

University of Leicester

School of Education

**IN SEARCH OF EXCELLENCE: A STUDY OF STUDENTS'
PERCEPTIONS OF EFFECTIVE TUTORS IN A PART-TIME
DISTANCE-LEARNING CONTEXT**

A THESIS

by

Kenneth Chee Kwong Chao

Submitted for the Degree of

Doctorate of Education

October 2005

UMI Number: U235222

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI U235222

Published by ProQuest LLC 2013. Copyright in the Dissertation held by the Author.
Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against
unauthorized copying under Title 17, United States Code.



ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

ACKNOWLEDGMENTS

I am greatly indebted to, and wish to thank, Professor Paul Cooper, my dissertation supervisor, for his guidance, constant support, encouragement, and invaluable suggestions at various stages of this research project.

My thanks also go to Professor Tony Bush and Professor Ray Bolam, my previous supervisors at the early stage of this project, and other academic staff at the School of Education, University of Leicester, for their valuable comments with regard to some of my preliminary ideas on the research project, and for the learning experience gained through the assignments, which enabled me to sharpen my research and analytical skills.

I also wish to acknowledge the financial support of my employer, the Open University of Hong Kong, which covered my various expenses including the postage fees of the invitation letters for the interview, and the service fees for a part-time research assistant for data handling and analysis.

Finally, I pay tribute to my wife, Noriko, my two teenage daughters, Kie and Ema, and my nine-year old son Ryuichi for their forbearance during the time I was engaged in my study and research.

Abstract

In search of excellence: A Study on Students' Perceptions of Effective Tutors in a Part-time Distance-Learning Context

Kenneth Chao

This thesis is a study on the perceptions about effective tutors held by distance learners studying for an open university degree in Hong Kong. It is primarily a case study based on the university in an institutional context.

By means of the Repertory Grid Technique and content analysis, the study generated different detailed lists of ranked grouped constructs and profiles representing perceived characteristics of effective tutors for all respondents as a whole and for respondents segmented into different academic performance groupings.

The findings served to complement the existing knowledge base on teacher/teaching effectiveness in the relevant literature. Apart from its unique context (institutional, cultural, and study mode of respondents) and methods of inquiry, the study was more comprehensive in terms of the richness and finer details of the data obtained when compared to other personal characteristics approach or trait view of teaching effectiveness.

The findings on ranked constructs were compared and contrasted with other relevant or significant research findings covering empirical research, which either employed the repertory grids or used the SET (Students' Evaluation of Teaching Effectiveness) approaches, namely, Reid and Johnston's codings, Feldman's categories, and the SEEQ (Student Evaluation of Educational Quality) factors. Generally, the comparison seemed to provide credibility to the construct and content validity of the findings.

The findings based on laddering up interviews provided additional understanding of the grid findings on the perceptions/constructs of effective tutors. In particular, the comparison and contrast of the laddering up findings on high-achieving and low-achieving learners in terms of desired consequences and values held showed that the two groups had distinct differences in study attitudes and approaches.

CONTENTS.....	i
TABLES.....	v
FIGURES.....	vi
 CHAPTER 1 INTRODUCTION.....	 1
BACKGROUND.....	1
CONTEXT.....	1
<i>The development of open and distance learning in Hong Kong.....</i>	1
<i>The Institution.....</i>	2
<i>The issue of tutors and research context.....</i>	3
THE STUDY.....	5
<i>Research aim and objectives.....</i>	5
RESEARCH QUESTIONS	7
SIGNIFICANCE OF THE RESEARCH STUDY.....	8
RESEARCH DESIGN AND METHODOLOGY.....	9
MAIN LIMITATIONS OF THE RESEARCH STUDY.....	10
OUTLINE OF CHAPTERS.....	10
 CHAPTER 2 LITERATURE REVIEW.....	 12
THE PURPOSE AND SCOPE OF THE REVIEW.....	12
THE CONCEPT OF EFFECTIVENESS AND MEANING OF TEACHER OR TEACHING EFFECTIVENESS.	13
THE HISTORY AND DEVELOPMENT OF THE TEACHER/TEACHING EFFECTIVENESS CONCEPT IN THE LITERATURE.....	15
<i>The personal characteristics approach.....</i>	16
<i>The input-output approach.....</i>	18
<i>The process-product approach.....</i>	20
<i>Other conceptions or alternative approaches.....</i>	24
THE RELATION OF THE CURRENT STUDY TO THE VARIOUS TEACHING EFFECTIVENESS APPROACHES.....	28
<i>Approach of the current study.....</i>	31
FURTHER REVIEW OF SOME EMPIRICAL RESEARCH THAT ARE RELEVANT TO THE CURRENT STUDY.....	34
<i>The associated Repertory Grid research literature.....</i>	35
<i>Student evaluation of teaching effectiveness.....</i>	40
CONCLUSION.....	44

CHAPTER 3 RESEARCH METHODOLOGY.....	46
INTRODUCTION	46
THE RESEARCH STRATEGY AND THE METHODOLOGICAL CHALLENGES.....	47
<i>Epistemological consideration</i>	47
<i>Ontological consideration</i>	50
THE RESEARCH APPROACH.....	52
THE CHOICE OF SAMPLE.....	56
METHOD OF DATA COLLECTION AND ANALYSIS.....	59
<i>The Repertory Grid</i>	59
<i>The Elements</i>	60
<i>The construct elicitation procedure</i>	61
<i>The data analysis procedure</i>	63
<i>The Laddering Technique</i>	64
<i>The Hierarchical Value Map</i>	72
QUESTION ON RESEARCH ACCESS AND ETHICS.....	83
VALIDITY AND RELIABILITY OF THE METHODOLOGY.....	85
<i>Construct validity</i>	86
<i>Internal validity</i>	86
<i>External validity</i>	87
<i>Reliability</i>	87
CONCLUSION.....	89
 CHAPTER 4 THE PILOT STUDY AND FINDINGS OF THE MAIN STUDY.....	 91
INTRODUCTION	91
THE PILOT STUDY.....	91
<i>The purposes of pilot study</i>	91
<i>The administration of the pilot study</i>	92
MODIFICATIONS IN LIGHT OF THE PILOT STUDY.....	93
FINDINGS OF THE MAIN STUDY.....	95
<i>The profile of the respondents</i>	95
RESEARCH FINDINGS.....	98
<i>Elicited Repertory Grid constructs</i>	98
<i>Findings of the Laddering up Interview on High-achieving Students</i>	110
The beneficial consequences as perceived by Pass 1 respondents.....	113
The beneficial values as perceived by Pass 1 respondents.....	120
<i>Findings of the Laddering up Interview on Low-achieving Students</i>	124
The beneficial consequences as perceived by Pass 4 respondents.....	126

