between positive and negative views. Those who agreed that it should be cut down, seem to think that fewer terms would be better because then the teachers would not find the framework perplexing.

Q 2 Should definitions of key terms be provided?

Question	Disagree	%	Undecided	%	Agree	%	Total
2	1	5	2	10	17	85	20 (100%)

The majority of the teachers 85% strongly felt that definitions of key terms should be provided. This is consistent with views of the inservice teachers.

Q.3 Should word limit be included for text selection ?

Question	Disagree	%	Undecided	%	Agree	%	Total
3	8	40	1	5	11	55	20 (100%)

Fifty-five per cent of the teachers agreed with the statement and 40% disagreed on the bases that it was not necessary and could become restrictive in selecting texts. However it was suggested that any word limit should be discretionary because the question is very

213

controversial. This point of view was incorporated within the Final development of the framework.

Q 4 Is a detailed step by step teacher's guide necessary ?

Question	Disagree	%	Undecided	%	Agree	%	Total
4	5	25	2	10	13	65	20 (100%)

A large majority (65%) of the teachers wanted a step-by-step guide (teachers' guide) to accompany the framework; only a few disagreed. Many indicated that it would be much easier to follow and would make understanding the process of using the framework clearer. This was another good point for further development.

Q. 5 Will the framework be useful for teachers with little knowledge of EAP materials ?

Question	Disagree	%	Undecided	%	Agree	%	Total
5	4	20	2	10	14	70	20 (100%)

Seventy percent of the teachers indicated that the framework would be useful for teachers with little knowledge of the process of developing EAP task based materials although 20% disagreed maintaining that EAP based materials and communicative based materials are the same. The undecided 10% were not sure of what EAP is, nor of the difference between EGP and EAP.

Q. 6 Does the framework motivate you to try out ideas?

Question	Disagree	%	Undecided	%	Agree	%	Total
6	1	5	3	15	16	80	20 (100%)

Most of the teachers, (80%), strongly agreed with the statement, as did the inservice teachers. They indicated that the framework would motivate them to try out ideas for developing EAP task-based materials, saying that it is challenging and makes them think a great deal about task input. Those who disagreed and were undecided did not give any reason.

Q 7 Can the framework be adapted for use in schools ?

Question	Disagree	%	Undecided	%	Agree	%	Total
7	1	5	2	10	17	85	20 (100%)

The majority, (85%) agreed with the statement and only a small number disagreed or were undecided. These findings are similar to the inservice teachers' findings and encouraged the possibility of the use of the framework by future English teachers in Malaysia.

Q 8 Would the framework help you to improve your knowledge & ability
to design better EAP materials?

Question	Disagree	%	Undecided	%	Agree	%	Total
8	-	-	3	15	17	85	20 (100%)

The majority (85%) of the teachers agreed with the statement, saying the framework in itself already introduces new knowledge and insight into task/materials development. The undecided (15%) felt that they needed more exposure and training first before they could comment because this aspect of ELT was new to them.

Q 9 Would you like to have the framework as part of your teaching kit?

Question	Disagree	%	Undecided	%	Agree	%	Total
9	-	-	-	-	20	100	20 (100%)

All 20 of the teachers wanted to have the framework as part of their teaching kit. To quote a few of them.

> *It systematically presents information in sequence and the learners' profile is easily referred to. Everything is put together and there is no need to refer to many books for information (12)*

Such a statement supported the future development of the framework and the study as a whole.

Q. 10 Will it change the way you think about EAP materials?

Question	Disagree	%	Undecided	%	Agree	%	Total
10	3	15	1	5	16	80	20 (100%)

Only 15% disagreed with the statement saying that it is too complicated and difficult to deal with, whereas the undecided 5% did not give any reasons. A large majority (85%) agreed. The main reasons for agreeing were: the framework is challenging; content (subject-matter), study skills and language skills are involved; and these make materials/task design more complex and challenging as a whole. This is a reflection of

the preservice teachers' willingness to learn, which is similar to the inservice teachers in general.

Q 11   Would knowledge about genre & knowledge structures be
          useful for designing materials?

Question	Disagree	%	Undecided	%	Agree	%	Total
11	4	20	1	5	15	75	20 (100%)

Only 20% disagreed with the statement and 20% were undecided. However most of the teachers (75%) agreed. Their reasons were, that if they know how to analyse a text it would give them more scope to design a variety of tasks, and if teachers know how a text is constructed they can teach their students to write better. The relatively larger majority than the inservice teachers (56%), is probably a reflection of the age group and willingness to become familiar with new ideas and to understand Genre and Knowledge structure.

Q12   Will it be useful for training purposes in materials design?

Question	Disagree	%	Undecided	%	Agree	%	Total
12	2	10	3	15	15	75	20 (100%)

A substantial majority (75%) of the teachers agreed with the statement. They indicated that the framework provided other information not usually found in the materials design course or text book. The findings reflect the overall usefulness of the framework to the preservice teachers. This complements the previous findings.

4.18.2.3 Summary Findings of Preservice Teachers

Complementary to the above discussion and preliminary conclusion, it can be concluded that the preservice teachers accepted the framework as a very useful tool for materials design and as a new innovation in their learning. More enthusiastically than the inservice teachers, they put forward views which were in some ways similar but different from the inservice teachers. This is perhaps because they have not yet started teaching and their perception is based on their experiences as students. Their views were seriously considered for improving the framework.

4.18.3 Teachers' Perception of *Task* (Preservice Teachers)

The objective of this part of the study was the same as that discussed in Section 4.16.2.3 but here the preservice teachers' perception of the concept "task" was particularly

studied. The procedure used for pilot study Phase 2A was similarly used to elicit their perceptions and to analyse their responses using the same questions and criteria as before by asking the following questions.

1.	To me task in language teaching and learning is/means.........
2.	Tasks are important in language teaching and learning because ....

4.18.3.1 Analysis and Findings of *Task* and Importance of Task

As previously, the teachers' responses were categorised systematically with similar responses grouped under one theme or strand as discussed in 4.16.3.1. For a further discussion on this refer Chapter 7. The preliminary findings of the teachers' perception of task and the importance of task are presented in figure 4.18 and 4.19 respectively .

Referring to figure 4.18 it can be seen that the preservice teachers had two additional categories in their perception of the concept task compared with inservice teachers. These are *"Something"* and *"Tool"* in addition to:- Activities; Exercise; and Work (see figure 4.15).   In response to question 2 (presented in figure 4.19), the teachers' perception is found to be oriented to Purpose/Objective, Practice/Skill, Management of Learning and Feedback. This is different from figure 4.16 given by the inservice teachers namely: Feedback/Evaluation, Purposeful/Meaningful, Learning/Learning Process, Understanding and Integration of Skills/Practice. The suggested aspect of "Management of Learning" shows an important insight of the preservice teachers - no other group considered this line of thinking. This is some indication that the framework motivated the teachers into creative thinking.

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                                    ┌──────────┐
                                    │   TASK   │
                                    └────┬─────┘
          ┌─────────────┬───────────────┼───────────────┬─────────────┐
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Exercises	Activities	Something	Tool	Work
- Any exercises which are given to the students in order to achieve the language skills.	- An activity used by the teacher in a language classroom to promote communication and to develop the four major language skills.	- Something that students have to complete in the process of learning English.	- A tool where students use language to communicate hence providing motivation for language use.	- Work that a teacher assigns students for language practice.
- Exercises that are created by the teacher to achieve communicative competence.	- Activities during English lessons, either done in group work or individually.	- Something that students can practice on in learning the target language.	- An interesting tool to learn and practice the language.	- Work which students have to complete to reinforce language practice.
- Exercises used to practice language learnt in class.	- An activity that enables students to practice using language in meaningful contexts.	- Something which could facilitate the learning of the target language.	-A tool which has a created problem which students have to solve.	- Work that is prepared by the teacher for the students to practice meaningful language.

Figure 4.18 Teachers' Perception of *Task* - Pilot Study Phase 2B

	- An activity which students will engage in.	- Something used by the teacher to aid the teaching and learning of the English language.		
	- Problem solving activities which involves students to communicate and use genuine language.			
	- Activities to help students learn, understand and use the language by using materials which they need to perform the tasks set for them			
	- Activities that are prepared for the students to practice and develop the 4 basic language skills.			

Figure 4.18 Teachers' Perception of *Task* Pilot Study Phase 2B

219

TASKS ARE IMPORTANT BECAUSE			
Purpose/Objectives	**Practice/Skills**	**Management of Learning**	**Feedback**
• They provide students with a purpose/ objective.	• It provides students with practice which should be communicative in nature and encourage students to interact.	• It encourages the students to manage their own learning ability by solving problems to help them acquire the language	• They provide feedback for future improvement for the teacher and the learner.
• It gives purpose for the students to learn.	• It allows students to practice using the language and help them to learn the target language.	• They break language skills into manageable chunks and students learn to manage and work on areas which are more focused.	• It allows the teacher to get feedback about the success or failure of a lesson/task.
• It gives meaning for language use and it fosters real communication.	• It helps students to practice using the language communicatively.	• It pushes students to manage their own ability at manipulating a task which will motivate the students to develop their language skills.	• Provides the teacher with an insight into the students learning ability and problems.

Figure 4.19 The Importance of task in language teaching and learning (Preservice)

Figure 4.19 Continued

• They engage students in using language for a real purpose.	• It helps students to practice developing their thinking skills in using the target language.	• It develops management of peer interaction in problem solving activities.	• Provides feedback for the students to check on their own language achievement.
• They provide meaningful objectives from which the students can work.	• It helps students to practice and develop the necessary skills in reading. writing, listening and speaking.		
• Students have a purpose in carrying out an activity and at the end of it they would have learnt consciously and unconsciously through the task.			
• It helps learners to achieve their aims, objectives and targets of learning the language.			

Figure 4.19 The Importance of task in language teaching and learning (Preservice)

However, similar to the findings from the inservice teachers, there is no clear focused definition and/or structured definition of the concept task. Individual teachers again tend to have their own interpretation based on their own exposure, experience and what their teaching and learning aims are. As for the inservice teachers, task seem to be viewed as simple, non-highly structured activities which are not part of a complex process and are easy to manage.

4.18.4 Factors or Criteria for Selecting, Adapting, Evaluating and Designing Task Based Materials

As in section 4.16.4, this aspect is considered to be important to understand the perceptions of preservice teachers. The same procedure was used as discussed in section 4.16.4. Below is a list of criteria/factors which the preservice teachers have identified as important to them in selecting, evaluating and designing task-based materials.

Table 4.10 Teachers' criteria for selecting, adapting, evaluating and designing EAP materials

Non- gender bias	Cultural factors	Interesting
Easily available and inexpensive	Adaptability	Authentic
Challenging	Appropriateness	
Manageable	Student Needs	
Relevant	Flexible	

There seems to be some agreement between the preservice and inservice teachers. Practically all the criteria/factors listed above are geared towards communicative language teaching in a broad sense. This could be due to the fact that the teachers are being trained to teach language communicatively. Criteria such as authenticity, interests, flexibility, being enjoyable, appropriateness, students' needs and adaptability tend to be the most common criteria for both the experienced and inexperienced teachers. It is interesting to note that *non-gender bias* and *easily obtainable and inexpensive* are considered important criteria for EAP.

4.18.5 Summary of Key issues raised from the findings of the Pilot Studies

An effort was made to ensure that the findings of study of the proposed framework are reliable, valid and repeatable, covering both inservice and preservice Malaysian teachers of English who are presently studying in the United Kingdom.

4.18.5.1 The Framework

The findings of the pre-pilot study of the framework raised various issues which were catered for prior to the final pilot studies. However several other key issues came to light and needed to be addressed in the revision of the framework. The following more important issues were raised:

- The need for a step by step clear, organised procedure with examples on "how to" develop materials.
- The use of simplified terminology with no complex forms.
- The need for a glossary of terms used with explanations and examples.
- The need for further training and exposure in using such frameworks.
- The need to consider the use of complex texts in materials design for teacher training.
- Considerations for using the framework not only as a training tool for designing materials but also as a tool for monitoring task input and as a checklist.
- Considerations for using the framework as a tool for classroom teachers to develop materials on their own in the EGP context.
- Input in the teacher's guide has to be carefully planned regarding the amount and type of guidance to be given.
- The workshop procedure has to be clearly and systematically planned for the main study. The researcher should be well prepared for a sudden need to make changes or to use an alternative methodology.

4.18.5.2 Perception of the concept 'Task'

- It is quite clear that although the teachers have an idea of what task means, there is much subjectivity in their definitions.
- There is much scope for the teachers to further develop their perceptions and definitions of task to a more structured and cohesive definition for materials development in EAP

4.18.5.3 General Conclusion

The above issues led to the conclusion that most teachers, experienced or inexperienced felt that without explicit guidance they will be lost. However, providing too much explicit guidance to teachers may hinder critical thinking. These teachers prefer to be dependent on "how to" information.

The feedback drawn from the various pilot studies will be used to restructure not only the framework but the teachers' guide, instruments and the workshop procedure for the main study. The findings of both pre and inservice teachers' responses to the framework

strongly indicate similarities in views with few differing views among the preservice teachers. Since these teachers have passed through the same education system, following the national curriculum, it can be concluded that undergoing similar training programmes, using similar texts and having similar previous learning experiences have influenced the teachers' thinking. The framework was further revised for use in the main study based on all the findings of the pilot studies.

4.18.6 The 'Final' Framework - Framework 4

Draft Framework 3 was further revised based on the findings of all three pilot studies to become Framework 4 - the 'Final Framework' (Figure 4.20). Changes were made across the framework strands and specifications (see 'Final' Framework at the end of this chapter). Cautionary remarks were included in the strand on *Suggested types of texts* and *thinking skills* were included in the knowledge structure strand. The title of the framework was changed to read " A Training framework for Developing EAP Task-Based Materials."

In conclusion, this chapter has presented the analysis and findings of the three pilot studies. At each stage the framework was further developed iteratively with a literature review of concepts related to new strands. Framework 1 was revised to include major changes after the pre-pilot study and was called Framework 2. Framework 2 was further revised with minor changes after piloting it at phase 2A and was then evolved into Framework 3. Framework 3 was piloted at phase 2B and was further revised to its current form (see figure 4.20 & Framework 4 at the end of this chapter). Key issues were also identified which were taken into consideration for the framework development and for the structuring of the instruments, workshop and training procedures for the main study. The issues raised were also used to further prepare a teacher's guide and materials for training purposes for the main study at UPM Malaysia. The application and working principles of the 'Final" Framework are discussed in chapter five.

Thus, the 'Final' Framework had evolved and developed through an iterative and interactive process with both the inservice and preservice Malaysian teachers and a continuous literature review (see figure 1.2). Therefore, the framework is more likely to be useful, practical and effective in its application within the Malaysian context. This hypothesis could only be tested during the Main Study by comparing it to the existing training approach as discussed in chapter six, seven and eight.
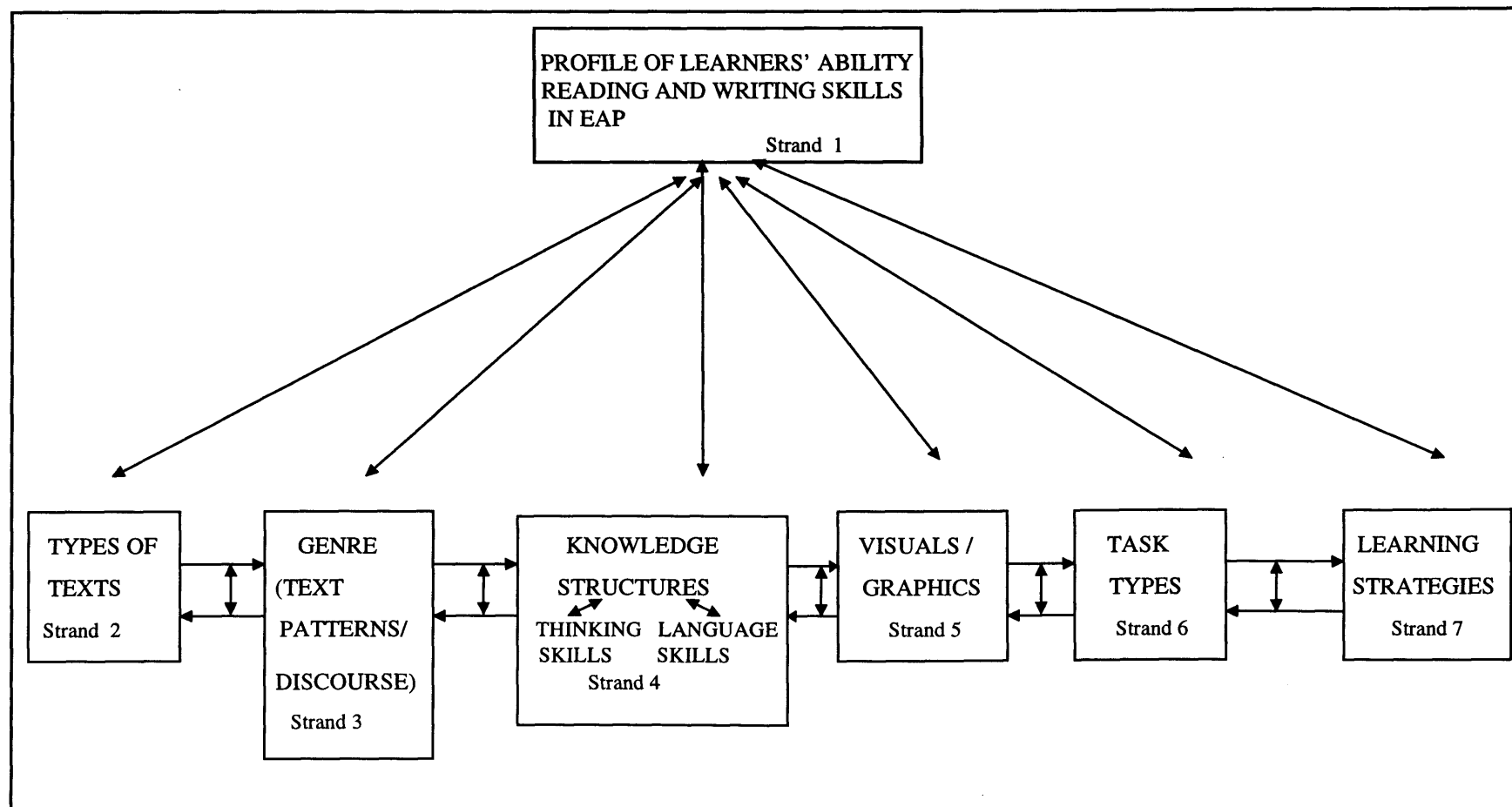
Figure 4.20 Outline of the 'Final' Framework - Framework 4

SPECIFICATIONS FOR LEARNERS' LEVELS OF ABILITY	SUGGESTED TYPES OF TEXT (Range and Complexity)	GENRE Suggested Text Patterns/Discourse	KNOWLEDGE STRUCTURES Suggested Thinking Skills and Language Skills
READING: Learners have difficulties comprehending texts. Can only follow a limited number of main points of simple texts of all dis - course types. Recognises only occasional words and phrases. Has many problems with technical and non- technical vocabulary. Has difficulty in transferring information from linear to non-linear text, as well as differentiating major and minor points. Unable to see relationship within and between sentences and paragraphs. Has poor inferencing skills. Completely dependent on support in understanding tasks and possibly, use of dictionary may not necessarily help in comprehension. **WRITING:** Able to write with some relevance to task. Can produce only a very simple frag- mented text. Writing displays very little ability to communicate. Has very little sense of organisation. Unable to use appropriate cohesive devices without support. Writing is limited to short simple sentences of about 4-5 words in a sentence. Vocabulary range extremely limited. Needs plenty of support in understanding structures of most discourse types. Needs a great deal of structured guidance to be able to write.	• General technical and science based text (e.g. beginning introductory engineering texts; school based textbooks used by technical school students); non-linear text • **OPTIONAL-**Created, amended and adapted texts from journals of sciences and engineering general reading texts **OR** alternatively use simple texts with straightforward structures suitable for this level • **OPTIONAL-** Difficult linguistic structures to be paraphrased where possible / necessary *if they might impede understanding - ONLY IF ABSOLUTELY NECESSARY.* • **OPTIONAL SUGGESTION-**Text might be between 100-250 words long or a long text with a simple structure, i.e. one with simple sentences or simple compound sentences. If text is short and the lexical loading is not complex or does not make reading difficult, use a text of about 1-3 paragraphs long or 1-5 depending on complexity of text. • Identify texts as outlined in the strand on genre. **Writing:** • Writing simple definitions, classifications, writing events, sequencing information, describing straightforward procedures or instructions. • Written work might be between 1-3 paragraphs with about 5-6 sentences in each.	• Narrative - evaluation - sequencing- • Descriptive - physical description - functional description • Definition - simple definition - non-formal definition - semi-formal definition • Combinations - descriptive and definition - description and definition and example • Classification - simple classification/categorisation • Simple Combinations - definition and classification and description	• Sequencing: Analysis by time; sequence markers; active/ passive voice; temporal sequence • Analysis by importance - ranking, explicit chronological sequence/markers. Verb tenses - - present/past • Analysis by space - prepositions of time, place, direction. Present progressive; past progressive; present perfect progressive • Noun/noun phrases • Describing: Description by shape, size, function • Defining: Definition formula - Term = Class + characteristics • Relative clauses - defining relative clauses - reduced defining relative clauses • Basic definition + one or more examples + explanation + breakdown of parts, properties + description of overall appearance • Classifying: Classification - general/specific ideas • Classifying from - general to specific-specific to general • Categorisation features - classes, types etc. • Classifications and examples (expanded classification) • Prefixes, suffixes • Cognates • Simple sentences • Cohesive devices, markers

SUGGESTED VISUALS/GRAPHICS	SUGGESTED TASKS AND SKILLS TO BE PRACTISED	SUGGESTED LEARNING STRATEGIES (Cognitive and Meta - cognitive Strategies)
It is suggested that initially the following visuals might be utilised: Pictures Diagrams Semantic trees Tables Action strips Realia (objects) Conceptual maps Charts - flow charts, linear charts	Suggestions for tasks and skills which provide for: • Skimming and scanning text for general and specific information • identifying/differentiating major and minor points • understanding text organisation • breaking up sentences, ideas or information in a text • ordering information • describing and classifying information • describing objects or procedures, processes • linking ideas through diagrammatic forms • identifying topic sentences, main ideas and supporting ideas • identifying simple grammatical structures used for different discourse genre • vocabulary building; word formation activities; activities involving use of contextual clues • paragraph writing. · • identifying and characterising features of different information and text types • observing features, details of information in text content • use of prefixes and suffixes • gap filling, ordering information-jumbled paragraphs, sentences, diagrams, pictures. • reading comprehension task - True, False activities, close procedures, questions involving textually explicit, implicit and scriptally implicit information • vocabulary in context exercises • using graphics to link ideas, using discourse markers to link ideas • using word phrases to connect ideas • transferring information from linear to non-linear text • relating text to graphics • labelling and describing objects, diagrams etc. • classifying according to categories • distinguishing between literal and implied meaning • making simple inferences through sequencing and deductive activities • questions and activities focusing on text structure/discourse and content of texts	Grouping (into meaningful groups/clusters, labelling) Associating (new information with familiar concepts etc.) Elaborating (new information through association with familiar concepts) Recognising and using formulas/patterns Reasoning deductively (through logical and systematic inferences) Analysing expressions, style, patterns, structure (breaking down new words, phrases, sentences or paragraphs into component parts) Transferring (mental images, information, ideas etc.) Highlighting (underlining, circling, capitalising ...) Taking notes (focus on understanding not writing) Organising (facts, patterns, ideas ...) Linking present knowledge to previous knowledge Guessing intelligently (through use of contextual clues) Using key words Semantic mapping Translating (from L1 to L2/vice versa to make comprehension of language clearer) Repeating (through varied meaningful activities)

SPECIFICATIONS FOR LEARNERS' LEVELS OF ABILITY	SUGGESTED TYPES OF TEXT (Range and Complexity)	GENRE SuggestedText Patterns/Discourse	KNOWLEDGE STRUCTURES Suggested Thinking Skills and Language Skills
READING: Learners able to comprehend unsimplified text only in highly familiar contexts. Can comprehend mainly simple texts in unfamiliar contexts. Able to extract major points when attention is drawn to them. Can identify some of the relationships between major and minor points. Has difficulty with different types of textual features and complex lexical items. Has many problems with technical and non-technical vocabulary. Has difficulty transferring information from linear to non-linear text and vice versa. Needs a great deal of support in understanding content and tasks. Able to make inferences only at a lower level. May need to use dictionary all the time with support. **WRITING:** Able to write with relevance to task but the writing has few ideas and no apparent development. Unable to use cohesive devices satisfactorily. Very limited use of vocabulary. Has very little control of sentence structure. Production of sentences are not necessarily linked. Can write brief notes and explanations only at sentence level. Attempts at communi - cating. Needs plenty of support in under - standing structures of most discourse types. Can work quite well within a structured guideline.	• Beginning level, technical/science based texts (e.g. assembly manuals, beginning level academic engineering texts. Secondary school science texts or journals; laboratory reports or experimental reports or procedure and ency-clopaedias; DIY manuals) • **OPTIONAL** - texts may be amended or adapted with difficult major linguistic structures removed and substituted if and when necessary to promote understanding of text but should be later replaced • **OPTIONAL SUGGESTION**-text might be between 150-300 words long or longer text with simple structure; 1-5 paragraphs is suggested • texts specifically selected for this level consisting of content which includes narrative, chronological/descriptive sequencing (e.g. laboratory reports, experiments etc.) as suggested in the strand on genre **Writing:** • writing descriptions, functions/ locations/ definitions/ classification • writing simple explanations/making exemplifications • written work might be between 1-5 paragraphs long with extended sentences.	• Descriptive - physical description - functional description - description of process - description of properties • Definition - semi-formal definition - formal definition - expanded definitions • Simple exemplification • Combinations - description and definition and exemplification • Classification and exemplification • Partial classification and exemplification • Combinations - definition and classification and example • Combinations description and definition or classification with expanded illustrations or examples	• Describing: Description by time sequence, importance/shape, size, function, properties; spatial description • Description between events • Defining: Definition and expanded classification • Sequencing: Chronological sequence - ascending order - descending order • Verb tenses, present/past • Steps in a progression • Sequence markers/expressions • Adjectives and compound nouns • Prefixes, suffixes; cognates • Principles/terms; family/group; characteristics • Exemplifying: Expressions of exemplification • Structures of explicit exemplification • Explicit enumeration • Models of necessity • Definite/indefinite articles • Basic description; basic definition and expressions of exemplifications • Formal definition and partial classification without basis stated • Classifying • Patterns and rules of describing, defining and classifying • Concepts • Simple, compound sentences

SUGGESTED VISUAL /GRAPHICS	SUGGESTED TASKS AND SKILLS TO BE PRACTISED	SUGGESTED LEARNING STRATEGIES (Cognitive and Meta - Cognitive Strategies)
It is suggested that initially the following visuals might be utilised: Drawings Tables Pie Charts Flow Charts Diagrams Pictures Simple semantic and concept maps	*Suggestions for tasks and skills which provide for:* • Scanning text for specific information • identifying/differentiating major and minor points - identifying markers or connectors that link them • reading for relevant information • expanding main ideas and topic sentences • making predictions (simple) • vocabulary building; word analysis • word formation, tabulating vocabulary into meaning groups • labelling diagrams • information transfer (from text to charts to text at sentence level-simple-compound) using note form or outlining activities • interpreting simple flow charts, diagrams/tables • expressing function, sequence/giving simple explanations; making definitions • tasks involving stipulation, negation, analysis of parts for defining • identifying textual features/discourse patterns through analysis and organisation of texts content • transferring information from text to charts, diagrams, tables and vice versa through structured outlines or guides • reading comprehension-short answer, open answer, true, false, not stated types at the lower level of skills hierarchy • understanding organisation of text content • questions involving textually explicit, implicit and scriptally implicit information • integration of lower order and higher order reading skills with complexity level maintained at level two • summarising, writing in chart form and from chart to written form • reordering information in paragraphs • recombining ideas to show development of text structure. • combining, definitions, descriptions, classifications with some exemplifications in written work or in diagrammatic form • differentiating between literal and implied meaning through slightly more complex deduction	Transferring (mental images, information, ideas) Taking notes (focus on understanding not writing) Summarising (condensing detailed information) Highlighting (underlining, circling, capitalising ...) Using linguistic clues to guess intelligently (using previous knowledge, L1 knowledge, visuals, contextual information ...) Recalling (from previous learning, patterns, image, ideas ...) Placing new words in context Semantic mapping Recognising and using formulas and patterns Grouping and associating (using mechanical techniques, drawing diagrams, pictures ...) Reasoning deductively (through logical/systematic inferences) Getting ideas quickly (skimming, scanning - charts, lists, diagrams) Analysing contrastively (analysing language elements according to similarities, differences between L1 and L2)

SUGGESTED VISUALS / GRAPHICS	SUGGESTED TASKS AND SKILLS TO BE PRACTISED	SUGGESTED LEARNING STRATEGIES (Cognitive and Meta - cognitive Strategies)
It is suggested that the following visuals might be used:	Suggestions for tasks and skills which provide for:	Recognising and using formulas/patterns
Pictures	• Building a text (analysing complex text structures; text organisation)	Translating (from L1 to L2 and vice versa to make comprehension and learning clearer)
Manuals	• interpreting diagrams and charts	
	• analysis of relationships, categories, methodology	Transferring (directly applying previous knowledge to facilitate new knowledge)
Graphs	• making predictions	
	• relating words (word formation/relationship)	
Grids	• skimming and scanning for major and minor points	Grouping and associating (into meaningful groups, new information with familiar concepts etc.)
	• ordering information, combining sentences, ideas	
	• summarising information in chart form, tables etc. and in writing	
Tree diagrams	• identifying words used to show, sequencing, cause-effect and for describing processes or procedures	Analysing (breaking down sentences, words, ideas into different parts/components, expressions, contrastively)
Statistics	• vocabulary building, word analysis	
	• finding topics or paragraphs and tabulating them as well as indicating/tabulating the supporting ideas	Highlighting (underlining, circling information)
Flow Charts	• close procedure-filling gaps with content words/function words.	Recalling (from previous learning, patterns, images, ideas ...)
Numbered steps	• developing and applying generalisations	
	• drawing conclusions from graphs, tables etc., decision making	
Cycles	• linking statements/comments	Summarising (condensation of detailed information)
	• identifying key words	
Event lines, sequence lines, time lines	• agreeing and disagreeing with statements, using operational definitions	Elaborating (new information through association with familiar concepts)
Objects	• differentiating and inferring facts from opinion	
	• differentiating identifying different types of definition/classification categories/features	Deducing information (by inferring, linking ideas, through association of information)
Semantic maps	• interpreting data	
Concept maps	• questions involving textually explicit, implicit and scriptally implicit information	Using linguistic clues (to guess intelligently, visuals, previous knowledge, suffixes, prefixes, contextual information)
	• introduction of complex higher order skills; e.g. introducing synthesising, analysing and evaluating skills at a simpler level)	
	• writing simple reports - short reports of about 1 1/2 pages long	Semantic mapping
	• note making	
	• summary writing	Adjusting or approximating the message (alteration through omission of items of information, make ideas simpler or less precise, rephrasing)
	• semantic mapping	
	• conceptual mapping	
		Recombining (construction of meaningful sentences through use of new and different elements).

231

SPECIFICATIONS FOR LEARNERS' LEVELS OF ABILITY	SUGGESTED TYPES OF TEXT (Range and Complexity)	GENRE Suggested Text Patterns/Discourse	KNOWLEDGE STRUCTURES Suggested Thinking Skills and Language Skills
READING: Learners comprehend the gist of the text but with difficulty. Able to follow several of the significant points presented in text as well as the general relationships. Can identify supporting and major details if attention is drawn to them with explicit markers. Encounters a lot of difficulties with textual features/lexical items. Has problems with technical and non-technical vocabulary. Need support in transferring information from linear to non-linear text when dealing with complex texts. Only able to make simple logical inferences and predictions. Can identify logical conclusions but still lacks the ability to make simple deduction. **WRITING:** Able to write with relevance to task using simple and compound sentences linked cohesively. Though at times cohesive devices are wrongly used. Able to write simple information tailored to specific functions. Unable to express ideas in a clear progression which sometimes impede communication. Organisational skills appear to be limited. Restricted use of vocabulary. Still requires a lot of support in understanding the structures of most discourse types. Structured guidance still necessary at this stage.	• Texts which are not too heavily specialised • Texts which are science based or technical in nature (e.g. science magazines, lower intermediate science/engineering academic texts, technical magazines, newspaper reports, journal reports, advertise - ments, brochures, simple manuals) used in introductory university courses • **OPTIONAL** -Texts might be adapted, created or synthesised when absolutely necessary. Replace difficult structures or lexical words with more familiar ones where necessary or possible. *Do not* replace key logical items. Advised to reinsert deleted /replaced structures or words at a later point. • **OPTIONAL SUGGESTION**-Text might be between 250-375 words long, about 1-7 paragraphs long. • Texts should include discourse genres as suggested in the strand on genre. **Writing:** • Writing descriptions, definitions, functions, instructions or writing explanations • Using contrast structures/comparison effect structures. Write simple and expanded definitions/ classifications • Written work might be gradually expanded from between 1-5 to 1-8 paragraphs long • Summary writing • Writing activities which include use of visuals	• Generalisation • Description of state • Description of operation • Definitions and generalisation • Definitions and exemplification • Structural • Combinations - description + definition + exemplification + explanation • Comparison and contrast • Combinations - description and definition and comparison and contrast and exemplification • Reintroduce earlier structures from Bands 1 and 2.	• Evaluating and generalising: Evaluation and generalisation expressions or patterns • Linear description; linear dimensions • Adjectives; use of nouns, verbs, adverbs, phrase and clause substitute • Processing and describing: Process description • Expressions of method • Sequence expressions • Defining: Formal, non-formal definitions • Formal definitions and extended definitions • Expressions of exemplifications/illustrations; structures of implicit exemplification • Names of parts; properties of parts; location of parts; function of parts • Different verb forms; prepositions; intensifiers • Passive forms • Sentence connectors/conjunctions; conjunctive adverbs, co-ordinate conjunctive; subordinate conjunctive • Tenses - present/past tenses • Countable/uncountable nouns • Connective words and phrases of comparison/ contrast; structure of explicit contrast • Comparative constructions • Model verbs; sub-ordinate clauses • Parallelism • Choice - alternatives; opinion • Simple compound - complex sentences

SPECIFICATIONS FOR LEARNERS' LEVELS OF ABILITY	SUGGESTED TYPES OF TEXT, (Range and Complexity)	GENRE Suggested Text Patterns/Discourse	KNOWLEDGE STRUCTURES Suggested Thinking skills and Language Skills

READING:
Learners able to read basically a mixture of text of an intermediate level. Able to handle complex text with some complex linguistic structures in familiar context and occasionally in unfamiliar context. Can distinguish major/minor points. Able to follow the more significant points if attention is drawn to them. Can perceive most relationship between and within sentences and paragraphs. Has some problems with technical and non-technical vocabulary. Comprehends most linear and non-linear information from texts which are not too highly complex. Has some problems making inferences and conclusion when faced with complex texts.
WRITING:
Able to write fairly relevant tasks but writing is still not sufficiently developed. Writing sometimes lack ideas, consistency and support. Needs support in handling different types of rhetorics. Writing lacks fluency. Resorts to simple/compound sentences which are short Limited vocabulary knowledge. Needs support in understanding the structures of some discourse types. Able to write without using a non-structured outline and able to write from non-linear information.
	• Texts which are specialised and within the academic context/discipline
	• Technical based texts (e.g. Journal of Science, Times Science Reports, Academic texts, Engineering text), Journal articles from conferences; symposiums, proceedings, manuals
	• **OPTIONAL** -Text need not be adapted but some vocabulary may need some adjustments or explanations. May use some 'genuine' texts or created texts
	• **OPTIONAL SUGGESTION**-Text might be between 375-500 words long or perhaps between 1-10 paragraphs
	• Content of text should contain a mixture of descriptive, problem-solution, cause - effect, comparison and contrast, predictions, persuasion, recommendation type information
	Writing:
	Report writing projects
	• report might focus on:
	  - recommendations
	  - describing propose projects, ideas
	  - presenting cause-effect solution
	  - problem-solution
	  - comparison and contrast
	  - evaluating and recommending
	  - writing frameworks
	  - summaries
		• Concept - principle
		• Classification (higher level)
		• Generalisation
		• Comparison - contrast
		• Cause - effect; effect - cause
		• Combinations of above - one or more types
		• Problem - Solution
		• Evaluation
		• Recommendation
		• Definitions
		• Combination of above patterns at a more complex level
		• Reintroduce earlier structures
		  - description of processes
		  - description of operation
		  - description of objects, machinery from Bands 1-3
			• Classifying: Implicit classification; implicit enumeration; indirect structures of classification
			• systems/dimensions of classification
			• expressions of properties/features
			• Analysing: analysis of hypothesis
			• drawing conclusion from evidence
			• inductive reasoning; deductive reasoning
			• Comparing and Contrasting: comparing by similarities; contrasting by differences; structure of implicit and explicit contrast
			• expressions of similarities/differences
			• problem - solution expressions
			• predicting; expressions of conclusions
			• explanation/exemplification; logical argument
			• Describing: description of process/procedure
			• Sequencing: chronological sequence expressions, markers; structure of implicit, explicit chronology
			• Spatial order; polar opposites, precise measurements; conditional constructions
			• connective words/phrases showing causal relationships/expressions; subordinate clauses
			• causative verbs, modals; adverbs, subordinate conjunctive, participle phrases
			• structure of concepts/principles
			• Defining: definitions/defining features, or evidence; restrictions or conditions
			• Recommending: evaluating, explaining, analysis instances, examples, applications with analysis
			• measure or test
			• patterns of facts/opinions; different verb forms
			• compound - complex sentences

SUGGESTED VISUALS / GRAPHICS	SUGGESTED TASKS AND SKILLS TO BE PRACTISED	SUGGESTED LEARNING STRATEGIES (Cognitive and Meta - Cognitive Strategies)
It is suggested that the following visuals or objects should be used: Rating charts Relational Diagrams Other Diagrams Statistical accounts Brochures Pictures Manuals Decision trees Semantic trees / maps Tables Different types of Charts Instruments Machinery Tools Sketches Plans Concept maps Time lines	*Suggestions for tasks and skills which provide for:* • Scanning text for specific information • looking for characteristics • note making in tabular form • making predictions • indicating contrast • distinguishing fact from opinion making references • expressing recommendation • paragraph writing • expressing certainty; organising a text • ordering information, sentence and paragraph combining • expressing causal relationships • writing notes from linear/non-linear texts • identifying significant details from tables, charts and graphs and formulating paragraphs • reading for general/specific information to describe a process, write a simple proposal • text completion • note making under headings and sub-headings • matching action with results, cause with effect etc. • describe an experiment or project in progress • taxonomy building • breaking down text - structure • building of a text through short paragraph writing using different types of rhetorics • interpreting, analysing and synthesising content into different forms • judging, evaluating, critiquing • recognising problems/generating structures • comparing/contrasting; explaining, deciding on goals, values, policy • interpreting data into different written forms • forming personal opinions • forming outlines, frameworks of content; summary writing • questions involving textually explicit, implicit and scriptally implicit information • note taking and note making from linear and non-linear texts • report writing • word formation and vocabulary building	Practising naturalistically (using language for actual communication, interacting with language) Reasoning deductively (through logical deduction of meaning, information ...) Analysing expressions (breaking down new words, phrases, sentences or paragraphs into component parts) Analysing contrastively (analysing language elements according to similarities, differences between L1 and L2) Using (i) a circumlocution or (ii) synonym (uses long winded roundabout manner to describe or explain a single concept) Adjusting or approximating the message (alteration through omission of items of information, make ideas simpler or less precise, rephrase) Organising (facts, patterns, ideas) Semantic mapping Elaborating (new information through association with familiar concepts). Overviewing and linking with known materials (e.g. overviewing key concepts, principles, rules etc.) Organising information (e.g. in note form, table form etc.) Planning for task completion

SPECIFICATIONS FOR LEARNERS' LEVELS OF ABILITY	SUGGESTED TYPES OF TEXT (Range and Complexity)	GENRE Suggested Text Patterns/Discourse	KNOWLEDGE STRUCTURE Suggested Thinking Skills and Language Skills

READING: Learners can read and understand most texts, which are not too highly specialised both in familiar and unfamiliar situations. Highly complex technical concepts and expressions may pose a problem. Encounters problems with technical and non-technical vocabulary occasionally. Able to extract essential information, follow significant points and can perceive relationships between and within sentences. Can make logical inferences. Able to think both inductively and deductively. Has a few problems with non-linear texts occasionally. Needs support with text understanding from time to time.
 	
WRITING: Able to write short written texts of about 600-800 words. Still lacks overall fluency. Progression of ideas not always clear. Fair control of organisation. Fair use of vocabulary and cohesive devices although could increase range of vocabulary. Sentence structure still limited. Able to formulate ideas from a given outline and from a variety of topics. Can write straight forward suggestions, recommendations and provide/make explanations and present simple arguments. Needs some support in understanding the structures of some discourse types.
	• Use academic, scientific and technical texts or journals from various sources. Specialised texts should be encouraged.
	• **OPTIONAL** -Texts which are too highly specialised may need some adaptation. Highly complex technical concepts and structures may have to be modified or examples and explanations need to be built into the tasks).
	• **OPTIONAL SUGGESTION** -Text might be between 500 - 1200 words or more. Text might be about 14 paragraphs long but perhaps no longer.
	• Text content should include problem-solution, cause-effect, comparison and contrast focus. Introduce text with chronological-ascending and descending order, proposal, recommendation, feasibility reports, progress reports, laboratory reports.
	Report writing projects
	• Writing of outlines, framework
	• Writing reports based on the above text patterns. Focus more on the following:
	  - proposal - argument
	  - hypothesis-theory-
	    recommendation/evaluation
	  - description-comparison-contrast-
	    recommendation
	  - concept-principle-evaluation
		• Process procedure - instructions + (description)
		
		• Arguments
		
		• Hypothesis - theory
		
		• Recommendation
		
		• Concept - principle
		
		• Cause + effect + solution
		
		• Comparison + contrast + evaluation
		
		• Recommendation + explanation
		
		• Reintroduce
		  - classifications + definitions
		
		• Combinations of above
		
		• Multiframed patterns
		
		• Reintroduce earlier structures from Bands 1-4.
			• Describing : The description of steps /stages/ progress; sequence /chronological order expressions, markers; events in progression; properties; structure expressions, patterns
			• analysis by time, importance, space, temporal
			• Processing: process - time relating - spatial arrangements
			• imperative verbs
			• verb forms - infinitives/
			• giving direction for process
			• logic and reason expressions, patterns
			• character; credentials (of writer); emotion
			• Making choices: arguments of facts; policy
			• Comparing: possibilities/alternatives
			• facts and opinions
			• sub-argument of existence; definitions; quality (argument of facts)
			• argument of policy
			• - sub-arguments of expediency, advantage or use
			• -sub-arguments of worth or goodness
			• statement of criteria
			• test of theory, experiments or models
			• statement of conclusions/interpretation
			• hypothesis, questions, problems
			• evidence, arguments, results of data
			• formal/informal expressions (I, let me, it is, we, you, how about, lets, why don't why not, I think)
			• use of modals
			• qualifying and supporting opinions
			• compound-complex sentences
			• Implicit and explicit chronology

SUGGESTED VISUALS /GRAPHICS	SUGGESTED TASKS AND SKILLS TO BE PRACTISED	SUGGESTED LEARNING STRATEGIES (Cognitive and Meta - Cognitive Strategies)
It is suggested that the following visuals could be used: Event lines; Time lines Plans; Sketches Pictures; Drawings Diagrams Relational diagrams Decision trees Flow charts Advertisement cards Graphs Tables Pie charts Machinery/instruments Models Do-it-yourself kits Cycles Manuals Brochures Statistical Data	*Suggestions for tasks and skills which provide for:* • Text completion - using functions words or content words or structures (grammatical structures) • words in context - vocabulary building • drawing conclusion • text organisation, matching, reordering, sequencing, linking/connecting ideas • learning to express intention and purpose • identifying patterns of arguments - logic - reason, taxonomy building • identifying correct paragraph heading • identifying hypothesis - theory - statements • grouping similar words together • differentiating facts from opinions • assessing advantages and disadvantages • transferring information from a variety of means - diagrams, charts, maps, tables/written text • questions involving textually explicit, implicit and scriptally implicit information • matching topic sentences; main ideas with supporting details • writing activities using any of the writing patterns taught through reading texts between 1-5 paragraphs long or more • writing/making conclusions • formulating simple hypothesis • explaining and predicting • ranking, appreciating, judging/criticising • applying or developing generalisations • justifying preferences and personal opinions • generating solutions • identifying alternative solutions • developing outlines, frameworks • developing texts from notes, graphics • summary writing, report writing • short and long report writing • vocabulary building • word formation	Coining words (making up new words to communicate a concept) Transferring (directly applying previous knowledge to facilitate new knowledge) Taking notes (to build up a framework/outline) Summarising (condensing information) Adjusting or approximating the message (alteration through omission of items of information, make ideas simple or less precise, rephrase) Practising naturalistically (using language for actual communication, interacting with language) analysing contrastively (analysing differences in language elements, patterns, structure not necessarily between L1 and L2) Grouping (into meaningful groups, clusters, labelling) Associating (new information with familiar concepts and previous patterns) Elaborating (new information through association with previous knowledge) Analysing (structures, patterns, styles and expressions) Reflecting and planning (e.g. by reviewing previous information and planning the next step in task completion and understanding) Monitoring and evaluating progress Recycle strategies used in previous levels

SPECIFICATIONS FOR LEARNERS' LEVELS OF ABILITY	SUGGESTED TYPES OF TEXT (Range and Complexity)	GENRE Suggested Text Patterns/Discourse	KNOWLEDGE STRUCTURES Suggested Thinking Skills and Language Skills

READING:
 	
Learners can read comprehend, analyse, synthesise, interpret and extract information which are detailed from a wide range of text. Better able to comprehend abstract information at this level. Able to differentiate relationships between and within sentences with only some difficulty. Implied or inferred statements do pose a problem from time to time with highly complex texts. Occasionally has a few problems with complex technical and non- technical vocabulary.
 	
WRITING:
 	
Able to relate readings to writing with little difficulty. Can do so if explicitly stated. Able to write on a number of topics with minimal guidance. Can write with a degree of fluency. Though more specific details need to be further developed. Organisational skills are quite good. Use of vocabulary, sentence structure and cohesive devices though satisfactory are still restricted. May still need support in understanding the structures of some discourse types.
	• Texts which are specialised (e.g. High intermediate, academic texts in the sciences/engineering. Journal articles, manuals, technical magazines, lecture notes, articles from proceedings
	• Textual features of very complex nature may need some explanation
	• Use of authentic materials encouraged
	• **OPTIONAL SUGGESTION - 800 - 1500 word level or more is suggested. That is, more than 14 paragraphs long**
	• A variety of text types which include different functions or discourse and which are multiframed as covered in levels 1-5
	
	Writing:
	• Writing compound/complex sentences to form several paragraphs in report form
	• Wide variety of writing techniques and organisation patterns should be utilised
	• Writing different types of reports - proposal, feasibility, recommendation, experimental (laboratory reports) for authentic situation as far as possible. Use different combinations as covered in levels 1-5.
		• Reporting
		
		• Mechanism description
		
		• Arguments / Judgements
		    •
		• Evaluation + recommendation
		
		• Description + classification + evaluation + recommendation
		
		• Proposal + recommendation
		
		• Comparison - contrast + evaluation + recommendation
		
		• Cause - effect + proposal + solution
		
		• Concept -principle + exemplification- evaluation
		
		• Multiframed, i.e. combination of all other types from Bands 1-5 should be reintroduced.
			• Evaluating, proposing, Comparing, classifying,
			• Recommending, arguing, exemplifying
			• Reporting through
			  - completed action
			  - uncompleted action
			• simple past tense
			• passive /active forms
			• present and past perfect tense
			• Reporting: reporting action completed before a given time
			• reporting a continuous action
			• present perfect continuous and past perfect continuous tenses
			• Describing: description of state, properties, processes
			• Naming and Labelling: names of parts
			• properties and locations of parts
			• action and function of parts
			• phenomenon acted upon and its properties
			• modal verbs, adjectives, noun phrases
			• sequence markers
			• condition and contrast forms
			• expressions of causal relationships
			• expressions of contrast and similarity
			• cohesive devices, markers
			• prefixes, suffixes, infixes
			• cognates
			• complex sentences
			• If clauses, conditionals

SUGGESTED VISUALS / GRAPHICS	SUGGESTED TASKS AND SKILLS TO BE PRACTISED	SUGGESTED LEARNING STRATEGIES (Cognitive and Meta-Cognitive Strategies)
It is suggested that the following visuals be used: Grids, tables Rating charts Graphs Decision trees Databases Drawings Concept and semantic maps Plans Cycles Flow charts Diagrams, relational diagrams Pictures Machinery Instruments Manuals Brochures Time lines, Event lines, sequence lines Do-it-yourself kits	*Suggestions for task and skills which provide for:* • Scanning for specific information • interpreting charts, graphs, tables, diagrams • describing and explaining the stages of an experiment, a process or procedure • putting action in sequence diagrammatically • reading comprehension activities-comprehension and application • questions involving textually explicit, implicit and scriptally implicit information • connecting ideas to form a summary • summarising the main/minor points of different types of reports and texts • assessing data for writing • building a text • reporting events • writing recommendations, cause-effect/other rhetorical functions • framing/outlining proposals, recommendations • appreciating, judging and criticising • interpreting data and drawing conclusions • formulating, testing and establishing hypothesis • understanding, analysing and deciding on goals, values, policies and evaluation criteria • explaining and predicting • generating solutions • vocabulary building - use of prefixes, suffixes; word formation; word analysis • developing detailed outlines, frameworks from simple ones • developing information from main ideas; supporting ideas with exemplification • sentence and paragraph combining • developing outlines from graphics, statistical data etc.	Reasoning deductively (through logical deduction of meaning, information ...) Analysing contrastively (analysing language elements according to similarities, differences...) Adjusting or approximating the message (alteration through omission of items of information, make ideas simpler or less precise, rephrase) Semantic and concept mapping of information or ideas Summarising (condensing detailed/complex information) Using linguistic clues (using previous knowledge, L1 knowledge, visuals, contextual information) Transferring (directly applying previous knowledge to facilitate new knowledge) Getting ideas quickly (skim/scan) Practising naturalistically (using language for actual communication, interacting with language) Elaborating (forming and recombining old and new information to generate more information or expand examples or ideas) Reflecting, planning, synthesising and evaluating information received Using directed and selective attention strategies to focus on texts and tasks

SPECIFICATIONS FOR LEARNERS' LEVELS OF ABILITY	SUGGESTED TYPES OF TEXT (Range and Complexity)	GENRE Suggested Text Patterns/Discourse	KNOWLEDGE STRUCTURES Suggested Thinking Skills and Language Skills
READING: Learners can read and comprehend a wide variety of technical and non- technical texts. Able to analyse, synthesise, interpret, extract and process information from a variety of complex and uncomplex texts for a variety of purposes. Able to adjust reading strategies to the purpose and type of text. Needs minimal support. Has a few problems with highly complex technical vocabulary. **WRITING:** Able to relate reading to writing. Can write with good, clear progression. Good control of sentence structure. Cohesive devices and vocabulary are appropriately used. Can do a great deal of independent work. Can write and produce a variety of written texts. May have problems with some grammatical structures which do not impede understanding. May still need to use more sophisticated vocabulary (complex vocabulary). Vocabulary still to some extent restricted to simple ones. May need some support in understanding the structures of some discourse type.	• Use complex and uncomplex texts from a wide range of scientific and technical areas. Texts can be very specialised. • Text should be a mixture of general and content related text • **OPTIONAL SUGGESTION-** Text size can range from 1500 words and above. No restrictions on number of paragraphs • Text content can be that of a narrative to argumentative with different discourse features and functions used or found. Texts which are multiframed should be used as much as possible **Writing:** • Different rhetorical techniques could be used to develop more complex type of writing • Writing activities to be directly linked to reading text • Writing of different types of reports -proposals -progress -experimental -recommendation -instruction -descriptive -feasibility - writing of detailed outlines and frameworks	• Situation -> problem- solution - evaluation • arguments - argument + exemplification • concept - principle - concept-principle + exemplification • description + classification + cause + effect + evaluation • description + comparison - contrast + evaluation + recommendation • multiframed - i.e. combinations of a number of discourse types • reintroduce other patterns used in Bands 1-6 as well	• Describing : Description of; - spatial relationships - logical/chronological sequence - time order • cyclical process • relative clauses, restrictive clauses • general -specific structure • cause - effect expressions, patterns • comparing • Contrasting • logic and reason patterns • character; credentials (of writer); emotion • Arguing: argument of facts of policy • possibilities/alternatives patterns • facts and opinions; choices patterns, expressions • argument of facts - sub-argument of existence; definition; quantity • argument of policy - sub-argument of expediency, advantage or use; sub-argument of worth or goodness • statement of criteria • structure of concepts/principles • Defining: definitions and defining features • Describing • restriction and conditions • examples, applications with analysis • comparing, contrasting, causal relationship • organisational techniques, patterns • prefixes, suffixes, infixes • cognates; adjective, noun phrases • Classifying; Evaluating; Recommending; sequencing; exemplifying; hypothesising etc.