The beneficial values as perceived by Pass 4 respondents.....	129
CONCLUSION AND SUMMARY OF MAIN FINDINGS.....	131
<i>Summary of main findings</i>	132
Repertory Grid interview findings.....	132
Laddering up interview findings for the high-achieving respondents.....	132
Laddering up interview findings for the low-achieving respondents.....	133
CHAPTER 5 DISCUSSION AND ANALYSIS OF FINDINGS.....	135
INTRODUCTION	135
DISCUSSION AND ANALYSIS	135
<i>Repertory Grid constructs and Profiles of Effective Tutors</i>	135
<i>Findings as compared with other relevant Teacher/Teaching Effectiveness Approaches</i>	144
<i>Comparison of Findings with other Relevant Research</i>	148
<i>Further Analysis and Comparison of the Laddering up Interview Findings</i>	160
Analysis and comparison of the differences in findings on perceived consequences.....	160
Analysis and comparison of the differences in findings on perceived values.....	164
CONCLUSION.....	166
CHAPTER 6 CONCLUSIONS AND IMPLICATIONS.....	170
INTRODUCTION	170
OVERVIEW OF MAIN FINDINGS	170
IMPLICATIONS FOR THEORY AND RESEARCH.....	172
IMPLICATIONS FOR PRACTICE	174
LIMITATIONS AND GENERALIZABILITY OF FINDINGS.....	175
CONTRIBUTION OF THE CURRENT STUDY AND CONCLUDING COMMENTS.....	176
APPENDIX 1.....	178
COMPARISON OF THE CURRENT STUDY WITH ASSOCIATED RESEARCH STUDIES USING REPERTORY GRID AND SET-RELATED RESEARCH STUDIES (TABLE 2.2)	
APPENDIX 2.....	182
AN IMPLICATION MATRIX TABLE REPRODUCED FROM REYNOLDS AND GUTMAN'S CLASSIC STUDY (1988)	
APPENDIX 3.....	183
AN HVM REPRODUCED FROM REYNOLDS AND GUTMAN'S CLASSIC STUDY (1988)	
APPENDIX 4.....	184
A PARTIALLY COMPLETED GRID (FIGURE 3.1)	

APPENDIX 5.....	185
INTERVIEW PROTOCOL	
APPENDIX 6.....	187
INVITATION LETTER FOR INTERVIEW	
APPENDIX 7.....	189
RESEARCH SAMPLE OF RESPONDENTS (TABLE 4.6)	
REFERENCES.....	190-198

Tables

TABLE 2.1:	COMPARISON OF THE VARIOUS TEACHER/TEACHING EFFECTIVENESS APPROACHES	29-30
TABLE 2.2:	COMPARISON OF THE CURRENT STUDY WITH ASSOCIATED RESEARCH STUDIES USING REPERTORY GRID AND SET-RELATED RESEARCH STUDIES	178-181
TABLE 4.1:	GENDER OF RESPONDENTS	96
TABLE 4.2:	AGE DISTRIBUTION OF RESPONDENTS	96
TABLE 4.3:	OCCUPATION OF RESPONDENTS	97
TABLE 4.4:	PREVIOUS EDUCATIONAL LEVEL OF RESPONDENTS	97
TABLE 4.5:	LENGTH OF STUDY (IN MONTHS) WITH THE INSTITUTION	97
TABLE 4.6:	RESEARCH SAMPLE OF RESPONDENTS	189
TABLE 4.7:	GROUPED CONSTRUCTS IN THE SKILLS CATEGORY	99
TABLE 4.8:	GROUPED CONSTRUCTS IN THE BEHAVIOUR CATEGORY	101
TABLE 4.9:	GROUPED CONSTRUCTS IN THE ATTITUDE CATEGORY	101
TABLE 4.10:	GROUPED CONSTRUCTS IN THE KNOWLEDGE CATEGORY	102
TABLE 4.11:	GROUPED CONSTRUCTS IN THE OTHERS CATEGORY	102
TABLE 4.12:	GROUPED CONSTRUCTS WITH RANKING (ALL RESPONDENTS)	103
TABLE 4.13:	GROUPED CONSTRUCTS WITH RANKING (PASS 1)	106
TABLE 4.14:	GROUPED CONSTRUCTS WITH RANKING (PASS 2 AND PASS 3)	107
TABLE 4.15:	GROUPED CONSTRUCTS WITH RANKING (PASS 4)	108
TABLE 4.16:	CONSEQUENCES DERIVED FROM THE LADDER UP INTERVIEWS WITH PASS 1 RESPONDENTS (BASED ON THE TOP FIVE RANKING ATTRIBUTES)	113
TABLE 4.17:	VALUES DERIVED FROM THE LADDER UP INTERVIEWS WITH PASS 1 RESPONDENTS (BASED ON THE TOP FIVE RANKING ATTRIBUTES)	113
TABLE 4.18:	ILLUSTRATIVE EXAMPLES OF SOME OF THE MOST MENTIONED CONSEQUENCES IN THE MEANS-END CHAINS	118
TABLE 4.19:	CONSEQUENCES DERIVED FROM THE LADDER UP INTERVIEWS WITH PASS 4 RESPONDENTS (BASED ON THE TOP FIVE RANKING ATTRIBUTES)	126
TABLE 4.20:	VALUES DERIVED FROM THE LADDER UP INTERVIEWS WITH PASS 4 RESPONDENTS (BASED ON THE TOP FIVE RANKING ATTRIBUTES)	126
TABLE 5.1:	CODING AND DESCRIPTION OF THE CONSTRUCTS (GROUPED CONSTRUCTS)	140
TABLE 5.2:	THE CODINGS AND THE DIMENSIONS OF REID AND JOHNSTON'S STUDY COMPARED TO THE FINDINGS OF THE CURRENT STUDY (THE ELICITED AND GROUPED 31 CONSTRUCTS)	150
TABLE 5.3:	FELDMAN'S CATEGORIES COMPARED TO THE FINDINGS OF THE CURRENT STUDY (THE ELICITED AND GROUPED 31 CONSTRUCTS)	154
TABLE 5.4:	MATCHING OF GROUPED CONSTRUCTS WITH FELDMAN'S CATEGORIES	156