SUGGESTED VISUALS / GRAPHICS	SUGGESTED TASKS AND SKILLS TO BE PRACTISED	SUGGESTED LEARNING STRATEGIES (Cognitive and Meta - Cognitive Strategies)
It is suggested that the following visuals be used:	Tasks and skills which provide for:	Transferring (directly applying previous knowledge to facilitate new knowledge)
Manuals	• Scanning text for specific information	
	• word roots	Getting ideas quickly; Semantic mapping
Videos	• working out the meanings of words from context	
	• using information from charts, diagrams, tables to write an	Looping (going back and forth to recall,
Do-it-yourself kits	essay/report etc.	review/reinforce old and new knowledge)
	1 describing/explaining	
Drawings	2 proposing and recommending	Summarising (condensing detailed and complex
	3 reporting and explaining events	information)
Advertisements	4 comparing and contrasting information	
	5 stating cause and effect or	Analysing contrastively (analysing language elements
Flow charts	action and results	according to similarities, differences, shapes, sizes ...)
	• linking ideas, words and phrases	
Statistical charts/accounts/tables/data	• reading comprehension activities	Reasoning deductively (through logical deduction of
	• questions involving textually explicit, implicit and scriptally	meaning, information)
Models	implicit information	
	• writing meaningful endings	Adjusting or approximating the message (alteration,
Cycles	• assessing attitude of writer	through omission of certain items of information, make
	• giving own opinion	ideas simpler, infer)
Charts (different types)	• evaluating advantages and disadvantages	
	• summarising from linear, non-linear information	Recombining (construction of meaningful sentences
Sketches; Plans; Pictures	• writing/organising reports of different types based on reading text	through use of new and different elements).
	• formulating, testing and establishing hypothesis	
Tables; Grids	• using operational decision techniques	Reflecting, planning and monitoring understanding of
	• understanding, applying and developing concepts with illustrations,	information
A Variety of Diagrams	graphics	
	• recognising problems, generating solutions	Elaborating through deduction; Setting goals and
Machinery; Instruments	• identifying alternative solutions and solving problems	objectives
	• word formation	
Time lines; Event lines	• word analysis	Analysing and synthesising old and new information
	• vocabulary building	(by making association and linking information)
Decision trees; Semantic and Concept Maps; Webs	• writing detailed outlines and frameworks	
	• generating writing from different visuals and graphics	Recycle previous strategies from other levels

CHAPTER FIVE

Application and Working Principles of the Framework

5.0 Introduction

This chapter presents and discusses the application and working principles of the framework. It first summarises the interrelationship of the framework strands and explains how the framework works. Next, it introduces and discusses the working principles of the framework. It highlights the application of Bloom's taxonomy of learning and Gagne's hierarchical structure of skills to the learners' profiles and the development of instructional objectives for task design. It then details suggestions on how to develop materials based on the framework strands. Finally it concludes by recapitulating teacher training in the light of all the previous reviews of theory and principles relating to the framework strands.

5.1 The Framework Strands

As discussed in chapter four the framework strands evolved over three stages in an iterative and interactive manner. The seven strands in the framework were not categories just added onto each other without any link or relationship. Each category has a value and is linked to the others in a systematic way according to the Saussurean notion. The horizontal dimensions of the specifications have a valid correspondence in that they are linked to one another. This is, however, not meant to be a one to one correspondence but rather a more general association.

To illustrate, let us look at draft framework one. Framework one consisted of the seven level band scale developed on the basis of the needs survey and literature search, and three strands of types of text, task types and learning strategies. These came together as follows.

5.1.1 Draft Framework 1
Framework 1 consisted of four strands as described in figure 5.1. Specifications 1, 2, 3 and 4 are linked to one another in a top down, bottom up manner Each one (A, B, C and D) depends on the other.
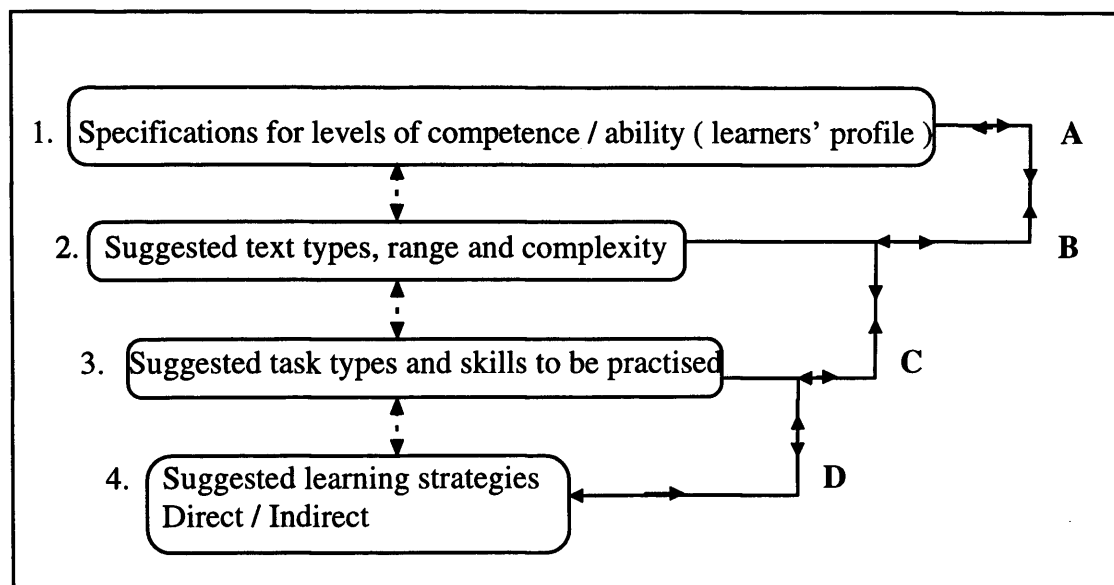
Figure 5.1 Outline of the relationship between strands in Draft framework 1

The framework evolved further with the feedback from the teachers during pre-pilot study one. They concurred that two more strands should be added. These were *'Genre'* and *'Visuals'*. A third strand, *'knowledge structure'* was also considered necessary because it suggests clear links between language and subject study. This led to the formulation of Draft Framework 2.

5.1.2 Draft Framework 2

Draft Framework 2 therefore consisted of seven strands (see figure 5.2). Three new strands were added on to the original ones; *genre, knowledge structure* and *visual aids / graphics*. The addition of the three strands is as follows:

Each of the categories are linked to one another. Adding categories 3, 4, and 5 is not simply increasing the total by three. The concept of the whole system is that it is a system of relations between each other. Strands are all related and each to a degree depends on the others. Each strand is interwoven and related to all others in the Saussurean notion of 'values' (Culler, 1976; Holdercroft, 1991). This concept of relations is a Saussurean system. According to the Saussurean school of thought (Holdercroft, 1991: 107-133) when one adds an element to a system, it changes the relationship of all the others including the new ones. It is therefore not just a question of adding but developing systematic relationships between each and all the strands.

The development of Draft Framework 2, with minor modifications made at a later stage after two further pilot studies (Framework 3) and later Framework 4 based on another

pilot study , was developed and evolved with the teachers reflecting on it and providing necessary feedback.

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┌─────────────────────────────────────────────────────────────────┐
│                                                                   │
│      ┌──────────────────────────────────────────────────┐        │
│      │   1. Specifications for levels of competence / ability │    │
│      │            ( Learners'  Profile )                 │        │
│      └──────────────────────────────────────────────────┘        │
│                                                                   │
│      ┌──────────────────────────────────────────────────┐        │
│      │   2.  Suggested types of texts, range and complexity │     │
│      └──────────────────────────────────────────────────┘        │
│                                                                   │
│      ┌──────────────────────────────────────────────────┐        │
│      │   3.  Genre,  suggested text discourse / rhetoric │        │
│      └──────────────────────────────────────────────────┘        │
│                                                                   │
│      ┌──────────────────────────────────────────────────┐        │
│      │          4. Knowledge structure                   │        │
│      └──────────────────────────────────────────────────┘        │
│                                                                   │
│      ┌──────────────────────────────────────────────────┐        │
│      │        5.  Suggested visual aids / graphics       │        │
│      └──────────────────────────────────────────────────┘        │
│                                                                   │
│      ┌──────────────────────────────────────────────────┐        │
│      │   6.  Suggested task types and skills to be practised │     │
│      └──────────────────────────────────────────────────┘        │
│                                                                   │
│      ┌──────────────────────────────────────────────────┐        │
│      │        7.  Suggested learning strategies          │        │
│      └──────────────────────────────────────────────────┘        │
│                                                                   │
└─────────────────────────────────────────────────────────────────┘
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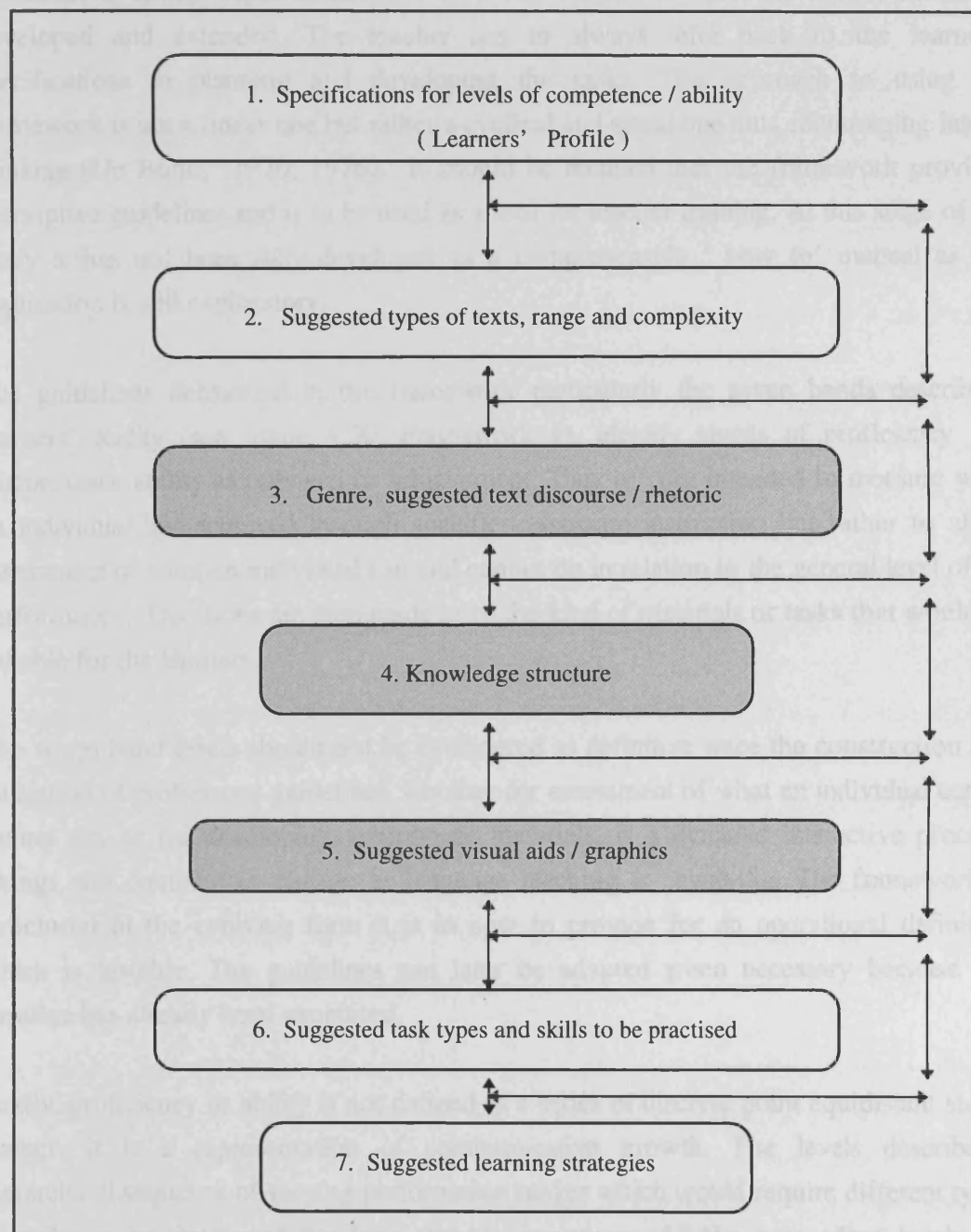
Figure 5.2 Outline of the relationship between strands after further additions in Framework 2

5.2 How the Framework Works

The framework has a structure and is evolved from a number of theoretical perspectives. Thus it is important to discuss how the framework works in the light of these theories.

5.2.1 Seven Band Level

The specifications for learners' ability (profile) is the centre of the whole system. It is the learners' ability which dictates the level and manner of how the task(s) should be developed and extended. The teacher has to always refer back to the learners' specifications in planning and developing the tasks. The approach to using the framework is not a linear one but rather a cyclical and spiral one thus encouraging lateral thinking (De Bono, 1970, 1976). It should be recalled that the framework provides descriptive guidelines and is to be used as a tool for teacher training. At this stage of the study it has not been fully developed as a comprehensive ' how to' manual as the application is still exploratory.

The guidelines delineated in the framework particularly the seven bands describing learners' ability (see figure 4.20, Framework 4), identify stages of proficiency or performance ability as opposed to achievement. They are not intended to measure what an individual has achieved through specific classroom instruction but rather to allow assessment of what an individual can and cannot do in relation to the general level of his performance. Decisions are then made as to the kind of materials or tasks that would be suitable for the learners.

The seven band levels should not be considered as definitive since the construction and utilisation of proficiency guidelines, whether for assessment of what an individual can or cannot do, or for developing appropriate materials, is a dynamic interactive process. Things will continue to change as language teaching is evolving. The framework is structured in the evolving form it is in now to provide for an operational definition which is testable. The guidelines can later be adapted when necessary because the baseline has already been structured.

Firstly, proficiency or ability is not defined as a series of discrete point equidistant steps. Rather, it is a representation of communicative growth. The levels describe a hierarchical sequence of varying performance ranges which would require different types of tasks to be developed for long term improvement. All the succeeding levels are characterised by overlap and refinement. Further, it allows for the visualisation of learner progress not in terms of framed stages but in terms of rhythms in which language use is 'there and evolving'.

The 'bands' which profile the learners' ability should not be viewed as a rigid framework. Instead they should be viewed as a means to broadly define types of learners to facilitate the development of appropriate materials. The band descriptors should not

be interpreted in a rigidly uniform manner. What is meant is that, for example, in the case of skill differences, the descriptors for listening, speaking, reading and writing would not necessarily be comparable.

The concept behind the descriptors is that they can be adjusted for 'normal' development where it is expected that comprehension is in advance of production. In the case of this framework, the learner may be classified as being on band 5 for reading but his writing ability may be at band 3 level. It is not always expected that a learner will be on the same band level for both skills. Rather, it is to be expected that there may be natural strength in one skill as opposed to another. Therefore, if a learner is on band 5 for reading he may deal with reading materials at that level or perhaps at band 6. But since his writing ability is that of band 3, he would best progress gradually from band 3 to that of the higher band levels. The band descriptors of the framework allow for such adjustments as the whole concept is to enable the learners to be able to move up and down the bands. As the saying goes 'a chain is as strong as its weakest link'. Thus in terms of students' learning, one can be very good at some aspects but not at others. As such any model has to identify the weakest link to improve the learners' weakest skill. This concept can be further illustrated by a two dimensional wheel cone model (see figure 5.3). This model is an overview of the way teachers can approach the selection of texts, tasks and materials to be designed. It also explains the way students can progress up and down the bands. The concept of this model thus allows for in-built assessment for monitoring and receiving feedback of students learning and of the teachers own ability to create materials according to varying levels of ability. The dotted line at the top of the cone denotes that there can be more levels. It also explains the overlapping nature of the framework's specifications.

The positive aspect of the framework is the 'banding system' itself. The seven level band description provides as narrowly as possible a profile of the assumed underlying ability of the learners. Beginning from level 1 to level 7 (see figure 4.20- Framework 4). Levels 1 and 2 are described as *"low proficiency"*; levels 3 and 4 are described as *"intermediate"* level; level 5 is described as *"high intermediate"* and levels 6 and 7 as *"advanced"* with level seven being closer to a *"native speaker"*.

Once the teachers have identified the learners' appropriate level, then the planning for the type of materials the learners would require can be carried out. This is where the other strands in the framework come into play. The other specifications are directly linked to the varying levels of the learners' ability. The learners are therefore the starting

A Two-dimensional model of the Working Principles of the Framework
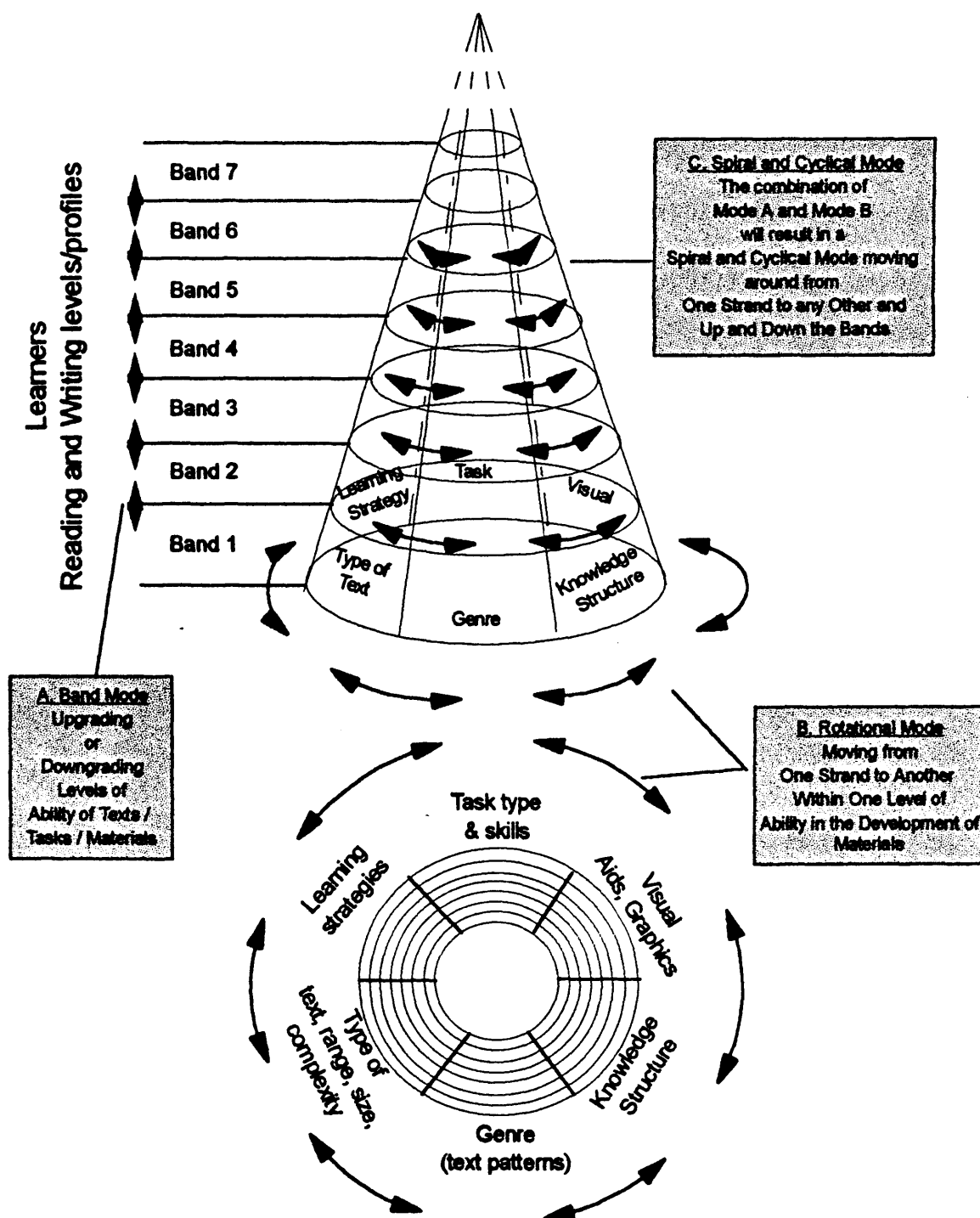
Figure 5.3 Two Dimensional Wheel Cone Model

245

point and the key focus in planning the materials to meet as closely as possible their specific needs. The planning stage can be explained as shown in figure 5.4. The diagram also exemplifies the manner in which the framework is used as a training and organising guideline in developing materials.

5.3 The Working Principles of the Framework

The development of the framework is influenced by research in English language teaching and learning both in the ESL and EFL context. It also draws on research in the field of education, namely in the area of instruction, cognition, thinking skills, learning and study strategies, Bloom's (1956) taxonomy of learning and Gagne's (1974, 1985) principles of instructional design as well as the social sciences.

The notion of developing some type of scaled progression for materials development evolved from:

(1) the area of testing i.e. the banding system or scaled performance profiles as dis - cussed in chapter 4.

(2) the application of: De Bono's (1970, 1976, 1994), Mohan's (1986), Fisher' s (1990) notions of thinking skills, Bloom's (1956) taxonomy of learning and Gagne's (1974, 1985) principles of instructional design and Davies' (1971) management of learning.

Adopting the concept of the band scales for the development of the framework meant that the materials could in some way be developed according to complexity levels for varying levels of language ability to develop a variety of skills. The learners' profile could be the starting point in sequencing, planning and grading texts, skills, tasks and materials according to varying levels of difficulty based on the learners' level of proficiency.

Nunan (1989:97, 1993) calls attention to the fact that the grading of content for a language programme is 'an extremely complicated and difficult business'. Richards, Platt and Weber (1986:125) explain that gradation may be based on the 'complexity of an item, its frequency in written and spoken English, or its importance for the learner'.

246
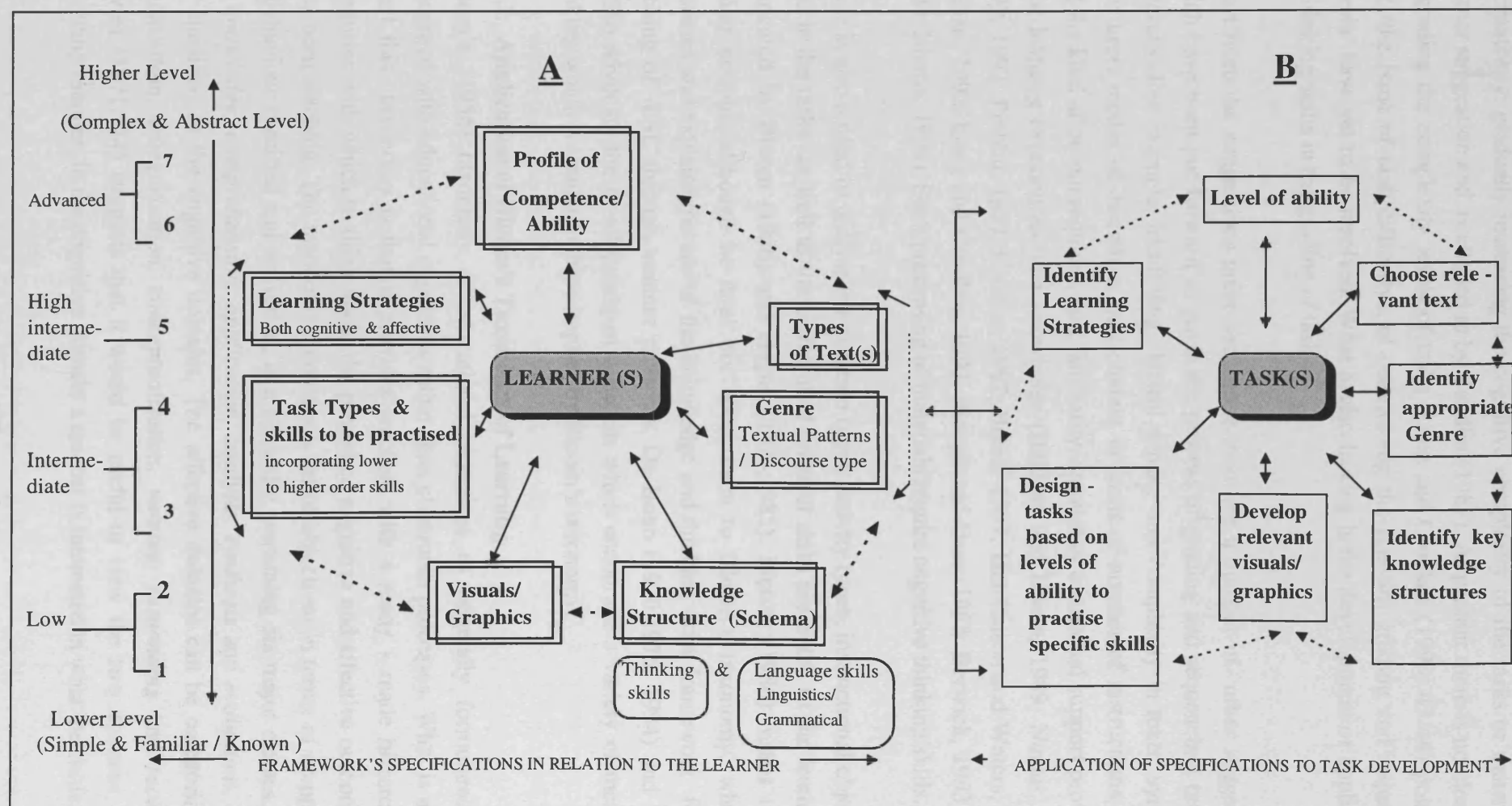
Figure 5.4   A Synthesised Model of the Interwoven and Related Aspects of the Working Principles of the Framework

Alternatively, gradually increasing the cognitive complexity of the tasks or materials is another suggestion and is alluded to by Candlin (1987). At present there is no clear way of grading the complexity levels of tasks. Long and Crookes (1993: 43-44) point out that 'the issue of task difficulty....of determining the relevant grading and sequencing criteria' have yet to be resolved. What is also lacking is the development or application of thinking skills in the grading of tasks.

Apart from the suggestions presented above there are a number of other suggestions which have been put forward to guide the process of grading and sequencing, tasks or materials. For example, identifying lexical density and complexity in texts, syntactic structures, modes of discourse, task content in terms of number of instructions, steps and the kind of output required, task familiarity, amount of contextual support provided, prior learning experiences, and knowledge (Halliday and Hasan, 1989; Nunan, 1988, 1990, 1993; Prabhu, 1987; Candlin, 1987; Breen, 1987; Hutchinson and Waters, 1987; Skehan, 1992; Long and Crookes, 1993; Plough and Gass, 1993; Berwick, 1993, Kay, 1994; Bhatia, 1994). Such processing of materials require cognitive thinking skills.

There is also a need to analyse the question types, activity types, instructional objectives used in the tasks as well as the hierarchical order of skills presented to the learners as advocated by Bloom (1956) and Gagne (1974,1985). Mohan (1986) makes use of similar notions, although he does not relate them to Bloom's taxonomy, when he discusses and explains the use of the knowledge and thinking skills framework for the teaching of ESL through content materials. De Bono (1970,1976, 1994) and Fisher (1990) advocate the development of materials which encourage a variety of means of thinking which is similar to those implied by Bloom's taxonomy.

5.3.1 Application of Bloom's Taxonomy of Learning

Bloom's (1956) taxonomy of educational objectives as originally formulated was concerned with educational objectives rather than classroom processes. What is unique about this taxonomy is that it provides teachers with a ready - made hierarchy of categories with which to think about the presumed cognitive and affective outcomes of classroom teaching. The taxonomy provides a list of objectives in terms of complexity of behaviour specified and arrived at, in a hierarchy containing six major classes. They are *knowledge, comprehension, application, analysis, synthesis* and *evaluation*. These are classified as the cognitive domains. The affective domains can be categorised as *organisation, categorisation, conceptualisation, valuing, responding* and *receiving*. Davies (1971: 74) suggests that it would be useful to view the two domains in the following manner. In the cognitive domain a teacher is interested in what the student will

do, whereas in the affective domain the teacher is concerned with what the learner does to it or with it. Both the cognitive and affective taxonomies are internally related and interrelated. For example, the objective in one class, say 'application,' makes use of and built on the behaviours implicit in the preceding objectives which are 'knowledge' and 'comprehension'. This relationship is clearly illustrated in the table 5.1.

Based on the taxonomy's objectives, Dunkin and Biddle (1974:234) suggest that a distinction can be made between intellectual skills and intellectual abilities. Intellectual skills require competence in applying a generalised technique or method in coping with a new situation or problem but they do not require specialised knowledge. Intellectual abilities, however, require both competence of technique and specialised knowledge. This relationship is clearly presented in the table 5.1. The taxonomy can thus guide teachers in developing materials based on the learners' capabilities and to further develop materials which could improve the learners' learning capabilities. This is because the taxonomy has been used as a basis for making distinctions between lower level and higher level thinking in the classroom (Dunkin and Biddle, 1974:234). This concept is also echoed by Gagne (1974:62). Further, the foundation of this dichotomy suggested by Dunkin and Biddle (1974:235) seems to be 'the hierarchical arrangements in the taxonomy of objectives according to their position on the dimension ranging from simple to complex or easy to difficult." This leads to the assumption that problems involving behaviours at the beginning of the list can be solved more readily than those requiring behaviours later on in the list.

The concept of Bloom's taxonomy of learning is applied to the present study in the learners' profile / band levels which provides the baseline for different levels of materials to be developed. The notion of higher and lower level or order skills as discussed by Gagne (1974,1985), Davies (1971), Schmeck (1988), Mohan (1986) and Fisher (1990) is adapted to meet the needs of the profiles and the framework. It is then applied to the development of materials, selection of texts, genre, visuals, skills, strategies which are then incorporated into appropriate types of tasks. The principles of the taxonomy are used only as a guide in understanding the notion of band scales, differentiating levels or types of skills and formulating objectives for selecting and developing varying levels of texts and tasks, which may develop cognitive thinking in progression.

Table 5.1 The relationship between the cognitive and affective domains (Krathwohl et al. 1964 cited in Davies, 1971)

COGNITIVE OBJECTIVES	AFFECTIVE OBJECTIVES
1. The lowest level in this taxonomy begins with the student's recall and recognition of KNOWLEDGE.	1. The lowest level begins with the student merely RECEIVING stimuli and passively attending to it It extends to his more actively attending to it,
2. It extends through his COMPREHENSION of knowledge,	2. then his RESPONDING to stimuli on request, willingly responding and taking satisfaction in responding,
3. to his skill in the APPLICATION of the knowledge that he comprehends.	3. to his VALUING the phenomena or activity so that he voluntarily responds and seeks out further ways to take part in what is going on.
4. The next levels progress from his ability to make an ANALYSIS of the situations involving the knowledge, to his skill in the SYNTHESIS of it into new organisations.	4. The next stage is his CONCEPTUALISATION of each of the values to which he is responding by identifying characteristics or forming judgements.
5. The highest level lies in his skill in EVALUATION, so that he can judge the value of the knowledge in realising specific objectives.	5. The highest level in the taxonomy is the student's ORGANISATION of the values into a system which is a CHARACTERISATION of himself.

250

Teachers can be trained to identify texts according to the learners' needs or assumed underlying ability. They would then be able to match the skills in terms of higher order or lower order skills to appropriate tasks based on the learners' profile. Pre-requisite skills or knowledge could be identified and built into the tasks. This would therefore mean that learners can begin at a less complex level and move up to a more complex level when they are ready. It is however not suggested that the tasks/materials developed should not contain both higher or lower order skills at any level in the band. This is because the bands or learners' profile provides broad guideline which allow for both higher and lower level order skills to be integrated into the materials/tasks at any particular level. What differs is the complexity of texts and the cognitive demands of texts and tasks. The learner's profile acts as an indicator of the degree of complexity of the text selected and the task that is used or designed. The teachers should use their discretion on when to integrate complex elements with non-complex ones and which elements they would like to begin with, first based on the type of learners they have.

Gagne (1974: 62, 1985) suggests that pre-requisite skills or knowledge of rules are needed first in order to enable the learning of more complex skills. Utilisation of such a strategy is also discussed by Van Patten, Chao and Reigeluth (1986). For example, if the teacher's target is to get the learners to acquire the necessary skills to engage in problem solving tasks the following procedure adapted from Gagne (1974: 62) may be applied through the integration of both lower order and higher order skills. The implication here is that such techniques develop critical thinking. In order to achieve such a goal the teachers and students need to be taught how to think differently. The implication is that to complete certain type of tasks one would need some prerequisite skills and knowledge in order to succeed and to move on to more complex skills as illustrated in figure 5.5.

5.3.2 Summary of the Application of Bloom's Taxonomy of Learning and Gagne's Hierarchical Structure of Skills

Bloom's (1956) taxonomy and Gagne's (1974,1985) theory of learning can thus be applied to the notion of the band levels and the materials training framework in the manner shown in figure 5.6.
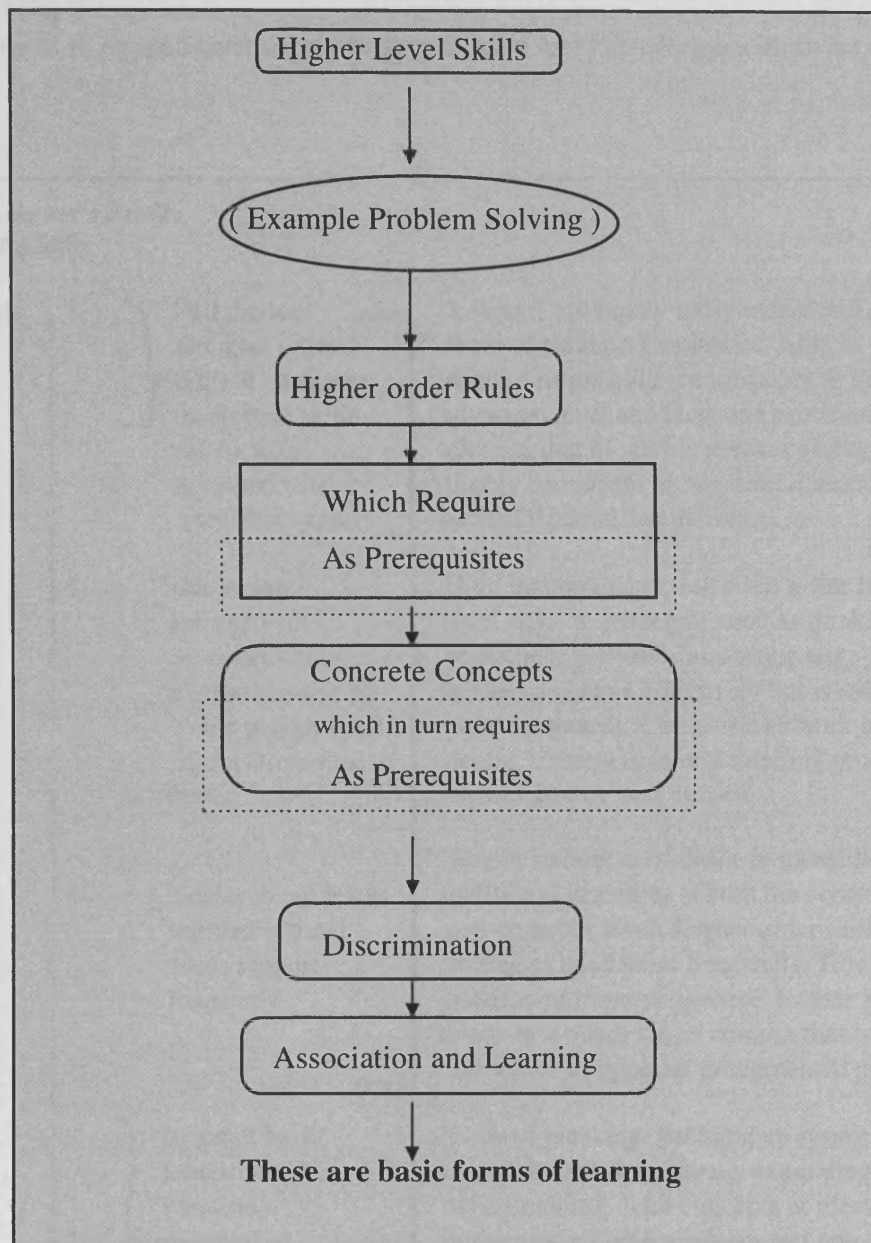
Figure 5.5 Suggested Hierarchical Structure of Skills / Rules to be Learnt
(Adapted from Gagne 1974; Van Patten et al, 1986)

Three different broad levels can be identified in the framework. They are the low, intermediate and high or advanced level. The low level (between bands 1-3) sets the foundation stage for the acquisition of essential skills and strategies. It also provides the necessary baseline knowledge to enable the learner to grasp the essentials and to provide

confidence and motivation. The intermediate level (between bands 4 - 5) encourages the learners to expand their newly acquired skills and knowledge with more confidence.

Learner's Profile of Ability

Bands		
7	Full mastery of higher order skills & strategies	Learners are highly independent and can utilise all form of skills and strategies. Able to work with abstract forms quite comfortably at the more advanced level and language proficiency ability is
6	intellectual skills can be fully exploited with very little support	close to that of native speaker ability. Should be highly competent at this level. Lateral, critical & parallel thinking are utilised.
5-----	Able to use and apply all necessary skills & strategies though would require some support from time to time	High intermediate level. Able to use higher level skills & strategies such as thinking, reasoning, analysing, evaluating and synthesising more effectively but is still not very competent. Can however work indepen - dently. Critical & lateral thinking processes are beginning to be well utilised
4-----	Begins to put things together but still needs support frequently	Begins to built confidence in using different skills and strategies at both the complex and non-complex level. Higher order skills and strategies used more frequently. However, needs a lot more of practise. Begins to perceive things in a much wider context that is, can now see whole as opposed to segmented parts.
3	laying of basic foundation. Requires a	Ground breaking. Building up strong founda-tion of knowledge. Slowly expanding, & experimenting with concepts & ideas.
2	great deal of. implicit & explicit support	Integration of both complex and non-complex skills and strategies but at a more simplified level. Introduction to critical, lateral & parallel thinking processes through less complex and
Bands 1		cognitively demanding texts and tasks.

At this level begins with the known and the familiar Both higher & lower order skills are integrated but at a lower cognitive knowledge. Helps to put it processing level. together.

Figure 5.6   Adaptation and Application of Bloom's taxonomy and Gagne's theory of learning.

The learners should be able to utilise and understand what is being taught quickly and should be able to work more independently only requiring guidance when confronted

with difficulties. The high or advanced level (bands 6 & 7) is the level at which both the cognitive and affective domains are well understood and utilised with ease. The learners' language competency approximates to that of native speakers. At this stage the learners are able to work on very complex texts and tasks and only need support occasionally.

A general rule that the teacher or trainee may wish to follow in planning the type of learning skills to begin with in enhancing language acquisition and cognitive ability may be as follows:

Low Level: *KNOWLEDGE* - remembering facts, terms and principles in the form that they are/were learnt. (e.g. knowledge of conventions, principles, specific facts, classification and categories, criteria, universals and abstraction in a field, theories and structure

COMPREHENSION - understanding material without necessarily relating it to other material. (e.g. translation, inter - pretation, extrapolation).

APPLICATION - using generalisation or other abstractions appropriately in concrete situations.

Mid- Level: *ANALYSIS* - breakdown materials into constituent parts (e.g. analysis of elements, relationships, organisational principles).

SYNTHESIS - combining elements into a new structure.

High- Level: *EVALUATION* - judging the value of material for a specified purpose, (e.g. judgement in terms of external criteria or internal evidence).

An additional level :*CREATING* - Using all of the above knowledge for exploratory and innovative purposes.

The above formula together with guidelines outlined in figure 5.6 drawn from Bloom's taxonomy and cited in Davies (1971:76) which forms part of the thinking skills, learning strategies, visuals, knowledge structure and tasks and skills to be practised provides tools for thinking about producing tasks which would not only allow for the acquisition of language but also the learning of content via the medium of English. By implication it guides in the development of tasks (Ur, 1996: 240). It reinforces further the use of

learning strategies as advocated by Chamot and O'Malley (1990) and Oxford (1990) in the development of reading and writing skills.

The framework specifications therefore provide guidance in developing materials and tasks that would encourage cognitive and intellectual ability. Teachers in training will also be able to acquire the skills and insights which their learners will need. Teachers can work in a systematic manner following the above method to ensure that essential aspects of thinking are developed and covered in their tasks and materials. As such the framework's cycle is as follows: It provides input from known to unknown, simple to complex, from the concrete to the abstract, from observation to reasoning and thus provides the concept of moving from a whole view to a more detailed view then back to a whole view. Such an approach is a means of developing critical thinking skills among teachers in developing EAP content based materials. For a review of contributions, advantages and criticism of Bloom's taxonomy of learning see Kissock and Iyortsuun (1982); Irwin (1991: 100); Fisher (1990: 68-71); Pearson and Raphael (1990: 214, 235); Anderson and Sosniak (1994).

5.4 Suggested Stages and Method of Developing Materials Based on the Framework

Basically the teacher would have to study the framework's specifications in detail. This would enable the teacher to have a clear picture of what he or she would have to do and how to go about it. The teachers' guide to the framework would provide the necessary guidance and information required (see appendix A5.1).

The *first stage* in planning the tasks and materials would be to identify as closely as possible the type of learners the materials are for. This is done by using the specifications for learner's ability (reading and writing skills) as a guide. The teacher can begin by studying the specifications to identify learners' current strengths and weaknesses based on their assumed underlying ability. Once these have been mapped out the teacher can then decide on objectives. What skills or strategies does he/she want the learner to learn or acquire first and why? Such questions will direct the teachers to consider their target objectives in developing teaching -learning materials. At this stage the objectives are still not refined but provide sufficient direction to begin working with materials.

The objectives will guide the teachers in the direction of text and task selection and in the development of the task(s). Types of objectives used will also determine whether the task to be designed is on the continuum of lower order to higher order skills. At the

same time classifying objectives could help in determining the complexity level of the tasks.

These instructional objectives may be general, behavioural or specific objectives. A survey of current texts and articles on materials selection, adaptation and design (Cuningsworth, 1984, 1995; McDonough and Shaw, 1993; Madsen and Bowen, 1978; Littlejohn and Windeatt, 1989; Hutchinson and Waters, 1987; Nunan, 1988, 1991; Ur, 1996) reveals that no mention is made about the use of instructional objectives as a guiding principle in text selection and tasks/materials development. However, Nunan (1991:74-76) provides a small number of objectives for the teaching of reading, drawing on Richards's (1989) study which indicated that teachers who teach reading skills found that instructional objectives were effective tools in guiding and organising lessons. Although designing instructional objectives seems to be a well known strategy in education, somehow this is not emphasised in ELT.

Mager (1962) cited in Davies (1971:77) states that:

> *an objective is an intent communicated by a statement describing a proposed*
> *change in the learner - a statement of what the learner is to be like when he*
> *has successfully completed a learning experience. It is a pattern of behaviour*
> *(performance) we want the learner to be able to demonstrate.*

The teacher's guide which accompanies the framework provides a list of suggestions for the teacher to think about in identifying and writing objectives for task and materials development (see appendix A5.1). Table 5.2 are examples of some of the types of cognitive and affective objectives drawn from Davies (1971:80) which a teacher could draw on to provide some sense of direction in tasks and materials development.

In using table 5.2 as a guiding instrument, the teachers can then make decisions about teaching-learning objectives based on their learners' needs, type of materials selected and type of tasks required to achieve the objective. The objectives can be further refined at a later stage when the reading and writing tasks and skills to be practised have been clearly identified and developed.

In the *second stage* the teachers can use the plans drawn up in stage one to identify texts that might be suitable for the type of learners as suggested in the specifications on types of texts. This would mean that at the same time the teachers will have to also study the specifications drawn up in other strands, on suggested genre, knowledge structures and visuals/graphics closely in order to be able to identify suitable texts. Once a text has been identified the teacher can now move on to the third stage.

The *third stage* suggests that the teachers go through the texts to identify the textual patterns present. Once a pattern is identified the teacher would have to study it to determine the kind of knowledge (thinking and language skills) required to understand such text(s). In the next stage the teacher would need to think about visuals.

In *stage four* the teacher would be directed to scrutinise the text for visual expansion. If visuals already exist then the teacher would need to decide whether they are appropriate, clear and constructive. Visuals should be developed with care and should facilitate comprehension, conceptualising both concrete and abstract information and extending students' ability to think, solve problems, show relationships and make associations. The visuals should be linked to understanding texts and grammatical functions which equip learners with effective learning strategies.

The next step, *stage five,* is an important one as the teacher would need to consider the type of skills and strategies he /she would need in order to enhance the learners' reading and writing ability in line with previous stages. This stage would see the formulation of tasks to practise the necessary understanding of text patterns and knowledge structures. The tasks would be formulated through the identification of skills to be acquired and learning strategies and visuals would be built into the task(s). Using the specifications for tasks and skills to be practised as a guide, the teacher can identify the type of tasks that would be appropriate and whether the task would be a single task or a task within a task with several related or unrelated steps. The teacher now has an idea of what the tasks or materials would consist of and what form it would take. At the same time decisions as to how the tasks will be worked on (individually, pairs or groups) can be made.

Stage six would see the teacher putting all these plans together by sketching a draft of the final product. At this stage the objectives are further refined. The teacher can thus relate the task(s) to the objectives. The teacher will have to consistently move back and forth from strand to strand in no particular order to make sure that the learners' needs are being met. Once the teacher has formulated the task(s) and or materials s/he would need to check the instructions, the number of steps involved in completing and understanding the tasks and the consistency of information. The teacher needs to determine the type of learning support the learners require in order to complete and understand the task at hand and consider at which level the learning support would be necessary.

Table 5.2 Action verbs as a guide to writing objectives (source: Davies, 1971:80)

COGNITIVE OBJECTIVES AND ASSOCIATED ACTION VERBS			AFFECTIVE OBJECTIVES AND ASSOCIATED ACTION VERBS		
CLASS	ASSOCIATED ACTION VERBS		CLASS	ASSOCIATED ACTION VERBS	
Knowledge	define state list name	write recall recognise label	underline select reproduce measure	Receiving	listen attend prefer	accept receive perceive	be aware favour select
Comprehension	identify justify select indicate	illustrate represent name formulate	explain judge contrast classify	Responding	state answer complete	select list write	record develop derive
Application	predict select assess explain	choose find show demonstrate	construct compute use perform	Value	accept recognise participate	increase develop attain	indicate decide influence
Analysis	analyse identify conclude differentiate	select separate compare contrast	justify resolve break down criticise	Organisation	organise judge relate	find determine correlate	associate form select
Synthesis	combine restate summarise précis	argue discuss organise derive	select relate generalise conclude	Characterisation	revise change face	accept judge develop	demonstrate identify decide
Evaluation	judge evaluate determine recognise	support defend attack criticise	identify avoid select choose				

Finally in *stage seven* the teacher can begin to finalise the materials and prepare them for use by the learners. Before they are printed the teacher needs to work through them to check for flaws or problem areas and ensure that there are answers to the task(s). The above process can be illustrated by a series of related diagrams (Figure 5.7, 5.8 and 5.9) which are self - explanatory.

Figure 5.7 presents an outline of the 'Final' Framework which the teacher has to study. Figure 5.8 illustrates further the processes that the teacher will use in developing the materials in relation for example to a particular band level as shown in figure 5.9 and this is further developed as visualised in figure 5.3 and figure 5.4. The approach used is clearly gleaned from the teachers' accounts in chapter seven.

The teachers study the framework's strands and specifications as thoroughly as possible and identify all the key elements required to develop tasks and materials for specific sets of learners. They need to be aware of the fact that all the higher and lower order skills need to practised as early as possible. The skills will have to be reinforced at all the levels from level 1 right up to the advanced level - level 7. The teacher has to constantly remember that the level of the text's and task' s complexity or demands differ from level to level. However, this does not mean that at the lower levels the teacher cannot mainly concentrate on a set of skills which are crucial in understanding texts in English or other higher order skills.

This framework is a training tool for designing content based EAP task - based materials. It is to be used alongside existing principles and criteria of materials design which the framework extends. It is designed to help teachers develop critical thinking skills which will in turn help them to understand what is involved in developing teaching - learning materials. Finally the process that the teachers follow could be summarised as shown in figure 5.10.

Not all teachers or trainee teachers will go through exactly the same stages. Differences are to be expected as individuals do not always think in the same way. As Sternberg (1995) and Skehan (1989) explain, by and large, individuals have different styles of thinking and learning. The principles of the framework acknowledge such differences and it is the aim of the framework to eventually equip teachers with guidelines for developing EAP materials for different types of learners. Nevertheless it is envisaged that the teachers and trainee teachers will experience some similarities while going through the process of using the framework.

Figure 5.7   Final Draft - Overall General Structure of the Framework

LEARNERS' PROFILE OF ABILITY (*Reading & Writing Skills*)

HERE YOU IDENTIFY THE LEARNERS' PROBLEMS & THE SKILLS
THAT YOU HAVE TO WORK ON IN YOUR MATERIALS AND TASKS

TYPES OF TEXTS

INVOLVES
SELECTION
OF APPRO-
PRIATE
TEXT(S)

GENRE (DISCOURSE PATTERNS)

INVOLVES
IDENTIFYING
THE TEXTUAL
PATTERNS /
RHETORICAL
PATTERNS IN
TEXTS

KNOWLEDGE STRUCTURES

THINK- & LANG-
ING   UAGE
SKILLS   SKILLS

INVOLVES IDENTI-
FYING THE KINDS
OF KNOWLEDGE
TO UNDERSTAND
TEXT STRUCTURE
& CONTENT. TO
INDUCE THINKING,
REASONING, EVA-
LUATION, ANALYSING,
COMPREHENDING,
SYNTHESISING ETC.

VISUALS / GRAPHICS

INVOLVES
IDENTIFYING
& DETERMI-
NING GOOD
VISUALS /
GRAPHICS
TO INDUCE
THINKING/
REASONING/
ANALYSIS /
EVALUA-
TION SKILLS
ETC .

LEARNING STRATEGIES

INVOLVES IDEN-
TIFYING THE
APPROPRIATE
STRATEGIES
TO INCLUDE
IN THE TASKS
AND TO HELP
IMPROVE
LEARNING
ABILITY

TYPES OF TASK(S)

SELECT / IDENTI-
FY SUITABLE
TASKS. THE
TASKS WILL
INCORPORATE
ALL THE OTHER
CRITERIA SUGGEST-
ED IN THE FRAME-
WORK

Figure 5.8 Application of the Framework's Strands and Specifications.

261

LEARNERS' PROFILE OF ASSUMED UNDERLYING ABILITY	
READING	**WRITING**
Have some problems comprehending the gist of the text. Able to follow some of the significant points present in the texts but has problems with general relationships. Can only identify a few supporting details if attention is drawn to them with explicit markers. Has problems identifying relationships between and within sentences. Encounters a lot of difficulties with textual features and lexical items. Has many problems with technical and non-technical vocabulary and transferring information from linear to non-linear texts. Only able to do simple analysis, reasoning, evaluation tasks. able to make only simple logical inferences and predictions.	Able to write with some relevance to task using simple and compound sentences though not always linked cohesively. Cohesive devises are often wrongly used. able to write simple information tailored to specific functions but relies heavily on explicit guidance. Unable to express ideas in a clear progression. Organisational skills appear to be limited. Restricted use of vocabulary. Needs a lot of support in understanding the structures of discourse types.

SUGGESTED TYPES OF TEXT(S)	GENRE (DISCOURSE PATTERNS)	SUGGESTED KNOWLEDGE STRUCTURE (THINKING & LANG. SKILLS)	GRAPHICS / VISUALS)	POSSIBLE LEARNING STRATEGIES	SUGGESTED TASK TYPES
Text which are science based or technical in nature (e.g. science & technical magazines, journals, reports, advertisements, brochures, simple manuals ,introductory engineering texts, academic texts) etc. used in basic courses *Text should be as authentic as possible *Problem-solution- Texts might be adapted where necessary	*Description of function, process, procedure, opera-tions, objects, properties etc. *Definitions *Generalization *Classification *Exemplification *Cause-effect *Comparison & Contrast *Evaluation Mutiframed-combi nation of the above	labelling, describing, classifying, sequencing, defining, evaluating, analysing listing, comparing, contrasting, defining, deciding, applying, judging, justifying, explaining etc.	Instruments Objects Pictures Plans Graphs Charts Grids Statistics Formulas Time lines Concept maps Semantic maps Tables Diagrams Models Webs etc.	*Grouping (into meaningful groups/clusters, labelling) *Associating(new informa-tion with new concepts etc.) *Elaborating(new informa-through association with familiar concepts) *Reasoning deductively (through logical and systematic inferences) *Transferring (mental ima-ges, information, ideas) *Highlighting(underlining, circling, capitalising) *Using key words *Summarising	Closed Task Open Task Shared Task Experience Task Independent Task Guided Task Gap filling Problem-solving Decision making etc.

Drawn from the framework's specifications and various sources as cited in the literature.

Figure 5.9   BAND 2   Example of a Slice of the Framework

```
┌─────────────────────────────────────────────────────────────────────┐
│                                                                       │
│  Stage 1              Stage 2                  Stage 3                 │
│ ┌──────────┐        ┌──────────┐            ┌──────────┐              │
│ │  INPUT   │ ←───→  │ PROCESS  │ ←───→      │  OUTPUT  │              │
│ └──────────┘        └──────────┘            └──────────┘              │
│                                                                       │
│  Planning stage for    Teachers go through     Teachers reflect on    │
│  teachers crucial.     a cognitive training    stage 1 & 2. They      │
│  Expectations are      process as they have     monitor & evaluate    │
│  clearly made at       to think in many         work produced by      │
│  this point drawing    different ways.          referring to the      │
│  on key elements       Cognitive,              framework. They        │
│  in the framework      Affective,              get feedback from      │
│                        Manipulative             the learners. Are     │
│                        Interactive              the materials a       │
│                        They are consis-         success or not.?      │
│                        tently  referring        Have their expectations│
│                        to the framework &      been realised? What are│
│                        internalising the process the strength & weaknesses?│
│                                                                       │
└─────────────────────────────────────────────────────────────────────┘
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Figure 5.10 Input - Output Process of Developing Teaching -Learning Materials

5.5 Framework

The whole framework , bands 1-7 presented here can be used individually - hence the overlapping specifications - or it can be used as a continuum to develop materials for varying levels within a mixed ability programme.   Teachers can synthesise the information and recreate mini frameworks of their own to meet their own needs in training or for classroom use.

Appendix A5.1   presents a simple guideline for use with the framework and some sample tasks developed based on the framework. These were used during the workshop sessions as discussed in chapter 6.

The working principles of the framework led to the structuring of the training workshops in the Main Study carried out at UPM on a large scale. This is discussed in Chapter 6. The summary of findings based on the pilot studies and the formulation of the working principles of the framework provided the context for reorienting teacher training in materials design in the context of EAP, particularly for Malaysia.

5.6 Teacher Training - A Reconsideration

The different aspects discussed in chapter 3, 4 and 5 strongly indicate that there is a need to take a different view about materials development in EAP within the context of EF(S)L. There seems to be a definite need to train teachers to consider many different theoretical and pedagogical aspects when designing and developing EAP materials using content area materials. The chief reason is because the teachers need to realise that they are not just merely propagating language learning and acquisition but also the learning and understanding of subject matter through the medium of English language.

The majority of EF(S)L teachers are trained for EGP purposes and few have specialist training in EAP/ESP, therefore to experience and understand the many aspects of materials design and development for tertiary education is crucial. There is a need to negotiate a shift from EF(S)L/ELT teacher to EAP/ESP practitioner. To teach effectively, the EAP teacher has to learn to function within the "discourse community" of a particular group of learners pursuing academic study in various disciplines. They need to understand at least some aspects of the subject matter their learners have to master. This means that there will also be a need to understand the discourse of the subject matter in order to be able to help the learners with understanding content vis-à-vis the learning of the language forms and discourse structures that are used to transmit the content. Therefore as Boswood and Marriott (1994:4) point out, there is a need to maximise "acculturation" into the community of the clients concerned . In this case the EAP instructors would need to acculturate to some extent into the EAP learners and their subject matter instructors' specific discipline. This means actually getting an insight into the real world of their learners and the kinds of texts and materials they use. Simply using a general text and teaching only language learning and study skills and hoping that they are transferable, is not adequate within the context of EAP.

5.7 Experiencing and Learning

According to Geddes et al. (1990:82), language learners are discovering that they must "learn how to learn". Therefore, language teachers too will have to be trained to help students to learn (Holec, 1981; Crookall, 1983; Wenden and Rubin, 1987; Oxford, 1990; Rubin and Thompson 1994). Allwright (1990) also shares the same view that teachers need to be trained to help students in this direction. Therefore he advocates the use of learning materials rather than teaching materials. How would teachers be able to do this if their own learning abilities or even proficiency/competence level is in dispute? The answer lies perhaps in training experiences and language awareness training.

Geddes et al. (1992) call for a training scheme which would allow teachers to learn how to learn and to experience what their learners experience. They maintain that:

> *It is unrealistic to hope that language teachers will help students sharpen their learning - to - learn strategies unless they themselves have had training in learning how to learn. .... And it is foolish to believe that language teachers will be able to convey to students the need for active involvement with authentic materials drawn from many disciplines and sources unless in their teacher training programme they have sampled a wide range of exciting, cross-disciplinary activities and materials (Geddes et al.1992: 85-86).*

The point raised here is important as the kind of experiences that teachers have had throughout their entire education may well shape and influence the way they think and prepare instructional materials. If teachers have not been trained to learn through experience and through processes of discovery, analogy, critical thinking , evaluating and synthesising, they will probably tend not to advocate such moves or innovation in their teaching. Ur (1992 : 61) suggests that there is a need to have programmes designed "to develop the professional theory of action of participants through the integration of both practical and theoretical input, experience, and reflection". Teachers need to be trained to integrate theory and practice through practical experience in order to be able to say what they know and what they lack. This would allow them to reflect on what steps or measures they would need to take to improve their ability to design and develop better materials. They need to learn to experiment with the integration of theory and practice. de' Escorcia (1985:234) explains that many teachers have:

> *no conscious awareness of study skills and strategies.......In EAP it is a crucial matter that the teacher himself should be at least a good, efficient reader, since he can hardly convince his students of the desirability of developing something he does not himself believe in and have fair to low - level proficiency*

This is a valid point for discussion because many teachers tend to copy from existing materials often without trying to go beyond what has been presented (Richards, 1992). For example, many teachers are content to follow examples from reading comprehension texts which merely focus on superficial questions or on the surface types of questions and activities. Such activities which are quite common in many texts are suitable perhaps in an EGP context but not in an EAP context where to develop critical reading and analytical skills is vital.

The argument is that therefore, in order to develop good materials a teacher needs to be more than just proficient in the language. Such proficiency is necessary but not sufficient. The teacher certainly has to be very competent and knowledgeable about the

language to be able to exploit the text completely. Edge (1988) firmly believes this and he says this is particularly true of NNS of English. He maintains that:

> *knowledge about language and language learning still has a central role to play in English language teacher training for speakers of other languages. What is needed is the development of a wealth of methodological procedures in which the resolution of learning and teaching problems can be shown to draw on the growing linguistic knowledge and skills of the trainees (1988:9)*

This implies that if teachers have a thorough knowledge about the language then they would be competent enough to undertake a variety of challenges in EF(S)L teaching. They should also be able to exploit that knowledge in the development of materials. Edge adds that TEFL trainees need to be able to analyse and understand how language works and to make judgements about acceptability in doubtful cases. This implies that the teachers would need to function as analysts of the language (ibid: 10). Still this does not mean that teachers have to teach learners everything about the language. The knowledge about language should be an enabling knowledge that provides the teacher with the tools to carry out the tasks of preparing materials, interprets syllabuses, content etc.(see Wright, 1991). This in a sense is a way of raising language awareness about language among both teachers and teacher trainees (Bolitho and Tomlinson, 1990; Ramani, 1990; Wright and Bolitho, 1993).

The above discussions fit in with EAP materials design, development and the present study. This is because the present study presents a number of aspects(beyond language competence) that a teacher should consider when designing EAP materials. These aspects cover research and theories of language teaching which can be considered important in training teachers to develop EAP materials. The teachers should not only be presented with just the why, which, how, where and when of materials design and development in theory, further, they should be given ample opportunities to practise, plan, and innovate materials based on some specific strategy. The strategy used for training the teachers should take them through several processes which would allow them to experience materials writing and also learn the way their own learners learn. This should enable them to understand that there is more to materials design and development than just constructing simple 'why' type questions for a reading lesson or an instruction to write about something. Teachers nevertheless need to be made aware of the need to be very competent in the language to be able to go beyond surface level materials development.

5.8 Conclusion

This chapter has outlined the working principles of the framework through the presentation of a number of theoretical issues. These were mainly based on research and theory in the field of education. The basis of a seven level band concept other than those presented in the field of testing in ELT was explained. The writing of instructional objectives for task design was also delineated and discussed from the perspective of education theories and applied to the context of ELT. The development of such working principles enabled the researcher to formulate a clearer workshop procedure for the Main Study as discussed in chapter 6.

CHAPTER SIX

Research Design and Methodology of Main Study-Phase 3: Evaluation of the Framework

6.0 Introduction

This chapter presents the rationale for the design and methodology of the main study carried out between July 1994 and October 1994 at UPM in Malaysia. The background and description of the participants, the various instruments, materials and workshop procedures used to gather data for this study are discussed in detail. Data analysis procedures and techniques used are also described and discussed.

This study is an exploratory study. It is designed to examine the usefulness of the Materials Design framework as a training tool for designing EAP materials in an EFL context. It also aims at arriving at an understanding of the teacher trainees' (here after referred to as teachers) perceptions of the concept 'task'; their perceptions and attitudes towards the framework as a training tool; and to determine whether there is an improvement in the teachers' thinking and ability in designing better materials. At the same time it also attempts to identify problem areas within the framework with a view of improving it, and the kind of problems NN teachers encounter when designing such materials. As such the method, design and instrumentation used to carry out the study should reflect the aims of the study (see section 1.8-1.9.2 of chapter one).

6.1 Methodology

Methodology is defined as the principles of methods used to carry out a research study. Some important aspects of doing research involve systematic thinking, strategic planning, organisation and use of appropriate procedures or methods. Therefore, establishing an effective structure of the research in terms of the relationships between all the different areas of the research project is imperative. Mouly (1978) cited in Cohen and Manion (1994:40) states that :

> *Research is best conceived as the process of arriving at*
> *dependable solutions to problems through the planned and*
> *systematic collection, analysis, and interpretation of data.*
> *It is a most important tool for advancing knowledge, for*
> *promoting progress, and for enabling man to relate*
> *more effectively to his environment, to accomplish his*
> *purposes and to resolve his conflicts*

Cohen and Manion (1994:38) stress that methods in research refer to "the range of approaches used in educational research to gather data for inference and interpretation, for explanation and predictions". Similarly, Hatch and Farhady (1982 : 1) state that we can define research as "a systematic approach to finding answers to questions." Hence, research questions can be investigated or researched from many different perspectives by using different procedures depending on the aims of the investigation (Seliger and Shohamy, 1989: 8). The aims of the investigation, therefore, determine the method of inquiry and analysis (Hatch and Farhady, 1982; Ary et al., 1990; Coolican, 1990; Hatch and Lazaraton, 1991; Cohen and Manion, 1994). At the same time, proponents of educational research also maintain that the kind and amount of resources available are also important. Bell et al. (1987:20) point out that " research design has to take account of the aims of the study, the resources available and the general feasibility of the study area." Thus, the research design, method of data collection and analysis, as well as available resources, are interdependent and directly establish and influence the statistical methods to be used in the ultimate analysis of the data collected.

The design and methods considered and used for this stage of the study were a) Quasi-experimental methods -intact group design; b) Qualitative and Quantitative methods (Kiess and Bloomquist, 1985; Ary et al., 1990; Hatch and Lazaraton, 1991; Coolican, 1991; Bogdan and Bilken, 1992; Nunan, 1992; Cohen and Manion, 1994).

6.2 Rationale for the Research Design and Procedures

Since this study involved the development of a materials training framework, several initial data gathering phases had to be designed. These consisted of three interrelated action research phases as discussed in chapter 1 section 1.13 and 1.14, *Phase One* - a Needs Assessment Survey and an on going literature search (which formed the baseline in the construction of the framework; see chapter four for a discussion of the development of the framework), *Phase Two* - action research and Pilot Study (which formed an integral part of the research and which resulted in the trialling and revision of the framework; see chapter 4) and *Phase Three* - the Main Study (which involved exploring and evaluating the revised framework on a wider scale using a quasi-experimental method).

6.2.1 Brief Review of Phase 1 and 2 of the Study

Phase One of the study aimed to establish a baseline as to what the learners' needs were, based on their own perceptions and views; what their perceived underlying ability is in reading and writing based on their performance on a general proficiency test for reading and writing; engineering subject specialist and English language instructors'

views, and to establish benchmarks and profiles (drawn from existing profiles) according to levels of ability. It also sought to identify and establish aspects of EAP materials design that might be needed by teachers based on English as a Second Language (ESL) Language instructors' and Subject specialists' views and documentary surveys (see EAP /ESP texts discussed in chapter 3 and appendix A4.3). The findings from the data gathered were both qualitative and quantitative. The initial findings and evidence gathered were used to structure and develop the profiles for the EAP Materials Design framework (hereafter referred to as **the framework**) in phase 2.

Phase Two of the study is discussed in detail in chapter four. It was aimed at trialling and revising draft framework One, Two and Three (see appendix A4.1, A4.2 & A4.4) by identifying problem areas, weaknesses and aspects that needed to be expanded, clarified and revised based on the views of the IS and PS teachers. It also aimed at improving and reconsidering approaches to be taken for the Main Study - Phase Three. Evidence and views were gathered through questionnaire analysis, discussion sessions, work sheets and materials. This part of the study was in essence both quantitative and qualitative besides being descriptive and analytical. This evidence was used to revise and develop the framework (framework 4 [see Figure 4.20]) before it was further assessed for its usefulness and workability in *Phase Three*. The workshop and data collection procedures too were further reviewed and revised for use in the main study.

6.2.2 Phase Three

Phase Three, the main study, aimed at further evaluating and assessing the usefulness and workability of the framework, in answering the questions surrounding the overall aims of the whole study, as outlined in chapter One. The study was both qualitative and quantitative in nature. This part of the study was intended to be descriptive and analytical rather than prescriptive. Analysis of the acquired data was intended to establish possible overall trends and patterns and allow for comparisons to be made between preservice (PS) and inservice (IS) teachers in relation to the use of the framework for training in designing EAP materials and to identify any significant differences between them where applicable.

These phases and the structure of the overall plan of the study is diagrammatically represented in figure 6.1A. A summary of the whole plan of the study including the plan for each of the phases is presented in figure 6.1B.

6.3 THE MAIN STUDY

The main study, phase 3 was designed to be conducted in two separate stages. Although separate, these stages are inter-related. Both were designed to be carried out for the same number of weeks using the same design and the same group of subjects. Both stages focus on PS and IS teachers undertaking a B.Ed degree in TESL. Stage One revolves around teachers designing materials without using the EAP Task-Based inservice, while in Stage Two teachers designed materials using the framework.

6.3.1 Design of the Study

The design selected for the study was that of an exploratory quasi-experimental, qualitative kind rather than a strictly experimental kind. The method of inquiry however, consists of basic and important elements of scientific research in that firstly, *it proposed the systematic design and development of a framework as a training approach to improve the manner in which ES(F)L teachers design, develop and assess EAP Task - Based Materials*, and secondly, *the study is empirical in nature as data was collected by reproducible and systematic methods*. The purpose of the study was therefore exploratory, analytical and descriptive.

The function of the study is definitely exploratory at this stage, and as Cronbach (1987 : 4) argues, that each investigation has its particular functions; a form highly suitable for one investigation would not be appropriate for the next. Further, more far - reaching methods to completely investigate the framework (e.g. a longitudinal study of teachers' ability to design materials in different contexts) can only be determined after this first stage of the study has been completed. According to Seliger and Shohamy (1989 : 8), "Once hypotheses have been formed, tested and confirmed or rejected, it may be necessary to repeat the experiment or reconfirm the conclusions by researching the question using different means." Hence, for this study, the research design was drawn up to gather the required initial data or information according to the aims of the study as outlined in chapter one.

6.3.2 The Intact-Group Design

To explore and evaluate the usefulness of the framework, an intact group or within - subjects repeated measures design (also known as time series design) was employed. Hatch and Lazaraton (1991: 85) maintain that "the majority of classroom research involves the use of classes where students have already been assigned on the basis of

271

some principle. This is called an intact group (What Kiess and Bloomquist (1985) call the within- subjects design)." Kiess and Bloomquist (1985 :58 - 59; 299) explain

A.

OVERALL AIM

TO DESIGN AN EAP TASK-BASED MATERIALS
DESIGN TRAINING FRAMEWORK

FOCUS | **QUESTIONS**

1. How would the design of materials based on the EAP framework differ from those based on the existing approach in terms of the teachers' understanding, applications and attitude.?	2. What differences will there be in terms of the teachers ability in understanding, applying and interpreting the concept of Task-Based Materials between the design of task-based materials based on the Framework and those based on the existing approach ?	3. a) What differences ,if any, will there be between PS and IS teachers in terms of overall understanding, applications and attitude about the usefulness of the EAP framework ? b) What type of problems did the teachers encounter?
This question guides the identification of changes and differences in the manner of designing tasks selecting texts etc.	Identification of definitions and perception of the concept 'task' and the methods of designing tasks	Identification of overall attitudes, perception and feelings about the framework and EAP materials & design
Data will be collected from questionnaires evaluation of materials from both the pre & post workshops and logs	Data will be collected from definitions of both the pre and post workshop and from the teacher made materials	Data will be collected from questionnaires and logs

Figure 6.1A OVERVIEW OF THE PLAN OF THE MAIN STUDY - (PHASE 3)

B.

PHASE 1   NEEDS ASSESSMENT SURVEY

Student Questionnaire

Language Instructors
Questionnaire

Engineering
Undergraduates
UPM 2/3 years

English
Language
Instructors

Engineering
Subject
Specialist

Subject Specialists
Questionnaire

General Proficiency
Test of Reading & Writing

Profiles Developed from
different types of profiles
used for different
purposes around the
world.

Development and Design
of EAP Task - Based
Materials Design Training
framework

Documentary Survey &
On going Literature Review

Development of Profiles /
Levels of Proficiency

PHASE 2

PILOT STUDY
Carried out in
the UK with
Pre & IS
Teacher Trainees
from Malaysia

PILOT STUDY 1
Trialing of 1st Draft
of the framework
(framework 1)

ACTION
Revise framework 1
(framework 2)

ACTION
Revise framework 3
(Develop framework 4)

ACTION
Revise framework 2
(trial framework 3)
Pilot Study 2B

PILOT STUDY 2A
Trialing of 2nd
Draft of the Frame-)
work)
(framework 2)

PHASE 3

MAIN STUDY
FRAMEWORK 4

 (UPM Malaysia)
To Assess the framework
in terms of its usefulness &
workability

Quasi Experimental Method
within Subject Design
Repeated Measures

Use of Existing Approach
Use of EAP framework
With both Pre & In -
service teacher trainees (UPM)

Figure 6.1B - SUMMARY OF ALL THE PHASES OF THE STUDY

that in the "within - subjects design, one group of subjects is exposed to all levels of each independent variable. Therefore, each participant is exposed to all levels of independent variable". Two different groups within the intact group were identified in this study; PS and IS teachers. Having two different groups within an intact group and using two different measures, would help to strengthen the study and to allow the researcher to compare the findings from both groups. This would allow for generalisations to be made. There were no specific control groups as it would have been difficult for the researcher to control any contamination of data that might have occurred during the study. This is due to the fact that the subjects were familiar with each other. They were taking the same courses and some even lived together. Instead both groups were their own control group. Therefore, an intact group/within - subjects repeated measures design was considered appropriate and adapted for the study at this point as the research is still at an exploratory stage. Hatch and Lazaraton (1991: 93) confirm that this type of design is " ideal for evaluation in materials development projects". In this study the researcher needed to follow the same groups of students (as in the case study method) in order to collect information from the same set of participants with regard to their experiences in developing materials using the two methods. Thus the intact group design was considered to be appropriate as a research method in teacher education.

Kiess and Bloomquist (1985 : 300 -301) argue that within - subjects designs "offer more sensitivity for detecting the effects of the independent variable (in this case, the two methods in materials design), and are susceptible to multiple treatments." This is because subjects are all exposed to the same treatment. Hatch and Lazaraton (1991 : 86) maintain that in such a context " Intact designs are often the only practical way of carrying out research which will help find answers to questions." They advise however, that care must be taken when making causal statements about the findings. They go on to add that the findings will "allow us to give evidence in support of links between variables" (ibid).

There are however criticisms against such a method. It has been noted that one of the major problems with such designs is the drop-out rate (Coolican, 1990; Nunan, 1992). However, Coolican (1990: 58) suggests that if such a design is to be used care must be taken to control the loss of subjects from the study in between conditions or methods. In the case of this study there was no loss of subjects and subjects maintain their groupings for both methods. In such methods, 'subjects' are to be treated as identical units for purposes of demonstrating the researcher's preconceived notions about humans which they cannot challenge. They are manipulated in and out of the research condition.

The present study utilised an iterative method and is consistent with Coolican's (1990:124) statement that "at the very least, though, most methods under the qualitative umbrella involve the notion of a 'research cycle', gone round several times, in which an integral step is to consult with participants as to the acceptability and accuracy of emergent theories, models and categories etc." The design used in this study is explained and expressed in Table 6.1:

Table 6.1 The schematic representation of the design used for the study

G 1 - (Within - Subjects Intact Group)	T 1 (M1) X T 2 (M2) X
G 2 - (Within - Subjects Intact Group)	T 1 (M2) X T 2 (M2) X

Key: G1:- Preservice teachers group.

G2:- Inservice teachers group.

T1:- Existing Materials Training Method.

T2 :- Use of the EAP Materials Training framework.

X :- Results

It must be emphasised that both the "G1" and 'G2" groups belong to one main group, that is, TESL Semester 7 in UPM.

'T1' stands for Method 1, the use of the UPM Existing Methodology and Training, 'X' stands for results and 'T2' stands for the Treatment-Method 2. The use of the EAP Materials Design Training framework and again 'X' stands for results. By setting up the design as above and as illustrated in Figures 6.2 and 6.3, the researcher is establishing replicability procedures to ensure reliability.

6.3.3 Description and Implementation of the Design/Experiment

The intact group within - subjects design was set up to explore the usefulness and workability of the framework as a training tool within a 12 week time frame. The main factors which had to be taken into consideration are as follows :

a / **Regular Access to the teachers** : How often would the researcher be able to meet the teachers who were following regular lectures ?

b / **How much time** (in terms of hours) would the teachers be willing to put in for the study because they were also fully committed to their regular lectures ?

275

c / ***How much time*** would the lecturer who was giving the researcher some of
his lecture hours (arranged before the researcher arrived at UPM) be
willing to give up ?

d / ***How many days*** would the teachers be willing to give the researcher to
conduct the workshop (training in the use of the framework) ?

e / ***Given the situation*** it would seem that the teachers would have to participate
in the study outside their normal lecture hours. In this case *how would it affect
the study and what would need to be controlled* ? This would then mean that the
researcher might have to schedule conference / consultation hours apart from the
workshops.

f / In order to ensure that the teachers would benefit from the study the
researcher would need to consider providing them with some form of
certificate of participation and feedback on the materials they had designed.

In short, the availability of full co-operation and having adequate time allocated were
crucial factors. Based on the above considerations the researcher decided that this field
work would need approximately 12 weeks in order for it to be conducted effectively. It
was also imperative that the researcher be prepared for any changes in which a quick
decision might have to be made with regard to the implementation and the carrying out
of the study.

Using the above factors and the schematic representation of the design, the two stages
of the study were set up using the same design.

The proposed method was intended to enable optimum use of the limited time available
to conduct the study. The methodology of Stage One and Stage Two of the study are
clearly exemplified in figures 6.2 and 6.3. A discussion of the workshop procedure is
presented in section 6.4.

6.3.3.1 THE DESIGN OF THE STUDY FOR STAGE 1 AND 2 .

STAGE ONE

First Four Weeks

| G1 | G2 |
| PS Teachers - N 44 | IS Teachers - N 63 |

Use of Existing Materials Selection and Adaptation Approach
T1 (Method 1)

Design EAP Task - Based Reading and Writing Materials
Not Based on The EAP Task - Based Framework

WEEK 1

Receive same 4 hours of placebo training

WEEK 2 - 4

Select and use content area (engineering) materials
Begin designing EAP Task-Based Materials
Meet for consultation two hours each week as a whole group
Keep a Guided Progress Log
Respond to Questionnaire Set A (after handing in materials)

Figure 6.2. STAGE ONE OF THE STUDY.
USE OF EXISTING TRAINING METHODS (METHOD 1).

STAGE TWO