TABLE 5.5:	SEEQ FACTORS COMPARED TO THE FINDINGS OF THE CURRENT STUDY (THE ELICITED AND GROUPED 31 CONSTRUCTS)	157
TABLE 5.6:	MATCHING OF GROUPED CONSTRUCTS WITH SEEQ FACTORS	159
TABLE 5.7:	COMPARISON OF PERCEIVED IMPORTANT CONSEQUENCES OF PASS 1 AND PASS 4 RESPONDENTS	161
TABLE 5.8:	COMPARISON OF PERCEIVED IMPORTANT VALUES OF PASS 1 AND PASS 4 RESPONDENTS	164

Figures

FIGURE 3.1:	A PARTIALLY COMPLETED GRID	184
FIGURE 3.2:	THREE EXAMPLES EACH ILLUSTRATING THE DIFFERENT USES OF THE LADDERING TECHNIQUE – LADDERING UP, LADDERING DOWN, AND PYRAMIDING	70
FIGURE 3.3:	EXAMPLE OF A SIMPLE LADDER BASED ON THE LADDERING UP EXAMPLE SHOWN IN FIGURE 3.2	74
FIGURE 3.4:	EXAMPLE OF A SIMPLE MEANS-END CHAIN CONSTRUCTED FROM AGGREGATING THE THREE LADDERS SHOWN IN FIGURES A, B, AND C (BASED ON A SINGLE ATTRIBUTE EXAMPLE)	76
FIGURE 3.5:	A SIMPLE HVM AGGREGATED FROM TWO LADDERS	79
FIGURE 4.1:	RADAR CHART SHOWING ALL THE RANKED CONSTRUCTS FROM RANK 1 TO RANK 10	105
FIGURE 4.2:	RADAR CHART SHOWING THE PROFILE OF EFFECTIVE TUTORS FOR PASS 1 RESPONDENTS	106
FIGURE 4.3:	RADAR CHART - PROFILE OF EFFECTIVE TUTORS FOR PASS 2 AND PASS 3 RESPONDENTS	107
FIGURE 4.4:	RADAR CHART - PROFILE OF EFFECTIVE TUTORS FOR PASS 4 RESPONDENTS	108
FIGURE 4.5:	HIERARCHICAL VALUE MAP FOR PASS 1 RESPONDENTS	112
FIGURE 4.6:	HIERARCHICAL VALUE MAP FOR PASS 4 RESPONDENTS	125
FIGURE 5.1:	COMPARISON OF CONSTRUCTS FOR DIFFERENT GROUPS C1-C15 (PASS 1, PASS 2 AND 3, PASS 4)	138
FIGURE 5.2:	COMPARISON OF CONSTRUCTS FOR DIFFERENT GROUPS C16-C31 (PASS 1, PASS 2 AND 3, PASS 4)	139
FIGURE 5.3:	STACKED BAR CHART SHOWING THE RELATIVE CONTRIBUTION (IMPORTANCE) OF EACH CONSTRUCT FOR DIFFERENT GROUPS OF RESPONDENTS (I)	142
FIGURE 5.4 :	STACKED BAR CHART SHOWING THE RELATIVE CONTRIBUTION (IMPORTANCE) OF EACH CONSTRUCT FOR DIFFERENT GROUPS OF RESPONDENTS (II)	143

Chapter 1 Introduction

Background

This thesis is a study on the perceptions about effective tutors held by distance learners at an open learning institute in Hong Kong and their various relevant implications. To preserve confidentiality, the open learning institute will be referred thereafter as ‘the Institution’ throughout this thesis. This is a case study based on ‘the Institution’ in an institutional context.

Context

The development of open and distance learning in Hong Kong

In line with the Hong Kong government’s initiatives to upgrade the quality of its workforce through the provision of more educational opportunities, higher education in Hong Kong has undergone unprecedented growth at a fast pace over the last 10 years. From only two universities formally recognized by the government back in 1991, Hong Kong has 10 degree-awarding higher education institutions now, eight of which are funded through the University Grants Committee under the aegis of the government (Source: Hong Kong Annual Report 2002). The increase tallied with the intention of the government to provide higher education opportunities including university places for about 60% of relevant age-group secondary school-leavers within 10 years from the year 2000, the rate of which increased from 13% in 1991 (HKSAR Education Commission 2000).

Along with the expansion of traditional higher education, the Hong Kong government is not oblivious of the enormous and seemingly insatiable demand for continuous learning

of its citizens who are full-time working adults. In fact, a large proportion of distance learning or other variety of courses were then offered through various course providers including profit- or nonprofit-making private providers, various continuous education centres of local universities, or through collaboration with overseas universities and institutes. Following the recommendation of the Education Commission in its second report, the Hong Kong government finally decided to establish in 1991 a degree-granting distance-learning institution with open access—the Institution—along the lines of the United Kingdom Open University model (Hong Kong Annual Report 2002). With an initial student number of 6,142, the total number of students has grown to 22,512—almost a fourfold increase as of October 2003 (Source: the Institution’s Facts & Figures 2003).

The Institution

The Institution was granted university status by the Hong Kong government in May 1997 upon the recommendation of the Hong Kong Council of Academic Accreditation. As of October 2003, a total of 81 degree and postgraduate programmes, and 38 subdegree programmes were offered by its four schools—Arts and Social Sciences, Business and Administration, Education and Languages, and Science and Technology. In addition, its Li Ka Shing Institute of Professional and Continuing Education offered 496 short courses for vocational training and personal enhancement to 18,632 students. The School of Education, and the School of Business and Administration have also extended their operation into mainland China with 3,521 mainland students (The Institution’s Facts & Figures 2003).

The Institution has less than 200 full-time academic staff in the four schools (at Professor, Associate Professor, Assistant Professor, Teaching Assistant, and Lecturer levels)

and 988 part-time tutors/senior tutors as of October 2002 (The Institution's Facts & Figures 2003).

The issue on tutors and the research context

In the Institution, a prominent feature of the responsibilities of a full-time academic staff as compared with other conventional universities is that direct teaching, lecturing, or tutoring in the face-to-face mode is not required of him. In fact one of the major responsibilities of a full-time academic staff in the Institution is course coordination, in addition to scholarly work, institutional administration, and service. In essence, the tutoring or teaching work for a relevant course being coordinated is executed or carried out through the part-time tutors managed and supervised by the responsible full-time academicians (more commonly known as course coordinators) who are held accountable for the selection, training, development, and monitoring of tutors (The Institution's Performance Management Handbook 2002).

While the Institution is generally pleased with its fast pace of growth, the proliferation of courses offered, the associated large-scale increase in the number of tutors required, as well as the increase in students with diverse backgrounds and learning preferences over the past years have posed considerable challenges for its full-time academic staff and the institute itself. This is in light of the Institution's continuing search for effective tutors, as well as the need for efficient supervision and management of in-service tutors, in order that the needs of students will be best satisfied, especially with regard to maintaining the quality of teaching and learning effectiveness.

This increased concern for tutors is very understandable. Distance education or open learning educational institutions all over the world spend considerable energy, resources, and efforts each year in the identification (in terms of recruitment and selection), training, development, and management of tutors. The Institution offers about 370 courses per academic year (Source: Registry of the Institution), and assuming that 10 prospective tutors have to be interviewed per course, it is estimated that the total time is equivalent to about 230 working days spent on the actual interview alone (calculated as eight hours per working day with each interview lasting about 30 minutes including the checking of credentials), which translates to more than half a year just spent on the interviewing process alone. With such tremendous investment in the pursuit for quality tutors, it is natural to expect that the recruited tutors can perform effectively to the satisfaction and benefit of all parties, i.e., the employing institute or university administration, the larger society, and most important of all, the learners or the students who come into direct face-to-face contact with the tutors.

The approach of the current thesis is mainly concerned with an in-depth exploration from a small sample of high-achieving, average-performing, and low-achieving students of the Institution of their perceptions (and implications) of effective tutors drawing from their actual experiences with real tutors. The thesis made use of a well-developed method called the Repertory Grid Technique and the associated laddering interviews as tools for investigation.

From this researcher's personal view and practical/professional consideration believed to be shared by many colleagues, an understanding of students' perceptions about tutor effectiveness in the Institution's context should have more priority than the evaluation of

procurement and performance of tutors. It should be noted that currently, the Institution has not yet established any formal comprehensive performance management system for its tutors. Its tutor recruitment and selection system is also relatively unsophisticated in the sense that there is no specification (personnel specification) about the priority or importance attached to various areas of assessment about prospective tutors. There is also no validation of the reliability and validity of the criteria used in the tutor selection interview. It is therefore difficult or impractical to evaluate the procurement and performance of tutors without a basic understanding of the more fundamental issues of tutor effectiveness, at least from the students' viewpoint, which is therefore considered an appropriate topic for this thesis.

It is acknowledged that tutors' effectiveness is better judged or determined by a number of stakeholders rather than solely relying on students' perceptions. Nevertheless, the current research is mainly interested in exploring students' perceptions of tutors for the rationale explained above. It is expected that the research findings may ultimately carry practical and policy implications for additional reference of the School of Business and Administration, and the Human Resource Unit of the Institution for future drafting of guidelines, and for the refinement of tutor recruitment and selection process as well as performance management. This is in the aim of raising or enhancing the capability or effectiveness of tutors in meeting the needs of students.

The Study

Research aim and objectives

The major aim of the research was to study students' perceptions of effective tutors and from these perceptions generate the profiles of effective tutors. The approach was to explore on an

in-depth basis students' perceptions (and implications) of effective tutors drawing from their actual experiences with the Institution's tutors. This will be derived from a small sample of students grouped into different levels of academic performance.

As students of different levels of academic performance may have different backgrounds, learning needs, motivation, learning styles, preferences, and expectations, it is likely that they may differ in opinions and perceptions on at least some dimensions reflecting the nature or characteristics of effective tutors, although it is also natural that there should be some shared opinions/perceptions on what constitutes effective tutors (i.e., universality of views).

Therefore, an associated hypothesis was that there would be some essential similarities but also differences in the perceptions between the distinct groups of learners exhibiting different levels of academic performance.

By means of laddering up interview, the study would also like to find out the rationale, explanations or implications in terms of perceived consequences and values (to be explained later) behind some of the identified characteristics/profiles of effective tutors as perceived by the distinct groups of learners exhibiting different academic performance (i.e., the high-achieving learners and low-achieving learners). In addition the study would like to find out if there are other distinct characteristics (apart from different levels of academic performance) possessed or exhibited by the high-achieving learners and low-achieving learners respectively which would help to differentiate these two distinct groups of learners from each other. To keep the thesis within acceptable length (and to enable easy comparison), the respondents for this part (making use of the laddering up interview) were confined to the samples of high-achieving and low-achieving learners only.

For the sake of clarifying the terminology ‘effective tutor’ used in this thesis as contrasted to ‘effective tutoring’ in the study of perception, it is worth noting that this study is interested in identifying students’ perceived characteristics of effective tutors covering aspects such as requisite skills, behaviour, knowledge, attitude, and other additional attributes. As the purview includes aspects of tuition or tutoring behaviour in delivering tuition (which relates more to skills and behaviour) in addition to innate personal characteristics (such as knowledge and attitude), the study is considered as more closely related to the study of effective tutors than to merely effective tutoring, as the scope is much broader. The readers of this thesis may wish to note this distinction in nomenclature and construe that in most cases, the two terms could well be interchangeable if referred to aspects of tutoring or tuition which effective tutors should exhibit.

Research questions

The following are the relevant research questions which can be derived and formulated from the research aim and objectives outlined above:

Research Question 1: What are the essential manifested characteristics of effective tutors as perceived by distinct groups of learners exhibiting different academic performance levels (i.e., low, average, and high achievers)?

Research Question 2: What are the possible explanations/implications behind the identified characteristics of effective tutors (and the essential similarities and differences) as perceived by distinct groups of learners? (More specifically what explanations or interpretations could be made in terms of the perceived consequences and values held by the high-achieving learners and low-achieving learners?).