```
                    ┌─────────────────────────────┐
                    │      Second Five Weeks       │
                    └─────────────────────────────┘
                           /              \
        ┌──────────────────────┐    ┌──────────────────────┐
        │         G2           │    │         G1           │
        │  PS  Teachers - N 44 │    │  IS Teachers - N 63  │
        └──────────────────────┘    └──────────────────────┘
```

Use of EAP Task -Based Materials Design Training Framework

T2 (Method 2)

Design EAP Task - Based Reading and Writing Materials

Based on The EAP Task - Based framework

WEEK 1		WEEK 2

2 Whole days of Intensive Training Saturday & Sunday from 9 - 6 (15 HOURS)	Using Identical Training Guide Format & Procedure	2 Whole Days of Intensive Training Saturday & Sunday from 9 - 6 (15 HOURS)

WEEK 2 - 4   &   WEEK 3 - 5

Select and use content area (engineering) materials
May use the same text in phase 1 or change if necessary
Begin designing EAP Task-Based Materials
Scheduling of three consultation hours for each
individual group throughout the 3 weeks
Keep a Guided Progress Log
Respond to Questionnaire Set B (after handing in materials)

Figure 6.3   STAGE TWO OF THE STUDY .
USE OF THE FRAMEWORK   (METHOD 2).

6.4 The Selection of Subjects

A quick survey of the number of institutions for higher education available in the state of Selangor and the city of Kuala Lumpur was carried out to identify the subjects for the study. The states were selected because of their accessibility and also the large number of institutions for higher education within them, as shown below.

Selangor	Kuala Lumpur
Institut Teknologi MARA Universiti Pertanian Malaysia International Islamic Universiti , Universiti Kebangsaan Malaysia.	Tuanku Abdul Rahman College Branch campus of Universiti Teknologi Malaysia Universiti Malaya.

All these institutions have English language departments or Language Centres providing language support services but not all are involved in teacher training at degree level. The only institutions involved in B. Ed. TESL programmes are Universiti Malaya (UM), Universiti Pertanian Malaysia (UPM) and Universiti Kebangsaan Malaysia (UKM) in Kuala Lumpur and Selangor. They are also involved in the TESL Matriculation programme and each has a TESL Matriculation Centre where pre - service teachers are prepared to join the B. Ed. TESL programme. From these institutions, Universiti Pertanian Malaysia was selected for the study for the following reasons.

1. It has the largest number of subjects in terms of pre- and inservice TESL students and they are representative of the kind of teachers found in the other Malaysian institutions.

2. It was the researcher's own institution, and therefore support to carry out the study would be available.

3. From a practical view-point gaining access to the students would not present any problem. At the same time the university and the department concerned would not feel threatened by the researcher's presence as she is part of the department. Moreover, the outcome of the study would be of benefit to the department and the university as a whole.

The other universities, namely UKM and UM, are mainly concerned with the training of PS teachers. The number of IS teachers was comparatively smaller. This is because these universities required the IS teachers to have the Malaysian High School Examination Certificate (STPM) which is equivalent to "A" level for admittance into the degree programme. However, UPM does not require this. The IS teachers need to have a minimum of 3 years teaching experience and a good attainment in their teacher training college certificate.

6.4.1 The Subjects

The subjects selected and identified for the study are the Final Year B.Ed. TESL teachers in their seventh semester (TESL Semester - 7, 1990 /1995 batch) of the Faculty of Educational Studies, Universiti Pertanian Malaysia.

They are:

a) Pre - service teachers [PS] (n = 44) and

b) In - service teachers [IS] (n= 63)

Both groups enrolled in the same B.Ed. TESL programme at the same time and moved from semester to semester as a group taking the same courses(using the same syllabuses) with the same trainers. Therefore both groups had identical training experiences. The only difference is that the IS teachers are all experienced teachers with a two year teacher training background.

Although there are TESL students from semester 1 to semester 6, only TESL semester 7 teachers will be used. The criteria used to select the subjects systematically are as follows:

a) They should be both final year PS and IS teachers in the same semester.

b) The teachers should have also covered the following courses:

    i / The teaching of Reading in ESL

    ii / The teaching of Writing in ESL

    iii / TESL Methodology

    iv / Psycholinguistics and Sociolinguistics

    v / Trends in Syllabus Design in ESL

    vi / Introduction to Linguistics and Syntax

    vii / Communicative Language Teaching

    viii / Materials Selection and Adaptation in ESL

These courses are considered relevant prerequisites for materials design. They enable teachers to understand the basic theories and principles which are relevant in the Teaching of English as a Second Language when participating in the study. (They are covered at the university between semester 1 to semester 7)

c) The teachers must have entered their degree programme at the same time and must have been engaged in it for the same length of time, regardless of their background.

d) It is desirable that the teachers should know each other quite well; this would facilitate group work as the workshop involves collaborative effort and team work.

e) All the teachers will have been exposed to the same language teaching theories and principles by the same academic staff in the courses listed above.

A general description of the subjects identified for the study is diagrammatically represented in figure 6.4.

6.4.1.1 Inservice Teachers

The IS teachers are all experienced teachers and have all undergone a basic two year teacher training programme at different teacher training colleges in Malaysia. They are trained either for primary or lower secondary teaching based on a uniform syllabus. Their experience ranges from 3 years to more than 10 years and many have taught in both the rural and urban areas in Malaysia.

Their admittance into the 4 year B.Ed TESL programme is based on their teaching certificate and on their having a minimum of 3 years teaching experience. A total of 63 IS teachers participated in the study . There were 42 female and 21 male participants. All the major ethnic groups of Malaysia were represented in this study sample. They were mainly Malays (n=35) followed by Chinese (n=14) and Indians (n =11). There were 2 indigenous Malays from East Malaysia and 1 Eurasian.

6.4.1.2 Preservice Teachers

The PS teachers must have at least a Grade 2 in the SPM with a good credit in English or a good pass in the STPM.

The teachers who have completed their SPM examination had attended a 2 year TESL Matriculation Programme at UPM to enable them to attain the equivalent level of STPM and to prepare them academically for the university programme. The trainees begin a 4 year degree programme in TESL together with the IS teachers at the end of the two years.

Candidates who have an STPM certificate do not attend the TESL Matriculation programme. They enter the degree programme directly, like the IS teachers. Their number in the UPM TESL programme is very small.

A total of 44 PS teachers participated in the study. There were 42 females and only 2 males in the group. This group consisted of predominantly Malay teachers (n= 43), and one Indian (no Chinese). None of them had any teaching experience nor were they involved in any part-time teaching at the time of the study.
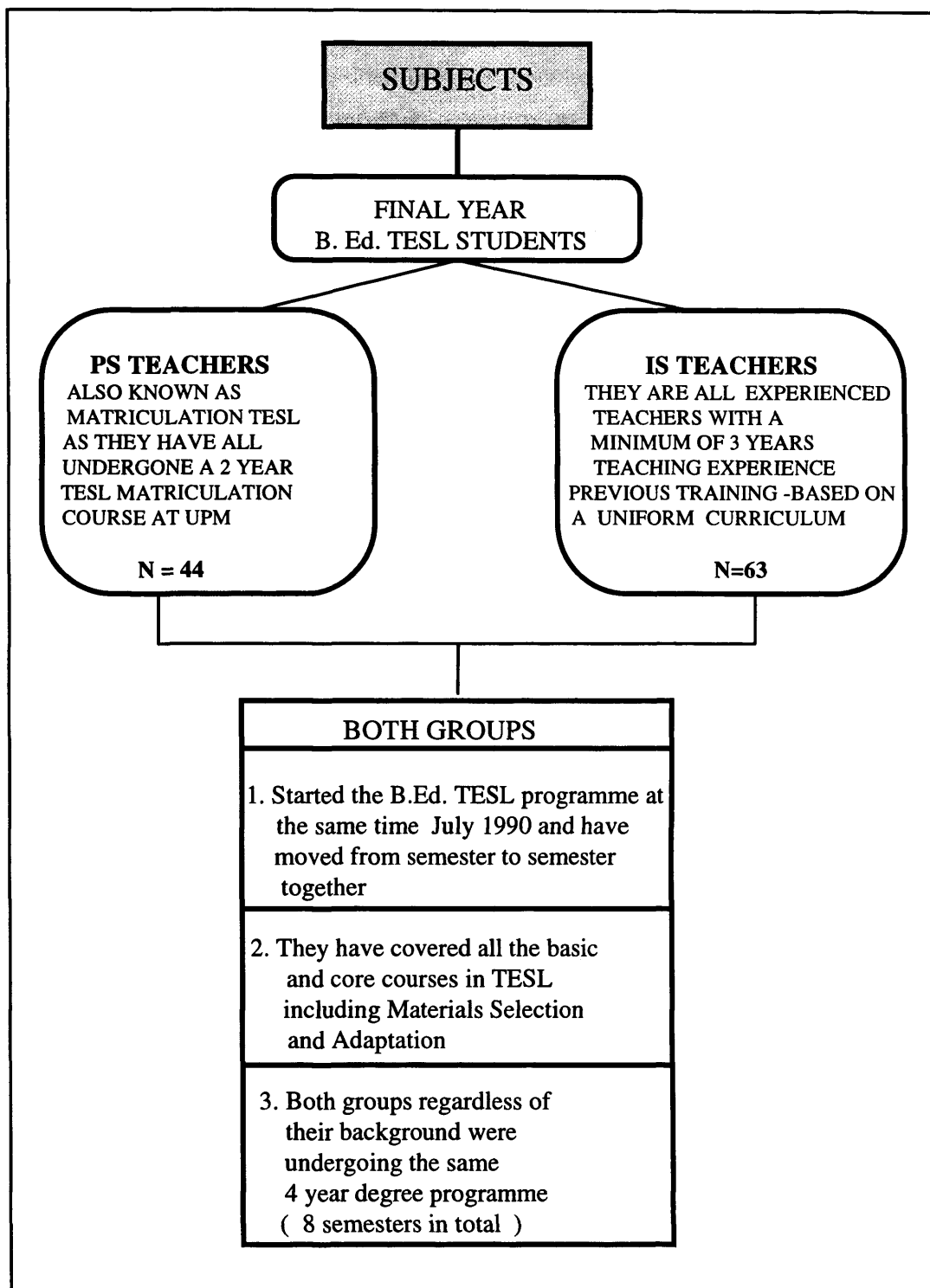
Figure 6.4 Summary of Subjects Background

Both the PS and IS teachers come from all over Peninsula Malaysia and East Malaysia. They are therefore representative of the kinds of teachers enrolled in other teacher training programmes in other universities and teacher training colleges. The only difference lies in the selection procedure for each university. Teacher training colleges

have a uniform selection procedure and a uniform curriculum but do not offer degree programmes. An important measure to achieve uniformly high standards is that although the entrance requirements differ from university to university for both the PS and IS teachers, all the universities prepare their teachers to teach according to the National Curriculum besides meeting requirements drawn up by the Ministry of Education for the teaching of English. Each institution therefore uses the standard syllabus prepared by the Ministry. Variations which occur are in the basic and elective courses in TESL / Applied Linguistics and perhaps in the quality and background of the academic staff teaching these courses.

6.5 Instruments

Several instruments were utilised in gathering data from the main study. The instruments were :

(a) Two sets of Evaluation Questionnaires:-
  Pre -Questionnaire and Post -Questionnaire

(b) A guided group collaborative progress log - pre and post

(c) A materials evaluation checklist (pre and post)

(d) Framework 4 and Workshop Training Materials

6.5.1 The Questionnaires

The questionnaires (which consisted of Likert type questions) were designed based on guidelines by Brindley (1989), Coolican (1990), Nunan (1991), Oppenheim (1992) and the University of Leicester's School of Education Research Projects Questionnaires. In fact, most of the questions had to be designed from scratch as the researcher was unable to locate relevant validated questionnaires for use in this study.

A number of items were piloted during the pilot study stage and were revised for use in the main study. Based on the pilot study a number of categories from the open responses were used to generate new questions. Once the questionnaire had been designed they were submitted for review by several lecturers at the University of Leicester's School of Education. Based on their comments further revisions were made. The questionnaires were again piloted on a small scale with the help of the M.A. in Applied Linguistics and PhD students in Applied Linguistics at the Universities of Leicester, Reading and Birmingham. This was to ensure that there were no redundant, overlapping or ambiguous questions and that the questions were clear and easy to follow. Based on feedback from this small scale piloting some questions were either revised or eradicated completely.

6.5.1.1 Evaluation (Method 1) Pre-Questionnaire

The Pre-questionnaire (see appendix A6.1) was designed to obtain information about the existing training approach and the extent to which it was useful in designing EAP task-based materials. It consisted of an introductory Section A which asked for background information and two other major sections; B, and C. Section B was sub-divided into two parts; Part A and B.

The questionnaire consisted of both Likert scale, closed and open - ended questions. Space was also provided for any other comments should a respondent select *uncertain*. Part A and B required participants to list the criteria they had used for designing materials in order of importance from a list provided and the kind of problems they had in designing the materials by selecting from a list of possible problems. Spaces were also provided to allow participants to indicate criteria or problems not listed. Section C required participants to indicate their degree of agreement about their ability to design EAP based materials and the amount of advice and guidance they had had directly or indirectly throughout their course with regard to materials design.

6.5.1.2 Evaluation (Method 2) Post-Questionnaire

The post-questionnaire had identical questions in section A, B and C as the pre-questionnaire. Since it was also being used to evaluate the EAP Materials Training Framework, an additional section, section D was included to assess responses to the framework. This section was designed to obtain feedback on the impact and overall view of the EAP framework. Four open-ended questions were also included (see appendix A6.2).

The questionnaires were used to elicit information from individual participants in order to supplement and complement the use of the group collaborative logs.

6.5.2 Guided Group Progress Log

The guided group progress log is a form of guided collaborative journal entry which the teachers kept as a group, to provide an account of how they designed their materials, reflections on problems encountered and any other comments, when using both approaches to EAP materials design. Usually diary or journal entries are kept by individuals but in this study group work was being carried out, therefore it was appropriate for participants to provide accounts as a group. Such methods have been used in action research in teacher education (Kelly, 1992 cited in Richards and Lockhart, 1994:18). Diary or journal entries are popular methods of collecting data in teacher education research (see Nunan, 1989; Bailey, 1990, 1991; Allwright and Bailey, 1991;

Palmer, G.,1992; Palmer, C.,1992, Richards and Lockhart, 1994). They provide in-depth and hidden information which cannot be gathered from questionnaire responses. In IS courses, the diary study has been shown to be an effective pedagogic tool in encouraging teachers toward reflective thinking and critical evaluation of teaching (Palmer, C.,1992; Palmer, G.,1992; Richards and Lockhart, 1994). It is also useful in charting novice teachers' reflections (Carter, 1993; Numrich, 1995).

The guided group progress logs were kept for both methods - the existing materials design approach (Method 1) and the use of the EAP framework (Method 2). The teachers were provided with a guideline to help them in writing their accounts (see appendix A6.3)

The participants were encouraged to comment or provide an account of their feelings, attitude, frustrations, doubts, problems and anything else pertaining to the process of designing EAP task-based materials. If there was any disagreement among group members they were to mention it. They were also informed that they could, if they wanted to, provide individual accounts. They were told not to worry about writing criticisms as there was no penalty for doing so. The researcher expected them to be as honest as possible. It was important that the participants keep a progress log as this might reveal information that could not be gleaned from questionnaire responses.

In an effort to control 'contamination of data,' the researcher informed the teachers that their feedback would be used only to make further improvement on the framework and decisions for future training purposes in materials development and teacher training. At the same time, they were informed that the researcher would not read their accounts until after the project has ended(Allwright and Bailey, 1991:192).

6.5.3 Materials Evaluation Checklist

In order to be able to evaluate the EAP materials developed by the participants, it was essential that a checklist be formulated. A review of several checklists was made to identify an appropriate one for the study (Cunningsworth, 1984; Dougill 1987; Breen and Candlin, 1987; Hutchinson, 1987; Hutchinson and Waters, 1987; Nunan, 1988; Sheldon, 1988; Skierso, 1991; Mcdonough and Shaw, 1993 and Rowntree, 1994). The review revealed that there were no evaluation checklists available for teacher made materials but many existed on evaluating commercially published materials (see references below). This created a dilemma for the researcher because it was necessary to have an independent checklist which was not related to the framework and could be easily used by independent raters.

It was therefore deemed necessary to either create an evaluation checklist or adapt one from existing textbook evaluation checklists. The question of what to include, and what not to include, needs to be identified and discussed along the following lines.

- Should an EAP materials checklist look different from the present ELT checklists available, since the latter focus on published textbooks ?

If so in what manner should it differ and what criteria should be used?

The checklist had to be one which would consolidate the training received by the teachers and the manner in which the materials were designed based on the framework but at the same time it should avoid the circularity of evaluating the EAP materials produced by using the framework in terms of only using the framework.

A number of ELT textbook and materials evaluation checklists had been published prior to the present research, mostly developed for commercially produced texts. Apparently, none of these published checklists have been statistically validated by a large number of teachers or users of such checklists. In a sense, the published checklists are based on experience and common sense, intuition, and a certain degree of usefulness.

The published checklists are primarily to help teachers to select published materials or, possibly, to train student teachers to do so. This research on the other hand, requires some form of checklist for training in materials design. The checklist will be used to evaluate the output of the training exercise and, in itself, will have a training function of being used by teachers to evaluate(and improve) their own materials. Therefore, it will have to be different from evaluating published output though some aspects of the latter might be utilised. Hence, it was necessary to select, adapt and amalgamate existing checklists for ELT textbook and materials evaluation. A balance would be needed between existing global checklists and aspects of the training framework which have a local function. Sheldon (1988 : 242) argues that "any culturally restricted, global list of criteria can never really apply in most local environments, without considerable modification and that one can only be committed only to checklists or scoring systems that one has had a hand in developing and which have evolved from specific selection priorities."

Sheldon(1988) suggests the preparation of a summary of common core factors which are most frequently used in deciding whether or not a textbook is chosen. This same principle could also apply in the development of an evaluation checklist. Hutchinson (1987:38) explains that at the deeper level of materials evaluation the

main question is not what? or how much, but why? Why are the materials as they are? Williams (1983) alludes to an evaluation scheme which relates to assumptions about teaching; one which would be consistent with the psychological and linguistic principles underlying current, accepted methods of second language teaching. This would hold true too of any materials evaluation checklists or criteria.

Several ELT textbook and materials evaluation criteria and checklists were reviewed (Tucker, 1978; Bruder, 1978; Williams, 1983; Cunningsworth, 1984; Dougill 1987; Breen and Candlin, 1987; Hutchinson, 1987; Hutchinson and Waters, 1987; Nunan, 1988; Sheldon, 1988; Skierso, 1991; McDonough and Shaw, 1993 and Rowntree, 1994). Based on this review a checklist was developed by selecting appropriate criteria, adapting and amalgamating what was deemed appropriate for use in evaluating materials designed based on a training exercise and which was workshop based (see appendix A6.4). This independent checklist was to be used by independent evaluators who would evaluate the materials designed using both methods in this study.

6.6 The Workshop

The study utilised workshop procedures as defined and used by Poel and Homan (1994) [also see Coelho, 1992, Sharan, Y. and Sharan, S., 1992; Kirschner et al., 1996] and was conducted over a twelve week period.

The first two days of the first week were used to discuss details of the study with the Head of the Language Centre and also to meet the teachers. The researcher was cautioned about demanding too much of the teachers since the study was being conducted during the normal academic session and teachers would need to fulfil their normal course requirements.

The teachers identified for the study were informed that the purpose of the study was to involve them in designing materials so as to enable the researcher to gather a variety of information about materials development. All 107 participants were willing to participate although they clearly realised they would have to work outside their normal lecture hours most of the time. See appendix A6.5 for some typical workshop handouts and materials.

6.6.1 Grouping of Teachers as a Collaborative Group

The teachers were grouped according to :

Preservice [PS] (N = 44)	Inservice [IS] (N = 63)
11 Groups	**15 Groups**
[11 groups of four]	[12 groups of four and 3 groups of five]

The peer group work format had to be utilised, for the following reasons:

- Teachers objected to working in randomly assigned pairs.

- Teachers wanted to work in groups and with peers that they could relate to.

This is consistent with the claim made by Hare (1982) that "groups that have a high level of interpersonal attraction have high **morale** and are termed **cohesive**" (emphasis added). This is because high cohesiveness is generally linked to high productivity (ibid: 121). If the researcher had determined the composition of the groupings, a certain amount of friction due to personality clashes, different levels of experiences, ability and different work styles may have occurred, as experienced in Kirschner et al's (1996:98) group work study.

Since the researcher had anticipated this situation, the alternative was to allow for group work as a collaborative and co-operative effort (Kessler 1992; Sharan & Sharan ,1992; Crookall & Oxford 1990). A collaborative group effort in designing materials was necessary as writing and creating materials is a group effort and not that of one or two people because developing effective learning materials is "a highly specialised craft one that seems to be perfected through the immersion in the activity itself" (Dubin and Olshtain, 1986:147). Using collaborative groups in teacher education leads to learning, heightens reflection, guides in the acquisition of knowledge, shapes planning and thinking etc.(Knezevic and Scholl, 1996; Bailey, 1996). Knezevic and Scholl (1996:95) argue for the use of such a method in teacher education studies and stresses that "collaboration can serve as a catalyst and a mirror for exposing, expressing , and examining ideas lead to enriched learning and improved instruction." They add that such a method merits further exploration as a "means of learning about teaching"(ibid: 79).

6.6.2   Stage 1 of the Study

Stage 1 of the study was carried out for four weeks (End of July - August 1994). The researcher met both the G1 and G2 groups at the same time. Both intact groups were given identical briefings.

The researcher explained that the groups were to design EAP Task -Based materials based on the B.Ed. TESL existing training approach which they had been exposed to throughout their degree programme, focusing particularly on courses on Materials Selection and Adaptation, the teaching of Reading and Writing in ESL.

The next stage was to set up a placebo training procedure with the use of the Existing Materials Selection and Adaptation Approach (T1; Method 1). A placebo training procedure was necessary in order to ensure that at the first phase of the study both groups undergo similar procedures as they would in the second phase which introduces a second approach and which is the treatment. This reduces the possibility of confounding. Coolican (1990 : 32) argues that if placebo effects are created it will help to "eliminate the possibility that results are confounded by expectancy variable."

A six hour training session in the form of a workshop was carried out in two afternoons. It is believed that this would not give away the actual purpose of the whole study at this stage and would reduce or eradicate the effect of confounding or the Hawthorn effect on the study. The workshop procedure is outlined below:

6.6.2.1 Workshop Procedure Stage 1 of Study (Use of UPM's Existing Materials Design Method - T1, Method 1)

A workshop procedure not reflecting that of the actual treatment stage of introducing the framework had to be carefully designed for this stage. It should not contain the same elements as in the main treatment workshop of stage 2. The training was provided for both intact groups at the same time. It was initially designed as a team effort where teachers working in pairs would have to co-operate and collaborate with each other. Alterations had to be made by allowing for a bigger group but still maintaining the idea of investigation through team work, collaboration and co-operation.

Stage 1: Organisation

1. The teachers were divided into two groups. PS (G1; N = 44) and IS (G2; N = 63). The teachers formed their own working groups as agreed, each with no more than 4 or 5 members. Thus a collaborative group dynamic method rather than a collaborative pair work method was utilised.

2. The groups were not all mixed in terms of the number of females and males. Some groups were all female and some all male. This situation is attributed to the fact that some of the groups had Muslim female members who may not want to work with male members and vice versa. Similarly, some teachers preferred to work with members of

their own sex; a very common phenomenon in the Malaysian cultural context. There were only two males in the PS (G1) group. All the groups were assigned a code (AA - AZ) which was used throughout the study to identify the different groups.

Stage 2a : Introduction and Purpose

1. Teachers were briefed about the purpose of the workshop.
2. In a brainstorming and discussion session, previous theory, criteria and factors covered in their B.Ed. TESL Materials Selection and Adaptation course using the course syllabus were reviewed. Issues about: criteria used for selecting and designing materials; issues and activities for teaching reading and writing skills covered at UPM were discussed (see appendix 6.5C - F). For example:

*   How do they select their materials?
*   How do they plan their materials?
*   What factors did they consider important in selecting and designing materials?
*   What skills did they consider important in reading and writing?
*   How do they know when and what type of skills to teach?
*   How do they identify these skills?
*   How do they teach these skills? etc.

It must be emphasised that **nothing new was introduced to the students** except a general view of what EAP is.

Stage 2b : Planning - Instructions and Handouts

1. Before beginning any discussion on how they were going to design their materials, the teachers were asked to respond to two questions about 'task' by completing the following questions individually:

> *(a) To me task in language teaching is / means ....*
>
> *(b) Tasks are important in language teaching because ....*

2. Next, the teachers discussed what they considered as *"task"*. Using a general outline created from their previous courses, they were instructed to practice outlining a few EAP reading and writing tasks using some engineering texts. They had to identify their target students' level ; objectives and rationale for using a particular text etc. and to incorporate into their materials factors introduced in their previous courses related to materials design.
3. Finally they were instructed to design six different reading and writing tasks

incorporating all their previous acquired knowledge from their B.Ed TESL courses and were given three weeks to complete writing the materials.

4. The teachers were asked to keep a guided progress log.

Stage 3 : While Working on the Materials

1. The researcher met the teachers as a whole group three times during the three week period for an hour each time. This allowed the teachers to clarify anything they were unsure of. No feedback was provided with regard to the type of materials being designed or about the text being selected. These meetings drew their attention to the instructions on the handouts and ascertained that they were following instructions.

2. At the end of the third week all the materials (including the texts used) and the logs were collected. The Pre-Questionnaire was administered and collected the following day. At the same time, another workshop session to commence training in the use of the second method, Use of the EAP Task - Based Materials Training Framework was established.

3. The teachers requested that they meet as two separate groups. The PS teachers would have their training first and would therefore begin designing their materials a week earlier. The teachers were only able to give two days and two weekends to the project. Therefore two different weekends were set up with similar timings: Saturday 9-6 and Sunday 9-6.

All the teachers had a week's break from designing materials before the start of the next workshop session.

NOTE:

a] The original training schedule had been planned to cover a three - four days workshop session. But the research had to fit in with the teachers' schedules and free time. Although the teachers were not able to give the research three - four days, they would have longer training sessions on the two agreed days.

b] The researcher had to also ensure that the same training approaches were used for both groups in the same order. There were no problems with handouts, transparencies, examples or guidelines. A systematic step by step guideline was prepared detailing what the researcher would be doing at each step to ensure uniformity in training between the two groups.

6.6.3 Workshop Procedure Stage 2 of Study (Use of EAP Task -
   Based Materials Design Training framework - T2 , Method 2)

Stage Two of the main study was to implement T2; Method 2 and to assess and explore the usefulness and workability of the framework in training teachers to design EAP Task- Based Materials. It is designed to expose the teachers to a number of theoretical and practical specifications, which are based on second language learning and teaching research to design EAP task-based materials for learning or study purposes.   This workshop session is designed to introduce the teachers to EAP task -based materials design, by building on their existing knowledge and experiences but also focusing on new ideas and other theories not usually discussed in textbooks on materials design and to take the teachers through the process of learning in the way their students might be learning. This phase of the study was also to gain more insights into the working of the framework and what other modifications need to be made before it can be used in a more formal teacher training situation successfully. The training session was conducted over 15 hours (7 1/2 hours each day for two days not including a 1 1/2 hour lunch break).

Part One

Stage 1 : Organisation
The IS and PS teachers attended the first and second training sessions respectively, using identical methods. The teachers remained in the same groups as in Method 1 and there were no drop outs or changes in group membership.

Stage 2 : Introduction and Purpose
The purpose of the workshop and the teachers role was explained. At the same time all relevant handouts to be used in the workshop hereafter referred to as training session(s) were distributed.

Stage 3 : Presentation and Discussion of the concept "Task"
1. The teachers were asked to reflect on their own interpretation of the concept 'task' which they had done during method 1.
2. Handouts with a number of different definitions of the concept "task" in language teaching were then distributed and the teachers discussed the definitions in their groups. They tried to understand them and identify the differences   between definitions by looking for key words or phrases. It was explained that learning tasks should be cognitive in nature and should lead learners to practise different types of strategies via a task. The concept of task within a task was introduced. The

292

different definitions of task were discussed and explained.

3. The teachers were asked to write a definition of what task meant to them after the above discussion.

4. The next step consisted of a discussion and explanation of what constitutes a *"task"*. It was vital that teachers understood this. They were introduced to the "input, process, output" stages of a task and were asked to practise the above concept based on what they already knew about *"task"*.

6.6.3.1 Training in the use of the EAP framework - A Teaching, Learning and Discovery Process.

At this stage the teachers had to help one another assimilate new information, use discussion questions raised to help focus on key points, answer one another's queries, make notes for later references and continue discussion until all members were clear and comfortable with the tasks pertaining to the use and understanding of the EAP framework.

The teachers were informed that they needed to go through the same processes as their learners when they are trying to learn a language especially when dealing with content based materials. Going through the same processes would help them to understand how the materials should be developed. This training session aimed to raise their awareness of many theoretical aspects of language learning which are so often taken for granted in materials design.

1. The framework was introduced to the teachers. Its use as a training tool was stressed and each teacher was provided with a copy of the framework. These were later collected.

2. The teachers were directed to peruse the framework thoroughly and to note the different specifications in the different strands. In their groups they were to try to interpret what each strand meant and how the specifications in the strands can be applied to task - based materials design. (Thus, indirectly practising some of the strategies/skills they would be working on in designing materials).

3. Next the teachers were asked what they thought all the strands and specifications meant and how are they related to task - based materials design.

4. They were then introduced to the working principles of the framework. The purpose and function of each strand and how each of the strands and their specifications relates to task - based materials design were explained. Examples were also provided.

The trainer explained the seven bands of the framework and emphasised the overlapping nature of the different levels and repetitions involved. It was explained that learning rarely takes place in a linear order and that repetition is necessary .

Part Two

Stage One: Practice in the Use of the EAP framework

1. During this stage the teachers practised using the framework to design sample materials (based on bands 1 and 2). They were introduced to some worked examples of materials, designed by working with two texts, to illustrate the working principles of the framework as a training and learning process.

2. They were next introduced to a model (see figure 5.4 in chapter 5) which emphasised the fact that the learners are the central focus, the how and what of text selection, the design of task-based materials is contingent upon what the learners may be able to do. In their groups, they identified key points in the strands for learners' levels of ability (*Learners' profile*) for reading and writing skills.

3. The next step involved the analysis of text structure. Each group was provided with an envelope containing sentence strips. They were instructed to reconstruct the texts and to identify what the text is about. In the process of sequencing and identifying the text, they wrote down how they arrived at their final text and what clues they used to identify the text topic and the text patterns. They identified the strategies they were using and linked them to the specifications on "Learning Strategies".

4. The text was then discussed and by asking questions the teachers were guided to identify text patterns and the strategies they were using. They studied the specifications on "*Learning Strategies*" then matched the text to the specifications of "*Suggested Types of Texts*" to see if the text in question matched up with the learners' specifications.

5. The trainer then distributed the original text to enable the teachers to see where they had gone wrong and to identify sources of errors if they had not identified the text correctly. The teachers had to next identify the text pattern (this aspect covers the strand on "*Genre-Suggested Text Patterns'*). At the same time they were asked to study the specifications on *Knowledge Structure* to relate them to the specifications on text patterns. They had to do this by identifying the key elements that would be needed to design a task for learners to go through the same process. What key visuals might they use to help break down the text ? This question examined with reference to the specifications on "*Suggested Visual Aids / Graphics.*"

6. The teachers were then asked to identify the skills or task that are pertinent in understanding the text patterns with reference to the specifications on " *Suggested task type and skills to be practised*". Attention was drawn to the fact that they need

not use the framework in a linear order and that it only provides suggestions. It displays potential choices and is not prescriptive. They were informed that there is no fixed order in using the framework but that the learners' profile had to be identified first before using any other aspect of the framework. The teachers were asked to try and visualise a pattern that could systematically lead them towards some general or specific task planning scheme.

7. The next step involved the formulation of objectives. Suggestions outlined by Davies (1971) were used (See chapter 5). Once the objectives had been determined the next step was to implement the principles of the framework towards designing the task-based materials. The trainer demonstrated how the specifications are used to plan the task input and to try and sequence the task systematically. Two skills were highlighted concerning how to go about developing a task within a task concept.

    (a) a writing task - summary writing

    (b) a reading task- reading for comprehension of text

  Teachers would later be shown how these two skills are linked.

8. In groups, they decided how they would normally develop a summary writing and a reading comprehension task. Next they began formulating the task. Teachers were then asked to define the concept *"task"* in pairs and to hand it in to the trainer, keeping a copy for themselves.

9. They were then shown a few worked examples of tasks developed from the text on "Batteries." Each example was explained and its objectives defined. The teachers were introduced to the idea of learner support, which would provide learners with extra support in understanding their work, and which would help to reinforce learning and reduce dependence on the teacher.

Stage Four : Wrapping it Up

In this final stage the teachers were given handouts with instructions about what they needed to do with regard to designing materials in the next three weeks.

1. Each group was randomly assigned two band levels to work on which meant that they would have to use two different texts. Detailed instructions outlining the number of tasks to be developed and further information required were provided on handouts. A teacher's guide was also provided (see appendix A5.1).

2. A time table was drawn up to allow for three consultation meetings with individual groups throughout the three weeks allocated for designing the materials. Each session was to last no more than an hour. No feedback about how they were performing was provided.

3. Guidelines for keeping a progress log during the process of designing the materials were distributed and were to be handed in at the same time as the materials.

Stage 5 : Implementation of Questionnaire, Collection of Materials and Guided Progress Log

1. At the end of the three weeks for both groups, all the materials and progress logs were collected and the post-questionnaire was administered .

2 All the teachers were given a certificate of participation (signed by the Dean of the Faculty of Education) confirming their participation in an EAP Materials design workshop. This was a way of thanking them for co-operating and being so diligent as there were no drop outs from either study group.

6.7 Conclusion

The main study was not without its problems. The teachers had to work on the materials in their own time outside their normal lecture hours. They therefore had to find time to meet as a group and get the work done in the best possible way they could. Every week for six weeks the teachers met the researcher as a whole group for two hours and would bring their materials to work on and to ask questions. The teachers confirmed that they were not discussing their work with one another across groups: there was a high level of competitiveness among them. This could be attributed to the fact that the Head of the Language Centre had requested the researcher to give the teachers a grade (amounting to 20% of their course marks) at the end of the project. This was because a great deal of the teachers' time was being utilised, including two out of the three hours of lectures (for three weeks) that the Head of the Language Centre normally gave the teachers. It is unclear how this grading might have affected the study since all their courses are graded in a similar manner.

The fact that the training time for the second phase of the study had to be reduced was another limiting factor. The planned four day workshop would have been more effective as there would have been more time to train the teachers in the area of genre analysis. As it was, the teachers had only a brief exposure.

6.8   Method of Data Analysis

The design of the study required the use of both quantitative and qualitative procedures in gathering and analysing the necessary data.

6.8.1 Qualitative Methods of Analysis

This section will discuss the analysis of those data gathered from the guided group progress log, raw materials in the form of task-based materials developed by the teachers and teachers definition of the concept *"task"*, and from open questions in the questionnaires pertaining to the use of the framework. Some other qualitative data also arose from the close and continuous contact the researcher had with the teachers particularly during stage one and two of the main study. These consisted of incidental comments noted as fieldnotes from the teachers relating to EAP materials design using both research approaches. These were analysed in the same manner as other qualitative data.

Robson (1993: 307 and 371) defines qualitative data as : " words, and other data which come in a non-numerical form" he argues that there "is no clear and accepted set of conventions for analysis corresponding to those observed with quantitative data".

The qualitative data in this study were intended to be the main focus of the study as they would generate more detailed insight into the way teachers designed the materials, the kind of problems they had and why, and their reaction towards the framework. In short, the qualitative data would offset any relative narrowness which is characteristic of more highly structured quantitative data generated by using fixed - choice categories created by the writer. With qualitative techniques or methods "the participants own terms and interpretations are the most central data" (Coolican, 1991 : 123). Therefore the analysis of these qualitative data would add depth, meaning and further clarification to the results of the quantitative assessments of the study which would in turn lead to deeper understanding and insight of the aspects being studied.

The method used in this study towards creating a structure from the data for analysis purposes was that of generating categories, themes and patterns from the respondents' comments. The aim was to sort and to re-sort the data and to produce relevant concepts, patterns or themes.

There are various types of qualitative analysis put forward by a number of research methodology texts. For example, Jones (1987: 267) discusses cognitive mapping, Robson (1993 : 390 and 392) considers content analysis, charts and matrices, Patton (1990) provides a detailed outline on content analysis, Coolican (1991: 234 -235) proposes categorisation of data, use of typologies and quotations and Cortazzi (1993) suggests the use of narrative analysis.

In analysing the data a combination of methods were used; mainly categorisation, frequency of occurrences of ideas/comments, themes or patterns of ideas, cognitive mapping, content analysis and charts/diagrams . Verbatim quotations were also included as suggested by Coolican (1991: 234). He also points out that :

> *It is not possible to give precise guidelines on the analysis and presentation of qualitative data. There is no universally accepted paradigm. The decisions will be influenced by the theoretical background or model from which the researcher is working*

The researcher is fully aware that the approach to doing qualitative analysis has to be very systematic and rigorous (Robson,1993 : 402). Therefore one has to not only categorise the data but also to take it apart piece by piece and then put the pieces back again in some other coherent form or pattern, while having regard to participants' own interpretations of the data.

During the process of analysing the data, the researcher was consistently making inferences, some involving feelings, opinions and reactions towards the data. These are however clearly labelled as such, following Coolican (1991 : 236).

Using the above guidelines the researcher was led to structuring an organised and systematic method of analysing the data, referring mainly to Robson (1993 : 277) who provides useful guidelines for the construction of categories for analysis. Guidelines suggested by Bogdan and Bilken (1992:165-180); Cortazzi (1993) and Miles and Huberman (1994); Allwright and Bailey (1991) were also considered and used.

6.8.1.1   Method of Analysis Used

The raw data were in the form of written accounts of the processes the teachers went through (guided progress log), written replies made by the respondents to open questions in the questionnaires as well as field notes of students' comments during the consultation sessions.

6.8.1.2   Guided Collaborative Progress Logs

1. A total of 52 group logs had to be analysed: 22 logs from the PS teachers (11 from Method 1 and 11 from M 2) and 30 logs from the IS teachers (15 from Method 1 and 15 from Method 2). The original responses were reproduced on the word processor to enable multiple copies of the texts/accounts/comments to be made. This was extremely useful to aid classification with the different categories identified. Frequent re-reading led to further groupings and sub-groupings of the accounts/comments and to the

generation of common categories and patterns, constantly bearing in mind the speakers' own likely interpretations and intentions.

2. The group progress log was a guided one with nine different categories. It was therefore necessary to begin analysing the data using those categories by first coding them. Multiple copies of the entries were cut up according to the nine major categories and pasted onto large poster size manila paper of different colours. The grouping of comments was done by cutting, moving and pasting conceptual units of ideas and text on large sheets of paper or by using the same procedure on the word processor.

3. After several re-readings, sub-categorising the data and tabulation, frequent comments were identified, summarised and slotted into the tables. A simple frequency count was then carried out to indicate how many people made similar comments with verbatim quotes included to highlight the findings.

4. Visual representations with concept maps or tree diagrams mapped out patterns of similarity, differences, patterns of action, beliefs/attitudes and approaches in designing the framework (Novak and Gowin,1984; White and Gunstone, 1992; Miles and Huberman, 1994). This was helpful to identify patterns of thought processes.

5. Accounts were also classified as positive or negative and the frequency of occurrences were tabulated. Tables of information were presented to show similarities and differences between the two groups. During the process of analysis it was essential that the main focus centred around the research questions asked. This was necessary as the logs generated a lot of rich data and not everything could be discussed.

6.8.1.3 Exercises on the Concept ' Task ' and Randomly Selected Materials

The other raw data to be analysed consisted of two types: materials produced by the teachers and the other was the definitions of the concept *"task"*.

Randomly Selected Materials

The materials were quantitatively analysed by two independent evaluators and the researcher using an evaluation checklist and as a result it was considered unnecessary to further analyse all the materials comprehensively. However a content analysis of 10 randomly selected materials from all 26 groups to complement the evaluators' findings was also carried out. The materials were evaluated under main categories and sub-

categories as in the progress logs and these are discussed under relevant categories in chapter seven and eight.

Exercises on the Concept 'task'

In analysing the teachers' perception and interpretation of the concept of *task* thematic analysis was used. Perceptions or definitions falling under similar themes were placed together and the frequency of occurrences noted. Further sub-categories were then sought and represented diagrammatically.

The entire process of analysing the qualitative data although taxing proved to be a valuable experience. This led to the discovery of new meaning which is unlikely to have been gleaned through the use of closed questionnaires.

Summarising the analysis of the written responses in the form of categories, themes patterns, and visuals from both the participant groups allowed for the "drawing of conclusions" as proposed by Robson (1993 : 390) and Coffey and Atkinson (1996).

The question of validity of the qualitative approach arises. Coolican (1991:38 - 39) points out that although qualitative approaches produce more valid data and rich information, they are more subjective and therefore potentially less reliable (Hatch and Lazaraton, 1991; Cohen and Manion, 1994). The present study employed several complementary methods to analyse the data to strengthen the findings. Two independent evaluators were used to evaluate the materials quantitatively using an evaluation checklist. (The researcher also evaluated the materials.) This triple independent evaluation would to some extent offset at least some possible subjectivity. The evaluations were later subjected to interrater reliability tests. The questionnaires which elicited individual responses were subjected to quantitative analysis to increase the reliability of the research findings.

6.9 Quantitative Methods of Analysis

The study used two sets of evaluation questionnaires and an evaluation checklist to elicit information which were all subjected to quantitative analysis.

6.9.1 The Evaluation Questionnaires 1 and 2.

The questionnaires (see appendix A6.1 and A6.2) consisted of mainly (a) Likert scale type questions and (b) a few categorical yes/no type of questions or options. The responses for (b) were coded on a scale of 1-5 and were nominal data. The responses

for (a) were coded on a scale of 1-5 and were interval data. The raw data were therefore in a suitable form for quantitative analysis by using descriptive and inferential statistics.

Initially, a descriptive analysis was carried out to determine the responses of the participants in terms of frequency counts and the extent to which particular occurrences or patterns occur. These would enable the researcher to determine how the participants had responded to specified questions or categories and to identify any trends or patterns. The manner in which the responses occurred would then determine the type of inferential statistics to be used.

The responses from both the evaluation questionnaires were analysed using the following tests:

1. Descriptive tatistics and frequency counts.
2. Conversion of responses to weights or values

The responses from the same sections of both questionnaires were paired up to simplify the process of analysing and interpreting them. The findings of the quantitative data would complement the findings of the qualitative data.

6.9.2 Evaluation of Materials (Based on Checklist)
The evaluation checklist consisted of 34 questions/variables.
Questions were ranked from 5 - Excellent; 4 - Good; 3 - Adequate; 2 - Weak and 1 - Totally Lacking .
The checklist was divided into three sections. Section A covered Aims and Objectives; Section B covered the Content and Section C covered aspects about tasks and practice activities (see appendix A 6. 4).

All three evaluators' ratings of the materials produced from both methods were subjected to an interrater reliability test using the Pearson Correlation Coefficient test. This would provide the necessary confidence level to support the evaluators' decisions and the internal consistency of the checklist could be determined.

The scores based on the interrater evaluation were analysed using:
1. Frequency Counts
2. Mean scores and Overall scores
3. The t-test for related data was used to test for significant differences

6.10 Summary

This chapter has presented the research design, methods used and the different types of instruments developed to gather different types of information in the study. The workshop procedures used were structurally presented to enable future replication. Finally a discussion of the methods of analysis used in analysing both the qualitative and quantitative instruments used were presented. The analysis and findings of both the qualitative and quantitative data is discussed in chapters seven and eight.

CHAPTER SEVEN

Qualitative Analysis

7.0 Introduction

This chapter presents the findings of the analysis of the main qualitative data which is to be complemented in Chapter 8 by the findings based on the data of the quantitative analysis. The qualitative data was drawn from the Guided Group Collaborative Progress Logs of the pre and in-service teachers, exercises on tasks, open-ended questions from the post questionnaire and other materials as discussed in Chapter 6. The findings obtained from Methods 1 and Method 2 (see below) are compared to trace the effect of the use of the framework by the teachers.

For ease of presentation the analysis and findings have been subdivided into two main sections:

Section One:- Analysis and Findings of the Group Logs.

Section Two:- Analysis of the Teachers' Perception of the Concept of " *TASK*."

Section One consists of two Sub-Sections One A and One B; these present the findings based on Method 1 and Method 2 respectively as defined in Chapter 6. The findings of Section One A are based on the Collaborative Group Log Analysis (M1) and those of Section One B are based on both the Collaborative Group Log Analysis and the Questionnaire Analysis of open ended questions (M2).

The presentation of the findings consists of ;

(a) Tables showing all the salient parameters deduced from a contents analysis. These are presented as summaries.

(b) Some quoted comments by the teachers as individuals or groups. These illustrate the summarised data, give a feeling of the general tone of the comments in teachers' own voices and permit some cross-checking with the summaries. For conciseness further complementary comments have been included in Appendix A7.1. No grammatical corrections or any other modification have been applied to any of the quoted comments.

(c) General remarks regarding the findings, when appropriate.

Section Two consists of Task exercise 1 (Method 1) and Task exercise 2 (Method 2). These present the findings of the concept 'TASK' based on the training workshops carried out by the researcher (see Chapter 6). The findings and analysis are presented using specific formats consisting of remarks and diagrams. The format has been designed for similar reasons as that of (a).

7.1 Section One

Analysis and Findings of the Existing UPM Method (Method 1) and the Use of the EAP Framework and Training (Method 2)

This section provides a brief review of the collaborative group progress logs and methods of analysis. It also presents the findings based on both methods.

7.1.1 Progress Logs

The progress logs were used to obtain data about the teachers' reaction towards the framework. Information obtained from the progress logs complements findings of the questionnaires, and adds more substance to judgements regarding the feasibility of using such a framework for training in the field of instructional materials in EAP.

It is expected that the logs reveal information that cannot be gleaned from questionnaire responses. As an alternative source of information, they will confirm, support and extend the questionnaire findings. The progress logs used for this study were guided - the teachers were given instructions of what points to cover (see appendix A6.3). The progress logs provided a reflection of the teachers' perceptions of the existing method (Method 1) and of using the framework (Method 2) as a collaborative group.

Each group provided accounts of their development of the materials and use of the framework. It has to be pointed out that group accounts are not without problems. Although no groups indicated tension or dissension within their own groupings, care was taken to provide opportunities for individuals within groups to give their own separate accounts if they wished. At the same time, questionnaires were also used to elicit information from individual participants to assess support for the findings based on the logs. In an effort to try and control 'contamination of data', the researcher informed the teachers that their feedback would be used only to make further improvement to the framework and decisions for future training purposes in materials development and teacher training. At the same time, they were informed that the researcher would not read their accounts until after the end of the project, as suggested by Allwright and Bailey (1991:192).

The groups' progress log is basically a record of the events, thoughts, comments and actions taken during the study. Comments are agreed as from a collaborative group. A detailed description of the log and the group is given in the Glossary Section 1.14 in Chapter 1 and in Chapter 6.

7.1.1.1 Number of Logs and Description of Group Methodology

The analysis is based on a total of 52 progress logs obtained from 107 teachers, equally divided between Methods 1 and 2. These were 22 preservice group logs (11 each from Methods 1 and 2) and 30 inservice group logs (15 each from Methods 1 and 2).

The number of Pre-service teachers was 44. They were subdivided into groups consisting of 11 groups of 4 members each. The number of In-service teachers was 63 subdivided into 15 groups consisting of (a) 12 groups of 4 members each, (b) 3 groups of 5 members each. The groups were allowed to form freely to ensure a reasonable mixture of abilities, cultures, background and other aspects associated with a multi-cultural and multiracial Malaysian society (see Chapter 1 and 6).

7.1.1.2 Group Observations

It was observed that all the groups went through the four phases of group development of forming, storming, norming and performing, as suggested by Guirdham (1990). This led to effective participation and contribution by all the teachers during the workshops and the study as a whole.

7.1.1.3 Method of Analysis

The progress logs were analysed using content and inductive analysis procedures within the key guidelines provided and taking note of any other incidental comments. The procedures involved identifying emerging categories, themes and patterns from the data (see chapter 6). Comments based on common frequency of occurrence are presented and representative quotes are provided to highlight the categories concerned. Composite schemata in diagrammatic form are also presented to show the teachers' (presumed) thought processes.

7.1.2.0 SECTION ONE A (Method 1 [M1] - Existing UPM Method)

This section presents and discusses the findings based on the teachers' accounts about designing EAP materials in M1.

7.1.2.1 Analysis of Logs

The comments made by both the preservice (PS) and inservice teachers (IS) in the first phase of the study (Method 1) indicated strong frustration in designing EAP materials. All of their comments centred around problems they were encountering during the study, most probably due to their lack of experience or knowledge about EAP. The most frequently mentioned problems are presented below under several categories for both group of teachers.

7.1.2.2 Text(s) Selection

The major items of concern by the teachers were analysed using inductive contents analysis and are presented in Table 7.1, followed by typical comments. In this and the following presentations (of quotes) the symbols P = and I = have been used to denote Pre-service and In-service teachers respectively; the number following the symbol represent the number of teachers within the group making the comment.

In the first phase of the study the teachers were asked to design materials for low, intermediate and advanced proficiency students.

Table 7.1 Text(s) Selection

Problems / Items of Concern	Pre-Service N=44	N %	In-Service N=63	N %
Text Selection				
1. Did not know where to begin to look for relevant and suitable texts.	32 *(8 groups)*	73%	43 *(10 groups)*	68%
2. Determining the suitability of texts/materials found.	32 *(8 groups)*	73%	49 *(12 groups)*	78%
3. No prior knowledge of how to select EAP/ESP texts/ materials.	44 *(11 groups)*	100%	54 *(13 groups)*	86%
4. Selected texts only according to whether it looked interesting, relevant and according to own ability to understand the texts.	36 *(9 groups)*	82%	53 *(13 groups)*	84%
5. Lack of knowledge about the intended learners' ability obstructed the selection of suitable texts.	40 *(10 groups)*	91%	45 *(11 groups)*	71.4%
6. Lack of any knowledge/ guidelines on how to select materials for EAP/ESP learners.	44 *(11 groups)*	100%	63 *(12 groups)*	100%

Table 7.1 continued

7. Technical jargon created problems in selecting suitable texts/ materials.	44 *(11 groups)*	100%	48 *(12 groups)*	76%
8. Prior knowledge/experience limited the selection of texts/materials for non-academic purposes and the selection was confined to school-based texts.	44 *(11 groups)*	100%	63 *(15 groups)*	100%
9. Selected texts based on whether it was interesting, long or short, appears authentic	36 *(9 groups)*	82%	55 *(9 groups)*	87.3%
10. Selected text based on intuition and appearance	40 *(10 groups)*	91%	50 *(12 groups)*	79.4%

The summaries categorised above are further illustrated below:

Comments

" *We only selected texts which appeared to be suitable, interesting and not too long.*"
(P=4).

"*When selecting texts, those with a lot of technical terms/jargon and which were not explained in the particular text posed a problem to our understanding. Therefore, they were rejected. We did not consider the actual needs of engineering students.*"
(I= 5).

"*We do not have any prior knowledge or training of how to select EAP/ESP materials. We therefore depend on criteria like interest, relevance, authenticity etc.*" *(P= 4).*

" *We selected the text based on our own intuition. If we think its all right and that we can follow the information then it will be all right for the students. I t makes more sense to select the texts this way than spending time analysing the content.* " *(I=4)*

From the above it can be seen that both the PS and IS groups faced similar problems in selecting texts for the engineering students. There were however areas where the IS teachers experienced less problems than the PS teachers. Fewer IS teachers indicated that they had selected texts based on intuition and appearance, for example, by referring to aspects involving learners' ability and technical jargon.

It is interesting to note that more than 70 percent of the IS and PS teachers had selected texts using the criteria of intuition and appearance, interest, length of text and whether they understood it. For most of them it was a frustrating and confusing experience for the reasons as given above. This was not surprising because the teachers appear to have had very little experience in text selection. An analysis of the text selected by the teachers showed that there was no proper planning in identifying most of the texts and

as long as the text was an engineering one it was deemed appropriate by the teachers. Furthermore, some of the texts selected were too complex.

7.1.2.3 Adapting or Summarising Content of Text

The findings reveal that both group of teachers were reluctant to adapt or summarise the texts for reasons presented in table 7.2 below. The teachers' comments which follow further illustrate these reasons.

Table 7.2 Adapting or Summarising Content of Text

Problems / Items of Concern	Pre-Service N=44	N %	In-Service N=63	N %
1. Unfamiliarity with engineering structures /genres and terminology posed a problem in either adapting or summarising text.	44 *(11 groups)*	100%	50 *(12 groups)*	79.4%
2. Inability to follow or understand content of texts limited the ability to adapt or summarise any text.	44 *(11 groups)*	100%	53 *(13 groups)*	84%
3. The language structures were too difficult to adapt or summarise.	44 *(11 groups)*	100%	38 *(9 groups)*	60.3%
4. Limited knowledge and experience in adapting texts of any kind.	36 *(9 groups)*	82%	48 *(12 groups)*	76%
5. No attempt was made to adapt or summarise the texts due to the complex nature of the texts content or language.	32 *(8 groups)*	73%	53% *(13 groups)*	84%
6. Lack of clear specifications of learners' ability hampered adaptation of text	36 *(9 groups)*	82%	50 *(12 groups)*	79.4%

Comments

"We have never been exposed to the field of EAP/ESP, and we have little experience for adapting school text book materials for secondary school students." (P= 4).

"The language structures are too technical as compared to the language used in EGP texts. Therefore it was difficult to locate main points from the materials selected and to adapt and summarise the text. We also lack the necessary experience." (I= 5).

"We have always found it difficult the summarise texts, so we left it out. Moreover, we did not quite understand the text. The engineering words/terms were difficult to understand." (P= 4)

"Since we chose text that we understood, adapting/summarising was not a problem." (I= 4).

Both group of teachers indicated that they had problems adapting or summarising the content of the texts. This was mainly because they found the language structures too difficult, were unable to understand or follow the text content and they had limited knowledge in adapting texts.

7.1.2.4 Developing Tasks/Activities

Initial discussions with the teachers during the workshops indicated that they generally have problems with the development of task/activities. This was clear from their logs, as summarised in table 7.3. Both groups of teachers appear to have developed the EAP tasks based mainly on their previous training and experience besides copying from other sources. They also indicated that their lack of understanding of the text, inability to identify the level of ability of the intended learners and problems in identifying what to include or exclude in designing EAP tasks, hampered their ability to develop appropriate tasks. However, two PS groups and six IS groups indicated that they had no problems at all. Generally it can be seen that the PS teachers had more problems in developing tasks. The tasks were mainly those that addressed lower order skills and were mainly focused on the lower level reading comprehension questions. Hardly any visuals were used and there were no links between one task to another and the objectives were not clearly stated. The findings are presented below.

Table 7.3 Developing Tasks/Activities

Problems /Items of Concern	Pre-Service N=44	N %	In-Service N=63	N %
1. Did not know what type of activities or tasks to develop/ design.	32 (8 groups)	73%	42 (10 groups)	67%
2. Developed tasks by copying from other existing texts or materials	44 (11 groups)	100%	54 (13 groups)	86%
3. Were uncertain about whether the tasks developed were suitable and relevant for EAP.	40 (10 groups)	91%	45 (11 groups)	71%
4. Difficulty in developing tasks because teachers could not understand the text.	44 (11 groups)	100%	50 (12 groups)	79.4%
5. Uncertain as to what approach(es) to adopt in developing the tasks.	36 (9 groups)	82%	39 (9 groups)	62%
6. Did not know where or how to begin designing the tasks.	40 (10 groups)	91%	38 (9 groups)	60.3%

Table 7.3 continued

7. Problems in identifying what aspects to include and exclude in designing tasks for EAP purposes.	44 *(11 groups)*	100%	58 *(14 groups)*	92%
8. Problems in identifying exact or clear language ability to develop relevant and appropriate tasks.	36 *(9 groups)*	82%	45 *(11 groups)*	71.4%
9. Used previous training and teaching experiences to try to design EAP tasks/activities.	44 *(11 groups)*	100%	63 *(15 groups)*	100%
10. Had problems in just designing reading and writing tasks as previous experiences advocated integration of all four skills.	44 *(11 groups)*	100%	54 *(13 groups)*	86%
11. Lack of a guideline and examples hampered the ability to develop tasks/activities.	44 *(11 groups)*	100%	50 *(12 groups)*	79.4%
12. No problems in developing tasks as the same techniques used for developing EGP tasks were employed.	8 *(2 groups)*	18.2%	24 *(6 groups)*	38%

Comments

The following comments exemplify the teachers' problems in developing tasks for EAP purposes.

"We faced uncertainty in how to go about doing the tasks because we were restricted to designing only reading and writing skills." (I= 4).

"We are not sure of which areas to highlight as we don't know which areas are important." (P= 4).

"No background knowledge in EAP/ESP; therefore activities designed reflect the group's teaching experience - primary/secondary levels." (I= 4).

"We don't know how to do the tasks because there were no examples or guidelines" (P=4)

"In designing the activities for EAP engineering students, we were not sure where to begin, what activities to develop and also the language of the text was too complex for us." (P= 4).

Clearly most of the groups had considerable problems in designing tasks and in some cases lacked the basic skills. Surprisingly, some indicated that they found it difficult to just develop tasks for only the reading and writing skills without integrating other skills. Could the framework and further training assist the teachers to overcome any weaknesses and concerns ? This was a very important question for this project and is discussed in Section Two.

7.1.2.5 Planning the Development of the Tasks / Materials

The importance of planning with guidelines and previous knowledge of EAP materials were highlighted by both groups of teachers. However there were serious concerns about planning as shown in Table 7.4.

Table 7.4 Planning the Development of the Tasks / Materials

Problems / Items of Concern	Pre-Service N=44	N %	In-Service N=63	N %
1. Difficulty in planning tasks/ activities due to lack of experience/knowledge of EAP/ ESP materials design.	44 (11 groups)	100%	50 (12 groups)	79.4%
2. Lack of definite guidelines/ format was a set-back in planning the materials.	44 (11 groups)	100%	48 (12 groups)	76%
3. Problems in planning materials that did not require the integration of four skills.	36 (9 groups)	82%	53 (13 groups)	84%
4. Problems in planning challenging/motivating activities due to the technical nature of the text.	40 (10 groups)	91%	54 (13 groups)	86%
5. Planning the tasks was too time-consuming.	44 (11 groups)	100%	55 (13 groups)	87.3%
6. Problems in defining objectives in the planning stage.	40 (10 groups)	91%	44 (11 groups)	70%
7. Lack of knowledge about the learners created problems in planning the materials.	36 (9 groups)	86.4%	37 (9 groups)	59%

Comments

The teachers' concerns were clearly expressed as shown below.

"We are so used to planning activities for school students, therefore we find it hard to plan activities that would cater for the needs of EAP students when we have no special training or knowledge." (P= 4).

"We have no clear guidelines and experience except what we learnt in materials selection and adaptation, but it was still very difficult to plan the materials." (P= 4).

"It was very difficult to plan at the initial stage. There were problems in deciding whether we should gear the activities towards a language-based or a content-based approach." (I= 5).

"We had no clear knowledge about the learners and the type of problems they had. Therefore we had problems in planning and setting clear objectives. Moreover, if we had to do any needs analysis, it would have been too time-consuming." (I= 5).

"The planning time for developing the materials was too time-consuming. It took us too long to decide on the activities." (P= 4).

"We had difficulties to plan the activities because there were no guidelines for planning the objectives." (I= 4).

311

"We did not know how or where to begin. Our previous training did not prepare us for doing activities for students at our level. We did not have examples to follow." (I= 5).

"If we had proper knowledge and exposure, it might not have been too difficult. All our experiences in materials selection and adaptation is only with the KBSM syllabus." (P= 4).

It can be seen that, on the whole, there were clear differences between the two groups at this stage of the study in terms of their concerns. The teachers maintain that they had problems designing tasks because they lack experience and knowledge in EAP. This indicates that they were not applying or transferring their previous knowledge about task design. Their problems centred around items 3, 4, 5, 1 , 9 and 6 (see table 7.4). Item 6 was a problematic area for the PS teachers and this is also exemplified in the findings of their materials in M2.

7.1.2.6 General Remarks on Method 1

The teachers emphasised very strongly that their lack of knowledge of EAP/ESP posed a problem in selecting texts and structuring task. There was a firm belief in the need for some form of guideline with examples of how to make appropriate materials. Interestingly both groups strongly indicated that they identified texts based on their intuition, feelings and appearance of the texts. It can also be gleaned that previous exposure or training influences or shapes their thinking. At the same time it is implied that they were not able to apply their previous learning and teaching experience into EAP materials development. The teachers' frustrations and concerns at this stage of the study are summarised as shown in figure 7.1. The teachers did not provide a detailed account of the processes they used in developing the materials as was found in M 2.

The determination of the level of competence in developing materials by the teachers at this stage of the research was very important, because the understanding and application of the framework and training depended on their initial competence. Therefore, the required training and workshop contents had to match their level of understanding at the beginning of Method 2.

7.1.3.0 SECTION ONE B (Method 2 [M2] -Use of the framework)

This section introduces and discusses the analysis of the teachers' reaction towards the use of the framework and the Training in Method 2 (M2).

VIEW OF EAP MATERIALS DESIGN

EASY TO DEVELOP

NOT MUCH PLANNING & THINKING NEEDED

ENCOUNTER PROBLEMS WHAT TO DO NEXT?

Frustration confusion

PUT EXISTING KNOWLEDGE TO PRACTICE

KNOWLEDGE BLOCKED

BEGIN TO SELECT TEXT USING EXISTING PRINCIPLES OF MATERIALS SELECTION AND OWN INTUITION

THROUGH THE DEVELOPMENT OF MATERIALS ON THEIR OWN

ADAPT TEXT -HOW?
REFLECT→TRACE PREVIOUS STEPS
STILL ENCOUNTER PROBLEMS
↓
WHAT TYPE OF TASK TO DEVELOP?
DO NOT KNOW WHERE TO BEGIN

FOLLOW PREVIOUS KNOWLEDGE
LESS LIKELY TO GO WRONG
BUT STILL UNCERTAIN ABOUT HOW
  TO DEVELOP TASKS ——► NEED MORE
  INPUT

REALISATION
NOT AS SIMPLE
AS IT SEEMS
UNABLE TO
UNDERSTAND THE TEXT

Figure 7.1 Teachers' Processes in Developing EAP Materials Using Method 1

7.1.3.1 Analysis and Findings of Group Logs

In general, the findings provide a picture of mixed feelings and reaction towards the framework, with most teachers leaning to a more positive attitude towards it. The analysis will be presented based on comprehensive headings, specific and narrowed headings and schematic mapping from the collated data.

7.1.3.1.1 Attitude Towards the Framework

During the pilot studies and Method 1, it became apparent that new ideas or tools put forward to assist pre and in-service teachers with the design of EAP materials must take into account the general abilities of the teachers and should provide them with a focus and a sense of direction. The findings of such a tool are presented in Table 7.5.

Table 7.5   Attitude Towards the Framework

Views	Pre-Service N=44	N%	In-Service N=63	N%
POSITIVE VIEWS				
1. Resourceful and provides good guidance for materials and task preparation.	36 (9 groups)	82%	54 (13 groups)	86%
2. Comprehensive and detailed, encompassing a wide range of suitable guidelines to facilitate text selection and task design.	28 (7 groups	64%	45 (11 groups)	71.4%
3. Useful and provided focus on tasks and materials design systematically.	24 (6 groups)	55%	49 (12 groups)	78%
4. framework's specification helps in monitoring and evaluating text selection and task design.	32 (8 groups)	73%	55 (13 groups)	87.3%
5. Provides broad, specific and flexible guidelines for text selection and task design.	36 (9 groups)	82%	42 (10 groups)	67%
6. Provides valuable insights into the different types of text patterns and learning strategies for task development.	20 (5 groups)	45.5%	49 (12 groups)	78%
7. An indicator of which skills, weaknesses or strategies to be developed in tasks.	28 (7 groups)	64%	53 (13 groups)	84%
8. Provided a whole new outlook on materials design.	24 (6 groups)	55%	58 (14 groups)	92%

Table 7.5 continued

9. It made the process of text selection and task design simpler and less of a burden.	36 *(9 groups)*	82%	63 *(15 groups)*	100%
10. Provided clear, focused and challenging guideline for inexperienced teachers to develop materials with more depth.	36 *(9 groups)*	82%	-	-
11. Useful for not only EAP materials development, but also EGP materials.	16 *(4 groups)*	36.4%	46 *(11 groups)*	73%
NEGATIVE/UNDECIDED VIEWS				
12. There are far too many aspects to take into consideration or focus on.	28 *(7 groups)*	64%	45 *(11 groups)*	71.4%
13. It is difficult to incorporate the different specifications for task design.	24 *(6 groups)*	55%	9 *(2 groups)*	14.3%
14. It takes too long to plan and develop the different types of tasks to satisfy the learners' requirements.	40 *(10 groups)*	91%	46 *(11 groups)*	73%
15. Too difficult and complex to follow although guidelines are provided.	20 *(5 groups)*	45.5%	21 *(5 groups)*	33.3%
16. There is no need for such a framework. It is a waste of time. Textbook examples can be easily copied and used	8 *(2 groups)*	18.2%	5 *(1 group)*	8%

Comments

The above findings are clearly reflected in the following comments:

Positive Reaction:

"In our opinion, this framework for developing EAP tasks contains a lot of special specifications and characteristics for the learners of various levels of competency or ability. When using it, we feel that this particular framework has a lot of positive impact on us towards guiding us in developing better task of learning." (I=5).

"The framework is resourceful and gives a lot of guidance for us to prepare tasks. The learning strategies and genre given widens our knowledge and encourages us to give more thought to task design. We did not readily have any input in these areas before." (I=4).

"When we first saw the framework, we all thought "wow! We are going to have difficulties digesting it. It seemed to look so easy during the training session. What we learnt though, is that materials design is no easy task and that it involves a lot of planning. In a sense, the framework provided us with the guidelines on how to design academic tasks or activities differently." (P=4).

"This framework gave us the guidelines in coming up with systematic tasks for EAP or for language teaching. We found it to be flexible and we did not have to use it rigidly. Most of all, it provided us with a whole new outlook towards materials design." (P=4).

Negative Reaction:

"We are not sure how we feel about it. In some ways we see its relevance and in some ways we find it intimidating, as there is far too much for us to focus on for designing just a few tasks. Our prior experience in materials design did not prepare us sufficiently to allow us to exploit the use of the framework or to design materials according to the specifications of the framework." (I=4).

"Although there is a systematic direction for us to select texts and other aspects for designing EAP tasks, we still faced a lot of problems in using it. We do not understand a lot of things and we have no time to spend too long on it. Unfortunately, we have never been exposed to this 'kind of thing' before, therefore we can't really appreciate it." (P=4). (See appendix A7.1 for more comments)

In general most teachers indicated that the framework provided them with a systematic means of thinking through text selection, task selection and development. They maintain that they were able to use the framework to monitor and evaluate the texts and tasks selected and developed. They found the framework to be a resourceful guideline and that the learners' profile provided direction as a starting point in text selection and subsequent use of the other strands of the framework. Although there were some negative views, these were mainly due to unfamiliarity with the framework and possibly to a negative attitude of some of the teachers about the complexities involved in EAP materials design. However, for many it provided a focus, a sense of direction and a means of monitoring and evaluating their materials..

7.1.3.1.2 Liked or Disliked the Framework

Findings about general acceptability in terms of likes and dislikes of the framework are presented in table 7.6.

Table 7.6 Aspects of the Framework which they Liked or Disliked

	Pre-Service N=44	N%	In-Service N=63	N%
Liked				
1. Specifications of learners' ability.	36 *(9 groups)*	82%	63 *(15 groups)*	100%
2. Specifications for learning strategies, visuals, and tasks/skills to be practised.	40 *(10 groups)*	91%	55 *(13 groups)*	87.3%
3. Specifications on types of texts.	32 *(8 groups)*	73%	59 *(14 groups)*	94%
4. The guidelines for genre, knowledge structure and visuals.	28 *(7 groups)*	64%	49 *(12 groups)*	78%
5. The framework as a systematic guideline.	32 *(8 groups)*	73%	55 *(13 groups)*	87.3%

316

Table 7.6 continued

Disliked.				
1. The suggested length of words of texts for each band level.	16 (4 groups)	36.4%	21 (5 groups)	33.3%
2. Non-restrictive nature of specifications.	-	-	17 (4 groups)	27%
3. Inadequate explanation of some terminology, e.g. multi-framed, spatial relationship, etc.	24 (6 groups)	55%	31 (7 groups)	49.2%
4. Specifications on genre and knowledge structure.	32 (8 groups)	73%	45 (11 groups)	71.4%
5. Need to have good theoretical knowledge and it is too demanding on the teacher.	44 (11 groups)	100%	42 (10 groups)	67%

The general views seem to be balanced and encouraging. Some of their comments are presented below:

Comments

"Our group members agreed that we liked the suggestions on the learners' ability, tasks, visuals, learning strategies. These suggestions helped us a lot in our selection of the text, tasks and how we should design the task. Moreover, the teachers' guide provided us with step-by-step guidelines which we didn't have from our previous materials course BB1 357." (P=4).

"We felt that the detailed information about the learners' level of proficiency and the other suggestions/specifications were helpful. All these aspects helped us to select and identify texts, develop objectives and plan tasks or activities. We found that we were also learning."
(P=4).

"Two of our group members felt that the recommended length of words to be used for each band is restrictive. This is because it gives lesser choice for us in selecting the text." (I=2).

"The framework has its own strengths and weaknesses. However, we (names supplied) felt that the guidelines on levels of ability, explanations and suggestions on task design (from teacher's guide as well), visuals, learning strategies and task types helped us to systematically develop our ability to design systematic tasks for the learners." (I=5).

On the whole, the teachers strongly indicated that there were many aspects of the framework which they liked although there were also other aspects which they disliked. There were teachers who provided individual reasons for aspects they liked or disliked, and also indicated that they lacked theoretical knowledge whenever they were exposed to such a comprehensive framework. The comments or views provided by the teachers about the framework were balanced and hence very encouraging to the researcher. It is also interesting to note that the teachers maintained that the aspects they disliked

stemmed from the fact that they needed to have good theoretical knowledge and that to remedy this would require considerable knowledge.

7.1.3.1.3 Approach/Approaches in Using the Framework.

The most important aspect in the use of the framework and its appropriateness is the way in which it was used or processed by the teachers in developing their tasks. It was considered useful to present the findings from the IS and PS groups in their own right, as the former were expected to be more experienced than the latter groups.

In analysing how the teachers used the framework, several alternatives are used and presented besides the composite schema. Diagrams illustrating the teachers' approach or approaches are also included. These provide an insight into the manner in which they processed the frameworks' specifications besides providing an overall picture of their selection of text, planning and development of the tasks/materials.

7.1.3.1.4.1 In-Service Groups' Processes and Comments in using the framework.

The processes used by the teachers are very detailed. The accounts of two groups' processes that are typical of most of the others are presented below (see appendix A7.1 for further comments).

Group AQ: (I=4).

"We designed our tasks based on the suggestions provided by the different categories of the framework. We also frequently referred to the teachers' guide provided and used the framework in a cyclical way, going back and forth to check all our steps. Our group worked in the following way when we used the framework to design the tasks:

1. *We studied the category on learners' ability individually, and identified the problem areas. Then we presented what we interpreted and agreed on the same thing. We then tried to formulate some learning objectives based on their ability.*

2. *Next, we selected texts which matched the above and the other categories in the framework.*

3. *Next, led by our group leader, we brainstormed the texts and together tried to identify the textual patterns and the knowledge structures needed to understand the text.*

4. *Draft plans were then drawn up by the four of us according to our own interpretations and ideas of our understanding of the texts and the kinds of tasks that we would design.*

5. *We then drafted rough sketches of possible tasks for reading and writing after pooling all our ideas together, and selecting what we thought were the best ones. In this way, each of us practised using the framework.*

6. *We next studied the suggestions for visuals and learning strategies, and tried to expand our ideas by incorporating them.*

7.	Finally, we went over our tasks again by referring back to the framework's specifications, and particularly the learners' profiles. It was a stimulating and challenging experience and we really had to plan well and think deeply about what we were designing. We were learning to do materials in a different way and we agreed that we did learn a great deal."

Group AX: (I=4).

"We referred to the framework very often, even when we were at the final stage of our work. In a sense, we were moving from one category to the other, then looping back and forth at the same time, like a spiral approach.

1.	We discussed the framework's specifications across the board carefully, to see the links.

2.	Discussed and brainstormed the interpretations of it. We also used our previous knowledge of materials development and also the principles of materials development. At the same time, we also referred to the teachers' guide provided.

3.	We were now ready to study each category closely. We studied the category on learners' ability - identified their assumed strengths and weaknesses for reading and writing skills.

4.	Next decisions on what type of text(s) would be suitable in terms of vocabulary, sentence structure, visuals, content, text patterns, etc. were made.

5.	We looked for text(s) that would meet the criteria suggested in the framework and, in particular, the learners' ability.

6.	Once we had the text, we each studied it in the light of our learners' ability and to identify text patterns, content, thinking and grammatical skills, etc.

7.	We then brainstormed our ideas and produced an outline of our drafts in terms of:-

	-	objectives
	-	types of tasks
	-	types of texts
	-	text patterns found
	-	type of knowledge structures required to understand texts
	-	visuals; what was lacking, what was needed, what would be effective.

8.	Individually, we designed tasks with reference to the framework and to meet again to discuss and brainstorm all the different ideas. We were, in fact, learning from each other.

9.	Then we put together all the ideas and discussed each task with reference to the framework. We tried to identify:-

	a.	The strengths and weaknesses of our task(s);
	b.	Text patterns and knowledge structures;
	c.	better ways of incorporating the learning strategies;
	d.	appropriate visuals for illustrating text content and text patterns;
	e.	appropriate learner support, explanations and how to provide feedback to the students. It was really a challenging experience and we realise that designing tasks or materials is not just adapting or simplifying materials, but it involves a lot of planning and thinking."

7.1.3.1.4.2 Pre-Service Group Processes and Comments in using the framework.

The following are the stated processes and comments of two Pre-Service groups which are representative of the others (see appendix A7.1 for others).

Group AA: (P=4).

1. "In our groups we discussed and brainstormed the different aspects of the framework to try and understand it. We had to keep moving from one category to the other and then going back again. In a way, we were looping and moving in a circle. This was to make sure that we could see and understand the links.

2. Next we studied the suggestions of the bands/learners individually. We then met again as a group to discuss our interpretations. Once we agreed on what we were looking for, we looked for the texts and studied the text individually again to identify the content, text patterns, thinking skills and grammar points.

3. The group members met up again to present our findings and suggestions for task design. As soon as we agreed on what type of tasks and that we had identified the necessary patterns and content, we began developing some plans to design the tasks, etc.

4. We prepared some objectives based on the learners' ability and what we had identified in the texts, based on the framework's suggestions.

5. Then we used our plans and objectives to guide us to design our tasks.

6. Once we completed the tasks and developed the learner support, we checked the steps in the tasks and the answers. When we were satisfied, we referred back to the framework to monitor the development of our tasks to make any other changes.

Group AR: (P=4)

1. "First of all we studied the framework as a whole, i.e. the framework for the bands we were given.

2. Next, we studied the categories on the learners' ability first, as this is the key to all other aspects of designing the materials.

3. We identified key problems from the profile together..

4. Then we went on to study all the other specifications by brainstorming and systematic organisation in the following order:

    - We identified the most appropriate text.

    - Then we studied the content of the text.

    - The next stage, we tried to study and identify the text patterns before identifying the grammar points and thinking skills required to understand the text. Our group found this quite difficult to do.

    - The next major thing that we did was to draft some objectives which would lead to the designing of the tasks by returning to the learners' profile and then go on to pick out some key points from all the other categories of the framework.

5. We then used the framework to check our tasks again.

320

6. *In the planning stage, we went forward and backwards and round and round the different categories to pick out different elements which would be needed to incorporate into the tasks.*

7. *We use the framework we think, in many ways. We were always referring to the suggestions in the framework while designing the tasks. We jumped from one group of suggestions to the other in no particular order. This we did only after we had studied and identified the students' level of ability. One of our group members noted that we actually use it like in a cycle where you can go forward and then reverse when you need to. So we found it to be flexible because we did not have to use all the suggestions in the framework - we had to be selective and only identify key aspects that were matching to our learners and to the texts. In our opinion there isn't any fixed way of using it. The only thing we had to make sure of is that we needed to identify the learners and the text first."*

7.1.3.1.4.3 Diagrammatic Schemata of the Processes Involved in Using the Framework

Only two schemata will be presented; they are quite representative of the others. This provides an insight into some of the processes used by the teachers.
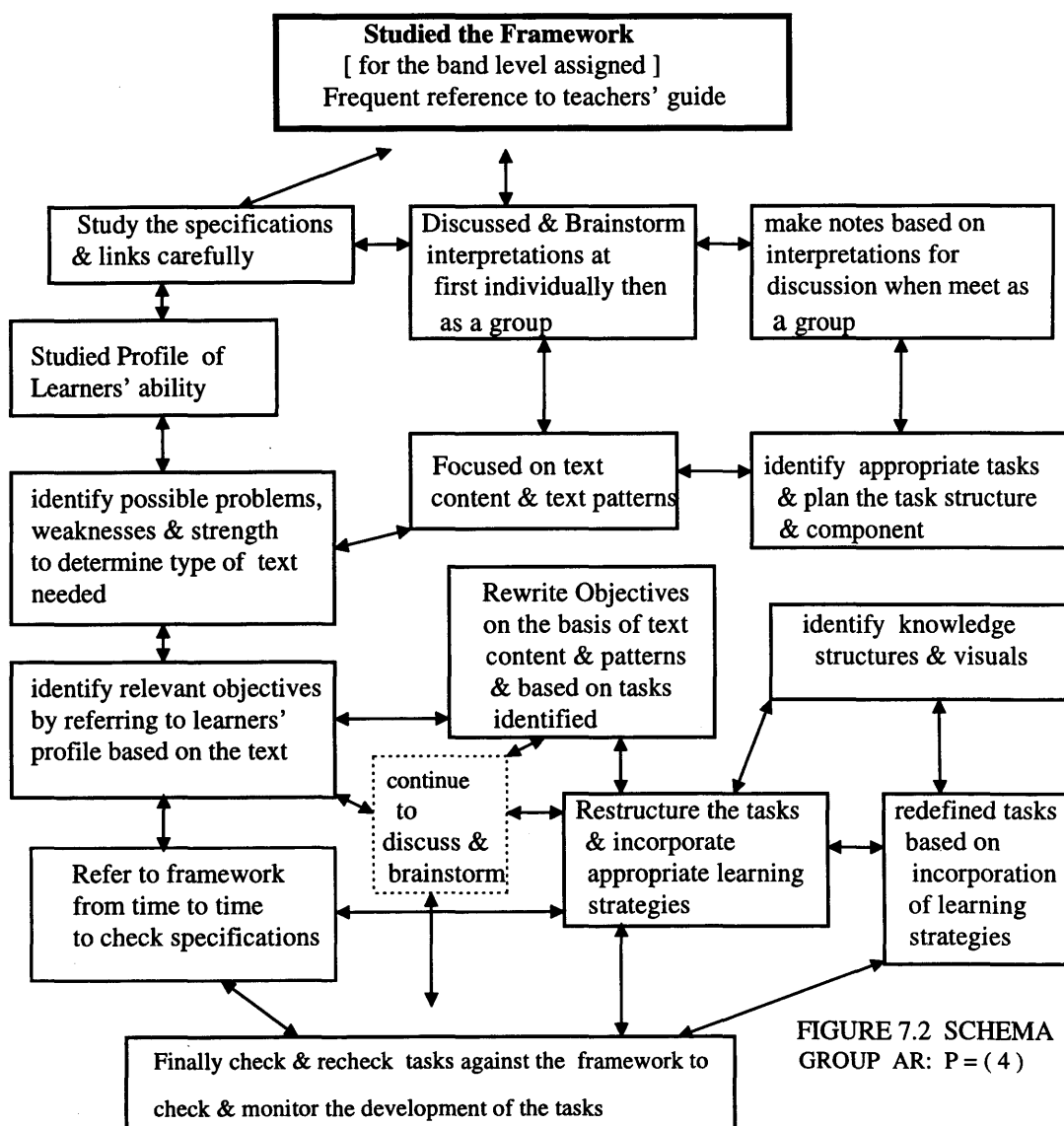
FIGURE 7.2 SCHEMA OF GROUP AR: P = (4)

Framework Strands & Specifications

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┌─────────────────────────────────┐
│ Framework Strands & Specifications │
└─────────────────────────────────┘
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Study the specifications & links carefully

refer to teacher's guide

Discussed & Brainstorm interpretations

Studied Profile of learners ability

Brainstorm & discussed points

Decide on type of texts vocabulary, visuals, content, text patterns, sentence structure

look for text which meets criteria suggested in the framework & in particular learners' ability

Selected Texts

- objectives;
- type of tasks;
- text patterns;
- type of knowledge structure required (thinking skills & grammar skills

Studied text in the light of learners' ability & other specifications of the framework

Brainstormed ideas and produced outline of draft of task in terms of :

identify appropriate visuals

- identify strength & weaknesses of tasks,
- incorporate learner strategies &
- appropriate visuals

Designed tasks based on draft plans individually

Brainstormed all ideas by pooling all ideas & discussed each task

include learner support and feedback

Check tasks by working back and forth through the specifi- cations & the links & with reference to the teacher's guide

Figure 7.3 Schema of Group AX: I= (4)

The findings show that the processes in which both group of teachers worked were initially similar (to begin with) but began to differ as they progressed in using the framework in developing the materials. It also reveals that there was a clear pattern of organisation.

Each diagram is synthesised from the groups' reflection. Each shows an iterative and interactive process in using the framework with the teachers going back and forth to monitor the development of their task in an effective manner. This suggests that both cognitive and meta-cognitive strategies are involved (see comments by teachers on how they used the framework in sections 7.1.3.1.4.1, 7.1.3.1.4.2 and appendix A7.1).

7.1.3.1.5 Text Selection

The aspect of text selection when using the framework is very important in terms of its usefulness to the teachers. The analysis of this aspect could reveal the manner in which the teachers selected text(s), based not only on the framework's specifications and teachers' guideline, but also on their own teaching experiences and existing knowledge of principles of text selection.

Table 7.7 presents the frequency of occurrences of the different criteria which each group used for selecting the texts. A composite diagrammatic form obtained from both PS and IS teachers is also presented, to illustrate their thinking processes.

Table 7.7   Methods used for Text Selection

Selection of Texts	Pre-Service N = 44	N%	In-Service N = 63	N%
Text(s) selected based on:				
a) Learners' profile / or assumed underlying ability/ learners' needs, based on the framework's specifications.	44 *(11 groups)*	100%	63 *(15 groups)*	100%
b) (i) Types of texts from the various engineering disciplines or literature. Basic texts, articles to advance texts within the engineering courses.	16 *(4 groups)*	36.4%	26 *(6 groups)*	41.3%
(ii) More general scientific-engineering based texts. (Genre)	28 *(7 groups)*	44.4%	37 *(9 groups)*	59%
(iii) text complexity (in terms of length, vocabulary, sentence structure).	12 *(3 groups)*	27.3%	22 *(5 groups)*	35%
c) Text patterns / structure (Discourse patterns) - clear uncomplicated ones.	40 *(10 groups)*	91%	59 *(14 groups)*	94%
d) Content. (Sufficient / adequate and appropriate)	44 *(11 groups)*	100%	63 *(11 groups)*	100%
e) Own comprehension of content. (text can be easily understood)	36 *(9 groups)*	82%	37 *(9 groups)*	59.0%
f) Adaptability of texts. (can texts be adapted when necessary)	28 *(7 groups)*	44.4%	39 *(9 groups)*	62%
g) Visuals (does content allow for inclusion of visuals; are existing visuals appropriate and adequate; what would be the most appropriate visual(s) to include; can visuals be modified)	44 *(11 groups)*	100%	63 *(15 groups)*	100%
h) Overall specifications of the framework and guidelines from the teacher's guide	40 *(10 groups)*	91%	59 *(14 groups)*	94%

Table 7.7 continued

i) Existing Principles of Materials Selection
 	
  - challenging
  - interests
	36
	(9 groups)
		82%	30
			(7 groups)
				47.6%

j) own teaching experiences	-	-	30 *(7 groups)*	48%
k) seeing what other teachers do	32 *(8 groups)*	73%	21 *(5 groups)*	33%

The above table clearly indicates that both the PS and IS teachers used quite similar methods when selecting texts, guided by the framework's specifications, the teacher's guide and the existing principles of materials selection. A few of the IS teachers also used their previous experience.

All groups emphasised the fact that they were guided by the specifications on the learner's profile of ability and visuals (100% for both sets of teachers). With the exception of one pre- and in-service group all other groups indicated that they did consider identifying text patterns in selecting the texts. All groups ensured that content was included in considerations of text selection. Other considerations were as shown in table 7.7 and the composite schema (which are typical of most groups) in figures 7.2 and 7.3 are further illustrated in figures 7.4 A, B, C and D. The analysis of the texts used by the teachers indicated that the texts were more systematically selected. More care was taken and many of the groups had to use a different text from that used in method 1. This suggests that the teachers were able to analyse the selected text according to the students' level of ability and the framework's specifications. The way the teachers selected the text showed some improvement but this aspect could be further improved.

Comments

Both the inservice and preservice teachers provided comments on how they thought the framework and teacher's guide helped (or did not help), in identifying and selecting relevant texts.

> *"Our group members think that the framework's guidelines did help us to identify the relevant text(s) for our assignment. It clearly suggests type of texts, from where and suggestions for text structure inclusion. At least we know what we need to focus on and look for. We were really practising how to identify suitable text. It wasn't easy but it made us think." (I = 5)*

> *"For us, text selection has always been a problem. However, we feel that the training we had in using the framework and learning how to identify texts which are relevant*

to our students made such a process much easier. We were also able to match it with our current knowledge of materials selection not what we think it might be." (P = 4)

"The framework teacher's guide and workshop sessions guided us to look for appropriate texts more systematically because: (1) it helped to identify the kind of learners we were going to be working with - not just abstract - intermediate, advance etc. (2) what type of text we should look for and where we might find such a text and finally (3) what should be in the text etc., etc. Our group members also realised that adapting the text would be possible because we were guided to look for text patterns. Therefore analysis of the text patterns would help in adapting our texts if necessary. Actually, this was a new aspect which two of our group members discovered quite by accident and helped us to discuss the issue. We had not realised this before." (I= 4)

"The specifications outlined in the framework helped us to at least identify the kinds of texts we need instead of running around in circles looking for texts like we did in the 1st phase. It provided direction for texts selection. In the first stage of the project we did not know how or where to look for texts and what would be suitable. Instead we tried to identify texts which we considered interesting and which we can understand. However, the second training session made us realised that this is not always possible. We gained knowledge of how to use our previous knowledge of materials selection together with the guidelines from the framework and the workshop sessions." (P = 4)

Problems:

"In spite of the training and guidance we feel that we still have problems identifying the texts which is simple enough for us to understand." (I = 5)

"We found it very troublesome to select the suitable texts for the project. We are not engineers and were never trained like this before. Therefore, we could not understand why we had to go through so much effort to select the suitable texts. All of us feel that selecting texts should not be made a difficult task. After all even with the framework we still could not find texts that we can understand. The texts we had was difficult to understand and we don't even know where to begin to identify texts patterns - what's the purpose?"
(P = 4)

It can be seen that the framework as a whole was seen as a useful tool to both groups of teachers in terms of learning how to think, to learn and re-learn, to plan and organise text selection and materials. However, some groups appear to have difficulties in spite of their previous teacher training courses and the workshops. These difficulties may be due to psychological problems or lack of confidence; this further confirms the need of such a framework for use as a guide and the desirability of further practice.

7.1.3.1.6 Designing and Developing Tasks.

The design and development of tasks is a function of skill application, previous experience and the understanding of the meaning and definition of the concept "Task". The analysis of accounts of the "task" design and development process during the second stage of the research strongly shows that the teachers (both pre- and in-service) started to develop new skills and had learned from their experiences and workshop during the second stage (M2) of the study. This is reflected in their definition of the concept "task"

and what they thought task should be for, as well as its importance. They were able to reflect on their learning during M1 and M2.

The presentation of the findings is given under three main headings, each aspect under a heading is considered an important factor and is based on frequency of mention.

(a) Table 7.8 demonstrates how the groups developed their own methods for designing the EAP tasks.

(b) The direct comments of the two groups outlining their thinking processes and feelings.

(c) The most important aspect of the task design and development in relation to the framework, as most frequently stated by the groups.

7.1.3.1.6.1 Design and Development of *task* by all the Groups

The analysis led to the identification of four major 'categories' or 'frames' used by the groups and although they are similar they are not the same as shown in table 7.8. The four categories identified provide a composite schema for the groups in terms of the approaches used, the manner in which the materials were selected and the way groups developed their tasks.

These four major types of similar processes could be discerned from the teachers' accounts. Frame four seem to be the most popular method of processing the design and development of the tasks, among both groups of teachers. It seems more of a top-down systematic approach and then doubling back in a bottom-up interactive manner to monitor progress at the end of the planning or drafting session. The inservice teachers were spread out among all four frames with Frames 1, 2, & 4 being the more common ones and only a few (4 groups) were in Frame 3. It suggests that the teachers were clearly able to account for the approach used in developing tasks (see appendix A7.1 for full accounts).

Table 7.8 Methods for Designing and Developing Tasks

Methods and Steps for Designing and Developing Tasks	Pre-service N = 44	N%	In-service N = 63	N%
A) FRAME ONE (i) Check students' needs again by looking at learners' profile first after text has been identified (ii) Break text content down by deciding what aspects to develop first then linking the aspects to textual patterns. (iii) Use textual patterns as a base and identify the key grammatical elements to include in the tasks. (iv) The thinking skills identified together with the text patterns are used to develop objectives for the tasks. (v) Objectives are reformulated and rubrics for tasks are planned and drafted. (vi) Break down tasks into smaller sub-tasks and begin incorporating learning strategies into task(s). (vii) Study task(s) again, identify poor rubrics, etc. and tasks which require learner support.	8 *(2 groups)*	18.2%	13 *(3 groups)*	21%
	Pre-service N = 44	**%**	**In-service N = 63**	**%**
B) FRAME TWO (i) Identification of all the necessary components in the text based on the framework specifications. (ii) Plan for visuals and type of learning strategy to include in the tasks. (iii) Develop main tasks then sub-tasks leading to the completion of the main task. (iv) With draft of main task, objectives of the task are formulated followed by objectives of the sub-task. (v) Sub-task(s) involves the incorporation of learning strategies. (vi) Monitor development of tasks by using framework and teacher's guide for feedback and evaluation purposes.	12 *(3 groups)*	27.3%	12 *(4 groups)*	19.1%

Table 7.8 continued

C) FRAME THREE				
(i) Brainstorm text content and text patterns. (ii) Identify thinking skills and grammatical elements. Matched these to learners' level. Include visuals and learning strategies. (iii) Formulate instructions and objectives of all the main task(s). (iv) Break down the main task components to identify sub-tasks. Begin to identify necessary learner support. (v) Try out the task(s), develop answers and rewrite some tasks, instructions and objectives. (vi) Re-analyse text(s), check task(s) developed and evaluated task(s) against learners' profile. (vii) Rearrange sequence of tasks to ensure links between tasks.	4 *(1 group)*	9%	9 *(2 groups)*	14.3%
D) FRAME FOUR	**Pre-service N = 44**	**%**	**In-service N = 63**	**%**
(i) Study text for type of content, text patterns and identify necessary content and text patterns to begin with. (Identify thinking skills and grammar points) (ii) Identify relevant main task(s). Formulate objectives for each main task(s). (iii) Study main task(s) and develop sub-tasks. Then link all tasks to show progression in text understanding. Built into the task appropriate learning strategies through actual tasks-sub-tasks or through instructions. (iv) Identify tasks for inclusion of visuals where appropriate. (v) Develop learner support for task(s) which might need further explanation. (vi) Go through task(s) again. Evaluate it against the framework specifications and the learners' level of ability. Monitor the answers. Make changes where necessary.	20 *(5 groups)*	45.5%	29 *(7 groups)*	*46%*

Direct Comments by Both Groups

The IS teachers were more willing to use the framework in an order which was more comfortable to them; some were able to develop a skill of using the framework without linearity. This is reflected by the four frames and the following comments:

"Designing the tasks took much planning and thinking. It was necessary for the group members to be clear about what our definition of task is. Our group members decided that we should develop our task based on our definition, and then we can either broaden or narrow the tasks based on the learners' needs, and other specifications in the framework . . . . . . incorporated the necessary aspects as outlined in the framework . . . . . . We considered our goal or objectives of the task as important and used them to guide us and to focus on the task we were developing. We spend much time thinking on ways of simplifying the instructions and have a sequence of linked tasks. There was a need to make sure that the tasks was at the level of the learners. We as a group think that one of the lessons we learned from this project is that task design is not a simple thing. It is easy to copy from texts but not so easy to develop on your own." (I = 5)

"This project has been one of the most challenging in terms of task design for all four of us. At first we wondered whether we would be able to do any but as we brainstormed and discussed as a team we were able to weed out what we thought was necessary and unnecessary. The learners were our central focus. That was the first thing we did. On a large piece of paper we placed a box with learners on it and what they required to learn . . . We spend time brainstorming the text against the framework then putting on paper what we should include in our tasks and the kinds of task we were going to design . . . . . We needed to really understand the texts and how we could exploit understanding of the texts at the same time imparting language learning skills . . . . . . Once we developed our objectives the path became smoother for us . . . . . We were able to build in the learning strategies, the instructions and develop a sequence of relationship between all the task . . . . a very new experience for us. The teacher's guide and the framework was also extremely useful for us at this stage. It provided systematic suggestions which helped us to see the links clearly . . . . . . The project suggests that there is a great deal more to task design than what we have been used to and that it differs from exercises or activities in its design and application. It is the teacher who can manipulate the task input with plenty of planning and thinking." (I=4)

"Designing the tasks was not as easy as we thought it would be. Our previous training sort of made us to think that task design is not a complex thing at all, and when we designed tasks using engineering students text during the 1st phase of this project it did not take us long at all. We did not have to sit and think and plan so much as we had to for the 2nd part of the project. It suddenly seemed that now there was still a great deal more we had to learn about task design. This was a new learning process for us. We had to spend so much time to analyse and reanalyse the task before any tasks could be identified and drafted. . . . We realised that by having a clear specific objective based on what the learners' needs are, text content and text patterns as well as the thinking skills and grammar points, the tasks can be better focused. Including the learning strategies into the tasks helped us to also focus on our instructions. Linking the tasks was not an easy job . . . . . . Most of all we feel that we had a lot more to learn. Our own learning experiences also did not prepare us for such detailed planning and in-depth thinking." (P=4)