Research Question 3: What are the other distinct characteristics (apart from different levels of academic performance) possessed or exhibited by the high-achieving learners and low-achieving learners which would help to differentiate these two distinct groups of learners?

Significance of the research study

Despite previous studies reported in the literature on various related issues (such as teacher efficacy, teaching evaluation, etc.), the proposed research which used a different methodology with laddering interview and analysis should help further complement our existing knowledge of learners' perceptions of effective tutors. Instead of treating all learners alike in their academic success profiles as often presumed in other prior studies, the study may also provide some complementary information or interesting findings. This can be done by paying attention to learners of different academic performance groups in the study's collection of data and analysis of students' perceptions.

In addition, the research is distinctive, since the respondents are mainly studying in a local distance adult-learning context. In a sense, it is useful to note that the system for the Institution's part-time tutors is different from that for the normal teaching staff in traditional schools, other institutions of higher learning, and staff tutors working full-time for the UK Open University in Britain. In other words, the Institution's tutors are expected to carry out tutoring duties mainly as a supportive function in line with the open education philosophy, instead of direct teaching or delivering face-to-face lectures.

Therefore, the findings of other studies about teaching effectiveness and related issues with focus on direct teaching staff may not be very applicable to the Institution's setting, or may not meet the requirement and expectation of the Institution's learners.

The use of Kelly's (1955) Repertory Grid Technique for the first part of the proposed research project to elicit learners' perceptions of tutors per se particularly contributes to the rich body of knowledge of the cognitive research discipline while taking advantage of its rigorous and researcher bias-free procedure of collection of data/information.

Overall, the research findings should help contribute to a further and better understanding of the needs and values of adult learners in a distance learning context which would be useful for reference by teaching practitioners, course designers, and administrators alike in their planning, design, and delivery of courses or programmes better suited to the needs of this particular category of learners.

Research design and methodology

To achieve the first primary research objective, i.e., to understand more about the perceptions of the Institution's distance learners (including low, average, and high achievers) toward their tutors, a part of the research project will employ the methodology based on the relatively well-known Repertory Grid Technique originally developed by Kelly (Kelly 1955). This is generally recognized as a powerful, systematic, and rigorous cognitive research technique based on the Personal Construct Theory (Easterby-Smith et al. 1996; Wright and Lam 2000). With the identification of Kelly's grid methodology as a rigorous means to find out perceptions about tutors, it is considered a very worthwhile opportunity to compare the construct findings with similar dimensions identified by other research studies on teacher effectiveness. The subsequent laddering interviews (and the use of hierarchical value maps) enhanced a further and deeper understanding of the rationale behind some of the constructs elicited in the first part, which in a way served as an explanation/triangulation of the findings collected on students' perceptions.

Main limitations of the research study

One of the major limitations of the present study is that the respondents are limited to a small number of learners/students, and only their perspectives are investigated. However, it is worth noting that the choice is deliberate, as it is intended to be the focus of the research effort. With an appropriate boundary set for the research area, efforts can be concentrated for a more in-depth exploration of the selected learners/students' inner perceptions and preferences, and their associated underlying causes. This consequently draws a more detailed and comprehensive comparison between different groups of learners/students.

Another obvious limitation is the unique characteristics of the Institution's tutors and the background of the respondents, as all the respondents are drawn from the Institution's learners enrolled in particular courses in the business school.

Outline of chapters

This research report consists of six chapters. In the next chapter, relevant literature related to the various research questions set out above will be reviewed. The review covers both the broad conceptual framework and the previous research/practice literature. The research design and methodology adopted for this research will then be fully discussed and justified in the third chapter. The findings of the research are presented, categorized, and synthesized in the fourth chapter. Discussions and major analyses of findings will be made in Chapter 5 in relation to the research questions, the literature review, and the practical issues. In the final chapter, an overview of the main findings will be presented. The implications of the findings for theory and research will also be discussed. The

chapter will then conclude with implications for practice and overall remarks made on the limitations of this study.

Chapter 2 Literature Review

The purpose and scope of the review

The main focus of this thesis is students' perceptions of effective tutors which relates to key concepts of teaching effectiveness and related issues. Therefore, an overview of various notions or concepts, and the history and development of the theoretical models of teacher/teaching effectiveness in the literature will be reviewed in this chapter. More specifically, the overview consists of references to a number of published accounts of relevant research studies, highlighting significant ideas or issues, and the similarity, differences, and limitations of their contributions, as appropriate. The most relevant/similar work related to the current thesis study will then be discussed in more specific details to highlight the distinct approach and methodologies adopted by the current research which intends to answer the specific research questions.

The secondary objectives (i.e., second part) of the current study are concerned with finding out the explanation or rationale behind the different perceptions about effective tutors held by learners of different academic performance levels. Specifically, the current study aims to find out the different explanations or values behind the perceptions about tutors held by the high-achieving and the low-achieving learners group for a more comprehensive comparison. As such, the second part of the literature review is essentially a follow-up or a natural spin-off from the first part of the study on the same issue of tutor effectiveness making use of the same laddering technique. The only difference is that laddering up instead of laddering down is employed for the second part of the research interview, and the findings are presented and analyzed using a hierarchical value map method which will be further explained in succeeding chapters. Therefore, no separate

review of literature (except on methodology which will be discussed in Chapter 3) is considered necessary for the second part.

Before reviewing the literature, it is useful and imperative to present some definitions of terms that will subsequently appear in the discussions and which will serve to clarify the concept of teacher/teaching effectiveness from other common usages. It would also help interpret various theoretical or research approaches to be discussed in the latter part of the thesis.

Concept of effectiveness and meaning of teacher or teaching effectiveness

The term “effective” is defined in the online Microsoft Encarta Dictionary (2003) as both “the *ability* to produce the required result” and “the *actual* achievement of the result”. In the Concise Oxford Dictionary (1990), it means “having a definite or desired effect”, “actual or existing in fact rather than officially or theoretically” (which is close to the second definition given by the Encarta Dictionary), and a number of other meanings. Accordingly, teacher/teaching effectiveness can be interpreted as the ability of a teacher to produce the desired result in the students, or the actual accomplishment of the desired result.