"When we used the framework, we had to design tasks, "de-task" and "re-task" the tasks. They never seem to be academic enough. As a group we always had a lot of debate about what is academic and what is not. Three of us (names supplied) felt that there was no need for all this headache when there are lots of books in the market. Only one member (name supplied) in our group seemed very keen on the framework and its uses. So she was the one who was always guiding us." (P=4)

"Headcracking! All the while we had prepared our teaching-learning activities based on what we have learnt in methodology, classroom management, materials selection and adaptation and the teaching of reading, writing, listening and speaking and micro-teaching. When we had to design tasks for EAP we found that we had difficulties applying our previous knowledge along with the framework. . . . . . As inexperienced trainee teachers we have no experience in task/materials design. What we know is what we did during our materials selection and adaptation course. Even then we were not really trained to design tasks in detail. We were just told verbally and then it was up to us to copy or refer to other texts for guidance. All the tasks/ activities we are used to designing are all communicative tasks/activities for secondary schools according to the KBSM syllabus. Therefore in designing tasks for this project we had difficulties even though we were given step-by-step training and practice. . . . . . . Too much thinking and planning had to be done to just design a few tasks. We felt that academic tasks are too demanding to design." (P=4)

The above comments complement the findings found in Method 1 because the above confirms that both the groups were weak at designing and developing *Tasks*. This is possibly due to the lack of previous training and difficulty in understanding of the concept *'tasks'*. The framework appears to be particularly helpful in the process of learning and re-learning how *tasks* can be designed and developed in an iterative or cyclical manner.

The comments show that the teachers realised that much thinking and planning was required in developing effective tasks. They also discovered that they needed to be clear about the definition of task and that the goal or objectives of the task were important. They found that they had to analyse and reanalyse the task they were developing, 'de-task' and 're-task' many times over. This exercise in EAP task development has not only been a learning experience but also a challenging one for most of the teachers.

Composite Schema in Diagrammatic form

Frame One
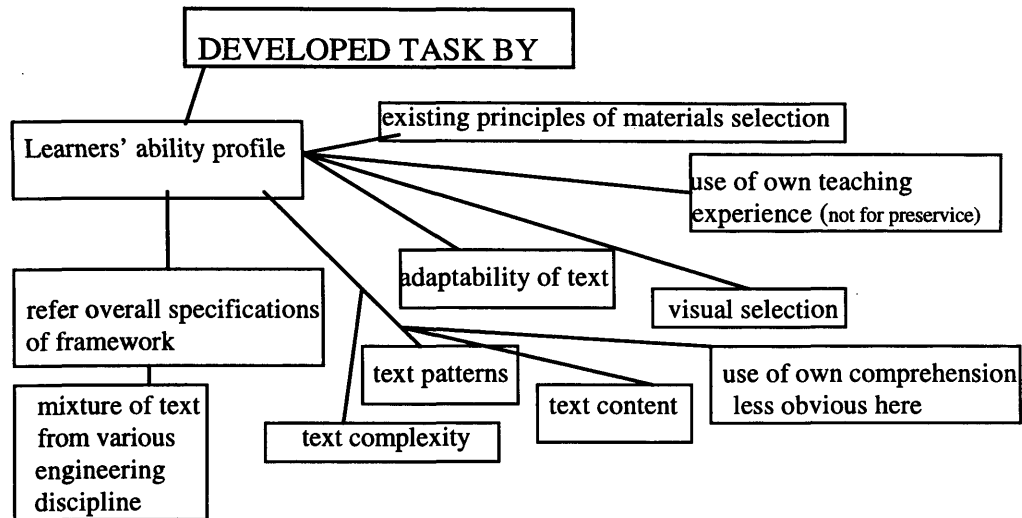
Figure 7.4A Schema of Frame One

Frame Two

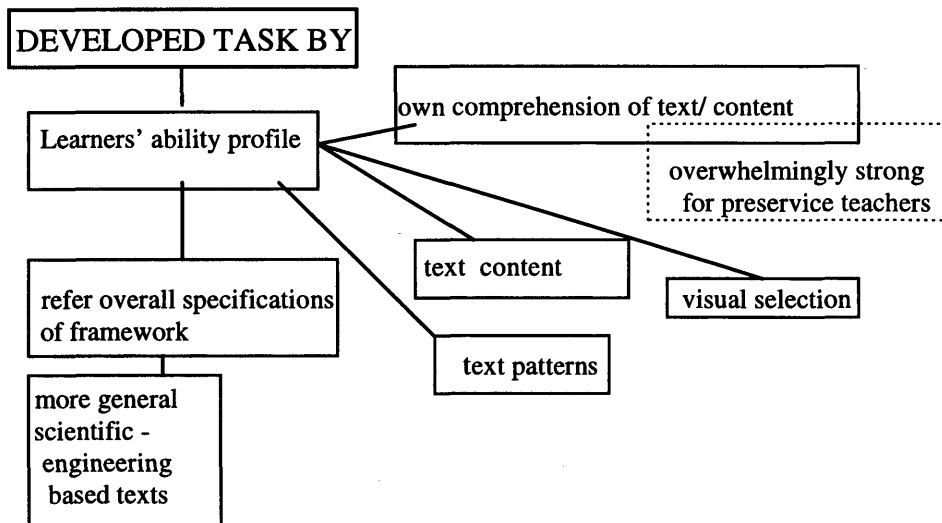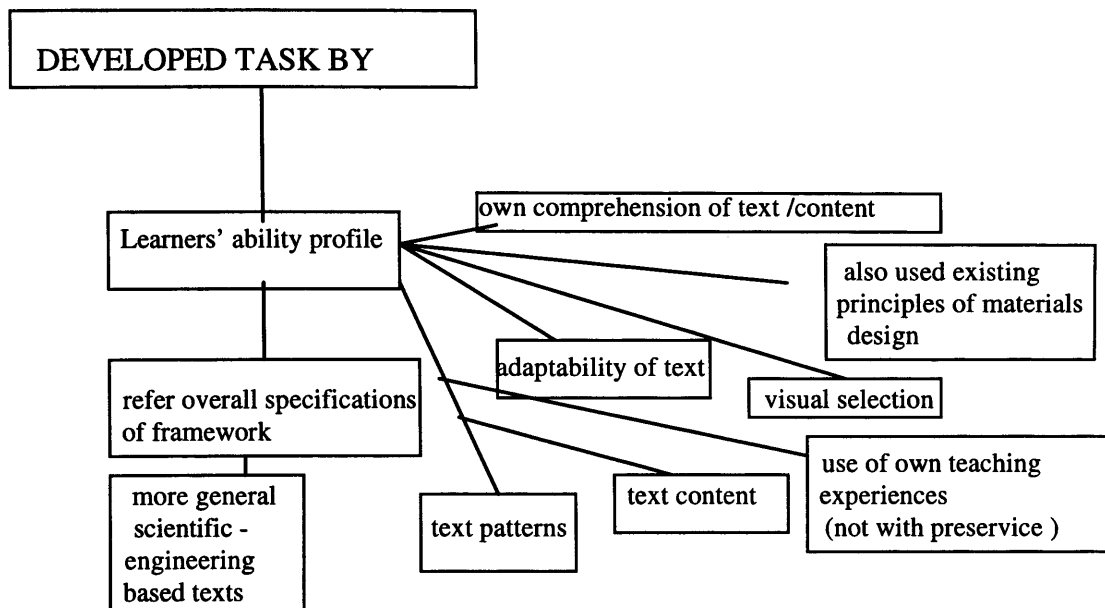Figure 7.4B Schema of Frame Two

Frame Three

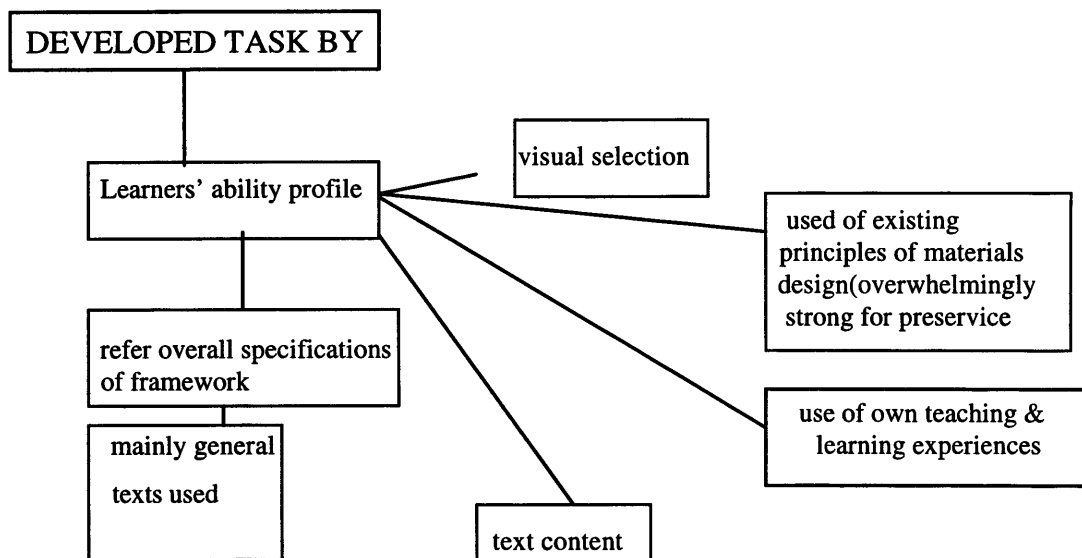Figure 7.4C Schema of Frame Three

Frame Four

Figure 7.4D Schema of Frame Four

7.1.3.1.6.2   Important Aspects of Task Design and Development Relative to the Framework

The aspects which were mentioned by the teachers as important can readily be divided into two categories, Usefulness/Reflection and Problematic, these are shown in table 7.9.

Table 7.9 Most mentioned aspects of Task Design and Development in relation to the Framework

Important Aspects	Pre-service N = 44	N%	In-service N = 63	N%
a) Usefulness and Reflections				
1. framework's specifications made it easier to have an overview of the actual task to be developed.	24 *(6 groups)*	55%	51 *(12 groups)*	81%
2. Provides ideas for types of task to design or develop.	32 *(8 groups)*	73%	54 *(13 groups)*	86%
3. Formulating and defining tasks objectives were central to guiding and developing appropriate tasks and instructions.	40 *(10 groups)*	91%	63 *(15 groups)*	100%
4. Incorporating learning strategies helps in the structuring of task and provides more focus which may or may not lead to development of sub-tasks.	28 *(7 groups)*	64%	53 *(13 groups)*	84%
5. Definition of "task" makes a difference to task design and formulation of objectives.	36 *(9 groups)*	82%	58 *(14 groups)*	92%
6. Formulating and defining task(s) structure not as easy as it had seemed to be.	44 *(11 groups)*	100%	63 *(15 groups)*	100%
7. Task needs to be designed to match learner's ability and the instructions should lead to clear progression of task completion.	28 *(7 groups)*	64%	59 *(14 groups)*	94%
8. Text content & structure can be broken down through the development of several types of tasks which are related to allow for text understanding in progression.	40 *(10 groups)*	91%	58 *(14 groups)*	92%
b) Problematic				
9. Designing tasks which include use of thinking skills and understanding of key grammatical points were difficult.	36 *(9 groups)*	82%	49 *(12 groups)*	78%
10. Developing tasks which were linked to one another in a sequence in terms of text understanding.	28 *(7 groups)*	64%	51 *(12 groups)*	81%
11. Too much planning time and input required.	44 *(11 groups)*	100%	48 *(12 groups)*	76.2%
12. Too many considerations to make thus making task design too complex a task.	32 *(8 groups)*	73%	41 *(10 groups)*	65%
13. Task design not just a matter of stringing a few sentences together but requires a lot of analysis of texts / materials, planning, drafting and redrafting to achieve the desired outcome.	36 *(9 groups)*	82%	59 *(14 groups)*	94%
14. Utilisation of the framework led to the realisation that there's a great deal more to task design than previous perception of task and that task differs from exercises in its design and application.	40 *(10 groups)*	91%	63 *(15 groups)*	100%

The above suggests that the framework was a useful tool in aiding the understanding of issues of *task* design and development and that the process must be continuously reviewed to ensure effective *task* design in materials. Clearly, the teachers were able to

reflect through group interaction about task development. Figures 7.4A, B, C, and D show that their thinking was more focused and there appears to be an overall sense of planned organisation.

Furthermore, the framework specifications as a whole seemed useful in stimulating creative thinking, promoting decision making and motivating most groups. Working with the framework also helped the teachers (individually and as a group), to identify some of their strengths, weaknesses and opportunities which need to be addressed to ensure proficiency in teaching EAP.

7.1.3.1.7 Task Development as a Learning Process

In analysing the logs it was found that the framework strands were able to stimulate the teachers to reflect on and question their ability and competence in the process of designing and developing the *tasks*. The teachers also talked about their own discoveries, what they thought they knew, and what they did not know. Thus they were able to assess their strengths and weaknesses. A few examples of the teachers' comments or views are presented below.

Comments

". . . . . . As a group we agreed that this project has been a challenging one as it needs a lot of thinking and analytical skills." (I=5)

". . We find that the process of designing the tasks is a meticulous one. A great deal of planning was necessary. . . . . . Task design was the most challenging aspect of the whole project. Our ability was being challenged. Some of our group members began to question their own language competence . . . . . We gained new insights into the process of task design. Each time we brainstormed and discussed our work we learnt new things, ideas and our own thinking was sharpened. We were therefore able to review our tasks differently." (I=5)

". . . . . . The process of designing the tasks became a learning process for all of us in the group as we found this the most difficult aspect of the work. All along we have taken task design for granted. But now we were forced to design the tasks based on a number of specifications and our analytical skills and knowledge of the language were being tested. A and B said that they felt as though their own ability was being questioned particularly when analysing the tests. For us, we began to see a whole new dimension in task design." (I=4)

"What we noticed, is that, it is not so easy to design good tasks which takes into consideration the cognitive aspects of learning and teaching. Previously we just looked at the surface of text for example, and develop tasks in any way we want and call it a task!" (I=5)

". . . . . This is the most difficult part as we spent a long time doing it. There was so much planning and thinking to do. We also had to analyse the text first. Our previous training did not encourage us to analyse a text in depth. It was also difficult to try and design tasks that are linked to each other in some ways although we see the

334

logic of it. We were never trained to do so. As long as the tasks made sense and covers aspects of the text content it was enough. Reading comprehension questions and simple essays were adequate. When we were students, we were also taught in the same way. . . . . . However, we find it a bit easier to develop the tasks further once we develop the learning objectives with reference to the framework." (P=4)

"We had to do much planning and even draw rough diagrams to help us have a direction towards task design. This is the first time we have to do such a thing. . . . . We did find it quite difficult to design tasks differently from the way we were previously trained and we do need more practice and more help. In our previous courses we were not trained to design tasks and task instruction. Instead we copy from other textbooks." (P=4)

"The designing of tasks as outlined in the project was time consuming, and sometimes demanding. But perhaps we felt this way because we are using it for the first time and still need more time to get to practise using it and getting used to designing task in a different manner. We cannot say that we have not seen any difference in our work because this would not be true. We were also learning and discovering things in the process. On the whole this was a challenging experience and we learnt a whole lot of new things like that there are different ways of handling a text and that there is a lot more we can do to develop our tasks further. It is not easy to design good tasks as we have to do a lot of thinking and planning if we want our students to learn." (P=4)

From the above and the log analysis, a large number of teachers stated that they benefited greatly from participating in this project. The teachers said they were learning and had discovered things that they had not thought of previously, for example how objectives and task definitions helped them in task construction. Many expressed their feelings in terms of the framework's capabilities of helping them with the process of developing *"tasks"* in a holistic manner. It would help them tackle new challenges in their future careers. Such feelings were treated as incidental findings by the researcher, but nevertheless were important from the aspects of the teachers' own career development, and for developing the use of the framework by other teachers in Malaysia in the future.

A further analysis of the teachers' tasks indicated that there was a change in the manner in which the tasks were designed. Clear objectives were stipulated and more higher order skills and learners' support were included within the developed materials. However weaknesses could still be observed and therefore the teachers needed more direction in developing tasks which incorporate higher order thinking and cognitive skills. The teachers also attempted to include visuals for text understanding and various types of learning strategies. Clearly this suggests that the teachers can be trained to develop effective materials.

7.1.3.1.9 Text Understanding and Text Analysis.

Many of the teachers indicated that there were varying problems, although some said that they encountered no problems at all. This was expected because the teachers were dealing with texts within a subject area for the first time.

The analysis can be categorised along three major parameters in text analysis, namely, language, structure and contents. The comments under each parameter were categorised in terms of frequency of occurrence. The three parameters and related problems are shown in Tables 7.10, 7.11, and 7.12 respectively.

Table 7.10 Language of the Text

Related Problems	Pre-Service N = 44	%	In-Service N = 63	%
1. Language of text technical in nature.	32 (8 groups)	73%	55 (13 groups)	87.3%
2. Vocabulary too technical.	36 (9 groups)	82%	49 (12 groups)	78%
3. Engineering terminology and jargon.	32 (8 groups)	73%	55 (13 groups)	87.3%
4. No problems because text was fairly simple to follow.	16 (4 groups)	36.4%	23 (5 groups)	37%

Table 7.11 Text Structure.

Related Problems	Pre-Service N = 44	%	In-Service N = 63	%
1. Difficulty in identifying the type of text problems / discourse patterns (not enough practice).	32 (8 groups)	73%	45 (11 groups)	71.4%
2. Sometimes the Genre was not clear.	40 (10 groups)	91%	39 (9 groups)	63%
3. Uncertain as to what some of the text patterns are because markers not explicitly stated.	36 (9 groups)	82%	53 (13 groups)	84%
4. Unable to analyse text for text patterns / structure (exposure and training too short).	28 (7 groups)	64%	37 (9 groups)	59%
5. Unable to adapt text because uncertain about text structure	24 (6 groups)	55%	39 (9 groups)	63%

Table 7.12 Understanding Text Content

Related Problems	Pre-Service N = 44	%	In-Service N = 63	%
A) No major problems in:-				
1. Interpretation of meaning.	28 (7 groups)	64%	35 (7 groups)	55.6%
2. Making technical association.	24 (6 groups)	55%	25 (6 groups)	40%

Table 7.12 continued

3. Exemplification.	24 (6 groups)	55%	35 (7 groups)	55.6%
4. Following main and subordinating ideas or points in the text,	12 (3 groups)	27.3%	31 (7 groups)	49.2%
5. Overall understanding of the content.	20 (5 groups)	45.4%	29 (7 groups)	46%
6. Making sense and comprehending technical illustrations or graphics.	24 (6 groups)	55%	31 (7 groups)	49.2%
7. Understanding of concepts.	20 (5 groups)	45.5%	29 (7 groups)	46%
B) Problems with:-				
1. Understanding some concepts and interpretation of meaning.	16 (4 groups)	36.4%	21 (5 groups)	33.3%
2. Making technical association.	24 (6 groups)	55%	32 (8 gropes)	51%
3. Understanding mathematical formula.	36 (9 groups)	82%	55 (13 groups)	87.3%
4. Following some of the main points.	32 (8 groups)	73%	53 (13 groups)	84%
5. Overall understanding of the content.	20 (5 groups)	45.5%	42 (10 groups)	67%
6. Could not understand the content of text. Therefore, unable to adapt the text.	20 (5 groups)	45.5%	42 (10 groups)	67%

The three parameters highlighted some of the problems encountered by the teachers and some of the reasons for these problems are presented below, as stated by the teachers. Problems arose in spite of the fact that most of the participants are qualified English teachers. Some groups stated that they did not encounter any major problems. The main problems were: understanding the text's content, technical jargon and terminology; understanding, identifying and analysing certain text structures especially when they were not clear. They thus had problems using authentic engineering texts. At the same time it is suggested that the teachers were having problems with knowledge about the language.

Comments

Language of the Text.

> "The language of the texts were technical in nature. Therefore, it made understanding difficult because the vocabulary is too technical."
> (I = 4)

> ". . . . We had to read the texts many times over because the language of the text was too technical, complex and contained too many technical terminology/jargon. (P = 4)

337

Text Structure.

"In identifying the text patterns, our group depended on discourse markers to help guide us. However, we found that this was not always possible and therefore we faced problems in identifying some of the text patterns. At the same time we feel that we need more practice." (P = 4)

"We had difficulties in analysing different textual patterns. We strongly feel that we needed more practice with more examples. We have had no previous training in text analysis." (I = 5)

Understanding Text Content.

"We had a problem with one of the texts we selected. This is because it compared some mathematical formula and complex diagrams. It made understanding the text a bit more difficult" (I = 4)

"As we are always dealing with school based texts which are simple to follow, reading the engineering text was difficult. At time we were unable to follow some of the main points or understand some of the concepts. The level of the text was quite high, that is the academic language was not something we could cope with." (P = 4)

No Problems.

"There was a need for us to make references with regard to technical jargon used. But on the whole no major problems arose in terms of interpretation of meaning and making technical association. This is because the texts we selected conformed to the requirements of bands 1 and 2." (I = 4)

"The text itself in terms of the content and the language was not difficult to follow. Except that we had some problems with some sentence structures and terminology in spite of the fact that we are supposed to be English language teachers!" (I = 4)

"Once we were taught how to determine text patterns and how to determine academic reading tasks, we did not have too much of a problem understanding the texts. Moreover we had no problems understanding the text content." (P = 4)

"We do not really have any problems in understanding the texts because they are actually simple to follow. That is why we chose it. The overall idea, the length of the text etc., are describing about the basic things. We also asked the engineering students to explain to us things/concepts in the texts that we could not understand." (P = 4)

It appears that some major problems encountered by both groups were due to the language of the text. This was followed by the text structure and text contents, respectively. It is interesting to note that these major problems with the language and contents were mainly related to scientific and technical matters, such as, mathematical formulae and grammatical ability. This could be due to a number of reasons such as, the lack of reading of technical/scientific/engineering publications by the teachers and poor

grammatical knowledge. A further major problem experienced by inservice groups appears to be associated with genre within the text structure. This could probably be due to lack of training in linguistic ability or general apathy towards the use of content based materials of a semi- technical kind.

Although many pre and in-service teachers had a number of problems within the three categories, some appeared to have very few. The latter were familiar with technical/scientific publications and were able to interpret and understand the intended message of the text and recognise grammatical and text patterns.

7.1.3.1.9 Knowledge Structure

It is vital, especially for non native speakers of English, to identify the knowledge structure of texts when creating and designing materials. To achieve this the teacher must be trained in various skills of recognition and understanding of patterns, grammatical compositions and other aspects of texts. Table 7.13 presents the findings referring to Knowledge Structure as defined in Chapter 4. This is followed by specific comments.

Table 7.13 Identification of Knowledge Structures

	Pre-Service N = 44	%	In-Service N = 63	%
A) Problems in identifying relevant knowledge structure:				
1. Uncertainty in identifying relevant thinking skills for some type of text patterns.	24 (6 groups)	55%	39 (9 groups)	63%
2. Not sure of what grammatical elements to focus on in relation to thinking skills and text patterns.	32 (8 groups)	73%	45 (11 groups)	71.4%
3. Problems with grammatical components / knowledge.	40 (10 groups)	91%	51 (12 groups)	81%
B) No major problems in:-				
1. Determining the type of thinking skills required for a particular text pattern.	16 (4 groups)	36.4%	23 (5 groups)	37%
2. Identifying key grammatical elements for both the thinking skills and text patterns.	32 (8 groups)	73%	45 (11 groups)	71.4%

Comments

The following comments refer to the types of problems and concerns shown by the teachers.

<u>Inadequate Grammatical Knowledge.</u>

> "At first during the training, we were not sure as to what was meant by knowledge structures. But once we were provided with explanations we began to see the meaning . The practices of identifying the thinking skills and the grammatical

elements on the topic of "Batteries" seemed so easy. However, once we started to analyse our own texts it became a complex process. It became more difficult for us to associate grammar points/input with the thinking skills. In other words, our grammatical knowledge was inadequate. It was just like playing a mind boggling game." (I = 5)

". . . . Although we could see the connection between thinking skills, grammatical components and text patterns, we found this stage of the work difficult to carry out. Our group members were fearful of this aspect because it was like going to reveal our weaknesses. You know, like what our knowledge is like, our grammar knowledge. Malulah (shy) because we are supposed to be English teachers. . . We understand what thinking skills are and we don't thing we had too many problems here. But to identify the grammar component necessary for the thinking skills and text patterns was a nightmare! We were not sure what grammatical knowledge to focus on . . . then we also realise that we don't know our grammar of English well. . . need to refer to grammar books . . . it became time consuming. We see the relevance for materials design and we learnt that there is a lot more about ESL/EFL that we do not know." (P = 4)

At (first) difficult but later Resolution

"In the beginning we found it difficult to identify appropriate grammar points to link with the thinking skills of the text patterns identified. But, later, as we deal with it more and more, it became clearer and we could see the link better with the tasks and the text patterns. In fact in the end we found that we could sort of map out the links. One point that we would like to make is that, there is a need for a more thorough course in grammar as we found that our own grammar knowledge is poor. In the long term poor grammar skills will be a stumbling block for most of us." (I = 4)

". . . . At first we felt panicked. We had problems on how to tackle the knowledge structure. We were confused between knowledge structure and language structure. Our group had to have a clearer and more slow explanation by the trainer. The trainer went over the examples again and explained to us slowly the difference between thinking skills and language skills (grammar) using the text on batteries. As a group we went over the examples again, brainstormed and discussed what we felt was relevant. But once we understood the basic principle we begin to have a clearer picture about what knowledge structure is all about and how to use it correctly. . . . . It became easier for us to include it in our tasks, we think. We also found that our present knowledge in language teaching is not enough. We have never before received any such training on how to apply this type of skills or knowledge to text understanding and in task design. It was therefore like a foreign object at first glance. You know, like something high sounding. Anyway, in the end we found this a challenging experience as we had to stretch our brains as far as we could." (P = 4)

Problems.

"We had problems in matching the knowledge structures to the text patterns sometimes. However, we had no problems identifying the thinking skills if we got the correct text pattern(s). Our main problem was identifying the relevant language input (grammar components) and linking it to thinking skills and text patterns to develop tasks for text understanding. We still need loads and loads of practice in this area. On the whole we all agreed that this was a very challenging activity and it also exposed our weaknesses." (P = 4)

"During the training workshop, we were exposed to the new idea of "knowledge structures". Thus we entered a new world of materials design. Although we were trained to apply this idea to our task design, we still feel that we did not get enough information as the training was too short. Therefore we were uncertain about how to tackle the texts and develop the task incorporating the aspect on knowledge structure. So we only did what we could or felt was right as the concept of knowledge structure was not within our present schema." (I = 5)

Not Too Much of a Problem.

"The texts we selected were not complex texts. Therefore, we did not encounter too many problems in identifying the appropriate knowledge structures." (P= 4)

"Our group did not face much problems. It was not difficult to identify the thinking skills which applied to the relevant text patterns because the texts we used were not difficult texts. The main grammatical points were easily identifiable but we did have a little problem identifying grammatical components that were not explicitly obvious. But we do feel that with more practice in doing this sort of activity we will be more competent." (I = 5)

Learning Process.

"We gained a lot of valuable knowledge from doing this activity. We had difficulties with it. Thus, we also saw that if we had problems so will our students." (I = 5)

"We saw the need to identify structures that would allow for the understanding of text patterns and the text as a whole. Thus, we were able to see the link it had with text patterns and were able to understand what knowledge structure meant and the role it played in task design." (I = 4)

"Once we knew what to look for and how to do it, we became quite confident in applying the aspects of knowledge structures in our task. It was not too difficult once we understood the text patterns. At least we found that we were learning through trial and error all the time." (P= 4)

"As soon as we were able to exploit the idea of knowledge structures into task design, it became a little easier for us to incorporate it into our tasks. We also realised that our present knowledge is inadequate. We found this to be a challenging experience as we began to see how our own task began to change its form." (P = 4)

The above suggests that a large number of both the pre- and in-service teachers had problems identifying thinking skills and relevant grammatical components for various types of text patterns. Only a small number indicated that they did not have many problems. Again this depended on the type of texts they were using, - of lower bands or higher bands. Teachers indicated that this was their first exposure to such practice. Previous training experiences were nowhere near comparable. However, those groups of teachers who managed this aspect of the project mainly did so only after brainstorming sessions among group members. For some, the consultation sessions were useful. According to the teachers' account lack of familiarity with knowledge

structures impeded their development of tasks. At the same time they realised that many of them had inadequate grammatical knowledge.

7.1.3.1.10 Reflection by the Teachers on Text Understanding, Text Analysis and Identifying Knowledge Structure.

Almost all the teachers strongly indicated that time, and the lack of practice and training, as well as lack of knowledge were the major factors contributing to the problems encountered when using the framework, rather than the use of the framework per se. Typical comments are given below.

> ". . . . we were not sure of the text patterns as we only had a short exposure during the workshop. Exploiting text patterns for materials design is a new concept, therefore we need more time to familiarise ourselves with such a new idea." (I = 5)

> "Being new to the idea of genre, looking for relevant text patterns posed a problem for us. In many cases, the text patterns were not so clear. Then identifying the knowledge structures to go with the text patterns was also difficult. We need more exposure, examples and practice as we are inexperienced teachers so we still need more help." (P = 4)

All the teachers became aware of this and commented that there was a need for more training and practice, and that any training to use new ideas or concepts (like Textual Analysis and Knowledge Structure Analysis) should be introduced slowly and steadily to build up the required skills and knowledge. In the time available it was only possible to introduce ideas and concepts besides raising awareness.

The above comments are not surprising. Teachers especially non native (NN) speakers, need more time and training as well as adequate guidelines such as the proposed framework, to work with. They need time to become more familiar with relevant text patterns, structure and genres, and acquire confidence to ensure that they can analyse texts in a comprehensive manner to create effective materials. Such activities are not (yet) part of most teachers' language or pedagogical background training.

7.1.3.1.11 Suggested Major Probable Problems When Using the Framework

In using the framework to design tasks and materials for EAP, the teachers identified three main problem areas.

(a)   Difficulty in using some aspects of the framework.

(b)   Lack of Time or Constraints

(c)   Lack of Practice

The most frequently mentioned concerns are tabulated under the three headings in the following tables.

Table 7.14 A Problems Encountered when using the framework

	Pre-Service N = 44	%	In-Service N = 63	%
A) Aspects of framework Difficulties in:				
a) selecting texts in general	20 (5 groups)	45.5%	25 (6 groups)	40%
b) gauging the suitability of a text according to students' level of proficiency	16 (4 groups)	36.4%	21 (5 groups)	33.3%
c) transferring non-linear information to linear and vice-versa	24 (6 groups)	55%	36 (9 groups)	57%
d) designing tasks incorporating knowledge structures	36 (9 groups)	82%	43 (10 groups)	68.3%
e) identifying the genre and text patterns	28 (7 groups)	64%	39 (9 groups)	63%
f) designing tasks based on text patterns and knowledge structures	36 (4 groups)	82%	43 (10 groups)	68.3%
g) designing tasks which are more challenging	16 (4 groups)	36.4%	23 (5 groups)	37%
h) practising use of framework specifications	12 (3 groups)	27.3%	16 (4 groups)	25.4%
i) linking the different components of the framework with previous knowledge	28 (7 groups)	64%	32 (8 groups)	51%

Table 7.14B

B) Time factor and other constraints				
1) Time factor				
a) training time too short to absorb the whole concept of the framework	36 (9 groups)	82%	51 (12 groups)	81%
b) inadequate time to design tasks and reflect on the framework's specifications	28 (7 groups)	64%	49 (12 groups)	78%
c) need more time to learn to use the framework	44 (11 groups)	100%	63 (15 groups)	100%
2) Constraints				
a) too much planning and thinking required	20 (5 groups)	45.5%	39 (9 groups)	63%
b) too time-consuming to develop tasks based on the framework's specifications	16 (4 groups)	36.4%	29 (7 groups)	46%
c) constraints from other workloads (normal lecture workloads)	24 (6 groups)	55%	39 (9 groups)	63%
d) framework's specifications are too demanding	24 (6 groups)	55%	32 (8 groups)	51%

Table 7.14C

C) Lack of Practice				
a) need more preparation and practice on text discourse (identifying text patterns)	44 *(11 groups)*	100%	59 *(14 groups)*	94%
b) need more practice to improve skills in using the framework's specifications	44 *(11 groups)*	100%	63 *(15 groups)*	100%
c) more practice to develop a complete understanding of the application of the framework	44 *(11 groups)*	100%	54 *(13 groups)*	86%
d) need more step-by-step practice to deal with knowledge structures and text patterns	44 *(11 groups)*	100%	55 *(13 groups)*	87.3%
e) need more guidance, exercises and practice to be able to exploit the use of the specifications to design tasks	36 *(9 groups)*	82%	49 *(12 groups)*	78%

Prior to, and independent of, the above findings, the teachers reflected their concerns in terms of their own personal inability to eliminate the above problems (although these were presented in groups). They tended to be very positive towards the use of the framework as a new tool for effectively designing and understanding EAP teaching materials. Some teachers made various comments as shown below.

Comments

Some teachers commented that they had some difficulty;

". . . . selecting suitable texts according to students ability *since we have very little or hardly any experience in this technique.* We feel that we need more practice and exposure. Doing one project is not enough. (The framework gave us a much better guidance than what we had before but with no experience we still had problems.)"
(P= 4)

". . . . difficult to design tasks which are more challenging *because of our limited background knowledge of the content area and theoretical knowledge in applied linguistics. We are not used to designing tasks which take into consideration genre, knowledge structures, learning strategies and learner support.* Perhaps if we are given time to digest the framework, have more practice and training we would become skilled at developing effective EAP tasks and materials.
(I = 5)

". . . . set in our old ways we find it difficult and tedious to refer to the framework constantly to design tasks, *as it is new to us.* It is difficult to change our style in a matter of 3/4 weeks *due to previous training and teaching experience. Moreover we were very influenced by our old ways.* Given more time and training we may perhaps be able to absorb the whole concept of using such a framework." (I = 4)

". . . . identifying the different types of text patterns was difficult for us *because we have never ever done this before.* We only heard about genre in materials design when we started on this project. We definitely need more practice and exposure." (P= 4)

".... difficulty in tackling text discourse/patterns *as they are not explicitly clear in the text. Moreover this was new to us and we have never ever considered it before for task/materials design.* A longer training and practice session is highly recommended by us. (I = 4)

The difficulties faced by both groups of teachers are quite normal because change is often frustrating, rarely immediate and often challenging and exciting. Understandably the teachers indicated that it was time consuming and made a lot of demands on the teacher but such a situation is:

1)   only or mainly at first or in the initial stage.

2)   leads to learners' independence because materials can be graded, used for self-access and the learners can also be made aware of the framework's content.

3)   leads to the teacher being more competent at tasks and materials development and evaluation.

4)   leads to the internalising of the principles of the framework alongside that of other principles of materials design and evaluation.

Regarding time for training, exposure or learning, the question of "How much time would be needed" is difficult to answer out of context because teachers have other commitments and priorities. In most cases, however, teachers' courses are normally too short and subject to shortcomings.

7.1.3.1.12 Overall View about the framework as a Learning Process

On the whole, the teachers indicated that the use of the framework for designing and developing materials was an effective learning process for them, as shown in Table 7.15 and the comments below.

Table 7.15   Reflections about Task Design

	Pre-Service N = 44	%	In-Service N = 63	%
1. Task design not a piece of cake.	36 (9 groups)	82%	51 (12 groups)	81%
2. Realised that there was still a lot more to learn about task design.	32 (8 groups)	73%	58 (14 groups)	92%
3. Realised the importance of developing thinking skills and the importance of learning strategies in task development.	40 (10 groups)	91%	63 (15 groups)	100 %
4. Realised that a task is just not simply reading and answering questions.	28 (7 groups)	64%	51 (12 groups)	81%

345

Table 7.15 continued

5. Realised that well-planned tasks get students to do a lot more thinking and reasoning.	36 *(9 groups)*	82%	58 *(14 groups)*	92%
6. Realised that a lot of planning and thinking is required for designing effective learning tasks.	44 *(11 groups)*	100%	59 *(14 groups)*	86%
7. Realised that the framework is applicable for use with EGP and together with other principles of materials design.	32 *(8 groups)*	73%	54 *(13 groups*	86%
8. Realised that learning for academic purposes involves the design of more cognitive-based tasks which enables students to interact with the text at a much higher level.	24 *(6 groups)*	55%	58 *(14 groups)*	92%
9. Realised that they had inadequate grammatical knowledge.	28 *(7 groups)*	64%	53 *(13 groups)*	84%
10. Realised that tasks could be designed in a step-by-step manner.	36 *(9 groups)*	82%	51 *(12 groups)*	81%
11. Realised that if they struggle to understand texts their own students would have even more problems.	20 *(5 groups)*	45.5%	53 *(13 groups)*	84%
12. Realised that developing tasks and materials requires a lot of analytical ability.	16 *(4 groups)*	36.4%	49 *(12 groups)*	78%
13. Realised how important visuals are in illustrating text content.	32 *(8 groups)*	73%	55 *(13 groups)*	87.3 %
14. Changed their perception about tasks design.	36 *(9 groups)*	82%	58 *(14 groups)*	92%

Comments

The above findings are clearly reinforced by the teachers' comments:

"We have learnt that a task is just not simply asking students to read and answer questions. But that a task in itself gets students to do a lot more thinking and reasoning." (I = 4)

" . . . . That a lot of planning and thinking is required on the part of the teacher in designing effective language learning tasks." (I = 5)

" . . . . and that learning for academic purposes involves the design of more cognitive based tasks that enables the student to interact with the text at a much higher level than just reading comprehension questions." (I = 5)

" . . . . This has been a very good experience, for it has widened our perception and knowledge in tasks and materials design in EFL/ESL with reference to ESP." (I= 4)

" . . . . We did learn that there was a lot more we can do with a text and that tasks which are designed with more planning and thinking can be more interesting and challenging. . . . "(P = 4)

" . . . . we discovered our weaknesses and also realised that there was still a lot more to learn in materials design or task design. What seemed so easy to us before and would only take 2-3 minutes to do, now takes more time than that - 2-3 hours!" (P = 4)

These findings clearly suggest that the teachers have not been adequately trained nor equipped with the skills to carry out material design, although this might be considered a prerequisite for teaching a foreign language for academic or specific purposes. This was confirmed by the findings during Method 1 of the study.

The framework and its other supplementary materials appears to have stimulated the teachers to evaluate their own skills and abilities identifying their weakness and strengths when attempting to create language teaching material. Beside being an effective EAP materials design tool, working with the framework also motivated the teachers to* investigate, review, explore and experiment with new academic techniques and consider devising other similar frameworks. This is considered to be a major achievement for the teaching of English or any other language within the context of a developing country such as Malaysia.

7.1.3.2 Analysis and Findings of the Open-Ended Questions based on the Evaluation Questionnaire

A sample of the full questionnaire survey is presented in Appendix A6.1and A6.2. This sub-section presents and discusses only a small part of the questionnaire and is limited to the open-ended questions 8 to 11 from Set 2, section D (Method 2, appendix A6.2). There were four questions asked, three specific and one for general comments. The findings and analysis were all based on individual responses and are presented in tables 7.16 to 7.19.

7.1.3.2.1 It seems to me that the framework has the following advantages:-

Table 7.16   Advantages of the framework

	Pre-Service N = 44	%	In-Service N = 63	%
1. Provides guidance in designing tasks.	31	70.5%	53	84%
2. Provides knowledge about EAP materials design.	37	84%	55	87%
3. Provides a detailed analysis of students' level and abilities.	42	95%	59	94%
4. Provides a detailed comprehensive overview of the many factors to be taken into consideration for task design.	32	73%	48	76%
5. It leads to better production of task(s).	29	66%	56	89%
6. Provides clear demarcation of learning strategies.	23	52.3%	51	81%
7. Easier to select texts and grade them in a continuum.	29	66%	50	79.4%

Table 7.16 continued

8. Allows for flexibility in materials and task design.	30	68.2%	57	90.5%
9. Provides essential components for text selection and task design.	39	89%	56	89%
10. It is concise, clear-cut and wide in scope.	24	55%	47	75%
11. It serves as a bank of resources for ideas and activities.	41	93.2%	54	86%
12. It provides help in identifying learning strategies, visuals and appropriate learner support in task design.	38	86.4%	57	90.5%
13. Provides step-by-step guidance in various aspects which leads up to specific task preparation according to level of needs.	42	95.5%	58	92%
14. Useful for designing tasks for both EGP and EAP.	39	89%	57	90.5%
15. It makes design of tasks more systematic and organised.	34	77.3%	54	86%
16. Teacher's guide provided additional support in understanding the framework.	40	91%	61	97%
17. It helps in monitoring and evaluating materials for EAP	37	84%	56	89%

7.1.3.2.2 It seems to me that the framework has the following disadvantages.

Table 7.17 Disadvantages of the framework

Disadvantages	Pre-Service N = 44	%	In-Service N = 63	%
1. It requires too much time.	33	75%	45	63%
2. Sometimes it is too packed with information.	18	41%	31	49.2%
3. Massive information may be too overwhelming for novice materials designer or teacher.	20	45.5%	16 ·	25.4%
4. Tedious to follow each feature faithfully.	21	48%	33	52.4%
5. Difficulty in linking the various components.	14	32%	26	41.3%
6. Terminology used is too high-flown, e.g. multi-framed, range, complexity, genre, etc.	33	75%	48	76.2%
7. The wide scope could lead to various interpretations.	-	-	15	24%
8. Requires more training time to digest information.	39	89%	51	81%

348

Table 7.17 continued

9. It needs patience, time and careful planning in designing tasks.	28	64%	53	84%
10. Requires or assumes a high expectation of the teacher.	31	70.5%	49	78%
11. The teacher needs to have a strong linguistic background / schemata.	36	82%	45	71.4%
12. The specifications are too elaborate.	-	-	39	62%
13. Too detailed and too long	21	48%	29	46%

7.1.3.2.3 Please state what you think you have learnt *or not learnt* from this project.

Table 7.18   Reflections of Knowledge Gained

Knowledge Gained	Pre-Service N = 44	%	In-Service N = 63	%
1. Learnt to design systematic tasks.	35	80%	56	89%
2. Learnt about writing out tasks.	-	-	48	76.2%
3. The need to provide learners with explicit support.	37	84%	55	87%
4. Learnt to write clear instructions.	41	93.2%	63	100%
5. Learnt about developing tasks within a task.	30	68%	57	90.5%
6. Learnt to pre-plan tasks and to work systematically.	35	80%	54	86%
7. Learnt that a lot of thinking aloud has to be done.	-	-	46	73%
8. Learnt about text analysis and an awareness of its importance.	32	73%	51	81%
9. Increased awareness of text patterns and relationship to task design.	40	91%	59	94%
10. Learnt that it is possible to incorporate a variable number of specifications into a task.	33	75%	50	79.4%
11. Learnt to be more critical about task being designed.	30	68%	49	78%
12. Tasks are not just about presenting all the four skills but also involve developing cognitive ability.	31	70.5%	55	87%
13. Learnt that good clear objectives and definition of task provided clear direction for task design.	38	86.4%	57	90.5%

Comments

Below are some of the teachers' comments about what they thought they had learnt from the project.

"It has helped me to remain focused on the student's level and ability and to work within the framework which in itself has made it possible for my group and I to come up with various types of tasks but still within the means of the students involved in each band." (I)

"I learnt to look at a text and break it into different types of text patterns for developing different type of tasks which I never thought of before." (P)

"The stages of developing the tasks were important to me to show how a task can be developed and progressed." (I)

"I guess I am now more critical and careful in planning effective tasks. I have also become more sensitive to the things I need to consider in designing tasks, especially in assisting students through various learning strategies." (P)

"I have learnt a lot from this project. This is the first time I have ever worked on EAP/ESP materials design. Upon completion, I feel confident that I can design other tasks based on any other learning needs or situation." (I)

"Overall, the framework really provides a lot of insight for me to upgrade my knowledge about task design. Frankly speaking, I learnt a lot from this project. It has been a real eye opener." (P-)

The reaction to the framework by individual teachers in question 8, 9, 11 clearly supports the group reaction throughout section 1B.

Generally, the teachers indicated that the framework had more advantages than disadvantages. The IS teachers appear to be more positive than the PS teachers. It can be deduced from table 7.16, items 3, 9, 11, 12, 13, 14, 16 and 17 were found to be clearly very advantageous for both group of teachers. Table 7.17 shows that items 1, 2, 4, 6, 8, 10, 11 and 13 appear to be aspects which were considered disadvantageous. Table 7.18 outlines the teachers' reflections about what they think they have gained from the project. It appears that both groups have gained a considerable amount of knowledge and insights into not only the process of EAP task development but also of their own discovery about task /materials development. The findings as illustrated in tables 7.16, 7.17 and 7.18 clearly support the findings of the group logs: the teachers were generally more positive towards the framework as a training tool.

7.1.3.2.4 Please add any other comments you may have.

Table 7.19   General findings based on individual reactions

Findings	Pre-Service N = 44	%	In-Service N = 63	%
1. The project / training should be a complete course by itself.	23	52.3%	28	44.4%
2. More training time is required.	44	100%	51	81%

Table 7.19 continued

3. Need a lot more practice with examples.	44	100%	59	94%
4. Simplify the framework.	32	73%	49	78%
5. Provide more clarification or elaboration.	44	100%	53	84%
6. Provide more examples and models to follow or copy from.	37	84%	32	52%
7. On the whole the framework is useful for focusing on task design	33	75%	52	83%

Teachers here again reinforced the findings of the collaborative journal writing. This further confirms the fact that they need more training and preferred to work with a simplified version of the framework. It is noticed that what they want are less complex means of thinking and of analysing work. They want things to be given in easy- to-assimilate stages, to facilitate understanding and thinking. This is very similar to the findings of the Pilot Studies

7.2 Section Two

Analysis of the Teachers' Perception of the Concept of "Task"

This section presents and compares the teachers' perceptions during (Method 1) and after the training and use of the framework (Method 2).

7.2.1 Methodology

Part of the methodology of the field-work (Phase 3 of the study , see chapter 6) was firstly, to ascertain the teachers' perception of the concept of "tasks" before being exposed to published definitions of task, theories and principles of task -based materials design (see appendix A6.5). Secondly, it was important to see if their definition of the concept task changed after the training sessions of designing materials using the framework and from the training exercise. Thirdly, it was crucial to note whether the teachers' materials themselves reflected any such changes.

7.2.2 Stage 1 (Method 1)

In order to obtain information about the teachers' perception and interpretation of the concept of task, the teachers were asked to respond on note cards to two questions about task during method 1. The questions were:

> Q1. To me task in language teaching and learning is /
>   means.........
> Q2. Task is important in language teaching and learning
>   because...........

This exercise was carried out *before* the teachers started designing EAP materials using the existing UPM method (M 1). The responses were classified thematically. At least two people must have responded in a similar way or have similar schema for an item to be classified under a single theme. Both the PS and IS teachers' responses to both questions were analysed collectively.

7.2.2.1 Teachers' Responses/Definitions to Question 1

> **Q.1 To me task in language teaching and learning is/means......**

The teachers were asked to respond to question 1 individually. They provided different types of definitions based on their own interpretation of the concept "task". After an in-depth analysis of the 107 definitions, six general categories of definitions were identified. The six categories are: tasks as an activity, work, exercises, tool, something and evaluation processes. These are presented in figure 7.5 and discussed below.
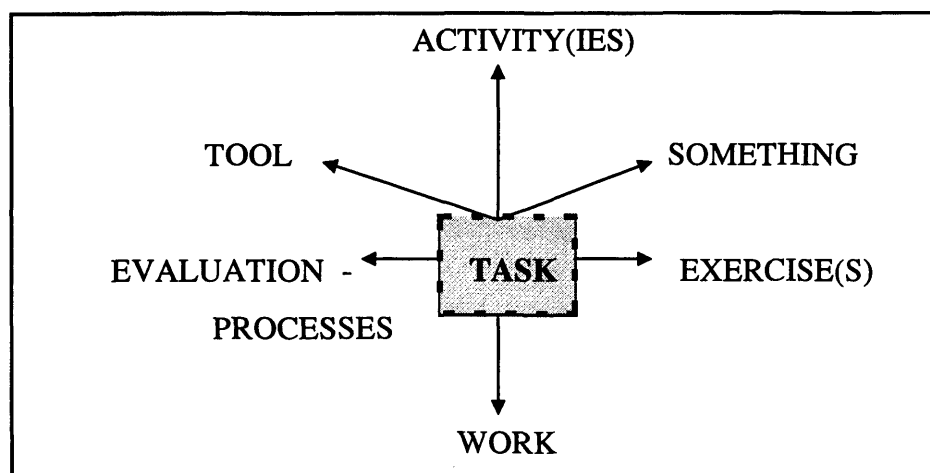
Figure 7.5   Meanings of Task

1. Task as an Activity

Most of the teachers (38.32 %, [N=41]) defined "task" as an activity or activities. Task is seen an activity which promotes learning; is enjoyable; is interesting; implements learning objectives; provides meaningful learning; demands active participation; engagement; involvement; has an end product; creates a need to learn; problem solving; is teacher - made/designed; can be used to diagnose learning; provides opportunities to learn and to practice using the language and involves one of the four skills.

Examples of some Definitions are:

> " an activity which should be enjoyable and innovative"
> " an activity that is enjoyable and yet meaningful"
> " an activity which involves the implementation of the learning objectives and the outcome desired in activities set for the learners"
> " a purposeful activity which creates a situation and need for the students to learn language"
> " activities designed to test / diagnose a particular skill"

These can be visually summarised as shown in figure 7.6 below.
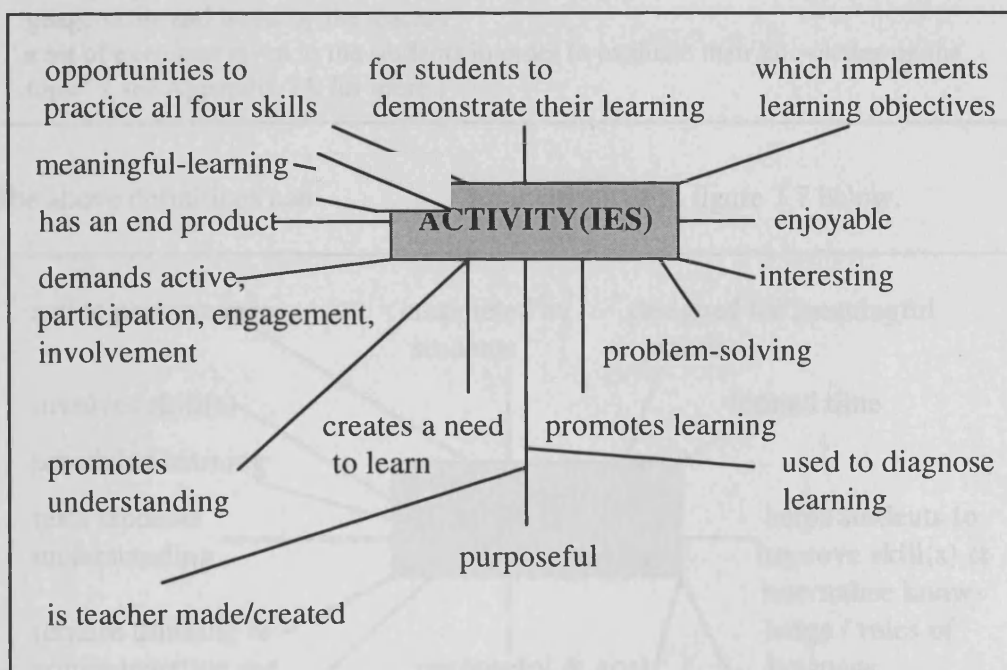
Figure 7.6 Task as an Activity or Activities

2. Task as an Exercise

Thirty-two percent of the teachers (N= 34) defined "task" as an exercise. For these teachers, task is considered as an exercise which tests students' understanding; it is designed for meaningful practice; involves active performance ands skills; it is completed by students and is goal directed; it helps students to improve skill(s) and internalise knowledge / rules of language; it is for a limited time; it requires thinking and communicative use and involves students' behaviour and performance. The following definitions provided by the teachers clearly show how they think about the concept task.

353

Examples of Definitions of Task as an Exercise

" exercises that should be done / completed by the students"
" any kind of exercises that involves skills in doing it and is meant for practice"
" any exercises to see whether the students understand what has been taught"
"an exercise which needs to be completed"
"an exercise given to the students to improve their learning skills"
" an exercise given to students to be completed to test their understanding of the lessons"
" a series of exercises and drills to help learners master the language learning skills"
" is language exercises that students complete after the introduction of certain language skills and items by the teacher"
" a set of exercises given to the students in order to evaluate their knowledge on the topic" (see Appendix 7A for more)

The above definitions can be visually summarised as in figure 7.7 below.
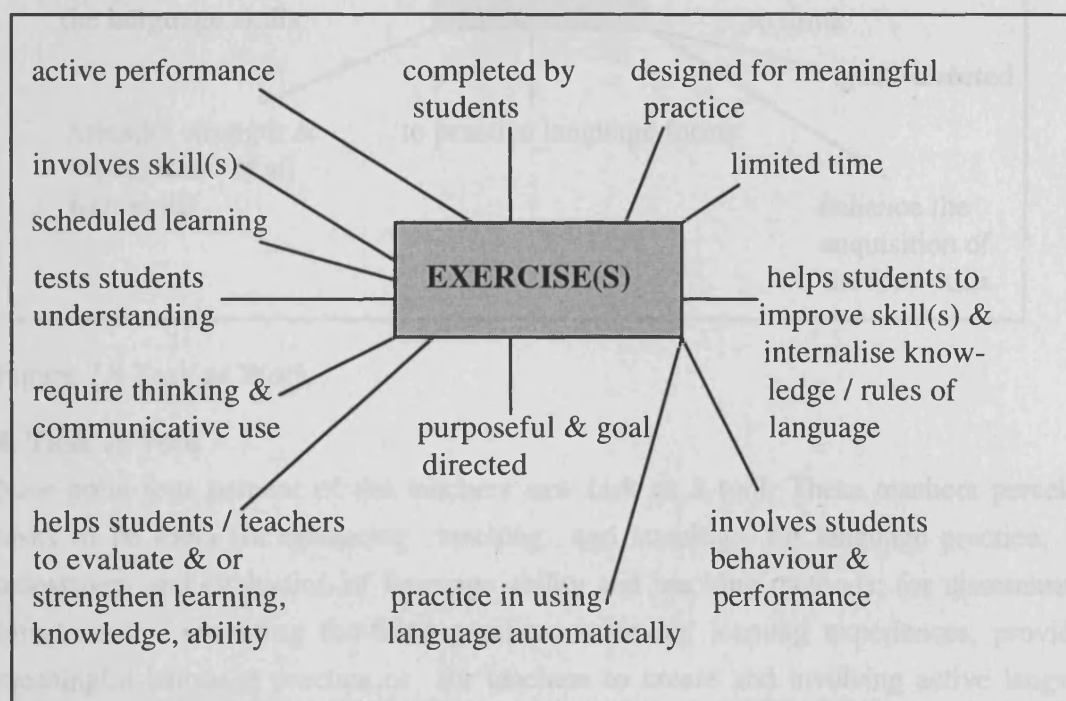
Figure 7.7 Task as an Exercise

3. Task as Work

Some teachers defined tasks as work: 11.21% of teachers (N=12) perceived task as a piece of work which is given to students to do. For this group of teachers, task is viewed as work which reinforces the language skills; it provides language practice in class and gets students to do something with the language; it requires learners to think, allows students to practise the language forms used in communication and provides

354

meaningful practice, and enhances all four language skills. Examples of some of the definitions provided are given below:

Example of Definition of Task as Work

" some kind of work meant to reinforce the language skills"
" any kind of work that gets students to do something with the language"
" work that are specifically geared to language practice in class"
" work which requires the learners to think" (see appendix 7A for more)

These definitions are visually summarised in figure 7.8.
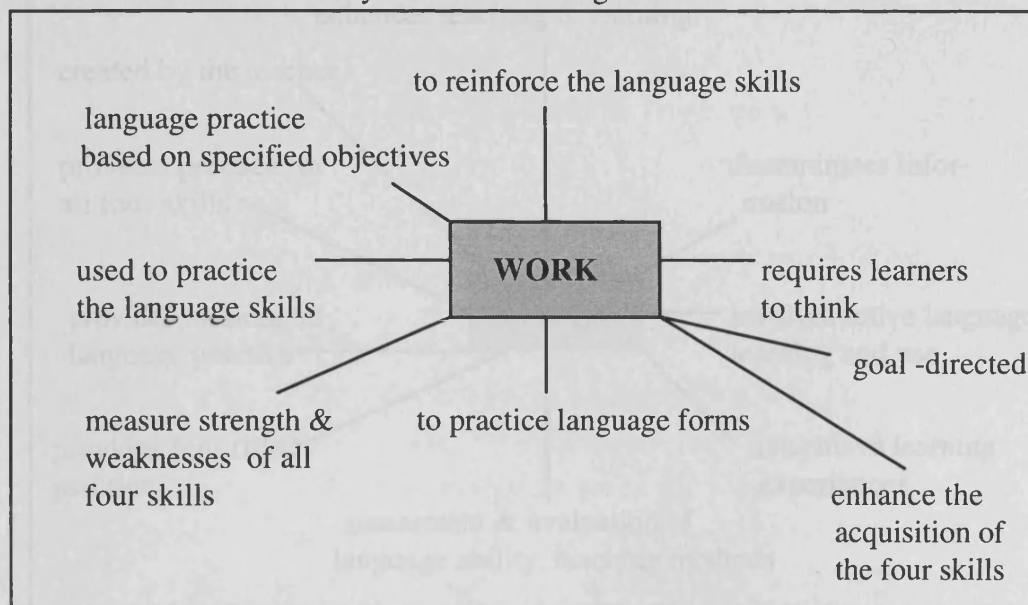
Figure 7.8 Task as Work

4. Task as Tool

Nine-point-four percent of the teachers saw task as a tool. These teachers perceived tasks to be tools for enhancing teaching and learning; for language practice; for assessment and evaluation of language ability and teaching methods; for disseminating information, providing fun-filled practice, achieving learning experiences, providing meaningful language practice or for teachers to create and involving active language learning and use.

The following are some of the definitions provided by the teachers:

Definition of Task as a Tool

" the most important tools which can be used in order to enhance the teaching and learning situation"
"a tool that is used to provide practice for the listening, speaking, reading and writing skills"

The visual summary of the above definitions is presented in figure 7.9.
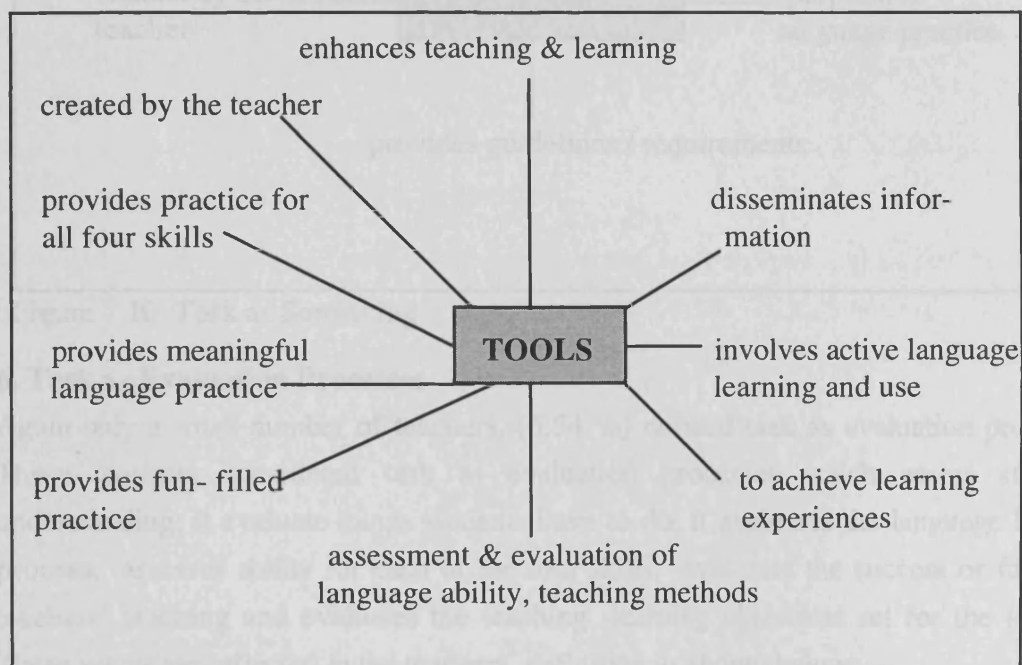
Figure 7.9 Task as a Tool

5. Task as Something

Only 2.8% of the teachers defined task somewhat vaguely as "something". They were all preservice teachers. They saw task as something to reinforce language skills; it provide guidelines and authentic language practice. Their definitions are presented below:

Definition of Task as Something

" something which is meant to reinforce the language skills"
" something that provides guidelines and requirements for pupils to do in class"
 " something which is created by the teacher for purposeful language practice"

Their definitions can be visually summarised in figure 7.10.
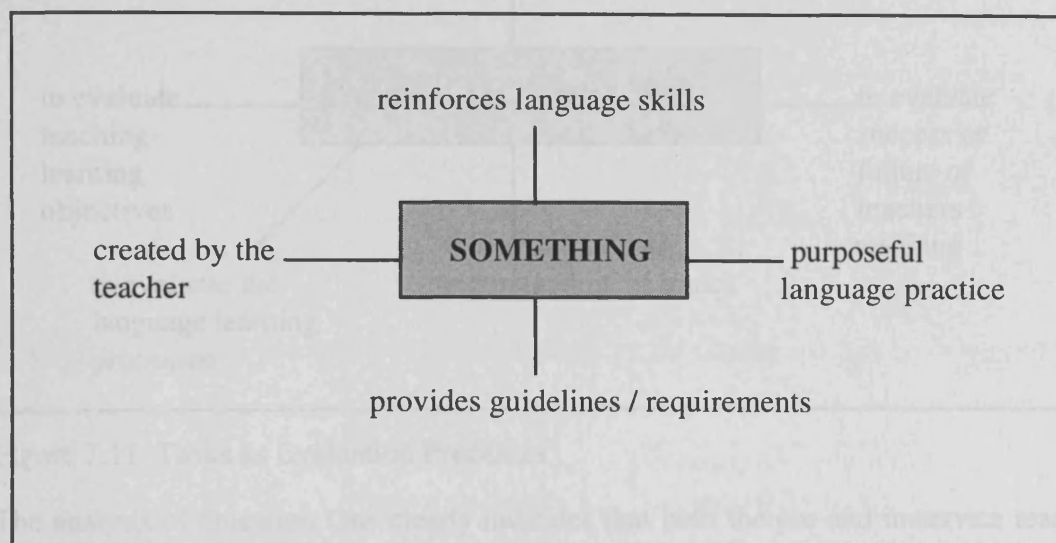
Figure 7.10 Task as Something

6. Task as Evaluation Processes

Again only a small number of teachers, (6.54 %) defined task as evaluation processes. These teachers considered task as evaluation processes which assess students' understanding; it evaluate things students have to do; it evaluates the language learning process, assesses ability for each of the four skills, evaluates the success or failure of teachers' teaching and evaluates the teaching -learning objectives set for the learners. These views are reflected in the teachers' definition as shown below:

Definition of Task as Evaluation Processes

" a way of evaluating / assessing students understanding on certain topics and is
   only given during or after each lesson"
" which evaluates the guidelines or things that the students have to do in class in
    order to assess the learners' language development"
" evaluates or measures the success or failure of the teachers teaching"
" evaluates the learners language learning processes"
" evaluates the teaching -learning objectives set for the learners by the teachers"
" assesses the students ability for each of the four skills"

These definitions are summarised in figure 7.11 below.

357