It is interesting to note that most of the literature reviewed below refer to either teacher effectiveness or teaching effectiveness, and these two terms are often used synonymously or interchangeably. As such, it is implicitly assumed that teacher effectiveness implies teaching effectiveness which is moderated by some other factors, and therefore, there is no need to differentiate the two. Some other literature interpret teacher effectiveness as more related to the characteristics of a teacher, whereas teaching effectiveness is

generally interpreted as more or less the end product of a teacher's teaching. To a certain extent, this is similar to the approach by Mitzel (1960) which is described briefly in the next section on the personal characteristics approach.

It is also useful to note that Medley (1982) further distinguished among "teacher effectiveness", "teacher performance", and "teacher competence":

"Teacher effectiveness will be used to refer to the results a teacher gets or the amount of progress the pupil makes toward some specified goal of education...teacher effectiveness will be regarded not as a stable characteristic of the teacher as an individual but as a product of the interaction between certain teacher characteristics and other factors that vary according to the situation in which the teacher works.

Teacher performance refers to the behaviour of a teacher while teaching a class... teacher performance is often used as a basis from which teacher effectiveness can be inferred.

Teacher competence refers to the set of knowledge, abilities, and beliefs a teacher possesses and brings to the teaching situation... Teacher competence is a stable characteristic of the teacher that does not change appreciably when the teacher moves from one situation to another. It resembles teacher performance in that it has also been proposed as a basis from which teacher effectiveness can be inferred". (pp. 1894-1895)

Teacher or teaching effectiveness should be distinguished from teacher efficacy which is defined as "the extent to which the teacher believes he or she has the capacity to affect student performance" (Berman et al. 1977, p. 137) or as the "teacher's belief or

conviction that he can influence how well students learn, even those who may be difficult or unmotivated” (Guskey & Passaro 1994, p. 4)

The review of literature that follows will show that the concept of teacher/teaching effectiveness is actually much more complicated and perplexing than as outlined above.

The history and development of the teacher/teaching effectiveness concept in the literature

A review of literature shows that interest on and studies related to the concept of teacher/teaching effectiveness (or effective teaching) has begun more than a century ago. This is due to the general recognition of its importance in relation to the increasing emphasis on raising the standard of general education for the public and its use for teacher education, certification, selection, and promotion (Mitzel 1960). According to Mitzel, the concept of teaching effectiveness has perplexed many educators for want of a common standard generally agreed upon as the criteria of teaching effectiveness. Sanford and Trump (1950) also criticized the lack of generally accepted criterion for preservice selection of teachers at that time and suggested that it was the reason for the ignorance in understanding success in teaching.

Since then, various paradigms or perspectives have been proposed toward the establishment of concepts or theoretical models of teaching effectiveness. These can be classified into a number of categories upon detailed analysis of the writings and literature (Connelly & Clandinin 1994; Ryan 1986, Burns 1992; Tang 2001):

The personal characteristics approach

This approach is also generally referred to or classified in literature as the personal trait approach (Medley 1982) or the trait view of teaching effectiveness (Connelly & Clandinin 1994). However, it should be noted that this labelling or classification may have been made for easier analysis of previous publications only by subsequent scholars or researchers, and such term might not exist in some of the original work or writings of the originating authors or researchers.

Amongst the various approaches or paradigms which will be reviewed in this paper, this approach is probably one of the oldest. According to Connelly and Clandinin (1994), this approach has a research history which can be traced back to the turn-of-the-century. The importance and pervasiveness of this approach can be appreciated by observing that “this single research paradigm dominated inquiry into teacher effectiveness for the first third of the century...” (Ryan 1986, p. 4-5), and that “this kind of research design was repeated over and over again in a series of studies across more than 35 years” (Ryan 1986, p. 4-5).

Perhaps this is understandable in recognition that most educational research have been under the influence of development in other disciplines such as psychology and sociology at that time. The dispositional approach which is the most influential trait theory was first put forward by Gordon Allport (Nicholson 1998) who succeeded in promoting personality as an important area of psychological research in the 1920s and 1930s.

According to this approach, there are certain personal characteristics possessed by effective teachers, which may serve to distinguish between effective and ineffective

teachers. For example, students might perceive a good teacher to be gentle, caring, understanding, and fun loving (Thomas and Montgomery 1998). In another study, Charters and Waples (1929) concluded that adaptability, considerateness, enthusiasm, good judgment, honesty, and magnetism were the six most important traits. As described by Ryan (1986), this approach is based on “a general assumption that it is what teachers are that makes them effective or ineffective” (Ryan 1986, p. 6). In Ryan’s words,

“The research was focused on identifying the ‘desirable’ traits, largely through collecting the judgments of former students and educators, and then incorporating the ‘desirable’ traits into rating forms. The rating forms could then be used to judge the likely effectiveness of teacher candidates and practising teachers” (Ryan 1986, p. 6)

Connelly and Clandinin (1994) provided the following remarks of the trait view after reviewing the relevant literature:

“In its strong form, it is assumed that teachers are born and not made, and that anyone may be a judge of teachers.... The research format is to ask students, principals, parents, and others to remember their best teachers and then to describe their personal characteristics.....”...A more scientific version of the trait view emerged in the use of observational rating forms. Rating forms contain lists of traits (personality, knowledge, skills, beliefs) which the rater either marks as present or absent, or present to a degree”. (Connelly and Clandinin 1994, p. 6036)

The following variations in various literature, where personal characteristics is only considered as one of the effectiveness criteria, should also be noted:

- Personal traits are only considered as one of the influencing factors in Medley's five conceptions of an effective teacher (Medley 1982).
- Barr et al. (1952) conceptualized the teaching effectiveness criteria as falling along an "ultimate-proximate" continuum, where the effects of teachers were classified as ultimate criteria, and teacher characteristics as proximate criteria.
- Mitzel (1960) modified Barr's continuum into three classes of effectiveness criterion variables: presage (teacher characteristics), process (teacher and student behaviour), and product (pupil change).

The input-output approach

In stark contrast to the personal characteristics approach which attached much importance to teacher characteristics, the much publicized study findings by Coleman et al. (1966) on the subject of equality in educational opportunities suggested that schools actually may have little effect on student learning, creating some impression that teachers and teaching have little effect on student achievement. Coleman et al. (1966)'s study could be classified as carrying out an approach under the influence of the **input-output approach** research tradition which was quite popular during the period of 1960 to 1970s.