```
                    to assess ability of all four skills



to evaluate            ┌─────────────────────────┐          to evaluate
teaching-              │  EVALUATION PROCESSES   │          success or
learning              └─────────────────────────┘          failure of
objectives                                                  teachers
                                    to assess students      teaching
     to evaluate the                understanding of topics
     language learning
     processes
```
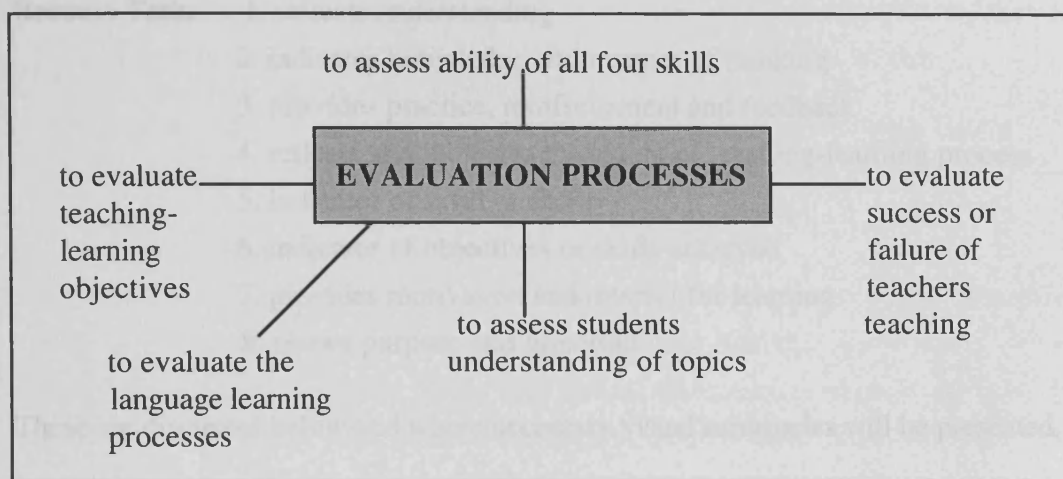
Figure 7.11 Tasks as Evaluation Processes

The analysis of Question One clearly indicates that both the pre and in-service teachers had their own but similar perceptions as to what task is. Their interpretation of task seemed largely dependent on their own experiences, whether as learners or as teachers.

From field-notes of an informal discussion with the teachers during the workshop, the majority (78%) of the teachers indicated that they had never really considered the definition of task. This is further reaffirmed by their discussions in the progress logs. It was only when the question was put to them, that they started to think and reflect about how they defined or perceived tasks based on their previous training, experience and current involvement.

7.2.2.2 Teachers' Responses to Question Two

Q.2 Task is important in language teaching and learning because...............

As in Question One the teachers responded to question two individually. The researcher felt that it was important for the teachers to respond to this question because the definitions provided in response to question one would not reveal why they considered task important in language teaching and learning. It was also necessary to determine whether the reasons they provided in question two reflected their own definitions of tasks.

At least eight distinct themes or categories of the reasons could be identified from the analysis of the teachers' responses.

358

Because Task: 1. reflects understanding
                 2. indicates knowledge and manner of thinking
                 3. provides practice, reinforcement and feedback
                 4. reflects and indicates the extent of teaching-learning process
                 5. indicator of level or ability
                 6. indicator of objectives or skills achieved
                 7. provides motivation and interest for learning
                 8. shows purpose and direction

These are discussed below and where necessary visual summaries will be presented.
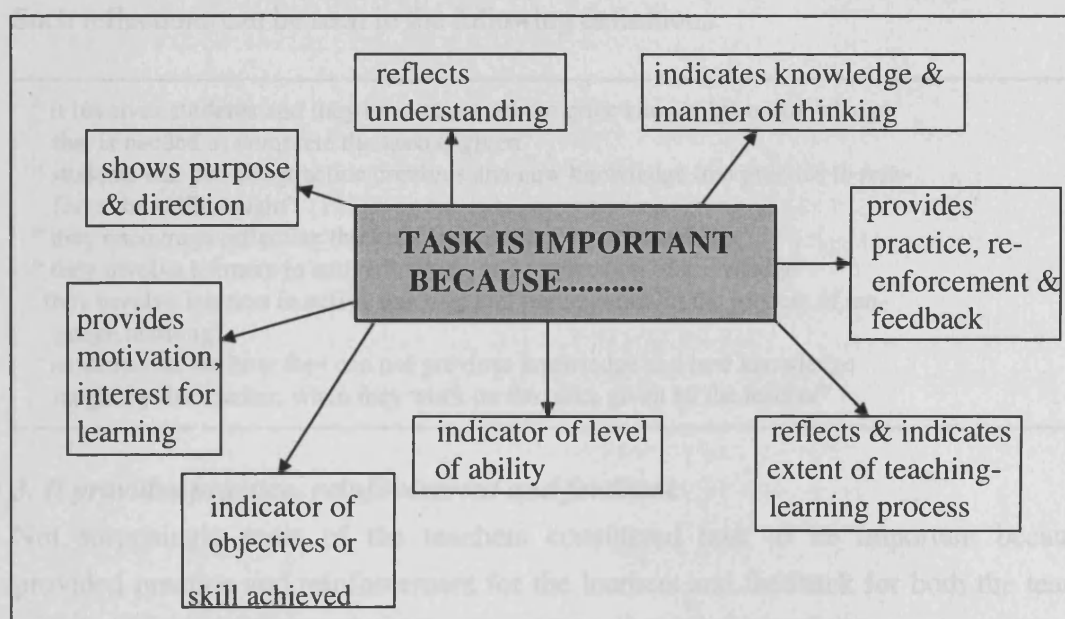
Figure 7.12 Importance of TASK

1. It reflects understanding.

Only a small number of teachers (5.6%) indicated that for them task is important because it showed understanding of lessons taught or being taught; or that it was a way for teachers to evaluate students' understanding, of lessons and knowledge; it reflected the learners' understanding and comprehension of what has been taught. These comments are reflected in the teachers responses presented below.

" It is used to evaluate the students understanding of the lessons being taught"
" it is used as practice for students and a way for teachers to evaluate students
   understanding"
" it serves as a measure of students' understanding of knowledge imparted by
   the teacher"

359

> " it reflects the learners' understanding and comprehension of what the teacher
>   has taught through the learning objectives"
> " it helps to ensure that learners have understood what they have been taught"

2. It indicates knowledge and manner of thinking

This theme was less frequently mentioned and only 4.7% shared the same thoughts. For this group of teachers task is important in language teaching and learning because it reflects the learners' cognitive ability and it is an indicator of whether the learners are able to exploit current and previous knowledge and to think effectively and actively. Such reflections can be seen in the following definitions:

> " it involves students and they have to use all the prior knowledge or knowledge
>   that is needed to complete the task(s) given"
> " students can put into practice previous and new knowledge into practice to rein-
>   force the skills taught"
> " they encourage reflective thinking and application of knowledge"
> " they involve learners in active thinking and application of knowledge"
> " they involve learners in active thinking and participation in the process of lan-
>   guage learning"
> " students can see how they can use previous knowledge and new knowledge
>   taught by the teacher, when they work on the tasks given by the teacher"

3. It provides practice, reinforcement and feedback

Not surprisingly most of the teachers considered task to be important because it provided practice and reinforcement for the learners and feedback for both the teachers and the learners. These were the most frequently mentioned reasons in response to question two with 35.5% of the teachers providing such thoughts or reasons. Some of the common reasons are illustrated below:

> " they provide opportunity to the learners to practice the language in a near
>   real situation"
> " it gives an indication to the teacher if learning has taken place when he / she
>   observes the change in students behaviour"
> " it allows the students to practice the language and to discover their own strength
>   and weaknesses"
> " it provides a lot of practices and input for learning to be purposeful"
> " it provides practice for the students and helps the teacher to assess the lessons /
>   syllabus objectives"
> " they enable students to practice and test what they have learned"
> " it gives practice to students to practice what have been taught"
> " it would provide practice for the learners and feedback for the teachers"
> " it gives practice to students to improve their language learning skills"

4. It reflects and indicates extent of the teaching - learning process

A number of teachers gave responses which could be categorised as a reflection or indication of the teaching - learning processes. Only 11.2% of the teachers considered task as important for determining or reflecting on the teaching- learning processes in the classroom. They indicated that a task would allow them to monitor the effectiveness of teaching and learning in the classrooms; it helps raise the students consciousness about what they are learning and to link it with previous schema; it changes behavioural patterns in students, generates student awareness of what they are learning, helps teachers discover their own innovativeness and ability to achieve objectives; it provides opportunities for teachers and students to work on the language together. Such reflections can be clearly discerned from these responses:

> " it would help to ensure that teaching and learning would be effective"
> " because not only can the task tell students of their strengths and weaknesses but they are important to guide the whole process of language learning and teaching"
> " it provides students with a variety of techniques in learning and helps teachers to identify which techniques are better than others"
> " it prepares the students for the learning unit by raising their consciousness and linking their available schema to present learning structure as well as framing the trainer's outline for teaching a specified learning unit in a systematic and co-ordinated way"
> " the aims of the task(s) is to change the behavioural patterns in students"
> " it encourages the students get involved in language use to fulfil the aim of the task"
> " to enable the students to participate actively in employing the use and usage of language"
> " they help to generate student awareness of what they are about to learn"
> " they help to 'discover' our (the teachers) innovativeness and creativity which are both instrumental towards meeting the objectives of the lesson in a manner which makes 'achievement' a success story"
> " it provides opportunities for the teachers and learners to work on and at language"

5. It is an indicator of level of ability

Some of the teachers (7.5%) thought that task is important in language teaching and learning because it would provide clear indications about the learners' language ability or level of proficiency. Therefore, for this group of teachers the importance of using task is perceived as a means of gauging or diagnosing the learners' mastery of the language. This is reflected in the following responses:

> " it helps to assess the students level of ability"
>
> " they can be used to gauge students achievement"
>
> " it gives opportunities for both teachers and learners to be involved actively in determining the level of proficiency attained"
>
> " the end product of the task will clearly show the students level of ability"
>
> " the task can be used by the teachers to measure the learners proficiency level"
>
> " when the teacher uses different types of task(s) he/she can identify the different levels of ability for different types of language skills"
>
> " the teacher can know what type of task would be suitable to check the learners proficiency level and also the teacher can use the pupils ability to design better tasks"

6. It is an indicator of objectives or skills achieved

Only 5.6% of the teachers considered task important for evaluating the skills or objectives achieved in language teaching and learning. They considered task as an important means of establishing what skills or objectives have been achieved or could be achieved. The following quotes provide an insight into the teachers' thoughts.

> " it is used to determine the attainment of objectives"
>
> " it will allow the teacher and the students to evaluate what skills have or have not been achieved"
>
> " it will reflect on whether students have acquired the necessary skills in the said lesson objectives"
>
> " they reflect whether objectives of the lessons have been met and that the pupils have improved in all; the four skills of listening, speaking, reading and writing"
>
> " they reflect whether teacher has achieved the objectives planned before the lesson"

7. It provides motivation, interest for learning.

Not many teachers considered this as an important aspect of task in language teaching and learning. Surprisingly only 7.5 % of the 107 teachers thought that task is important in language teaching and learning because it would help to motivate students besides generating interest in language learning or teaching. The following responses indicates this:

> " it would enhance students interest in learning and teachers maturation in education"
>
> " they can motivate the students to improve themselves in the target language"
>
> " it motivates the students in learning the target language"
>
> " they stimulate learning in an interesting and involving manner"

8. It shows purpose and direction

A large number of teachers (22.4%) clearly felt that task is important in language teaching and learning because it provided a sense of purpose and or direction. For these groups of teachers task was a means of providing guidance and focus in learning the language and in applying knowledge gained or obtained in the classroom. Such beliefs are clearly reflected in the following quotes:

> " task provides purpose for learning and teaching in the classroom"
> " it gives direction to learners in completing the tasks"
> " it provides a sense of purpose to the learners and thus helps to motivate the learners once they are able to solve it"
> " they gear teachers and students towards the learning objectives by providing purpose and direction"
> " the task provides guidance and a sense of direction to students in learning their target language"
> " it helps students to focus on what they are learning"
> " task are a means of leading or directing the learners towards completing any tasks successfully and also provides language learning input"

All these findings indicate that all the teachers clearly understand the role of *task* in language teaching. They consider it important for different reasons and the importance accorded to *task* depended on their perception of the concept *task*. An interesting finding is that the purpose of the task dictated the kind of importance accorded to it.

7.2.3 Stage 2 (Method 2)

The next stage of the study was to get the teachers to define the concept of task *after* the training, practice sessions and the introduction to the framework but *before* they embarked on the design of the materials. Below is an outline of the teachers' perceptions and definitions about the concept task which were collected at stage two.

At this stage, that is **after the training,** the definition of task was observably more specific and more cognitive in nature. On the whole it appears that teachers had a better or different understanding of the concept. Five distinct groups of comments could be discerned from the teachers' responses and these could be further classified into two broad categories- task as cognitive in nature and task as non-cognitive in nature. These definitions were written in pairs with one group having three members

since there were 107 teachers. It was observed that there was a great deal of excitement and discussion in doing this stage of the exercise. When asked, the teachers said that they found it challenging after being exposed to other definitions and theories of task based activities. They were only aware of Nunan's (1989) and Prabhu's (1987) definition of task. It came as a surprise to many of them that there were a number of other definitions of task in different contexts. Further, such exercises (according to the teachers) have never been done by them.

All the responses from both the pre - and in-service teachers were analysed collectively and are also presented collectively as in Stage One. The researcher considered this stage of the study as important, in terms of the definition of 'task' because it revealed marked changes in the way the teachers apparently perceived and defined 'task' after further training and introduction to the framework.

The teachers definition were better structured and more focused after M2. It is apparent that they were not merely recalling the different published definitions as presented and discussed during the workshop (see section 4.9.1, table 4.2). Instead, they were able to synthesise the different aspects of the published definitions, their own previous perceptions of task and from working with the framework to make materials a new definition of task was evolved. The indication is that they now had a better understanding of the concept task. This can be seen in the definitions presented below. The following is an outline of the different themes as defined by the teachers:
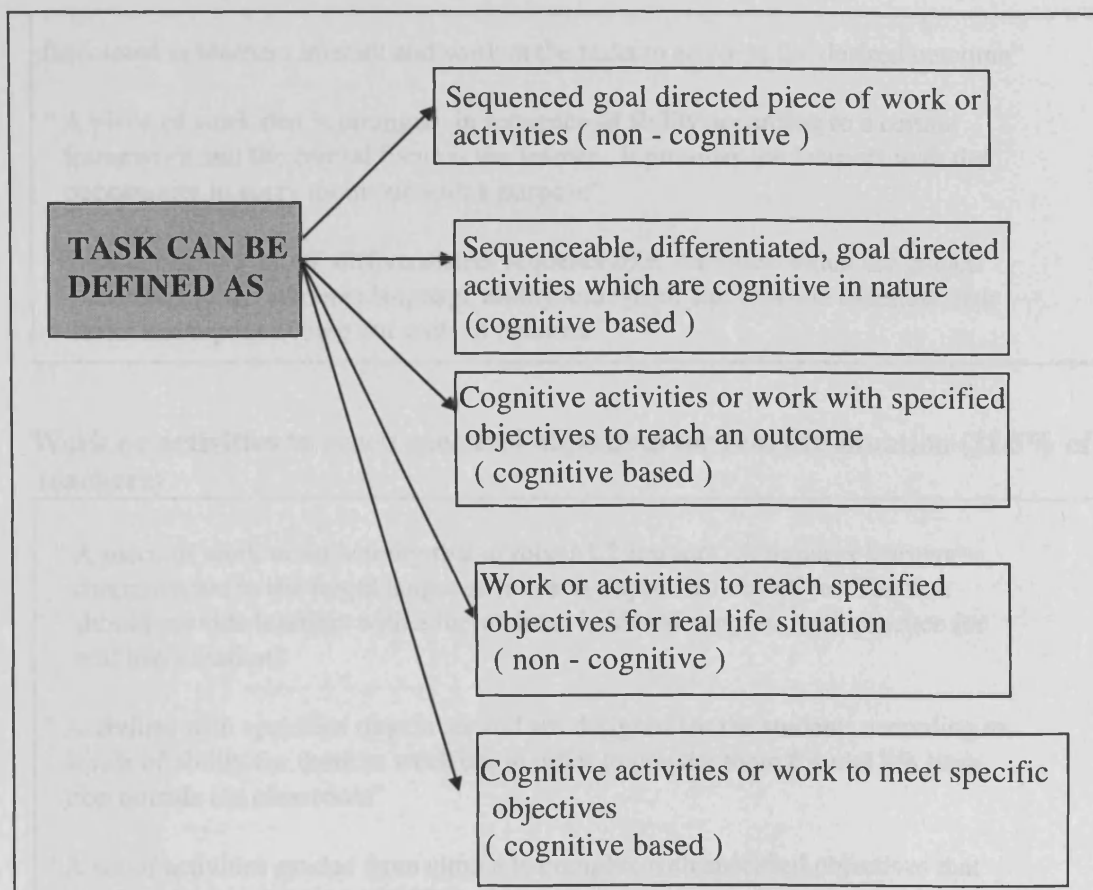
Figure 7.13 Definition of Task

The diagram shows a box labeled "TASK CAN BE DEFINED AS" with arrows pointing to five boxes:

- Sequenced goal directed piece of work or activities (non - cognitive)
- Sequenceable, differentiated, goal directed activities which are cognitive in nature (cognitive based)
- Cognitive activities or work with specified objectives to reach an outcome (cognitive based)
- Work or activities to reach specified objectives for real life situation (non - cognitive)
- Cognitive activities or work to meet specific objectives (cognitive based)

7.2.3.1. Task defined as Non-Cognitive

Twenty-nine percent of the teachers defined task as non cognitive activities or work. Two categories of task definition could be deduced from the responses provided.

1. *Sequenced goal directed piece of work or activities* and

2. *Work or activities to reach specified objectives for real life situation(s)*.

Examples of some of the definitions are as follows:

Sequenced goal directed piece of work or activities (7.5% of teachers)

" A sequenced goal directed piece of work or activity designed by the teacher so that learners are able to comprehend, manipulate, produce or interact with each other communicatively, using the four language skills in the target language to complete a task successfully within a social setting"

" tasks includes pieces of work, activity (ies), instructional questions, work places, simulations and any other activities which involved filling in gaps, information - gap activities, performing operations or decision making etc. Tasks, preferably should be sequenced according to students' ability, are goal directed with a specified objective to be achieved at the end of it. Language learning is

facilitated as learners interact and work at the tasks to arrive at the desired outcome"

" A piece of work that is arranged in sequence of ability according to a certain framework and the central focus is the learner. It provides the learners with the opportunity to carry them out with a purpose"

" Task is one of a set of differentiated, sequenceable, activities which are graded according to the students language ability and where students can manifest their skills and input to come out with an outcome"

Work or activities to reach specified objectives for real life situation (21.5% of teachers)

" A piece of work or an activity that involves L2 learners. It requires learners to communicate in the target language to reach a specified objective. The task should provide learners with a hierarchical ladder of progress with practice for real life situation"

" Activities with specified objectives and are designed for the students according to levels of ability for them to work on, in order to prepare them for real life situation outside the classroom"

" A set of activities graded from simple to complex with specified objectives that involves learners' thinking skills and communicative procedures and requires the use of the target language similar to real life situation"

" A piece of work, activity or work place designed for learners to perform, using the given input. These tasks are simulations of real-life which will facilitate language learning"

" Tasks are activities which are instructional in nature and intended for specific purposes and objectives of language learning. These activities are aimed at different learning abilities within the context of a learners environment"

7.2.3.2. Task defined as Cognitive based
Seventy-one percent of the teachers defined tasks as cognitive activities or work. Three categories were clearly identified from the responses provided.

1. Sequenceable, differentiated, goal directed activities which are cognitive in nature.

2. Cognitive activities or work with specified objectives to reach an outcome.

3. Cognitive activities or work to meet specific objectives.

Examples of some of the definitions are presented below.

Sequenceable, differentiated, goal directed activities which are cognitive in nature (30% of teachers)

" A set of activities that are differentiated according to levels of ability, specified objectives and sequenceable with the learner as the central focus. It is goal directed facilitates language learning by making use of cognitive and communicative procedures. The focus is on meaning and form while the teacher acts as a facilitator"

" Task is a range of work plans or activities which include a set of sequenceable and differentiated levels of ability which have terminal objectives. It involves the learner's cognitive and thinking skills within a specified objective"

" The term task refers to a range of problem solving, problem posing, decision making etc. activities which involves an individual or a group of learners with specific objectives and needs in mind. Instructional questions in the form of performing operations on task input and structured according to levels of ability facilitate learning. This involved the affective and cognitive domains. Through such activities learners are helped to activate the schemata to comprehend and interact with the text which emphasises meaning and form"

Cognitive activities or work with specified objectives to reach an outcome (16.8% of teachers)

" Task is a goal directed cognitive activity designed for varying levels of ability which involves the learner to think, manipulate, produce and interact with the task, text and peers using the target language"

" Task is a piece of work involving problem posing and problem solving activities with specific objectives and clear instructions that allows the learners to perform cognitive tasks according to his own level of ability by thinking, reflecting, applying knowledge and communicating in order to arrive at an outcome"

" Cognitive activities or work organised according to levels of language proficiency which involves thinking and responding to specific objectives to achieve an intended outcome"

" A piece of work or activity which has a range of work plans organised according to a hierarchy of skills to meet different learner needs with instructional purposes where students have to perform goal-directed cognitive activities"

" Tasks are cognitive instructional activities which are based on work plans profiled according to learners' needs to reach a specific target or goal"

" A procedural process involving a number of set cognitive and affective activities whereby objectives intended are carried out through problem solving and problem posing activities to achieve the target goals"

Cognitive activities or work to meet specific objectives (24.3 % of teachers)

" An activity designed according to levels of ability with specific objectives which
  demands the learners use of their cognitive ,affective and psychomotor ability to
  communicate within himself and/or others in solving the problems in a best
  possible way giving special attention to both meaning and form"

" Activities with instructions that involves cognitive and communicative applica-
  tion with specified objectives to perform varying levels of input to reach a specific
  outcome"

" a piece of work designed according to what learners are capable of doing. Learners
  perform and progress from one level to the next using their cognitive and affective
  ability to achieve an outcome which is meaningful and gives satisfaction"

The definitions in Stage Two clearly indicate a marked change in the manner the teachers viewed and defined task. Whether task is seen as cognitive or non-cognitive, all the teachers appear to have changed their definition of tasks by adding more depth to it. For example, they now saw task as work or activities rather then exercises, and a tool or something, which could be sequenced according to learners' level of ability. These perceptions were not seen in the "pre-task (framework) exercise" in Method 1. Also task is now seen more clearly as goal directed and incorporating specific objectives to reach a definite outcome. The definitions are now more focused, coherent and specific. They incorporate the teaching of both 'meaning' and 'form' of task, as advocated by the framework. Definitions are also now more dictionary like. It is also interesting to note that the teachers have included aspects of the framework specifications in their definitions which suggests that they had used the framework as a guide in developing their materials.

An incidental finding of this exercise is that it can be clearly extracted from the definition the importance of tasks in language teaching which are implied explicitly in their now more focused definitions. This endorsed their comments that the way they defined tasks controlled the way they designed tasks and the purpose for which the task is being defined. An analysis of randomly selected teacher made materials clearly suggests that their actual tasks have changed. The tasks were more focused and better structured. They consisted of more steps, had clear instructions, and learner support was provided where appropriate. Although the changes could be better, given the short training exposure, there is indication that the teachers can be trained to develop more focused EAP tasks with varying levels of complexity for different proficiency levels. The extent to which the materials had changed is discussed in chapter 8.

7.3 Conclusion and Summary

The findings suggest that the teachers were better able to develop EAP materials through the use of the framework together with other support literature used during the training. The teachers had a positive attitude towards the framework as a training tool and saw that it could be used alongside existing principles of materials design. They found it to be useful, flexible, and it provided them with new ideas to try out which led to a better understanding and a new perception of the concept of 'task' when developing EAP materials.

It is also suggested that they were better able to focus on the entire process of developing materials and were able to monitor their progress. Thus they saw the process of developing the EAP materials less as an "input - output equation" and more as a shared collaborative learning endeavour (Woodward, 1991:213) involving shared knowledge. Their main aim was learning, understanding and developing the materials. In trying to apply the different specifications of the framework's strands into task design, the teachers were negotiating, discussing and brainstorming the activities. They were thus indirectly investigating their own abilities and understanding in developing EAP materials (Gebhard et al, 1990). They had to use the framework for interactive decision making at a more complex level (Bailey, 1990). They were automatically guiding each other through reflection of the process they were going through, thus discovering areas that were problematic or more problematic. They were thus improvising together by reflecting in action as suggested by Schon (1987).

Interestingly it can be deduced from the findings that the teachers were developing experiential knowledge (Parrott,1993) within the six weeks of working with M 1 and M 2. According to Clandinin (1986) such experiential knowledge and beliefs developed by teachers are central to the types of instructional decisions that teachers make. It appears that the teachers as a collaborative group were beginning to explain previously unrecognisable complexity in issues pertaining to EAP task-based materials design. They were devising, analysing and evaluating (Parrott, 1993).

The teachers indicated that they were having problems with the language of the authentic texts ,and with text structure and grammar. These were the basic reasons why they were reluctant to adapt or summarise the texts. They also lacked practice and the confidence to adapt and make materials. Richards's et al (1996) found that NN teachers of English in training were always concerned about knowing the structure of English. Generally, these teachers show that they are beginning to understand the complexities of developing materials.

The teachers' accounts also strongly suggests that the teachers themselves had consciously or unconsciously used both meta-cognitive, cognitive and socio-affective strategies (Oxford, 1990) when using the framework to develop the materials as a collaborative group. Thus it can be concluded that the teachers had not only indicated that the framework was useful as a training tool but they had a more positive attitude, besides becoming more aware of their own developing skills and knowledge about materials design. Five main aspects are clearly identifiable.

1. The teachers' initial beliefs/images about EAP materials development had been inaccurate (materials are not so easy to develop).

2. They had acquired new technical know-how and insights in to EAP task development.

3. They had discovered new ways of thinking laterally (they were unaware of this but their accounts indicate so).

4. A new dilemma in developing EAP task - based materials and materials on the whole had emerged.

5. They had acquired new self - knowledge and realisation (they were more aware of their own strengths and weaknesses).

On the whole the teachers found that they were better able to weigh the content of EAP materials development. As Richards's (1990) explains, "teachers need to develop competencies in knowing when a skill should be used or dropped". Their knowledge about materials appear to be developing. Freeman (1991) maintains that "teaching knowledge is developmental." Their previous images of EAP materials development being "easy, just copy, cut and paste" was only a false illusion. The teachers' previous images were derived from their previous experiences as school pupils or watching other teachers (Calderhead and Robson, 1991) but they were now able to reconstruct their existing images and beliefs about materials design. It also appears that they have learnt to value both positive and negative experiences of EAP task-based materials design and the use of the framework as a training tool. Their strong positive attitude towards the usefulness of the framework also suggests that "interest is closely related to curiosity" (Crookes and Schimdt, 1991:26) and thus it also led them through a whole new learning experience.

7.3.1 Incidental Findings

The way the teachers had used the framework clearly details their approaches. Their accounts indicate that they used the framework in a cyclical and looping manner. This enabled them to utilise the framework as a checklist. As the use of the framework was

not controlled, the teachers were able to use it to develop their own mini frames or guidelines derived from the framework's strands to plan the development of their tasks.

The training and the guide was not to "spoon-feed" but to get teachers to learn through managing and solving problems as advocated in management training programmes (Pedler, 1983). This would allow the teachers to identify for themselves what works and what does not by reflecting more critically. They were able to ask sharper questions like, "what and why" rather than focusing on "how to" all the time. It is also appears that the teachers were able to work or apply theories and principles of materials design and other linguistic theories in a context embedded situation and within a cognitively more demanding context, rather than in a context reduced situation as explained by Cummins (1984).

It also appears that through collaborative work the teachers seem to benefit from interacting with their peers. They were able to explain their own understandings of the framework's contents, and supplementary guides; they questioned and challenged one another; they negotiated the interpretation of the strands and its application to task design; they listened to each others' ideas and finally made decisions and choices about the best approach about texts, tasks, visuals, objectives etc. (see Sharan and Sharan, 1992; Kessler, 1992; Coelho, 1992; McDonell, 1992; Knezevic and Schol, 1996).

Through co-operative collaborative group work in developing the EAP materials, the teachers were learning from each other. They were generating questions, making clarifications, brainstorming, thinking, reasoning, analysing, synthesising, evaluating and planning a course of action through the outlining of structured plans and drafts to achieve a common goal. They were thus helping each other to gain confidence through exploration of ideas which led to the shaping of either positive or negative understanding. Finally, in developing the EAP materials in method 2 the teachers appear to have reflected through identifying, analysing and generalising (Graves and Graves, 1990).

In order to determine individual teachers' opinions questionnaires were administered for both M1 mad M 2. These are discussed in chapter eight. Chapter eight also presents a statistical analysis of the teachers materials based on a checklist and the extent to which the materials differed.

CHAPTER EIGHT

Quantitative Analysis

8.0 Introduction

A quantitative analysis was deemed necessary for this study to complement the qualitative findings based on group logs presented in Chapter Seven. This chapter explains the methods of statistical analysis, briefly describes the instruments from which data were drawn, discusses the findings globally and highlights certain aspects. Finally it presents the conclusions and the implications of the analysis.

For presentation purposes the analysis and the findings have been divided into two main sections:

Section One:- Analysis, findings and discussion of the pre (method 1) and
post (method 2) questionnaires.

Section Two:- a) Analysis, findings and discussion of the interrater reliability
of the analysis of the teachers' materials.

b) Analysis, findings and discussion of the significant differences
in materials developed through method 1 and method 2.

The objective of the analysis is to establish through comparison, firstly, whether there are any overall differences in (a) what are considered important criteria for selecting texts and developing materials (b) problems encountered in developing EAP materials (c) teachers' perception, attitude towards designing materials (d) their overall attitude and reaction towards the materials (e) understanding of the underlying principles as delineated in the framework. Secondly, it seeks to establish whether there are significant differences between materials developed through both Methods 1 and 2.

8.1 Methodology.

The questionnaires are analysed using frequency counts and percentages. Results are presented in table form. Weights or values are given to some responses in order to analyse the data globally. Only marked differences are discussed and presented. The materials developed using both methods are analysed using a standard checklist (see Chapter 6 and Appendix A6.4) by three different evaluators. Both tests of significance (t-test) and inter rater reliability tests (Pearson Correlation) are used. Only overall performance and differences on identified individual criteria on the checklist are

presented and discussed. There are some limitations in the use of the measures as the checklist does not directly measure the framework strands and specifications but instead provides a broader spectrum of evaluation of teacher made materials. Since it was devised for the purpose of this study from various sources (see references in Chapter 6) shortcomings are undoubtedly present. However, since three raters evaluated the materials a balanced and more reliable evaluation can be maintained.

Section One
8.2 Analysis and Findings of Pre and Post Questionnaires

Analysis and findings of the Inservice (IS) teachers responses are presented and discussed first followed by those of the Pre-Service (PS) teachers in the case of the questionnaire analysis and the evaluated materials.

8.3 Inservice Teachers Questionnaire Analysis and Findings

In method 1 only 60 teachers returned the questionnaires out of 63. However in method 2 all 63 teachers returned the questionnaires. The IS teachers were all experienced teachers with a minimum of three years teaching experience in either primary or secondary teaching. According to them they have had only one course in materials selection and adaptation at the university and some input from their TESL methodology course. They have had very little training or exposure to materials development.

8.3.1 Factors/criteria in selecting texts and materials for designing EAP materials.

Part A, section B of the questionnaire (Appendix A6.1) required teachers to identify six criteria which they considered important and necessary for selecting texts and designing EAP reading and writing materials. To achieve this, 15 criteria were provided based on the previous pilot studies and a review of literature. It was considered impractical for the teachers to rank all 15 criteria in order of merit. Therefore it was decided that the teachers should identify only six main criteria. Each of the six criteria were then ranked on a rating of 1-6 after an initial analysis to enable the researcher to ascertain and summarise the teachers' perceptions of the most important criteria.

Table 8.1 below presents the summary of all the criteria selected by the teachers as important during Method 1 and after Method 1. The figures indicate the number of people multiplied by each rating to give a global view.

Table 8.1A **Criteria considered important in EAP Materials Design - M1 and M2;**

Criteria	Method 1 (N = 60)								Method 2 (N = 63)							
	6	5	4	3	2	1	Total		6	5	4	3	2	1	Total	
1. Challenging	36	0	4	24	16	5	85		0	15	4	3	2	1	25	
2. Relevance and Appropriacy	24	20	32	15	6	5	102	D	0	40	52	27	10	5	134	E
3. Manageable	0	5	8	0	8	5	26		0	5	8	3	18	2	36	
4. Learners' ability	60	20	12	12	12	5	121	B	258	70	16	0	2	0	346	A
5. Provides practice	30	10	8	6	8	1	63		0	0	12	3	12	6	33	
6. Exploitable	30	20	8	12	12	1	83		12	40	20	54	16	4	146	D
7. Interesting and enjoyable	30	45	16	18	10	6	125	A	0	10	4	3	0	1	18	
8. Authenticity	24	20	12	9	6	4	75		60	25	16	21	30	8	160	C
9. Cultural values	0	0	4	9	2	3	18		0	0	0	0	0	0	0	
10. Integration of skills	18	30	20	27	6	3	104	C	0	10	8	3	4	5	30	
11. Learning strategies	12	30	28	15	10	4	99	E	42	60	56	36	10	7	211	B
12. Adaptability	18	25	36	3	4	4	90	G	0	15	36	27	18	18	114	F
13. Purposeful	18	30	16	24	4	5	97	F	0	15	12	6	2	2	37	G
14. Learner centred	30	30	20	0	6	2	88		6	10	4	3	2	2	27	
15. Easily obtainable	30	15	16	6	10	7	84		0	0	4	0	0	2	6	

Key: The numbers 1-15 denote the codes for the list of criteria provided in the questionnaire.

The alphabets A -G denotes the descending order of importance in selecting criteria for selecting materials based on the analysis.

It was observed that in Method 1, the teachers considered the following criteria as important. (Only scores above 90 are presented but scores above 80 will also be discussed). Materials should (as illustrated in table 8.1B): be interesting and enjoyable; be matched to learners' ability; integrate all four skills; be relevant and appropriate, develop learning strategies; be purposeful and adaptable.

Table 8.1B Criteria for selecting materials considered important by the IS teachers

Method 1	Method 2
A - Interesting and enjoyable (7)	A- Learners' ability (4)
B - Learners' ability (4)	B - Learning strategies (11)
C - Integration of all 4 skills (10)	C - Authenticity (8)
D - Relevance and appropriacy (2)	D - Exploitable (6)
E - Learning Strategies (11)	E - Relevance and appropriacy (2)
F - Purposeful (13)	F - Adaptability (12)
G - Adaptability (12)	G- Purposeful. (13)

Key- 1. The **alphabets denote** descending order of importance in alphabetical order based on the analysis.
2. The **number in brackets** corresponds to the coded numbers of the criteria as listed in the questionnaire.

But, after completion of Method 2, there was a significant change in perception of what is considered important as presented in table 8.1B. Materials should: first be matched to learners' ability; develop learning strategies; be authentic and exploitable; be relevant and appropriate; be adaptable and purposeful.

In M1 the IS teachers considered the first three major criteria *interesting and enjoyable, learners' ability* and the *integration of all four skills* as the most important criteria. However, after working with Method 2 (using the framework) there appears to be a major shift in perception. At this stage the IS teachers overwhelmingly considered *learners' ability* as the most important criteria followed by *learning strategies* and *authenticity*. These first three criteria are essential principles of the framework and this suggests that the IS teachers appear to have apparently understood the value of the underlying principles delineated by the framework. It is interesting to note that the criterion *interesting and enjoyable* was no longer considered an important criteria after working with Method 2. *Learners' ability* continued to remain an important criteria although in Method 1 it was the second most important criteria. The criterion *integration of all four skills* was the third most important in Method 1 but in Method 2 it dropped dramatically out of the first seven important criteria. This is perhaps due to the fact that in Method 2 the teachers were working only with reading and writing skills.

Instead *authenticity* became the third most important criterion in Method 2, as suggested by the strand on *types of texts* in the framework.

In Method 1, the IS teachers considered *relevance and appropriacy*, developing *learning strategies*, *purposeful* and *adaptability* as the other most important criteria. It is interesting to note that the teachers have ranked developing *learning strategies* so highly, although according to them (in workshop discussions) they have previously never been asked to consider this when designing materials. This indicates that the teachers are now aware of such strategies. That is, they know about them but have not been trained to apply them. As a result of the training (M2) developing *learning strategies* was considered the second most important criterion by the teachers. *Relevance and appropriacy* remained important with only the ranking of importance accorded to it in Method 1, changed from being fourth to fifth in Method 2. *Exploitable* was the fourth important criterion in Method 2. This is significant because it was essential that the texts the teachers had selected could be well exploited to enable tasks to be developed for text understanding. In fact, in some respects this is the whole point of the framework. It was considered important in Method 1 (ranked 11th) but hardly emphatically so. *Adaptability* was not considered highly important in Method 1 (ranked seventh) but was considered as the sixth most important criterion in Method 2. Thus, for both methods, although *adaptability* was accorded importance it would probably be considered only when absolutely necessary. Furthermore, the analysis of the materials in Section B of this chapter revealed that teachers (both pre-and in-service) did not attempt to adapt texts. *Purposeful* remains important in both methods.

A closer look at Table 8.1A reveals that the criterion of being *learner-centred* was more frequently mentioned in M 1 than in M 2. In the workshop context, this could be interpreted that with M 2 teachers were continually working towards the learners' needs and therefore materials are automatically learner centred (as the framework focuses on the learner) and hence developing *learners' ability* was ranked the most important. However, what is of concern is the fact that the materials should be *"challenging"* was not considered important in M 2 as it was in M 1. Could this be attributed to the fact that since the teachers are already working with subject matter materials and incorporating higher order skills, this in itself makes it *challenging*? This would need further investigation. Another interesting finding is that in M 1 *easily obtainable* as a criterion mattered to the teachers but in M 2 it ceased to be of importance.

The IS teachers also mentioned materials should reflect *moral values* as another criterion (N=26) in selecting and developing materials. This was an additional criteria

provided by the teachers themselves. This is consistent with the requirements of the Malaysian National Curriculum. However in M 2 no mention was made about "*moral values*" and similar criteria were not suggested by the teachers.

On the whole, it can be deduced that the IS teachers' perception of what criteria are important changed after working with both methods and there is a clear indication that by and large the IS teachers had understood and had internalised the principles delineated by the framework. Thus, the above finding provides the answer to research question number 3 (see Chapter 1).

8.3.2 Problems encountered in designing the materials.
Part B, of Section B of the questionnaire asked the teachers to list the kind of problems they encountered in developing EAP materials by selecting from a given list. Frequency counts and percentages were used to analyse all the data.

In response to a question as to whether they had encountered any problems in designing the materials, 91.7% (N=55) strongly indicated that they did have problems with only 8.3% (N=5) maintaining that they had no problems in M 1. This percentage differed in Method 2 though not markedly so. 77.8% (N=49) IS teachers indicated that they were still having problems which appear to be less than in M 1. The number of teachers encountering no problems increased with 22.2% (N=14) indicating that some at least, now had fewer problems.

The teachers were then asked to select six main type of problems from a list provided and to add any others not mentioned. Not everyone listed six problems and thus there were instances where there were no responses at all for both M 1 and M 2.

The discussion below is based on table 8.2 and 8.3. Table 8.2 presents a summary of all the problems listed based on frequency counts and Table 8.3 provides a summary of additional problems mentioned.

In M 1 "*selection of texts*" and "*selecting planning and designing tasks*" were listed as being the most problematic with 42 (70%) of the teachers indicating so for each type of problem. *Identifying text types/textual patterns* was ranked next with 41 (68%) of the teachers encountering problems with this aspect. 37 (62%) of the teachers maintained that they had problems *integrating learning strategies* (one recalls that this was never a part of their previous training). *Matching materials to levels of ability* was another

Table 8.2   List of Six Main Problems encountered in Developing EAP Materials (IS Teachers)

Type of Problems   List of Six Main Problems Encountered (M1 and M2)

	Method 1 (N = 60)							Method 2 (N = 63)						
	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total
1. Grading Texts and Tasks	5	3	9	4	7	6	34	9	5	4	1	-	-	19
2. Selection of texts	25	9	3	0	2	3	42	16	3	0	0	-	-	19
3. Matching Materials to levels of ability	5	10	4	2	7	8	36	0	1	0	0	-	-	1
4. Integrating learning strategies	4	4	4	9	12	4	37	9	9	9	0	-	-	27
5. Selecting, planning and designing tasks/activities	4	12	8	13	3	2	42	7	6	3	1	-	-	17
6. Adapting the text	1	7	10	8	1	3	30	4	8	4	1	-	-	17
7. Identifying skills to be taught	1	4	8	8	5	3	29	2	4	0	0	-	-	6
8. Identifying text types/textual patterns	12	8	9	5	2	5	41	8	14	6	2	-	-	30
No responses	(3)	(3)	(5)	(11)	(21)	(26)		(8)	(13)	(37)	(58)	(63)	(63)	

Note: In M 1 only 60 questionnaires were returned out of a total of 63.
      In M 2 all 63 participants returned the questionnaires

378

problem encountered by the teachers with 36 (60%) listing this as a problem. The next problem identified by the teachers was "*grading texts and tasks*" with 34 (57%) of them stating so. "*Adapting text*" was low on the list with 30 (50%) identifying this as a problem. Finally, 29 (48%) of the teachers said that they encountered problems identifying the "*skills to be taught*". The problems listed by the teachers (with the exception of "integrating learning strategies") correspond closely to problems stated or identified in their journals presented in Chapter 7 Section 1A.

The number of teachers indicating or identifying the type of problems they had encountered with Method 2 dropped significantly and there were more teachers providing no responses. This is clearly shown in Table 8.2. With M 2, the IS teachers appear to have listed "*identifying text types/textual patterns*" as the most problematic with 30 (47%) saying that they had problems here. This is consistent with problems mentioned in Chapter 7, Table 7.11, where a large proportion of the IS teachers maintained that they had problems identifying text patterns and the need for more training in this aspect. The second type of problem was that of "*selecting texts*" and "*grading texts and tasks*" with 19 (30%) of the teachers selecting these two aspects as a problem. Fewer teachers raised these two aspects as an issue; probably most did not find these two aspects so much of a problem as indicated in Chapter 7 where the framework strands guided the teachers in text selection and grading text (see Table 7.7 and accompanying comments).

The third type of problem was that of "*selecting, planning and designing tasks/activities*" (N=17) and "*adapting text*" (N=17). Twenty-seven per cent of the IS teachers maintained that they had problems. The number is small, less than thirty-per cent, and is to be expected. With regard to "*adapting text*" many teachers did not attempt to adapt text as is clearly indicated in the evaluation of materials discussed in Section B of this chapter.

On the whole, the teachers indicated that they had more problems when working with EAP materials in M 1 and appear to have fewer problems when working with M 2. This supports the findings based on the journals discussed in Chapter 7. It can be suggested that having a focus and a clearer structure which the framework provides made it easier for the teachers to design EAP materials. The fact that a large number of teachers did not list problems in M 2 raises the point that they considered they had few or no problems, implying that the use of the framework had helped solved some earlier problems.

8.3.2.1 Other Problems Encountered

Table 8.3 lists additional problems raised by the teachers for both methods.

Table 8.3   Other types of problems encountered

Type of problem	Method 1 (N = 60)	Method 2 (N = 63)
1. Understanding the text(s)	12 (20.0%)	20 (32.0%)
2. Technical terms	8 (13.0%)	19 (30.0%)
3. Developing appropriate visuals	9 (15.0%)	3 (5.0%)
4. Identifying appropriate tasks	5 (8.3%)	3 (5.0%)
5. Identifying relevant grammatical structures to be taught in text	-	38 (60.3%)
6. Identifying appropriate learners' support	-	11 (17.5%)

Note: A large number of teachers did not raise problems that they might have encountered.

Thus, the above distribution is not a true reflection of the teachers' views.

Twenty percent of the teachers had problems in understanding the texts in Method 1 as compared to 32% in M 2. This difference could be attributed to the fact that in M1 the IS teachers may have selected texts which they could comprehend but in M 2 they were guided by the framework strands and text complexity depended largely on the band level the teachers were working on. Only 13% of the teachers said they had problems with "technical terms" in M1 and 30% had problems with this aspect in M2. The same explanation as with text understanding applies. In M 1 the teachers were more free to identify texts but in M 2 they had more specific guidelines which they had to adhere to. Thus, the texts selected were more technical in nature and contained more technical terms. With regard to the development of appropriate visuals, 15% of the teachers maintain that they had problems in M 1 and only 5% of the teachers indicated this aspect as a problem in M 2. This is probably due to the exposure and training provided in M 2 in using the visual strands of the framework. 60% of the teachers indicated that they had problems with "grammatical structures to be taught" in Method 2 and no mention of it is made in M 1. This is consistent with the analysis of the journals in Chapter 7, Table 7.13.   Identification of grammatical components was stressed in the framework's specifications thus teachers' attention was particularly focused on this aspect; it was not stressed in M 1.   The same explanation may apply to the problem of identifying appropriate learners' support to complement the grammatical components.

8.4 Inservice Teachers' Perception and Knowledge about EAP Materials Design

Section C of the questionnaire consisted of Likert scale questions and were divided into Part A - 10 questions and Part B - 11 questions. Both parts required teachers to indicate their degree of agreement or disagreement with regard to their own knowledge about EAP materials development and the amount of guidance they have received.

Frequency counts and percentages were used in analysing the responses. For ease of discussion the data were collapsed together as follows: Scales 1 and 2; and 4 and 5 were grouped together as "Disagree" and "Agree" respectively leaving Scale 3 (uncertain) unchanged. The findings are presented in Table 8A and 8B in appendix A8.1). Table 8.4 and 8.5 presents the collapsed data.

It is observed that in Method 1 a large majority of the IS teachers (96.7%) strongly felt that they had not been adequately prepared for designing EAP task-based materials. This was expected as their present training programme does not include any component for EAP or ESP teaching. After being exposed to Method 2, 54% of the teachers agreed that they had had adequate preparation in designing EAP materials. 20.6% felt that it was still inadequate and 25.4% were uncertain. This is consistent with findings in Chapter Seven where teachers maintained that they needed more training and practice as a short training session was not sufficient.

In response to question 2, 51.7% of the teachers felt that they had not been encouraged to explore a variety of techniques for designing materials in their existing programme (M1) as opposed to 30% agreeing. This indicates a mixed reaction to their present training course. However, in Method 2, 68.3% of the teachers perceived that they had been encouraged to explore a variety of options in developing materials with less than 35% disagreeing or uncertain. The indication is that in working with the framework in groups, the teachers were able to try out ideas, discuss and manipulate their tasks in many ways with a structured guideline as a point of reference.

In Method 1, 45% of the IS teachers thought that they did have help in developing effective strategies for designing task-based materials (Q.3) and 40% disagreed. However in Method 2, an overwhelming 71.4% of the teachers stated that in Method 2, they had been helped to develop effective strategies for designing task-based materials with less than 30% disagreeing or uncertain.

More than half of the IS teachers (56.7%) in M1 stated that they had not been encouraged to review and evaluate their own developed materials with only 30% maintaining that they have been encouraged to do so. This view shifted significantly in M 2 as 81% of the teachers agreed that they have been encouraged to review and evaluate their own materials and only less than 20% disagreed or were uncertain.

As to whether they had been encouraged to identify their strengths and weaknesses in designing and adapting material, 55% of the teachers maintained that in M 1 they had not but 79.4% (a significant improvement) agreed with the statement in M 2.

In Method 1, 70% disagreed with statement 6 but a high proportion (82.5%) of the teachers agreed with the statement in M 2. This clearly suggests that the framework did provide a sense of direction in the design of EAP materials.

During M 1, 85% disagreed with statement 7 and more were uncertain. Whereas in Method 2, the situation practically reversed to 16% disagreeing, 24% uncertain and 60.3% agreed. This indicates very strongly that a major change had occurred from a nil agreement to over 60% agreement. This suggests that in M 2 they were provided with the necessary guidance to identify text problems in tasks.

Similarly for statements 8 and 9 there was a change from nil agreement in Method 1 to 69.9% and 63.5% respectively for M 2. This further reinforces that the framework and the resultant training helped in designing and adapting EAP materials besides providing strategic planning skills and thinking processes.

Referring to statement 10, there was again a reversal of opinion from 46.7% of the teachers disagreeing and 18.3% agreeing with the statement in M 1, to 22.2% disagreeing and 50.8% agreeing and 27.8% uncertain in M 2. Therefore on the whole the teachers felt that they gained confidence in developing EAP materials although the indication is that more practice and training is needed.

Table 8.4   Compressed Data and Analysis of Inservice Teachers' Responses to Section C, Part A

Questions Section C (Part A)   Method 1 N = 60   Method 2 N = 63

In your opinion, do you think that, at present, you have	Method	Disagree	Uncertain	Agree
1. been adequately prepared to design EAP/ESP task-based materials?	Method 1	58 (96.7%)	-	2 (3.3%)
	Method 2	13 (20.6%)	16 (25.4%)	34 (54%)
2. been encouraged to explore a variety of techniques/options for designing materials?	Method 1	31 (51.7%)	11 (18.3%)	18 (30%)
	Method 2	6 (9.5%)	14 (22.2%)	43 (68.3%)
3. been helped to develop effective strategies for designing task-based materials?	Method 1	24 (40%)	9 (15.6%)	27 (45%)
	Method 2	10 (15.9%)	8 (12.7%)	45 (71.4%)
4. been encouraged to review and evaluate own developed materials?	Method 1	34 (56.7%)	8 (13.3%)	18 (30%)
	Method 2	3 (4.8%)	9 (14.3%)	51 (81%)
5. been encouraged to identify your strengths and weaknesses in designing and adapting materials?	Method 1	33 (55%)	10 (16.7%)	17 (28.3%)
	Method 2	4 (6.3%)	9 (14.3%)	50 (79.4%)
6. been provided with structured guidelines for designing materials?	Method 1	42 (70%)	6 (10%)	12 (20%)
	Method 2	6 (9.5%)	5 (8%)	52 (82.5%)
7. been provided with adequate guidance to identify different textual patterns in a text for designing task?	Method 1	51 (85%)	9 (15%)	-
	Method 2	10 (15.9%)	15 (23.8%)	38 (60.3%)
8. been guided to develop EAP materials through strategic planning and thinking processes?	Method 1	60 (100%)	-	-
	Method 2	6 (9.5%)	13 (20.6%)	44 (69.9%)
9. adequate knowledge to design and adapt EAP/ESP materials?	Method 1	60 (100%)	-	-
	Method 2	4 (6.3%)	19 (30.2%)	40 (63.5%)
10. the confidence to design EAP materials for different learning needs or purposes?	Method 1	28 (46.7%)	21 (35%)	11 (18.3%)
	Method 2	14 (22.2%)	17 (27%)	32 (50.8%)

8.4.1 Guidance Received in Materials Selection and Design : Section C, Part B

There seems to be positive agreement among the IS teachers that they have been provided with adequate guidance in materials design during M 2 compared to Method 1. Statements 1, 2, 6, 8, 9 and 11 in table 8.5 show a significant change in perception as to the amount of guidance received in Method 2 as compared to Method 1 of the order of 70% and above. Whereas statements 3, 5, 7 and 10 also showed significant changes but of the order of 58% and statement 4 showed a 50% agreement as against 1.8% in M 1. It can be concluded that training in the use of M 2 (through the framework) has had a positive effect seen in all the eleven statements pertaining to the degree of guidance received in EAP materials design.

8.5 Inservice Teachers' Overall View of the Impact of the Framework on Them

To gauge the impact the framework has had on the teachers in its own right, a fourth section (Section D) with regard to the framework was included in the post questionnaire. The seven statements listed required the teachers to indicate the degree of impact certain key aspects of the framework had had on them

The results are presented in Table 8.6. This shows that the framework has had a "strong/very strong impact" on the IS teachers. Over 71% responded very positively to statements 1, 2, 3, 4 and 5; statements 6 and 7 had positive responses of over 60%. The results of analysing the IS teachers' responses shown in Tables 8.1A - 8.5 strongly indicated the usefulness and effectiveness of Method 2 (use of the framework) in general, whereas the results of the analysis in Table 8.6 shows that the framework has had a strong impact on the IS teachers in its own right and this complements the findings presented in the previous tables.

The analysis and finding of the preservice (PS) teachers are considered and discussed in the following sections. This is then followed by a discussion of the analysis of the evaluated materials from both methods.

Table 8.5   Compressed Data and Analysis of Inservice Teachers' Responses to Section C, Part B

Have received guidance in the following for materials design. Method 1 N = 60; Method 2 N = 63

Questions Section C (Part B)

	Method	Disagree	Uncertain	Agree
1. identifying learners' language ability/problems	Method 1	47 (78.3%)	5 (8.3%)	8 (13.3%)
	Method 2	12 (19%)	7 (11.1%)	44 (70%)
2. selecting appropriate texts or materials for different types of learners	Method 1	24 (40%)	15 (25%)	21 (35%)
	Method 2	10 (15.9%)	6 (9.5%)	47 (74.6%)
3. dealing with text complexity (e.g., text patterns, grammatical structures, terminology	Method 1	40 (66.7%)	10 (16.7%)	10 (16.7%)
	Method 2	18 (28.6%)	7 (11.1%)	38 (60.3%)
4. identifying tasks based on textual/discourse patterns (e.g. through genre analysis or textual analysis)	Method 1	59 (98.3%)	-	1 (1.7%)
	Method 2	26 (41.3%)	5 (7.9%)	32 (50.8%)
5. designing EAP tasks from different text-types	Method 1	60 (100%)	-	-
	Method 2	9 (14.3%)	13 (20.6%)	41 (65.1%)
6. identifying and developing appropriate learner support	Method 1	20 (33.3%)	15 (25%)	25 (41.7%)
	Method 2	1 (1.6%)	7 (11.1%)	55 (87.3%)
7. designing tasks based on the knowledge structures (thinking skills and grammatical components) implied in a particular text	Method 1	32 (53.3%)	16 (26.7%)	12 (20%)
	Method 2	18 (28.6%)	8 (12.7%)	37 (58.7%)
8. identifying, selecting and developing appropriate visuals or graphics for text understanding	Method 1	25 (41.7%)	12 (20%)	23 (38.3%)
	Method 2	10 (15.9%)	9 (14.3%)	44 (69.8%)
9. identifying and matching appropriate reading and writing skills to task design	Method 1	21 (35%)	14 (23.3%)	25 (41.7%)
	Method 2	11 (17.5%)	2 (3.2%)	50 (79.4%)
10. developing and matching task(s) to learners' levels of competence	Method 1	31 (51.7%)	13 (21.7%)	16 (26.7%)
	Method 2	7 (11.1%)	19 (30.2%)	37 (58.7%)
11. incorporating relevant learning strategies into task designed	Method 1	51 (85%)	9 (15%)	-
	Method 2	8 (12.7%)	8 (12.7%)	47 (74.6%)

Table 8.6 Inservice Teachers' Responses to Questions in Section D (M2) - Impact framework had on them

Questions   Section D

Impact and Overall View of EAP task-based framework	Method 2	No Impact	Weak Impact	Uncertain	Strong Impact	Very Strong Impact
1. Increased your awareness about different		-	8 (12.7%)	8 (12.7%)	31 (49.2%)	16 (25.4%)
strategies in designing materials.		8 (12.7%)			47	(74.6%)
2. Enhanced your knowledge of underlying concepts		-	7 (11.1%)	11 (17.5%)	29 (46%)	16 (25.4%)
of EAP task-based materials.		7 (11.1%)			45	(71.4%)
3. Provided the context for the learning of new skills (e.g. strategic planning, selecting, drafting,		-	8 (12.7%)	5 (7.9%)	36 (57.1%)	14 (22.2%)
redrafting, reviewing, monitoring and evaluating) in materials design.		8 (12.7%)			50	(79.4%)
4. Increased awareness of your own ability to reflect.		-	8 (12.7%)	10 (15.9%)	24 (38.1%)	21 (33.3%)
on the way you design materials.		8 (12.7%)			45	(71.4%)
5. Helped to develop adequate confidence in		-	9 (14.3%)	9 (14.3%)	23 (36.5%)	22 (34.9%)
designing EAP task-based materials.		9 (14.3%)			45	(71.4%)
6. Developed an awareness of the links between		-	16 (25.4%)	9 (14.3%)	26 (41.3%)	12 (19%)
different aspects of EAP materials design as exemplified by the framework.		16 (25.4%)			38	(60.3%)
7. Increased your awareness of the sequence of		-	11 (17.5%)	11 (17.5%)	27 (42.9%)	14 (22.2%)
levels of complexity of texts, tasks and materials as exemplified by the framework.		11 (17.5%)			41	(65.1%)

8.6 Preservice Teachers' Questionnaire Analysis and Findings

The preservice (PS) teachers' questionnaires are analysed in the same way as the IS teachers. It is presented and discussed in the same order.

8.6.1 Factors/criteria (considered important) in Selecting Texts and Materials

Table 8.7A presents the summary of the weighted value of all the criteria selected by the PS teachers and what they considered important during Method 1 (M1) and Method 2 (M2). Weighted scores above 70 are discussed.

In Table 8.7A the criteria *interesting and enjoyable* and *learner centred* were ranked the most important in M1, whereas the criteria *integration of all four skills, purposeful, relevance and appropriacy, challenging* and *learners' ability* were of average importance. The other criteria were considered of less importance. In M2, the criterion *learners' ability* was perceived to be of utmost importance whereas the criteria *exploitable, authenticity, learning strategies, manageable* and *relevance and appropriacy* were of significant importance and were more important than those considered in M1. These can be further outlined as follows in table 8.7B.

Table 8.7A   The Eight criteria ranked important for selecting materials by PS teachers.

Method 1	Method 2
A - Interesting and enjoyable (7)	A - Learners' ability (4)
B - Learner centred (14)	B - Exploitable (6)
C - Integration of all four skills (10)	C - Authenticity (8)
D - Purposeful (13)	D - Learning strategies (11)
E - Relevance and Appropriacy (2)	E - Relevance and Appropriacy (2)
F - Challenging (1)	F - Manageable (3)
G - Learners' ability (4)	G - Adaptability (12)
H - (Adaptability) (12)	H - (Easily obtainable) (15)

Key: 1. The **number in brackets** corresponds to the coded numbers of the criteria as listed in the questionnaire.
      2. The **alphabets denotes** the descending order of importance in alphabetical order based on the analysis.

387

Table 8.7B   Criteria Considered Important (by Preservice Teachers) in EAP Materials Design (Methods 1 and 2)

Criteria	Method 1								Method 2							
	6	5	4	3	2	1	Total		6	5	4	3	2	1	Total	
1. Challenging	24	10	12	9	12	1	68	F	0	0	0	0	0	0	0	
2. Relevance and Appropriacy	12	30	12	3	10	4	71	E	30	10	20	12	10	7	89	E
3. Manageable	24	15	4	6	6	0	55		0	20	8	39	4	4	75	F
4. Learners' ability	6	15	24	6	8	3	62	G	162	75	8	0	0	0	245	A
5. Provides practice	12	20	4	3	2	1	42		0	0	4	3	8	8	23	
6. Exploitable	0	5	8	9	6	1	29		18	45	36	12	14	2	127	B
7. Interesting and enjoyable	72	15	8	18	2	8	123	A	0	0	0	0	0	0	0	
8. Authenticity	6	15	4	18	6	3	52		18	55	32	9	10	2	126	C
9. Cultural values	6	10	0	0	2	2	20		0	0	0	0	0	0	0	
10. Interpretation of skills	18	5	32	15	2	4	76	C	0	0	0	0	10	2	12	
11. Learning strategies	12	25	8	12	2	4	53		0	0	44	36	14	7	101	D
12. Adaptability	12	5	20	6	14	4	61		0	10	20	15	10	7	62	G
13. Purposeful	18	10	16	18	4	6	72	D	0	0	0	0	0	2	2	
14. Learner centred	30	35	20	6	10	2	103	B	6	0	0	0	2	0	8	
15. Easily obtainable	6	0	0	0	0	0	6		29	0	0	3	4	2	33	

Key: The numbers 1-15 denote the codes for the list of criteria provided in the questionnaire.

The alphabets A -G denotes the descending order of importance in selecting criteria for selecting materials based on the analysis.

The first seven criteria ranked by the PS teachers as important in M1 clearly exemplify current ELT concerns in materials and those of the teachers' current training. The criteria *interesting and enjoyable* and *learner centred* were considered the most important criteria followed by *integration of all four skills.* However, after working with Method 2, there seems to be a significant change in perception. What was considered most important shifted considerably to *learners' ability.* What is even more interesting is the fact that *exploitable* is perceived to be the second most important criterion followed by *authenticity* and *learning strategies.* The criteria *interesting and enjoyable, learner-centred* and *integration of all four skills* and *purposeful* all ceased to be of major importance. The criteria *challenging* was not given any importance in M2. This could mean that since the task deals with subject matter material, higher order skills and that the text itself is already *challenging, exploitable* is given more importance and that it should be *manageable.*

Other criteria considered relevant to the PS teachers and which were not on the list provided are *moral values* (60.5%) and the *text has to be understood by me* (39.5%) in M1. However, in M2 only *text has to be understood by me* was mentioned by 65% of the PS teachers.

8.6.2 Problems Encountered by Pre Service teachers in Designing Materials.

All 43 (100%) PS teachers maintained that they have problems in designing EAP materials in Method 1 and still in Method 2. What differed was the types of problems they had in the two methods.

With reference to Table 8.9, the most frequently mentioned problems in M1 are *identifying text types/textual patterns, selecting, planning and designing tasks/activities; integrating learning strategies; matching materials to levels of ability.* This were considered the most problematic. *Selection of texts* and *identifying skills to be taught* were considered less significant problems and *grading texts and tasks* and *adapting texts* were considered even less problematic. But in M2, there were only minor shifts. The most frequently stated problems were *selecting, planning and designing tasks/activities, identifying text types/textual patterns, interpreting learning strategies* and *adapting the text* (which shows a similar trend as in M1) with the exception of *matching materials to learners' ability.* This is now considered less problematic as might be expected, given the use of band

Table 8.9 List of Six Main Problems encountered in Developing EAP materials (PS Teachers)

List of Six Main Problems Encountered (M1 and M2)

Type of Problem	1	2	3	4	5	6	Total	1	2	3	4	5	6	Total
1. Grading of Tests and Tasks	2	0	4	4	1	6	17	2	1	11	1	6	1	22
2. Selection of Texts	22	3	1	4	2	1	33	2	3	6	4	0	3	18
3. Matching materials to levels of ability	4	12	5	7	4	5	37	0	0	6	0	2	0	8
4. Integrating learning strategies	1	8	5	6	12	6	38	18	3	3	2	2	0	28
5. Selecting, planning and designing tasks/activities	5	7	7	6	6	7	38	7	9	4	9	0	1	30
6. Adapting the text	3	4	6	6	1	2	22	0	12	5	7	1	3	28
7. Identifying skills to be taught	1	4	9	7	7	4	32	4	3	4	8	5	1	25
8. Identifying text types/ textual patterns	5	5	6	3	10	10	39	10	10	2	6	2	0	30
9. No responses						(2)			(2)	(2)	(6)	(25)	(34)	

The analysis presented in table 8.11 is based on frequency counts for each of the six main problems listed by the preservice teachers. For discussion purposes, only the total score is discussed.

levels and the strands of the framework. *"Identifying skills to be taught"* and *"grading texts and tasks"* were perceived to be less significant problems. The findings indicate a very small shift from one method to the other. This is not surprising because clearly the indication is that PS teachers are inexperienced and have no exposure of practical experience in selecting, evaluating, adapting and developing materials and hence the persistent problem.

8.6.2.1 Other Problems Encountered

Table 8.9   Other Types of Problems Encountered   (Preservice Teachers)

Type of Problem	Method 1 (N = 43)	Method 2 (N = 43)
1. Understanding of the text(s)	11 (25.6%)	13 (30.2%)
2. Identifying of the appropriate tasks	11 (25.6%)	6 (14.0%)
3. Technical terms	10 (23.3%)	4 (9.3%)
4. Developing appropriate visuals	11 (25.6%)	7 (16.3%)
5. Identifying relevant grammatical structures to be taught in text	-	10 (23.3%)
6. Identifying appropriate learner support	-	3 (7.0%)

Table 8.9 provides a list of other problems mentioned by the PS teachers. In M1, problems of *understanding the text, identifying appropriate tasks, technical terms and developing appropriate visuals* are at an almost equally distributed level whereas in M2, the most predominant problems were *understanding the texts* and *identifying relevant grammatical structures to be taught in text.* Others were considered less problematic. *Identification of grammatical structures and appropriate learner support* were introduced in M2. It is interesting to note that *identifying relevant grammatical structures* was the third most problematic area in M2. This indirectly implies that the PS teachers became aware of their own weaknesses in terms of grammatical knowledge and this is directly related to *learner support.* It is also likely that the PS teachers see grammar in a discourse perspective when they use the framework, because grammar relates to knowledge structures and text types. This, in turn, is likely to lead to the realisation that discourse grammar is complex and that they need to know more about it.

8.7 Preservice Teachers' Perception of Knowledge about EAP Materials Design.

The PS teachers' responses to Section C, part A was a lot more difficult to analyse as there were considerable shifts from very negative to highly positive. This was totally

unexpected. The training in M2 (use of the framework) appears to have given the PS teachers a better insight into EAP materials design and materials design on the whole. The distribution of responses (see Table 8C, appendix A8.3) is illustrated in detail. The summary version is presented in Table 8.10 below.

It can be seen that the most significant shift of 100% can be seen in statement 5, followed by statements 2,4 and 8. All others showed a modest shift.

There was a clear disagreement by all 43 PS teachers in M1 that they had been encouraged to identify their own strengths and weaknesses in designing and adapting materials but unanimously agreed strongly that they had been trained to do so in M2. The strong positive shift here could be attributed to the fact that part of M2 and the use of the framework was to help teachers raise their consciousness of their own ability to design EAP materials; in doing so the PS teachers were able to recognise their own strengths and weaknesses. This also applies to statement 2 and 8.

There were, of course, those who could not decide where they stood (reasons not provided) but this number were relatively low. In statement 10 - confidence in designing EAP material, 51.2% of the PS teachers said that they were relatively confident in M2 compared to 76.7% saying that they were not confident in M1. However, it is observed that in M2 34.9% of the teachers indicated that they were "uncertain" as compared to 11.6% in M1. Although the number who were uncertain increased in M2, the indication is that this is still a positive shift.

8.7.1 Guidance Received in Materials Selection and Design : Section C, Part B

The results in Table 8.11 shows a general shift from negative to positive between the two methods, with the number of teachers mentioning "uncertainty" being nearly the same with the exception of a few items. For a detailed distribution of responses see Table 8D (appendix A8.4).

Table 8.10 Compressed Data and Analysis of Pre-service Teachers' Responses to Questions in Section C, Part A

Questions Section C (Part A) Method 1 N = 43   Method 2 N = 43

In your opinion, do you think that, at present, you have	Method	Disagree	Uncertain	Agree
1. been adequately prepared to design EAP/ESP task-based materials?	Method 1	30 (69.8%)	9 (20.9%)	4 (9.3%)
	Method 2	5 (11.6%)	10 (23.3%)	28 (65.1%)
2. been encouraged to explore a variety of techniques/options for designing materials?	Method 1	24 (55.8%)	12 (27.9%)	7 (16.3%)
	Method 2	-	-	43 (100%)
3. been helped to develop effective strategies for designing task-based materials?	Method 1	25 (58.1%)	11 (25.6%)	7 (16.3%)
	Method 2	3 (7%)	5 (11.6%)	35 (81.4%)
4. been encouraged to review and evaluate own developed materials?	Method 1	27 (62.8%)	5 (11.6%)	11 (25.6%)
	Method 2	-	-	43 (100%)
5. been encouraged to identify your strengths and weaknesses in designing and adapting materials?	Method 1	43 (100%)	-	-
	Method 2	-	-	43 (100%)
6. been provided with structured guidelines for designing materials?	Method 1	30 (69.8%)	8 (18.6%)	5 (11.6%)
	Method 2	2 (4.7%)	6 (14%)	35 (81.4%)
7. been provided with adequate guidance to identify different textual patterns in a text for designing task?	Method 1	32 (74.4%)	11 (25.6%)	-
	Method 2	11 (25.6%)	8 (18.6%)	24 (55.8%)