Strictly speaking, literature and studies that can be grouped under the input-output approach are more about *school effects* than *teaching effectiveness* per se (Ryan 1986). As described in detail by Connelly and Clandinin (1998), "According to this conception, teaching and teachers are considered to be effective only in so far as there is residual

output variance not accounted for by input variance on such matters as economic levels, student ability, and socioeconomic status”.

Despite the large sample of respondents with over 4,000 public schools involved and 645,000 pupils in the United States being surveyed, Coleman et al.'s study in the input-output tradition has attracted much criticism since publication, and critics have pointed out various flaws in the methodology including its omission of examining classroom process variables and omission of including actual observation in classrooms or schools (Averch et al. 1972). There was also the criticism that Coleman's study was mainly concerned with student achievement in relation to school differences rather than with teacher or classroom differences. This was believed to allow in some way the individual effects of the latter input to balance, offset, or average out each other, and therefore, schools are found to be quite similar to each other in their effects on students (Good, Biddle, and Brophy 1975).

In reality, the classification of universities and schools into different ranks and league tables by stakeholder organizations all over the world shows clearly that there is little public belief and support for the conception that schools, teachers, and teaching have only minimal effect on student achievement, as advocated by some supporters of this approach. On the contrary, the question of what difference a school can make in student achievement, in relation to literacy and numeracy in particular, has received more attention nowadays. In fact, it is reported that certain teacher preparation characteristics have become important considerations in school achievement (Fuller 1990). Despite all its inadequacies, the input-output approach has its values which are as follows:

The input-output approach represents an important development or stage in the literature and studies related to teacher or teaching effectiveness to some extent. As reported by

Good et al. (1983), the approach was once very popular in the late 1960s and early 1970s, and was used frequently by critics of teachers and schooling. Hence, the literature review is considered not complete without including this approach.

The input-output approach also reminds educators at all levels to be more conscious of the limitation of teachers or teaching as one of the input variables. At least, it may provide an alternative perspective or explanation that in extreme cases or in very unfavourable environments or other conditions, the effect of teacher or teaching effectiveness may be seriously affected or drastically moderated.

The process-product approach

By highlighting the contribution or importance of the process as an intervening variable in educational outcome, the **process-product approach** has in a way eliminated one of the major weaknesses inherent in the input-output approach to teacher and teaching effectiveness. As reported by Ryan (1986) after reviewing relevant literature, the process-product approach commenced in the mid-1960s following an encyclopaedia article by Mitzel (1960) on teaching effectiveness. The underlying assumption of the process-product approach was that it is what teachers do, rather than what they are, that makes them effective or ineffective, or makes a difference to educational outcomes. In Ryan's words,

"Specifically, the research was based on an assumption that teachers differed in their use of instructional behaviours that are characteristic of effective teachers. Thus, the research focused on identifying 'desirable' teacher behaviours, largely through low inference observation systems and through analysis of the relationship between the

average frequency of use of various teacher behaviours and average student learning. Behaviour checklists and classroom observations become commonplace in many school districts.” (Ryan 1986, p. 8)

Low inference observation means that the observer should only make as little or limited direct inference or extrapolation as possible from what is objectively visible or audible in the classroom (Gage 1963).

The emphasis on observable behaviour or ‘behaviourism’ of major educational research studies in the United States categorized under this approach should be seen as a natural development. It concurred with the rise and increasing influence and use of behaviourism as a major psychology discipline from the 1950s until around 1965 when the spotlight began to turn to cognitive psychology (Mills 1999; Hilgard 1989)

It was acknowledged that the full process-product model of research on teaching advocated by Dunkin and Biddle (1974) was influential in defining this particular research approach (Burns 1984; Connelly & Clandinin 1994). However, Mitzel’s work was more classic and seemed to mark the beginning of change in teaching effectiveness research direction (Ryan 1986). In more detail, Dunkin and Biddle’s model specified the temporal relationship among 13 classes of subvariables which can be grouped into four sets of variables first proposed by Mitzel (1960): presage (e.g., teacher characteristics), context (e.g., student characteristics), process (e.g., teacher and student behaviour, classroom interactions), and product (e.g., pupil change, achievement). However, this approach was subsequently named ‘process-product model’, as much research attention in this tradition has been focused on the relationship between measurement of teacher behaviour (process) and student learning (product).

As highlighted previously in the discussion on Dunkin and Biddle's model which actually covers four sets of variables, i.e., presage and context variables in addition to the process and product variables, the following additional sources of literature should be noted.

They depict the origin, interpretation, extension, or variations of this process-product model approach in various literature where teacher/teaching behaviour/characteristics may only be considered as one of the influencing factors or effectiveness criteria.

- The teaching process approach identified by Gage (1963). In this approach or literature with this approach, the main concern was not to establish empirical predictor-criterion relationship such as relationship between teacher behaviour and student success. The literature under this approach are mainly concerned with description or conceptualization of teaching behaviour and the four sequential sets of variables, namely, teacher perceptual and cognitive processes; teacher action; pupil perceptual and cognitive processes and pupil action (Burns 1984). Strictly speaking this approach cannot be considered as the process-product approach but it is important in that it can be perceived as one of the basic building block or groundwork from which other process-product approaches developed.

- The mediating process paradigm and the classroom ecology paradigm identified by Doyle (1978), which differentiate from those more traditional and mainstream process-product approach with main focus on teacher/teaching behaviour. In the former, Doyle noted that a number of research literature focused on individual student's cognitive processes (mediation) that intervene between teaching behaviour and learning outcomes. The latter as pinpointed by Doyle was concerned with demands of different classroom environment which act as intervening or context variables where students will be prompted to develop cognitive and perceptual coping strategies.

- The extended process-product approach identified by Gage (1978). In this extended approach, the two paradigms—the separate mediating response and classroom ecology (Doyle 1978)—are included as belonging to the same category of process-product research approach. Gage argued that these two paradigms helped strengthen, not weaken, the process-product approach by introducing additional factors for consideration. Its name ‘extended’ is derived to distinguish it from the old conception focusing solely on behavioural aspects.