8. been guided to develop EAP materials through strategic planning and thinking processes?	Method 1	30 (69.8%)	13 (30.2%)	-
	Method 2	-	1 (2.3%)	42 (97.7%)
9. adequate knowledge to design and adapt EAP/ESP materials?	Method 1	35 (81.4%)	8 (18.6%)	-
	Method 2	5 (11.6%)	9 (20.9%)	29 (67.4%)
10. the confidence to design EAP materials for different learning needs or purposes?	Method 1	33 (76.7%)	5 (11.6%)	5 (11.6%)
	Method 2	6 (14%)	15 (34.9%)	22 (51.2%)

Table 8.11   Compressed Data and Analysis of Preservice Teachers' Responses Section C, Part B

Guidance Received in Materials Selection and Design. Method 1 N = 43; Method 2 N = 43

Questions Section C, Part B

How much advice or guidance have you been given in the following areas:	Method	Disagree	Uncertain	Agree
1. identifying learners' language ability/problems	Method 1	27 (62.8%)	7 (16.3%)	9 (20.9%)
	Method 2	2 (4.7%)	4 (9.3%)	37 (86%)
2. selecting appropriate texts or materials for different types of learners	Method 1	22 (51.2%)	10 (23.3%)	11 (25.6%)
	Method 2	3 (7%)	13 (30.2%)	27 (62.8%)
3. dealing with text complexity (e.g., text patterns, grammatical structures, terminology	Method 1	26 (60.5%)	13 (30.2%)	4 (9.3%)
	Method 2	5 (11.6%)	12 (27.9%)	26 (60.5%)
4. identifying tasks based on textual/discourse patterns (e.g. through genre analysis or textual analysis)	Method 1	39 (90.7%)	-	4 (9.3%)
	Method 2	6 (14%)	11 (25.6%)	26 (60.5%)
5. designing EAP tasks from different text-types	Method 1	43 (100%)	-	-
	Method 2	4 (9.3%)	10 (23.3%)	29 (67.4%)
6. identifying and developing appropriate learner support	Method 1	14 (32.6%)	8 (18.6%)	21 (48.8%)
	Method 2	-	6 (14%)	37 (86%)
7. designing tasks based on the knowledge structures (thinking skills and grammatical components) implied in a particular text	Method 1	30 (69.8%)	9 (20.9%)	4 (9.3%)
	Method 2	6 (14%)	12 (27.9%)	25 (58.1%)
8. identifying, selecting and developing appropriate visuals or graphics for text understanding	Method 1	15 (34.9%)	8 (18.6%)	20 (46.5%)
	Method 2	2 (4.7%)	3 (6.9%)	38 (88.4%)
9. identifying and matching appropriate reading and writing skills to task design	Method 1	16 (37.2%)	9 (20.9%)	18 (41.9%)
	Method 2	-	-	43 (100%)
10. developing and matching task(s) to learners' levels of competence	Method 1	32 (74.4%)	5 (11.6%)	6 (14%)
	Method 2	4 (9.3%)	7 (16.3%)	32 (74.4%)
11. incorporating relevant learning strategies into task designed	Method 1	43 (100%)	-	-
	Method 2	4 (9.3%)	11 (25.6%)	28 (65.1%)

From Table 8.11 it can be seen that the most significant statement with which the PS teachers disagreed in M1 were statements 5 (100%) and 11 (100%). These changed to positive 67.4% agreement and 65.1% agreement respectively in M2. This significant change is attributed to the fact that their current training in materials selection and adaptation does not include any work in EAP and application of learning strategies (see Chapter 7) but during M2 they had some training to include such strategies and to design materials from different text-types.

The next significant disagreements in M1 were statements 4 (90.7%), 10 (74.4%) and 7 (69.8%). These changed to positive in the order of 60.5%, 74.5% and 58.1% agreement respectively in M2. These positive agreements are perhaps due to the new and further exposure and training in M2 covering the three areas of *identifying textual patterns in text-types, developing and matching tasks to learners' level of competence* and *designing tasks based on knowledge structures.*

A considerable shift has also occurred in statements 8 (34.9%) and 6 (32.6%) disagreement in M1 to 88.4% and 86% respectively in M2. Again these aspects were part of the working principles of the framework in M2 and were handled by the teachers. The positive agreement clearly suggests that the PS teachers had understood the principles of the framework.

8.8 Preservice teachers' overall view of the impact of the framework on them.

Section D of the questionnaire was also administered to the preservice teachers to gauge the impact of the framework on them. The detailed distribution of responses is presented in Table 8.12 below.

As can be seen from Table 8.12, the framework appears to have had a strong impact on the PS teachers with only a minority of 2.3% maintaining that it had a weak impact. There were also very few uncertainties. This suggests that the PS teachers find the framework to be most helpful. This may also be a reflection of their age, attitude and willingness to learn.

Table 8.12   Preservice Teachers' Responses to Questions in Section D (M2) - Impact framework had on them

Questions   Section D

Impact and overall view of EAP Task-based framework	Method 2	No Impact	Weak Impact	Uncertain	Strong Impact	Very Strong Impact
1. Increased your awareness about different		-	-	-	24 (55.8%)	19 (44.2%)
strategies in designing materials.		-			43	(100%)
2. Enhanced your knowledge of underlying concepts		-	1 (2.3%)	3 (7%)	25 (58.1%)	14 (32.6%)
of EAP task-based materials.	1 (2.3%)				39	(90.7%)
3. Provided the context for the learning of new skills (e.g. strategic planning, selecting, drafting,		-	-	5 (7.9%)	26 (60.5%)	17 (39.5%)
redrafting, reviewing, monitoring and evaluating) in materials design.		-			43	(100%)
4. Increased awareness of your own ability to reflect.		-	-	4 (9.3%)	23 (53.5%)	16 (37.2%)
on the way you design materials.		-			39	(90.7%)
5. Helped to develop adequate confidence in		-	-	-	25 (58.1%)	18 (41.9%)
designing EAP task-based materials.		-			43	(100%)
6. Developed an awareness of the links between		-	-	8 (18.6%)	22 (51.2%)	13 (30.2)%
different aspects of EAP materials design as exemplified by the framework.		-			35	(81.4%)
7. Increased your awareness of the sequence of		-	-	4 (9.3%)	26 (60.5%)	13 (30.2%)
levels of complexity of texts, tasks and materials as exemplified by the framework.		-			39	(90.7%)

396

The overall reaction of the PS teachers towards M2 and the framework is clearly positive. Although they still face numerous problems in designing EAP materials the indication is that they are more confident than they were previously. The shift in perceptions in the criteria considered important in materials design clearly suggests that they have understood at least some of the principles delineated by the framework and exemplified in the training.

Section Two

8.9 Analysis and Finding of Pre- and In-service Teachers' Evaluated Materials.

The PS and IS teachers developed materials during both phases of Method 1 (M1) and Method 2 (M2). In M1 the teachers developed one set of reading and writing materials and in M 2 two sets (referred to as Task 1 and Task 2). It was considered necessary for the teachers to develop two sets of materials in M2 as one set would not have provided them with enough practice and exposure. It should be remembered that the teachers worked on the materials in groups and therefore the evaluation is based on group work. The completed materials from both methods were evaluated by three experienced ESL/EFL lecturers using a standard checklist. All the evaluators have had considerable experience in evaluating books and materials. Two evaluators had no knowledge or information about the EAP framework. The third was the researcher herself.

8.10 Procedure for Evaluation.

The raters were provided with an evaluation checklist (see Appendix A6.4) developed specifically for this study (see Chapter 6 for a detailed discussion). In addition they were also provided only with the seven band profiles of the learners and text types list. These were the first two strands of the framework.

A short three and half hour practice and brainstorming session was carried out. This would enable the two independent evaluators (raters) to familiarise themselves with the checklist, and for all the raters to clarify any confusion besides ensuring conformity in evaluation procedures. Due to the fact that all raters were busy with their own work, this exercise (completion of the evaluation) took much longer than originally anticipated.

8.10.1 Statistical Procedures.

In order to determine performance on the materials from both methods, the scores from the evaluation checklist were given a weighted value. The checklist consisted of a five point rating scale: 5 (excellent); 4 (good); 3 (adequate); 2 (weak) and 1 (totally lacking). These ratings were given a value of 5, 4, 3, 2, and 1. The rated values given by each rater were added to give a composite score for each group's performance on all the materials. The overall performances were compared to observe change in using both methods. The individual ratings provided by all raters on all the material were then subjected to an inter-rater reliability test, using the Pearson Correlation Coefficient Test.

A t-test was used to determine differences in performance or change between the two methods in the materials on individual aspects of the checklist and also on overall scores. In this chapter only the findings of the t-test on Method 1 materials and Method 2, Task 1 materials are presented. A t-test was also carried out on Task 2 of Method 2(see appendix A8.8 & A8.9) but it is deemed unnecessary to report these because the over all findings are similar. In any case, a breakdown of the overall performance on all materials is presented.

As with the questionnaire analysis, the analysis of the inservice (IS) teachers is presented first, followed by those of the preservice (PS) teachers. A summary of findings from both groups will then be presented.

8.11 Inservice Teachers Overall Performance in EAP Materials Development.

Generally there was a positive improvement in the IS teachers materials in Method 2 over Method 1. Table 8.13 below indicates the direction of the improvement.

Table 8.13   Overall Score and Performance   (IS Teachers)

Inservice Group	M1 Materials Total Score	M2 Materials (Task 1) Total Score	M2 Materials (Task 2) Total Score
AC	201	368	396**
AD	197	355	399***
AE	219	405	442**
AH	229	427	449**

Table 8.13 continued Overall Score and Performance   (IS Teachers)

AI	197	350	412***
AK	190	448	423*
AN	208	388	422**
AO	295	349	398***
AQ	324	419	465***
AS	187	361	382**
AT	178	327	347**
AV	189	347	356**
AW	135	287	322**
AX	275	436	447**
AZ	242	416	437**
Overall Mean	**218**	**379**	**406.4**

Table 8.13 shows the distribution of overall scores derived from totalling all the individual raters scores (see Appendix A8.6 for individual rater's scores). The scores marked with three stars indicate a very significant improvement in Task 2 of M 2. Two stars indicates an average significance and one star indicates a drop in improvement for Task 2 in M 2.

The findings clearly suggest that the IS teachers' EAP materials and also their own ability improved after the training in M2. The improvement is not just based on one set of materials but on two.   Task 2 (materials set 2) of M2 clearly shows further improvement from Task 1 of M 2 with the exception of "group AK" which showed a slight drop of about 25 points but still an improvement over M 1. On the whole there was a significant difference (p<0.05) on the overall ability to design better EAP materials in M 2 than M 1. This represents a significant change in the materials. Four groups' materials: group AD, AI, AO and AQ had a highly significant difference of p<0.000.   Group AW whose performance was low in Method 1 showed a marked improvement particularly in Task 2 although their material's ratings remain low in comparison to other groups. This group struggled throughout the project for both methods and they did mention that they had problems (see Chapter 7).

The raters' scores were subjected to an inter-rater reliability test. This test shows a clear reliability coefficient of 0.9 (p <0.000) indicating a very high reliability among raters (see appendix A8.8) on the evaluation of all three sets of materials. Table 8.14 below presents a detailed analysis of one set of the materials based on the checklist.

Table 8.14 Analysis of individual items Paired Differences (Inservice Teachers)
N = 15 Groups   Rater A, B and C M 1 Task and M 2 (Task 1 [T1])

Variables/Questions	Raters	Mean	t-value	2-tail sig.
1. Are the overall aims and objectives sufficiently stated?	RA (M1)	2.6000		
	RA (M2, T1)	3.5333	-3.29	0.005
	RB (M1)	2.5333		
	RB (M2, T1)	3.8000	-4.46	0.001
	RC (M1)	2.5333		
	RC (M2, T1)	3.8667	-4.93	0.000
				p<0.005
2. Do the objectives correspond to the level of the intended learner?	RA (M1)	2.3333		
	RA (M2, T1)	3.6667	-4.93	0.000
	RB (M1)	2.2000		
	RB (M2, T1)	3.9333	-6.98	0.000
	RC (M1)	2.3333		
	RC (M2, T1)	4.0000	-6.61	0.000
				p<0.001
3. Are the text(s) appropriate and relevant for the intended level of the learners (e.g. text types, graphical level, syntax and lexis)	RA (M1)	1.9333		
	RA (M2, T1)	3.6000	-8.92	0.000
	RB (M1)	2.0667		
	RB (M2, T1)	4.0000	-9.37	0.000
	RC (M1)	2.1333		
	RC (M2, T1)	3.8667	-9.54	0.000
				p<0.001
4. If the text has been adapted, is the adaptation appropriate? (optional)	RA (M1)	1.5333		
	RA (M2, T1)	1.2667	0.84	0.413
	RB (M1)	1.5333		
	RB (M2, T1)	1.2000	1.16	0.265
	RC (M1)	1.5333		
	RC (M2, T1)	1.2667	0.94	0.364
				not sig.

Table 8.14 Continued

5. Is the content clearly introduced?	RA (M1)	1.9333		
	RA (M2, T1)	3.8667	-10.64	0.000
	RB (M1)	2.2667		
	RB (M2, T1)	3.6000	-5.74	0.000
	RC (M1)	2.2667		
	RC (M2, T1)	3.8000	-6.00	0.000
				p<0.001
6. Is the presentation of the content/materials clear?	RA (M1)	2.6000		
	RA (M2, T1)	3.9333	-6.32	0.000
	RB (M1)	2.6667		
	RB (M2, T1)	3.8667	-5.39	0.000
	RC (M1)	2.6000		
	RC (M2, T1)	3.8667	-5.10	0.000
				p<0.001
7. Is the purpose of the materials made clear?	RA (M1)	2.9333		
	RA (M2, T1)	3.8667	-3.11	0.008
	RB (M1)	2.5333		
	RB (M2, T1)	3.9333	-6.55	0.000
	RC (M1)	2.6000		
	RC (M2, T1)	4.0667	-5.74	0.000
				p<0.001
8. Is the content systematically organised?	RA (M1)	2.6000		
	RA (M2, T1)	4.0667	-6.20	0.000
	RB (M1)	2.6667		
	RB (M2, T1)	3.9333	-6.97	0.000
	RC (M1)	2.6667		
	RC (M2, T1)	3.8667	-8.29	0.000
				p<0.001

Table 8.14 continued

Variables/Questions	Raters	Mean	t-value	2-tail sig.
9. Is the language input (focus) to be covered clearly stated?	RA (M1)	1.5333		
	RA (M2, T1)	3.5333	-9.17	0.000
	RB (M1)	1.5333		
	RB (M2, T1)	3.7333	-9.89	0.000
	RC (M1)	1.6667		
	RC (M2, T1)	3.7333	-8.33	0.000
				p<0.001
10. Do the tasks/activities cater for individual differences/needs within a given level?	RA (M1)	2.3333		
	RA (M2, T1)	4.1333	-6.44	0.000
	RB (M1)	2.1333		
	RB (M2, T1)	3.5333	-5.50	0.000
	RC (M1)	2.0667		
	RC (M2, T1)	3.4667	-5.50	0.000
				p<0.001
11. Are the tasks/activities appropriate to under-standing a given text?	RA (M1)	2.6667		
	RA (M2, T1)	3.2667	-3.67	0.003
	RB (M1)	2.5333		
	RB (M2, T1)	4.0000	-6.20	0.000
	RC (M1)	2.6667		
	RC (M2, T1)	4.0000	-7.14	0.000
				p<0.01
12. Are the tasks/activities broken down into manage-able stages?	RA (M1)	2.0667		
	RA (M2, T1)	3.8667	-7.41	0.000
	RB (M1)	2.4000		
	RB (M2, T1)	3.9333	-6.94	0.000
	RC (M1)	2.0667		
	RC (M2, T1)	3.8667	-9.00	0.000
				p<0.001
13. Do the tasks/activities designed follow a step-by-step (interrelated) procedure?	RA (M1)	2.1333		
	RA (M2, T1)	4.0000	-6.82	0.000
	RB (M1)	2.2667		
	RB (M2, T1)	4.0667	-8.09	0.000
	RC (M1)	2.5333		
	RC (M2, T1)	4.0667	-6.49	0.000
				p<0.001

Table 8.14 continued

Variables/Questions	Raters	Mean	t-value	2-tail sig.
14. Are the tasks/activities sufficiently sequenced and where possible graded according to levels of complexity?	RA (M1)	1.8000		
	RA (M2, T1)	4.0667	-9.13	0.000
	RB (M1)	1.8000		
	RB (M2, T1)	3.9333	-8.34	0.000
	RC (M1)	2.0000		
	RC (M2, T1)	3.7333	-6.98	0.000
				p<0.001
15. Can a task within a task pattern be determined?	RA (M1)	1.7333		
	RA (M2, T1)	3.6000	-7.30	0.000
	RB (M1)	1.8667		
	RB (M2, T1)	3.6667	-9.00	0.000
	RC (M1)	2.0000		
	RC (M2, T1)	3.6667	-7.91	0.000
				p<0.001
16. Are the tasks/activities meaningful and relevant to the learners' level of ability (e.g. in relation to his/her academic discipline)?	RA (M1)	2.0667		
	RA (M2, T1)	3.6000	-5.28	0.000
	RB (M1)	1.8667		
	RB (M2, T1)	3.7333	-7.30	0.000
	RC (M1)	1.9333		
	RC (M2, T1)	3.8000	-7.90	0.000
				p<0.001
17. Are the tasks/activities substantial and challenging enough (within the academic context)?	RA (M1)	3.0000		
	RA (M2, T1)	4.2000	-5.39	0.000
	RB (M1)	2.1333		
	RB (M2, T1)	3.8667	-11.31	0.000
	RC (M1)	2.6667		
	RC (M2, T1)	3.9333	-4.75	0.000
				p<0.001
18. Are individual tasks/ activities sufficiently guided (where necessary)?	RA (M1)	1.2667		
	RA (M2, T1)	3.9333	-16.73	0.000
	RB (M1)	1.2667		
	RB (M2, T1)	4.0000	-15.04	0.000
	RC (M1)	1.2667		
	RC (M2, T1)	4.0000	-15.04	0.000
				p<0.001

Table 8.14 continued

Variables/Questions	Raters	Mean	t-value	2-tail sig.
19. Is there adequate learner support for task completion and comprehension (where necessary)?	RA (M1)	1.0000		
	RA (M2, T1)	4.0667	-20.01	0.000
	RB (M1)	1.0000		
	RB (M2, T1)	3.86667	-14.94	0.000
	RC (M1)	1.0000		
	RC (M2, T1)	3.9333	-19.14	0.000
				p<0.001
20. Is there a variety of tasks types/activities (ranging from higher order skills to lower order skills)?	RA (M1)	2.8000		
	RA (M2, T1)	4.0667	-5.55	0.000
	RB (M1)	2.7333		
	RB (M2, T1)	3.9333	-4.58	0.000
	RC (M1)	3.0000		
	RC (M2, T1)	3.7333	-3.21	0.006
				p<0.01
21. Are new terms, vocabulary and concepts sufficiently developed in/ through the tasks?	RA (M1)	2.4667		
	RA (M2, T1)	3.3333	-3.67	0.003
	RB (M1)	2.4667		
	RB (M2, T1)	2.8667	-1.87	0.082
	RC (M1)	2.6000		
	RC (M2, T1)	3.2667	-2.65	0.019
				not. sig.
22. Are the tasks/activities well linked and can be begun at different points/ or order?	RA (M1)	2.4000		
	RA (M2, T1)	3.1333	-3.56	0.003
	RB (M1)	2.0667		
	RB (M2, T1)	3.3333	-4.75	0.000
	RC (M1)	2.4667		
	RC (M2, T1)	3.2667	-4.58	0.000
				p<0.01
23. Do the tasks/activities exploit the use of learning strategies?	RA (M1)	1.4000		
	RA (M2, T1)	3.2667	-8.67	0.000
	RB (M1)	1.4000		
	RB (M2, T1)	3.8667	-8.49	0.000
	RC (M1)	1.6667		
	RC (M2, T1)	3.8000	-7.79	0.000
				p<0.001

Table 8.14 continued

Variables/Questions	Raters	Mean	t-value	2-tail sig.
24. Do the tasks/activities attempt to address discourse patterns in text(s)?	RA (M1)	1.3333		
	RA (M2, T1)	4.0000	-14.27	0.000
	RB (M1)	1.26667		
	RB (M2, T1)	3.5333	-19.18	0.000
	RC (M1)	1.4667		
	RC (M2, T1)	3.6000	-11.12	0.000
				p<0.001
25. Do the tasks/activities show progression in developing text under-standing through linked tasks?	RA (M1)	1.3333		
	RA (M2, T1)	3.5333	-11.00	0.000
	RB (M1)	1.2667		
	RB (M2, T1)	3.8000	-15.33	0.000
	RC (M1)	1.4667		
	RC (M2, T1)	3.6000	-8.34	0.000
				p<0.001
26. Do the tasks/activities involve cognitive demands (e.g. thinking skills, reasoning, problem-solving, etc.)?	RA (M1)	2.0667		
	RA (M2, T1)	3.6000	-7.12	0.000
	RB (M1)	2.0667		
	RB (M2, T1)	3.9333	-7.90	0.000
	RC (M1)	2.0667		
	RC (M2, T1)	3.9333	-7.90	0.000
				p<0.001
27. Are the tasks, instructions clear?	RA (M1)	2.9333		
	RA (M2, T1)	4.0000	-5.87	0.000
	RB (M1)	2.8667		
	RB (M2, T1)	4.0000	-5.91	0.000
	RC (M1)	3.0000		
	RC (M2, T1)	3.8667	-4.52	0.000
				p<0.001
28. Do the tasks include graphics or visuals?	RA (M1)	2.3333		
	RA (M2, T1)	3.8667	-5.60	0.000
	RB (M1)	2.3333		
	RB (M2, T1)	3.7333	-5.14	0.000
	RC (M1)	2.4000		
	RC (M2, T1)	3.8000	-4.84	0.000
				p<0.001

Table 8.14 continued

Variables/Questions	Raters	Mean	t-value	2-tail sig.
29. Are the graphics/ visuals presented in the tasks/activities appropriate?	RA (M1)	2.4000		
	RA (M2, T1)	3.8000	-5.14	0.000
	RB (M1)	2.3333		
	RB (M2, T1)	3.7333	-5.14	0.000
	RC (M1)	2.3333		
	RC (M2, T1)	3.8000	-4.72	0.000
				p<0.001
30. Do the visuals/graphics address the problem of text understanding and comprehension?	RA (M1)	2.4000		
	RA (M2, T1)	3.7333	-4.77	0.000
	RB (M1)	2.3333		
	RB (M2, T1)	3.8000	-4.56	0.000
	RC (M1)	2.2000		
	RC (M2, T1)	4.0000	-12.44	0.000
				p<0.001
31. Do the tasks/activities allow for variation in inter- action (e.g. individual, pair or group work)?	RA (M1)	3.0667		
	RA (M2, T1)	3.9333	-3.39	0.004
	RB (M1)	2.8667		
	RB (M2, T1)	3.9333	-4.67	0.000
	RC (M1)	2.6667		
	RC (M2, T1)	3.7333	-4.30	0.001
				p<0.01
32. Do the tasks incorpo- rate meta-cognitive strategies which involves planning, selecting, synthesising and evaluation?	RA (M1)	1.6667		
	RA (M2, T1)	3.6000	-6.81	0.000
	RB (M1)	1.7333		
	RB (M2, T1)	3.4667	-6.98	0.000
	RC (M1)	1.6000		
	RC (M2, T1)	3.4667	-9.73	0.000
				p<0.001
33. Can the tasks/activities be adapted for other levels where applicable? (e.g. if task is meant for advanced level, can it be adapted for a lower level?)	RA (M1)	2.2667		
	RA (M2, T1)	3.6667	-6.55	0.000
	RB (M1)	2.2000		
	RB (M2, T1)	3.8667	-6.61	0.000
	RC (M1)	2.2000		
	RC (M2, T1)	3.8000	-6.29	0.000
				p<0.001

Table 8.14 Continued

Variables/Questions	Raters	Mean	t-value	2-tail sig.
34. Is there an attempt to integrate reading and writing skills for academic purposes?	RA (M1)	1.7333		
	RA (M2, T1)	3.8000	-9.06	0.000
	RB (M1)	1.8667		
	RB (M2, T1)	4.2000	-10.04	0.000
	RC (M1)	2.3333		
	RC (M2, T1)	4.2000	-9.73	0.000
				p<0.001

8.11.1 Analysis of Materials based on individual items on the checklist (Inservice Teachers)

Table 8.14 provides a description and a breakdown of the t-test of all raters on each variable on the checklist. Based on the analysis and findings illustrated in table 8.14, it can be concluded that the IS teachers have improved significantly in Method 2. All the variables show a significant change between p<0.001 and p<0.01. The exception is with variable 4 (adaptation of text). A majority of the IS teachers did not attempt to adapt the text at all. Variable 21 also does not show a significant change and again it is interesting to note that vocabulary was not dealt with sufficiently.

Adaptation of the text seems to be problematic for the IS teachers; they lack the confidence to do so. Another explanation could be that the texts they were working with needed no adaptation. Furthermore, this variable was an optional one. As for vocabulary , it is unclear why the IS teachers failed to develop this aspect in M2. One explanation could be that they had problems with technical terms or overlooked the matter (see journal analysis in chapter 7). Their logs do not present any discussion on vocabulary development.

The significant changes can be seen in the IS teachers' writing of objectives, task development, selection and development of visuals, variation in tasks, writing of instructions, use of cognitive activities and aspects of discourse and learning strategies as exemplified by analysis in Table 8.14. It can also be seen that all three raters were in agreement over the ratings although slight variations do occur.

8.12 Preservice Teachers Overall Performance in EAP Materials Development.

It was observed that the preservice teachers' performance in developing EAP materials showed a significant change and improvement. There were, however, four groups whose overall performance across the two sets of materials in Method 2 were basically consistent, that is, both Task 1 and Task 2 showed an improvement but not markedly so. Table 8.15 below indicates the direction of the improvement. For a detailed breakdown of individual raters' scores/ratings see appendix A 8.3.

Table 8.15 N = 43 Overall Scores and Performance (Preservice teachers)

Preservice Group	M1 Materials Overall Total Scores	M2 Materials (Task 1) Overall Total Score	M2 Materials (Task 2) Overall Total Score
AA	140	336	397***
AB	259	318	334
AF	203	410	398*
AG	202	220	309***
AJ	183	364	395
AL	168	317	315*
AM	255	311	306*
AP	165	300	285*
AR	188	317	365***
AU	276	326	357
AY	257	403	420
Overall Mean	208.7	329.3	352.8

Three stars indicate highly significant improvement in Task 2, M 2, two stars indicate average significance and one star indicates a drop in improvement in Task 2, M 2 over Task 1 M 2.

Table 8.15 illustrates the distribution of all the raters' total overall scores. The findings suggest that there was an improvement in the PS teachers' materials in M2 compared with M1. Improvements occurred in both Task 1 and Task 2 of Method 2. The changes were significant at the $p < 0.05$ level. It was, however, observed that four groups' scores (groups AF, AL, AM and AP) were higher on Task 1 than they were on Task 2 in M2. The differences in scores, however are minimal and indicates consistency. Three of the groups: Groups AA, AG and AR showed very highly significant changes or improvements ($p < 0.001$). On the whole, the improvements in both tasks in M2 are consistent though not overly high when compared to the IS teachers.

The scores from all the three raters were also subjected to an inter-rater reliability test. The findings indicate a high reliability of 0.9 (p<0.000) confirming significantly high reliability among the raters on the evaluation of all three sets of materials (see Appendix A8.8 for a breakdown of reliability scores). Table 8.16 below provides a detailed analysis using a t-test of the materials based on a checklist.

Table 8.16 Analysis of individual items. Paired differences (Preservice Teachers)
N = 11 Groups   Rater A, B and C   M1 Tasks and M2 (Task 1 [T1])

Variables/Questions	Raters	Mean	t-value	2-tail sig.
1. Are the overall aims and objectives sufficiently stated?	RA (M1)	2.1818		
	RA (M2, T1)	3.0000	-2.04	0.068
	RB (M1)	2.2727		
	RB (M2, T1)	3.2727	-2.47	0.033
	RC (M1)	2.4545		
	RC (M2, T1)	2.9091	-1.17	0.271
				not sig.
2. Do the objectives correspond to the level of the intended learner?	RA (M1)	1.9091		
	RA (M2, T1)	3.1818	-3.82	0.003
	RB (M1)	2.0909		
	RB (M2, T1)	3.2727	-3.63	0.005
	RC (M1)	2.2727		
	RC (M2, T1)	3.6364	-3.52	0.006
				p<0.01
3. Are the text(s) appropriate and relevant for the intended level of the learners (e.g. text types, graphical level, syntax and lexis)?	RA (M1)	2.2727		
	RA (M2, T1)	3.6364	-4.89	0.001
	RB (M1)	2.2727		
	RB (M2, T1)	3.8182	-4.22	0.002
	RC (M1)	2.2727		
	RC (M2, T1)	3.7273	-4.28	0.002
				p<0.01
4. If the text has been adapted, is the adaptation appropriate? (optional)	RA (M1)	1.0000		
	RA (M2, T1)	1.0909	-1.00	0.341
	RB (M1)	1.0000		
	RB (M2, T1)	1.0909	-1.00	0.341
	RC (M1)	1.0000		
	RC (M2, T1)	1.0909	-1.00	0.341
				not sig.

Table 8.16 continued

Variables/Questions	Raters	Mean	t-value	2-tail sig.
5. Is the content clearly introduced?	RA (M1)	1.8182		
	RA (M2, T1)	3.3636	-4.22	0.002
	RB (M1)	2.1818		
	RB (M2, T1)	3.5455	-3.52	0.006
	RC (M1)	1.9091		
	RC (M2, T1)	3.1818	-5.37	0.000
				p<0.01
6. Is the presentation of the content/materials clear?	RA (M1)	2.1818		
	RA (M2, T1)	3.0000	-3.61	0.005
	RB (M1)	2.1818		
	RB (M2, T1)	3.5455	-5.59	0.000
	RC (M1)	2.8182		
	RC (M2, T1)	3.5455	-2.39	0.038
				p<0.05
7. Is the purpose of the materials made clear?	RA (M1)	2.1818		
	RA (M2, T1)	3.9091	-5.19	0.000
	RB (M1)	2.5455		
	RB (M2, T1)	3.9091	-4.89	0.001
	RC (M1)	2.6364		
	RC (M2, T1)	3.7273	-3.18	0.010
				p<0.01
8. Is the content systematically organised?	RA (M1)	2.5455		
	RA (M2, T1)	3.1818	-4.18	0.002
	RB (M1)	2.9091		
	RB (M2, T1)	3.6364	-2.67	0.024
	RC (M1)	2.9091		
	RC (M2, T1)	3.6364	-2.67	0.024
				p<0.05

Table 8.16 continued

Variables/Questions	Raters	Mean	t-value	2-tail sig.
9. Is the language input (focus) to be covered clearly stated?	RA (M1)	1.7273		
	RA (M2, T1)	3.0909	-4.89	0.001
	RB (M1)	2.0000		
	RB (M2, T1)	3.1818	-4.49	0.001
	RC (M1)	2.0000		
	RC (M2, T1)	3.3636	-6.71	0.000
				p<0.001
10. Do the tasks/activities cater for individual differences/needs within a given level?	RA (M1)	1.4545		
	RA (M2, T1)	2.9091	-4.66	0.001
	RB (M1)	1.4545		
	RB (M2, T1)	3.0000	-4.54	0.001
	RC (M1)	1.4545		
	RC (M2, T1)	3.0000	-4.54	0.001
				p<0.001
11. Are the tasks/activities appropriate to under-standing a given text?	RA (M1)	2.5455		
	RA (M2, T1)	3.5455	-5.24	0.000
	RB (M1)	2.5455		
	RB (M2, T1)	3.3636	-3.11	0.011
	RC (M1)	2.5455		
	RC (M2, T1)	3.4545	-3.19	0.010
				p<0.05
12. Are the tasks/activities broken down into manage-able stages?	RA (M1)	2.0909		
	RA (M2, T1)	3.3636	-6.53	0.000
	RB (M1)	2.3636		
	RB (M2, T1)	3.4545	-3.18	0.010
	RC (M1)	2.1818		
	RC (M2, T1)	3.4545	-4.67	0.001
				p<0.01
13. Do the tasks/activities designed follow a step-by-step (interrelated) procedure?	RA (M1)	1.9091		
	RA (M2, T1)	3.5455	-8.05	0.000
	RB (M1)	2.1818		
	RB (M2, T1)	3.6364	-4.66	0.001
	RC (M1)	2.2727		
	RC (M2, T1)	3.6364	-8.96	0.000
				p<0.001

Table 8.16 continued

Variables/Questions	Raters	Mean	t-value	2-tail sig.
14. Are the tasks/activities sufficiently sequenced and where possible graded according to levels of complexity?	RA (M1)	2.3636		
	RA (M2, T1)	3.4545	-3.18	0.010
	RB (M1)	2.1818		
	RB (M2, T1)	3.5455	-2.80	0.019
	RC (M1)	1.4545		
	RC (M2, T1)	3.5454	-3.46	0.006
				p<0.05
15. Can a task within a task pattern be determined?	RA (M1)	1.5455		
	RA (M2, T1)	3.4545	-5.19	0.000
	RB (M1)	1.5455		
	RB (M2, T1)	3.5455	-5.24	0.000
	RC (M1)	1.4545		
	RC (M2, T1)	3.5454	-5.68	0.000
				p<0.001
16. Are the tasks/activities meaningful and relevant to the learners' level of ability (e.g. in relation to his/her academic discipline)?	RA (M1)	2.4545		
	RA (M2, T1)	3.3636	-2.32	0.043
	RB (M1)	2.4545		
	RB (M2, T1)	3.4545	-2.47	0.033
	RC (M1)	2.4545		
	RC (M2, T1)	3.4545	-2.47	0.033
				p<0.05
17. Are the tasks/activities substantial and challenging enough (within the academic context)?	RA (M1)	2.8182		
	RA (M2, T1)	3.5455	-2.67	0.024
	RB (M1)	2.7273		
	RB (M2, T1)	3.3636	-2.28	0.046
	RC (M1)	2.7273		
	RC (M2, T1)	3.1818	-2.19	0.053
				p<0.05

Table 8. 16   continued

Variables/Questions	Raters	Mean	t-value	2-tail sig.
18. Are individual tasks/ activities sufficiently guided (where necessary)?	RA (M1)	1.2727		
	RA (M2, T1)	3.3636	-7.35	0.000
	RB (M1)	1.2727		
	RB (M2, T1)	3.2727	-6.63	0.000
	RC (M1)	1.2727		
	RC (M2, T1)	3.5455	-8.33	0.000
				p<0.001
19. Is there adequate learner support for task completion and comprehension (where necessary)?	RA (M1)	1.0000		
	RA (M2, T1)	3.3636	-11.63	0.000
	RB (M1)	1.0000		
	RB (M2, T1)	3.5455	-10.29	0.000
	RC (M1)	1.0000		
	RC (M2, T1)	3.3636	-9.69	0.000
				p<0.001
20. Is there a variety of tasks types/activities (ranging from higher order skills to lower order skills)?	RA (M1)	2.6364		
	RA (M2, T1)	3.3636	-2.19	0.054
	RB (M1)	2.6364		
	RB (M2, T1)	3.1818	-2.21	0.052
	RC (M1)	2.7273		
	RC (M2, T1)	3.2727	-2.63	0.025
				not sig.
21. Are new terms, vocabulary and concepts sufficiently developed in/ through the tasks?	RA (M1)	1.7273		
	RA (M2, T1)	3.0909	-4.04	0.002
	RB (M1)	1.9091		
	RB (M2, T1)	2.6364	-2.67	0.024
	RC (M1)	1.9091		
	RC (M2, T1)	3.0000	-3.83	0.003
				p<0.05
22. Are the tasks/activities well linked and can be begun at different points/ or order?	RA (M1)	2.0000		
	RA (M2, T1)	2.5455	-1.94	0.082
	RB (M1)	2.2727		
	RB (M2, T1)	3.1818	-3.19	0.010
	RC (M1)	2.4545		
	RC (M2, T1)	3.0000	-1.60	0.140
				not sig.

Table 8.16 continued

Variables/Questions	Raters	Mean	t-value	2-tail sig.
23. Do the tasks/activities exploit the use of learning strategies?	RA (M1)	1.5455		
	RA (M2, T1)	3.4545	-7.62	0.000
	RB (M1)	1.5455		
	RB (M2, T1)	3.4545	-6.06	0.000
	RC (M1)	1.7273		
	RC (M2, T1)	3.2727	-4.22	0.002
				p<0.01
24. Do the tasks/activities attempt to address discourse patterns in text(s)?	RA (M1)	1.4545		
	RA (M2, T1)	3.2727	-5.59	0.000
	RB (M1)	1.4545		
	RB (M2, T1)	3.0000	-4.95	0.001
	RC (M1)	1.6364		
	RC (M2, T1)	3.0909	-3.20	0.008
				p<0.01
25. Do the tasks/activities show progression in developing text under-standing through linked tasks?	RA (M1)	1.9091		
	RA (M2, T1)	3.2727	-6.71	0.000
	RB (M1)	2.0000		
	RB (M2, T1)	3.4545	-4.66	0.001
	RC (M1)	1.9091		
	RC (M2, T1)	3.2727	-4.04	0.002
				p<0.01
26. Do the tasks/activities involve cognitive demands (e.g. thinking skills, reasoning, problem-solving, etc.)?	RA (M1)	1.3636		
	RA (M2, T1)	3.4545	-9.90	0.000
	RB (M1)	1.7273		
	RB (M2, T1)	3.3636	-4.85	0.001
	RC (M1)	1.9091		
	RC (M2, T1)	3.4545	-5.49	0.000
				p<0.001

414

Table 8.16 continued

Variables/Questions	Raters	Mean	t-value	2-tail sig.
27. Are the tasks, instructions clear?	RA (M1)	2.8182		
	RA (M2, T1)	3.4545	-4.18	0.002
	RB (M1)	2.9091		
	RB (M2, T1)	3.6364	-3.07	0.012
	RC (M1)	3.6364		
	RC (M2, T1)	3.3636	-2.67	0.024
				p<0.05
28. Do the tasks include graphics or visuals?	RA (M1)	2.0909		
	RA (M2, T1)	2.6364	-1.75	0.002
	RB (M1)	2.1818		
	RB (M2, T1)	3.2727	-2.78	0.012
	RC (M1)	2.1818		
	RC (M2, T1)	3.1818	-2.24	0.049
				p<0.05
29. Are the graphics/ visuals presented in the tasks/activities appropriate?	RA (M1)	1.9091		
	RA (M2, T1)	3.1818	-3.32	0.008
	RB (M1)	2.0909		
	RB (M2, T1)	3.0000	-2.19	0.053
	RC (M1)	2.0909		
	RC (M2, T1)	3.0909	-2.14	0.058
				not sig.
30. Do the visuals/graphics address the problem of text understanding and comprehension?	RA (M1)	1.9091		
	RA (M2, T1)	3.5455	-3.46	0.006
	RB (M1)	1.9091		
	RB (M2, T1)	3.6364	-5.68	0.000
	RC (M1)	2.1818		
	RC (M2, T1)	3.2727	-2.29	0.045
				p<0.05

Table 8.16 continued

Variables/Questions	Raters	Mean	t-value	2-tail sig.
31. Do the tasks/activities allow for variation in inter-action (e.g. individual, pair or group work)?	RA (M1)	2.0909		
	RA (M2, T1)	3.5455	-3.98	0.003
	RB (M1)	2.1818		
	RB (M2, T1)	3.3636	-3.36	0.007
	RC (M1)	2.1818		
	RC (M2, T1)	3.2727	-3.46	0.006
				p<0.01
32. Do the tasks incorpo-rate meta-cognitive strategies which involves planning, selecting, synthesising and evaluation?	RA (M1)	1.5455		
	RA (M2, T1)	3.0909	-5.48	0.000
	RB (M1)	1.6364		
	RB (M2, T1)	3.3636	-4.03	0.002
	RC (M1)	2.1818		
	RC (M2, T1)	3.1818	-3.52	0.006
				p<0.01
33. Can the tasks/activities be adapted for other levels where applicable? (e.g. if task is meant for advanced level, can it be adapted for a lower level?)	RA (M1)	2.2727		
	RA (M2, T1)	3.1818	-3.63	0.005
	RB (M1)	2.6364		
	RB (M2, T1)	3.3636	-2.39	0.038
	RC (M1)	2.5455		
	RC (M2, T1)	3.2727	-2.67	0.024
				p<0.05
34. Is there an attempt to integrate reading and writing skills for academic purposes?	RA (M1)	1.5455		
	RA (M2, T1)	3.8182	-7.47	0.000
	RB (M1)	1.7273		
	RB (M2, T1)	3.7273	-5.61	0.000
	RC (M1)	1.7273		
	RC (M2, T1)	3.5455	-5.59	0.000
				p<0.001

8.12.1 Preservice (PS) Teachers' Materials based on Individual items in the Checklist.

Unlike the IS teachers, some aspects of the PS teachers' materials did not reflect a strong positive or significant change. Other aspects of the PS teachers' materials showed

no change at all. These can be seen in Table 8.16 which also presents those aspects that had very strong significant differences.

Table 8.16 provides a very clear picture of the PS teachers' materials. Although there is an overall change this is not as highly significant as that of the IS teachers' materials. Most of the significant changes are within the $p < 0.05$ level but a few are at $p < 0.001$ level and $p < 0.01$.

Variables 6, 8, 11, 14, 16, 17, 21, 27, 30, 33 are all at the $p < 0.05$ level. Variables 2, 3, 5, 7, 12, 23, 24, 25, 31 and 32 are at the $p < 0.01$ level and variables 9, 10, 13, 15, 18, 19, 26, and 34 at the $p < 0.001$ level. The variables which showed no significant differences are variables, 1, 4, 20, 22, and 29. There were also very clear indicators that the raters were not in agreement over some of the variables (For example: Variables 1, 6, 8, 14, 20, 22, 28, 29 and 33). The reason is uncertain, although the evaluation of such materials is subjective in nature despite precautions and efforts to attain consistency (Dougill, 1987, Low, 1989).

The PS teachers seem to be having problems in developing or writing objectives. This is perhaps because they have no classroom experience and are still learning. It can be observed that the raters were not quite in agreement on this particular question (variable 1). Like the IS teachers, the PS teachers avoided adapting texts. Only 1 group attempted to do so. As indicated in Chapter 7, the PS teachers are uncertain about text adaptation and say that they lack the necessary skills to adapt text. On the other hand, it might be maintained that since adaptation requires a good knowledge of grammar and a complete understanding of the text, the teachers found this to be too demanding on their time. The fact that they were using content materials also made it difficult for them to adapt such text without consulting the subject specialist. Variable 20, clearly shows that although there is some variety in task types/activities, the difference between both methods are of borderline significance. This suggests that the PS teachers were working around tasks which they found familiar and which they understood or felt comfortable with. Variable 22 is another aspect where the raters were in disagreement. The evaluation shows that the PS teachers were having difficulties in linking tasks or activities in a manner in which these could be begun at different points or order. This is not surprising as naturally PS teachers would need more practice to make them more skilful or competent at such changes. Variables 28 and 29 on visuals also suggests borderline significance indicating some difference but these were minimal. In their journals, the PS teachers did express the fact that they were having problems identifying and developing visuals constructively (see Chapter 7).

The findings suggest that the PS teachers' materials made use of cognitive and meta-cognitive strategies more effectively as seen in Variables 30, 31 and 32 where the significance is $p<0.05$ and $p<0.01$. On the whole the PS teachers made every effort to ensure that they integrated reading and writing skills for academic purposes ($p<0.001$). The PS teachers did make an effort towards incorporating learning strategies in their tasks ($p<0.001$) and attempted to address the discourse patterns in the text through their tasks ($p<0.01$). These were highly significant differences. The development of tasks into a manageable whole (Variables 13, 14, 15) clearly shows the fact that the PS teachers grasped the basic principles of task development as delineated by the framework and this is clearly indicated by the significance levels where $p<0.001$, $p<0.05$ and $p<0.001$.

It can be concluded that the PS teachers' materials showed quite significant improvement but with some aspects of materials design needing more practice or understanding. At the same time it is an indication that the PS teachers have understood the working principles of the framework and of materials design.

8.13 Summary and Conclusion of Findings

The findings from the quantitative data clearly complement those of the qualitative data in Chapter 7. Both the pre-and in-service teachers have reacted positively towards Method 2 - which involved the use of the framework.

It can be observed that their perception about what is considered important and the levels of problems they encountered indicated positive shifts. The preservice teachers indicated that they had more problems in designing EAP materials than the inservice teachers. This is to be expected because they are still learning and are inexperienced. Their exposure is limited. However, they clearly indicated through their positive responses that they have learnt and understood many of the principles of EAP materials design. Their responses are more positive than those of the inservice teachers. This suggests that they are probably more receptive to new ideas and challenges. It may also be a reflection of their age, attitude and willingness to learn.

The inservice teachers indicated that they too had some problems in designing EAP materials but due to their experience their problems are not as profound as the preservice teachers. It is expected that the teachers would encounter problems as it is the first time that they are dealing with EAP materials through subject area materials.

Where previously (M1) both pre-and in-service teachers were giving negative comments or perceptions, in M2 the perceptions were more positive and the indication is that they are learning more about EAP materials development. These conclusions in the findings discussed throughout section One of this chapter are clear. Positive shifts in criteria for text selection and materials design show that both groups of teachers have, in general, understood the principles of the EAP framework and materials design.

The evaluation of the materials by the raters also show significant differences and improvement for both groups of teachers. The inservice teachers showed a better understanding of the principles delineated in the framework than the preservice teachers. There is clear evidence of consistency in the preservice and inservice teachers' perception, attitude, agreement and problems as seen in the questionnaire analysis and the evaluation of the materials. It is also evident that the raters were generally in agreement in evaluating the materials although they also showed disagreement in some instances. This was particularly evident in the evaluation of the preservice teachers' materials. Such subjectivity in evaluating materials is an inevitable factor as explained by Dougill (1987) and Low (1989), although precautions were taken.

The final conclusion is that by following a more structured framework teachers are able to have a better focus of what they are doing and can easily monitor their own progress and ability. At the same time, the findings clearly suggest that there is a need for more training in EAP materials development and that teachers can be trained to deal with content based materials with the aid/support of very clear and specific guidelines. It can also be concluded that the framework would need to be further amended and trialled so as to improve it further.

CHAPTER 9

Summary of Findings, Implications and Suggestions for Further Research

9.0 Introduction

This concluding chapter discusses the summary of findings of the study, its implications and recommendations for further research. Section One discusses the summary of findings of the qualitative and quantitative analysis as well as the overall conclusion. Section Two discusses the implications of the study and the final section focuses on the recommendations for further research within the Malaysian higher education context.

The aim of this exploratory study is to investigate and determine whether the development of the EAP Materials Framework (hereafter referred to as framework) can be used as an effective teacher training tool in EAP materials development, after training had been given. There is an abundance of suggestions, guidelines and examples for materials design and evaluation in ELT. This study, however, focuses on an EAP Materials Design Training Framework and its usefulness in guiding teachers to develop EAP materials for various subject disciplines in Malaysian universities.

The central questions in the study are to explore whether the teachers were able to develop better EAP materials through the use of the framework than their current approach, to find out their perception about the usefulness and effectiveness of the framework as a training tool; and finally to find out whether there are any significant differences in attitude, perception of tasks, materials and materials developed using both methods. This was shown and discussed in the development of the framework and pilot studies (Chapters 4), in the qualitative analysis of the data (analysed in chapter 7), and to further complement the group findings, the quantitative analysis described individual differences in perception and ability to design EAP materials and the extent to which the materials improved (discussed in chapter 8).

9.1 Summary of Findings of the Qualitative Analysis.

The qualitative analysis subjectively highlights the differences in attitude, perception, problems, and approaches in developing EAP materials using both Method 1 (M1) and Method 2 (M2) by both the pre- and in-service teachers.

The analysis was done in two parts: firstly by comparing both the pre- and in-service teachers use of the EAP framework against that of the existing method and secondly by comparing the progress or change made by both groups (using both methods) in understanding the concept of "task". These were compared using summaries of comments in the logs, visual illustration of group approaches, categories and sub-categories of similar themes through content analysis.

The main finding is that the framework as a training guide did have a positive effect on both groups of teachers. What differed was the degree of effect it had on them.

Both groups of teachers appear to have become more aware of their strengths and weaknesses and evolving beliefs. They were able to make better decisions about how their materials should be selected and developed through strategic planning and focused thinking. Thus the training (M2) assisted them in the process of learning and relearning about EAP task-based materials development by encouraging them to plan, think, monitor, review, evaluate, restructure their materials, and to develop metacognitive reflection and awareness of all these processes.

The majority of the teachers maintained that the framework strands provided them with specific guidelines for selecting appropriate texts according to the learners' ability and other strands and specifications. This made it easier for them to identify texts. At the same time they had a structured guideline to guide them to think through their plans and approaches to task design. The teachers were able to exploit the framework strands and specifications, as they began to understand it, to systematically identify texts and to develop task in a more structured manner.

The teachers reflected that they had used the framework (in M2) to develop their tasks in a cyclical and iterative manner. They were able to monitor, review, evaluate, structure and restructure their tasks from a cyclical point of view. It was found that the teachers were able to devise plans that worked well for them. They were better able to manage the development of tasks. In contrast when using M1 they were not very focused and were uncertain in which direction they should proceed, how to select their materials or how or what type of tasks to develop. Their accounts suggest that they were not able to plan coherently nor were they able to devise workable plans to help them develop materials. Further, from the teachers' accounts it could be discerned that even though they were working as a collaborative group, they were not able to guide or help each other to focus in developing the EAP materials. In contrast, when using the framework (M2) and after training they were as a group better able to guide each other in

developing materials by sharing their knowledge, brainstorming, analysing and reasoning through the apprenticeship of learning together based on a structured guideline. This suggests that through the use of the framework, the group was better at "decision-making" in M2 than in M1.

It can be concluded that the "decision-making process" that the teachers acquired in Method 2 is the result of the training in the use of the framework. It is suggested that this is because the teachers had acquired new knowledge and skills, developed a more positive attitude and had developed a better awareness of pedagogical content knowledge because they had been exposed and "educated" about EAP materials design (Freeman, 1989; Richards, 1991). Thus, the process used by the teachers (with the framework as a guide) was inquiry-based and utilised a discovery-oriented approach (Richard and Nunan, 1990). This was an unexpected finding.

The teachers' accounts indicate that they were having problems in identifying text patterns (at a higher level) and identifying more complex grammatical elements but realised the importance of understanding them for development of EAP materials. In contrast, in M1 they gave no consideration to such aspects in developing their materials. On the whole the teachers were able to understand the general content of the texts selected by them except for when texts had mathematical formulae and were laden with too much technical information. Because of such problems they were reluctant to attempt text adaptation or summary. This is understandable as a short training exposure cannot provide the necessary practice that a long-term training stint can. What is of interest is that in M1 teachers were also reluctant to adapt text even though they were selecting text according to their own comprehension ability. This suggests a pressing need for EAP teachers to work with subject specialists to maximise student learning. In the long term this may guide the EAP teachers in adapting, further selecting tasks, and developing tasks in line with the students' academic work. It can be concluded that in working with the framework teachers were able to identify their own area of weaknesses in terms of text discourse and knowledge structures, thus highlighting areas in which teachers need further practice.

In terms of the understanding of the concept of 'task', both groups of teachers showed a clearer understanding with a much more coherent and concise view of 'task'. Their definitions of 'task' in M2 changed substantially from those in M1. The definition of 'task' is better defined, more focused and well structured. The teachers maintained that they were better able to develop appropriate tasks when their definition of task was more focused and they had a more clear objective (see chapter 7).

422

On the whole the teachers were able to reflect on whether their existing training/knowledge had equipped them with the necessary skills in developing EAP materials or materials in general. They contrasted M1 with M2 and reflected that Method 2 was a learning process for them and that through it they had entered a more complex world of materials design, besides acquiring new skills and knowledge.

9.1.1 Summary of Findings of Quantitative Analyses

The quantitative analysis of the study was based on (a) individual responses to the pre and post questionnaires and (b) evaluation of individual variables on each groups' materials using a checklist. The analysis was therefore done at two levels; firstly, by comparing the pre- and in-service teachers' attitude in perception of both Methods 1 and 2, and secondly by comparing the progress and overall performance of the teachers' materials. These were compared using various measures: frequency counts and compressed or weighted values, means, overall scores, t-scores and reliability tests.

The study shows that both groups of teachers' attitudes and perceptions towards EAP materials design and the framework as a whole is more positive. The analysis of the materials by the evaluators also shows overall improvement in materials developed in M2 than in M1. There seems to be a better understanding of what EAP materials development entails.

The teachers' consideration and views of what were important and relevant criteria for EAP materials design in M1 changed in M2. For example "Interesting and enjoyable" predominated as the most important criteria in M1 and this changed to matching materials to students' "Learning abilities" as the most important in M2 which is consistent with the principles of the framework.

In addition, the type of problems encountered also showed a shift in "selecting materials" from very problematic in M1 to less problematic in M2. The inservice teachers showed a drop in the type of problems they had in M2 in contrast to M1. The preservice teachers however continued to have problems but these were considerably lower than in M1. This is not surprising as the preservice teachers are still inexperienced.

Both groups of teachers indicated that they were better prepared for EAP materials in Method 2 than in Method 1 and were exposed to other aspects of materials design which had not previously been part of their schema. In terms of their confidence level,

both groups were of the opinion that they were more confident in designing EAP materials. The inservice teachers indicated a much higher level of confidence than the preservice whose confidence level was only at the 56% mark. Nevertheless this is an encouraging sign and the increased level of confidence is clearly marked in the analysis of the teachers' materials.

The degree of impact the framework had on the teachers also seems to have a positive shift. The framework seems to have a greater impact on the preservice teachers with an overwhelming percentage (>90%) responding positively towards it. The preservice teachers showed that they were more willing to accept changes, were more receptive to challenges and had a more positive attitude towards new ideas and techniques than the inservice teachers. The inservice teachers response with regard to the impact the framework had on them is within the 60% - 80% range, thus still indicating a positive impact.

The study also shows that the materials developed by both groups of teachers were significantly better ($p < 0.05$). The differences between the performance and progress of the teachers' materials in M2 and M1 are again statistically significant ($p < 0.05$) for all the measures (variables) on the checklist, with the exception of "adaptation of materials" and vocabulary development which showed no significant differences. These two aspects would need further investigation.

The inservice teachers performed significantly better ($p < 0.001$) than the preservice teachers in developing the materials on almost all the variables. The preservice teachers' materials, although statistically significantly better ($p < 0.05$), showed low performance particularly in developing objectives, developing a variety of tasks and in using visuals. This is perhaps due to the fact that preservice teachers have no experience in dealing with materials other than as learners themselves.

The inter-rater reliability in using the evaluation checklist to analyse the materials shows a strong degree of agreement among the three raters for both the pre- and in-service teachers' materials with the correlation index at 0.9 and is statistically significant ($p < 0.05$). This suggests that the checklist was reliable as a measuring instrument.

In the final analysis these results show that both groups of teachers' attitudes and perceptions towards EAP materials design and the use of the framework as a whole is very positive. The analysis of the materials by the evaluators also shows overall

improvement in materials developed in M2 than in M1. There seems to be a better understanding of what EAP materials development entails.

9.1.2 General Conclusions of Findings.

The findings of both the qualitative and quantitative analysis show that both groups of teachers showed better progress and understanding of EAP materials development in M2, when using the framework. The findings also showed that both groups of teachers not only had a more positive attitude towards the framework but also found it useful in guiding them towards a more structured manner of designing EAP materials. They were better able to work and function as a collaborative group which resulted in a better understanding of the framework and better materials. This is apparently because in using the framework as a guide they had learnt to ask inquiring and focused questions which lead to critical thinking skills. Together they had to share knowledge and experience to learn how to plan their materials. Thus they had to learn to steer the group towards planning and investigation (Sharan and Sharan, 1992). The framework as a guideline helped them to make choices and decisions. They were in a group (as gleaned through their accounts in Chapter 7) identifying, analysing, generalising and goal setting through reflective talk, as suggested by Graves and Graves (1990) cited in Sharan and Sharan (1992: 33) on group processes.

The teachers now had a structured focus (that is the framework) to help them in the process of EAP materials development, thus as a collaborative group they made use of exploratory talk (Barnes and Todd, 1978; McDonell, 1992). This in turn helped them: to further sort out their thinking; clarify meaning and confusion; explore their ideas; think up questions; suggest possible ideas, alternatives, answers; negotiate meaning and intention; link ideas, tasks and perceptions in some way; look for causes and reasons; shape understanding; interpret and reflect on previous and current knowledge and experiences and define their ideas coherently. These techniques are usually advocated for learners or children but are rarely propagated in teacher training, particularly in ELT (see Kessler, 1992, Sharan and Sharan, 1992; Knezevic and Scholl, 1996; Poel and Homan, 1994; Jacob et al, 1996; Kirschner et al, 1996).

Thus, from the teachers' accounts the above processes were identified and can be classified as incidental findings. This is a strong explanation as to why the teachers also improved in designing the EAP materials and also one of the reasons why the framework had a positive impact on them. As Dubin and Olshtain (1986) explain: materials writing is a craft and team work is better than individual work when working with materials.

The findings generally show that in M1 the teachers' pedagogical content knowledge about EAP materials development on the whole appears not to be well 'shaped' and developed. At the same time, it can be deduced that it was not a requisite to use such knowledge to question their pre-existing belief and ability about materials development. However, in M2, the findings suggest that the teachers' pedagogical content knowledge is further enhanced through the understanding of theory and practice and through understanding of how all the different strands in the framework, including previous and existing knowledge about materials design, can be organised to develop better EAP materials. In addition, the teachers developed better skills in developing materials.

By implication the findings suggest that the framework strands and specifications, together with the training, has exposed the teachers towards planned critical thinking and analysis besides raising their awareness about other aspects of materials design. Further, the framework motivated them, provided challenges which enabled the teachers to learn and relearn the process of designing tasks and materials.

It is also implied that there was a dilemma of perception versus reality in designing materials. In M1 the teachers' perception of developing materials had always been one where they simply "copy, cut and paste"; but when it came to the reality of getting down to design EAP materials their perception was shattered. Their pedagogical conceptions were vague, global and relatively undifferentiated in M1. By the time they had completed their training in the use of the framework, their strategies and approaches had become more specific, differentiated and concrete. Problem solving in materials design had become multi-dimensional and pedagogical concepts were just about beginning to show signs of being more subject and content specific. This is consistent with Shapiro's (1991) research findings in teacher education.

The findings of the study suggest that teachers have used both meta-cognitive and cognitive strategies in developing their EAP materials in M2. They used higher order thinking skills, and their ability to think, create and organise improved markedly through the use of the framework specifications and collaborative work.

9.2 Implications of the Study Findings

The outcome of the study has meaning for ELT practitioners in the training of teachers for EAP materials development or materials development in general. Its implications include the need for further investigation into the teachers' perceived competence and their actual knowledge and ability to develop materials. Further exploration of ways and

methods is needed to heighten the teachers' confidence and ability to develop materials involving higher order skills and the learning of content through the English language. The EAP framework, models, the training and research instruments generated for and during the study, require further development and refinement by systematic trialling and wider testing.

The implications of this study can be discussed regarding: teacher training, collaborative work between language teachers and subject specialists, and research methodology. All these aspects will be discussed below but particular attention will be paid to teacher training and research methodology.

9.2.1 Teacher Training.

The use of the EAP Materials Training Framework in this study has demonstrated in part that both the pre- and in-service teachers needed a training module to guide them through the process of materials development.

The teachers' revelation that they lack the knowledge, skills and confidence in developing EAP materials in the initial stage of the study also applies to materials development in general. Much has been taken for granted in this aspect of materials development. Too much emphasis has been placed on the use of commercially produced textbooks and evaluation checklists for selecting from diverse and abundant commercial materials. While it is acknowledged that using such checklists and commercially produced materials has considerable advantages, teacher training programmes should not lose sight of the need to equip teachers with the tools and skills for developing materials because this sharpens their own intellectual abilities.

Commercially produced texts or materials are often viewed as a good means for training teachers about materials development together with the teaching manual. This further propagates the assumption that "the textbook teaches and serves as a medium for teacher training" (Richards, 1993:4). It is assumed that if the teacher follows the book and the teachers' manual, the teaching will be reasonably effective.

Over-dependence on commercially produced materials, teachers' manuals and answer keys have potentially more negative effects on teachers' ability to think critically. As pointed out by Richards (1992:7), "there is a lowering and reduction of the level of cognitive skills involved in teaching resulting in a level of teaching in which the teachers' decisions are largely based on the textbook and the teachers' manual". This reliance on textbooks often has the effect of de-skilling teachers (see Shannon, 1987; Apple and

Jungck, 1990; Littlejohn, 1992 and Richards, 1993). This was clearly noticeable in Method 1 of the study when teachers had difficulties making decisions about developing materials. Everything seemed to be a problem for them and their reluctance to think was crystal clear. The dependence on commercially produced materials and lack of training in critical thinking for developing materials led to the reduction in the quality of teachers' decision-making and pedagogical reasoning.

Teachers in training and those already teaching need to be reoriented towards producing or adapting materials more frequently to de-emphasise the problem of de-skilling. Towards this end then, a training framework in materials design like the EAP Materials Training Framework (or one which is similar or developed along the same lines) is needed.

It is important to lay the foundations of basic understanding of the different aspects of language teaching and learning theories in materials design and to see their links as well as consider applications.

In the context of EFL teaching, the ability to think cognitively and to be able to make decisions without being dependent on other books is crucial. As Britten (1988) explains, "EFL teacher trainees for whom English is a foreign language are learning to do something very much harder than native speaking trainees or teachers." This point is also made by Medgyes (1994). This implies that the teachers must first understand the learning processes themselves before they can effectively train their own learners to; think critically, apply cognitive strategies and understand content.

The framework emphasises the acquisition of discourse, understanding of written texts and grammatical knowledge. As non-native speakers of English, these teachers need to clearly understand how the language works in order to develop materials that teach and propagate learning. It is important to raise their awareness about the language particularly in pedagogic terms (see Bolitho and Tomlinson, 1990; Rinvolucri, 1985; Edge, 1988; Wright and Bolitho, 1993). The framework initiated an analysis of text structure, content and grammatical components which next led the teachers towards developing tasks for text comprehension. Thus the aspects of text analysis and identification of essential grammar components was leading towards analytic thinking and processing of text in a cognitive way. The need to identify visuals and utilising them for text comprehension and academic writing again equips the teacher with training in making choices, decision-making and analytic thinking - through the use of authentic texts.

The findings of this study suggest that a methodological framework and training exercises in critical and analytical development of materials can show positive results and is therefore potentially useful for those involved in teacher training for materials development in Malaysia. It could enrich the manner in which both pre- and in-service teachers are trained to think about materials development. At the same time, such ways of changing the attitudes and attainment of the teacher trainees should be considered.

The technique of using collaborative groups for such projects should be further investigated and enhanced. This has been shown to motivate and encourage teachers to learn from each other and to be more confident and it raises metacognitive awareness and reflection on elements of teaching and design of materials.

9.2.2 Collaboration between Language Teachers and Subject Specialists.

The development of the EAP Materials Training Framework involves the use of authentic texts from students' subject discipline, for example the Engineering Faculty or other disciplines.

The results of the study indicate that teachers had a lot of problems with technical content, jargon and vocabulary. Co-operation between language teachers and subject specialist is essential if better English for Academic Learning Purpose Materials (EALP) are to be developed. Thus, by working and consulting with subject specialists, the subject specialists could help EAP teachers to comprehend the text better and hence the teachers would be able to construct tasks more effectively and which would be more beneficial to the learners. This would also help the teachers to make decisions about text selection and raises the subject specialists' awareness of language issues in content teaching

9.2.3 Research Methodology.

The study revealed a number of positive and negative aspects of the methodology employed in the main study. The positive aspects were (a) that it employed an intact group design thus allowing the researcher to follow the same set of teachers for both Methods 1 and 2; (b) the teachers were allowed to design their materials in collaborative groups, which yielded a number of unexpected results. For example, as collaborative groups they were able to help each other crystallise ideas and concepts which resulted in a more focused way of developing materials. Such an approach should be further investigated, as suggested by the present study and by Knezevic and Scholl (1996).

The main weakness identified through the study arose, mainly in the use of large number of teachers in terms of:

a) The teacher made materials could not be analysed qualitatively to the desired depth.

b) The time available for monitoring, feedback, follow up discussion and adequate individual attention.

Another weakness identified was the lack of adequate consecutive stages in monitoring certain aspects of materials design and development.

The above aspects need to be considered for other such studies in materials design and development in the future. Ideally, it would have been better to use smaller groups, case study methods and longitudinal studies. Longer training sessions should be planned, transcripts of group collaborative discussions recorded and then analysed, followed up by individual or group interviews to investigate further, the teachers problems. Furthermore, the methodology of text selection and text adaptation should be closely monitored if possible, and a more comprehensive and well structured evaluation procedure *for teacher made materials,* should be addressed before conducting such studies.

9.3 Suggestions for Further Research.

It is proposed that if similar research is undertaken in Malaysia or elsewhere, a variety of teachers from various locations and with diverse training experiences should be used. Samples should also include, trainers and teachers already involved in EAP teaching. It would be preferable to conduct a longitudinal study stretched over a much longer period where continuous evaluation can be made at various points.

The present framework should be further tested on a wider scale, again with a variety of teachers and revisions made in the light of the above and further research findings.

The actual materials developed from the framework and the training should be piloted on a wide scale with EAP learners for feedback, and to further improve the framework. Detailed observation of how the learners interact with the materials should be made, preferably by teachers using the framework, and to record the types of tasks which prove to be most effective. At the same time, teachers' own problems should be identified, recorded and categorised for further action. In systematising the research procedure for wide scale testing of the framework, the strengths and weaknesses of the framework can be further elaborated, modified, applied, evaluated and revised in an iterative manner.

The above suggestions are made in the light of the research's findings which relate specifically to a Malaysian context and is subjected to limitations as discussed in Section 1.1.2. However, the broad thrust of the present study and its implications may be applied elsewhere to EFL settings involving non-native speakers as English teachers.

9.4 Concluding Remarks.

The outcome of the study indicates positive results in using the framework. It was used alongside existing principles and practices. The study has advanced theory in the sense that the framework synthesises and applies a number of theoretical approaches. It has raised questions, opened new avenues and presented an approach and means for training teachers to design EAP materials and perhaps materials in general which appear to be entirely new within ELT teacher education in Malaysia. The framework as a training tool is considered useful by most of the teachers who are convinced that it is not only applicable for EAP materials design but also for designing materials in general. At the same time, it can be used as a guide for materials writing alongside existing principles.

The framework has a far wider application in that its basic principles can be extended and used to devise similar frameworks in other fields of material development. It can be used to advance materials development for multi-media approaches (e.g. videos and computer programmes) for language teaching and learning. More strands or levels can be added on to it and the basic concept of the framework could be used to develop training materials for clients other than students - perhaps for industry. Finally it is hoped that the framework concept can be applied to develop skills in materials design for Bahasa Malaysia (the national language of Malaysia), for which there is a strong need.

This study has been a preliminary attempt to explore whether such frameworks can offer alternative means for developing cognitive abilities among teachers in training. This does not in any way claim that the present training methods are ineffective but hardly any emphasis is placed on teachers' cognitive development and ability to design materials. By interacting with the framework both trainers and teachers who use them can facilitate advanced thinking skills and raise the level of awareness of important aspects of materials design. This is because the framework utilises a number of theoretical bases, mainly the idea of bands, genre theory, knowledge structure, visuals and learning strategies together with current principles of material design. It encourages the notion of 'the teacher as curriculum developer' (Nunan, 1987; Perrett, 1994; Graves,

431

1996; Blyth, 1996). It can also raise teachers' awareness through constructive and methodical means, which in turn will allow teachers in training to address their own weaknesses and to further enhance their strengths. In doing so teachers will become more sensitive towards the type of materials they are using or preparing. If materials lack depth they will be able to identify and rectify such situations.

The framework has postulated a model for not only training teachers to develop materials but also for learners to move along a continuum of band levels to work at their own pace (see Two Dimensional Cone Model, figure 5.3, chapter 5) using a hierarchy of skills. It promotes flexible learning and allows for the addition of more levels and components.

The development of the framework itself has been systematic, using an iterative-interactive approach. It is easily replicatable and the methodology can be applied reliably to similar developments. It used quasi-experimental means to further investigate its usefulness and validity as a training tool.

Finally, the use of the framework has remained productive: the teachers see the band levels not only as benchmarks for assessment and profiling but as criteria across the strands for structuring materials and tasks. The materials produced will be further modified in the light of students' feedback and needs. Reflection on such a bank of materials, involvement and experience with the design process will no doubt stimulate further modifications to the framework.

The framework integrates strands which, certainly in the teachers' minds, might otherwise have remained quite separate. Teachers' comments show that for those who worked with it and were, in a sense, part of its design, the framework came to symbolise a multi-faceted, responsive and reflective approach. They saw they had changed the framework and that it had changed them. Using it, they had different perceptions of the framework, and of materials design, and perhaps of themselves as ELT professionals.

The framework evolved in an iterative, interactive approach, progressively including clients' needs, suggestions and comments so that each major development showed a symbiotic relation between researchers, materials developers and users. Perhaps this could be a model for the evolution of other frameworks in other applied linguistic contexts.

The development of the framework for training in EAP materials design incorporates some basic principles and techniques that can be further developed into a more systematic approach for materials development. It has demonstrated a change in the teachers' thinking, attitude, perception and ability within a fairly short time.

Thus, it is hoped that the use of such a framework, could instil critical thinking skills, positive attitudes and enhance ability in developing effective learning materials in future teachers and consequently their learners. A young and upcoming industrialised nation like Malaysia will surely benefit from critical thinking adults and this will meet the needs of Vision 2020 to develop productive human resources with better critical thinking abilities in order to help the nation become a global player within the international arena.

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