- A research paradigm on teacher cognition and decision making identified by Shulman (1986), which can be considered as a logical extension of the extended process-product approach. In essence, it is concerned with teacher’s beliefs about teaching and students, teacher’s thought processes and decisions in planning instructional activities, and the kinds of decisions made during teaching (Clark and Peterson 1978) which may be considered antecedent to the subsequent impact on teacher behaviour. Based on their influential review of available research on teachers’ thinking in 1986, Clark and Peterson concluded that more descriptive research on how teachers make interactive decisions need to be made. It was suggested that students’ cognitions and thought processes would mediate effective teaching as well (Clark and Peterson 1986; Peterson 1988). To sum up, it is to be noted that this paradigm is mainly concerned with one of the four kinds of variables identified by Gage from his review of the literature described as the teaching process paradigm in 1963, which is outlined in the previous paragraph above.

The extensions or variations of the process-product model described above which incorporate the cognitive elements should be seen as natural evolution. By 1967, cognitive psychology replaced behaviourism as the mainstream movement in the

United States and other parts of the world, and it naturally had its impact on the educational arena and associated research (APA Monitor Online 1999).

Other conceptions or alternative approaches

The other more recent conceptions or alternative approaches in the last 10 years or so are as follows:

- Some teaching effectiveness approaches are encompassed in research studies with specific focus on instructional design and processes, educational technology, teaching methods, the search for the best teaching methods, etc. Ryan (1986) argued that the process-product category could also include the instruction processes and instruction context. However, the author of the current study would like to draw a distinction between **teaching method research** and teacher-effectiveness research. In the latter, teachers and not the teaching method the teacher used are the focus of the study, and variation in teachers' behaviour, etc. (not necessarily including or confined to the teaching method) may be related to students' performance.
- The theoretical and research approach on **expertise in teaching**, or the **expert-novice model** of teacher effectiveness tried to distinguish between expert and novice teachers. (Tang 2001; Berliner 1994; Hunter 1984). Related research studies focused on identifying the skills, strategies, cognitive structures, and models of teaching that effective expert teachers employed (Connelly and Clandinin 1986). In essence, there are three main streams of research directions that can be subsumed in this approach: management skills, cognitive and decision-making skills, and models of teaching used by expert teachers.

- The **teachers' knowledge model** emerged in the 1980s as an extension of the expert-novice model (Leinhardt 1988). In essence, it classified teacher's knowledge in three domains: general pedagogical knowledge, subject matter knowledge, and pedagogical content knowledge. The latter (i.e., pedagogical content knowledge) can be understood as aptly combining or synthesizing the former two kinds of knowledge of the teacher to make learning easier for the target audience—students (Shulman 1986; Tang 2001). More specifically, pedagogical content knowledge can be seen as consisting of the following four components: conversant in teaching the particular subject or course content, knowledge of instruction strategies, curriculum and curricular materials, and students' understanding and potential misunderstandings (Grossman 1990; Borko and Putnam 1995). Another point to note in this model is that it advocates that teacher's performance should be evaluated in action/practice or in the classroom (in situ) according to the kinds of knowledge exhibited (Shulman 1986; Tang 2001).

- The **reflective practice** conception which is sometimes also referred to as the Teaching as Inquiry conception conceived that teaching could be improved or more effective teaching could be developed through self-reflection and evaluation of one's own teaching practice (Schon 1983; Tang 2001; Duckworth 1986). Van Manen (1977) classified reflective teaching into three levels: technical such as selecting appropriate methods of teaching, interpretive, and critical. In essence, this approach is more concerned with the development of teaching or teacher expertise through reflective teaching with evaluation tools including classroom and peer observation, action research, teaching portfolio, learning from mentors and supervisors, etc (Tang 2001). There has been a surging interest on the implicit theories of teachers/teaching since the 1990s (Marland 1992). The implicit theories focus on how teachers make sense of their teaching, how they act in the classroom, and other teaching contexts based on teachers' internal frames of reference or beliefs, which reflect the

increasing importance accorded to reflection in the practice approach. In particular, Brown and McIntyre (1988) suggested that the following elements should be taken into account in mapping teachers' conceptualization of teaching: the teachers' goals and beliefs, the students' state of minds or activities which teachers sought to create or foster, the strategies and conditions affecting teaching, and the relationships among all these elements. Calderhead and Robson (1990) also proposed that it would be useful for teachers to reflect on how their past personal experiences would impact on their teaching.

The discussion made above on the various themes and conceptions of teacher/teaching effectiveness in the literature would not be complete without specifically highlighting some of the important concurrent developments in the United Kingdom, although some of the UK perspectives may not fit perfectly into any one of the categories described above. In a way, the most notable and unique contribution which can be identified from the UK literature on the teacher/teaching effectiveness conception is its approach from a more humanistic perspective based on a more sociological way of understanding—a qualitative and grounded theory stance (LeCompte et al. 1992). More specifically, the research tools used were primarily qualitative which consist of field methods, observations, and interviews. The emphasis was on students and teachers' cognition and thought processes as well as classroom culture as socially constructed by the participants including the teachers and the students (Galton et al. 1999; Brown and McIntyre 1988; Cooper and McIntyre 1996). The mutual influence or interactions between students and teachers, that is, the 'interdependence of teachers and students' or the 'bi-directionality' in classroom processes, was also considered important (Cooper and McIntyre, 1996).

Under close scrutiny, some UK studies shared some but not all commonalities with some of the approaches or paradigms described above such as the teaching process approach, the mediating process and classroom ecology, the extended process-product, and the teacher cognition and decision-making approach.

The qualitative and interpretative research direction or approach adopted by UK studies which sought to understand rather than prescriptively theorize about effective teaching is understandable and noteworthy. In their influential review of prevailing research on teachers' thinking, Clark and Peterson (1986), two American professors, aptly pointed out that the research studies in the 1980s often prescribed premature models of teachers' classroom decision making. Starting with a preconceived notion of a theory and the associated assumptions in the researcher's mind, and then conducting the research study with a view to establishing a theory, this kind of prescriptive theorizing is considered inadequate due to the immature or insufficient assumptions of researchers about the nature of teaching or of effective teaching. By adopting a grounded theory approach, UK researchers have by and large avoided the pitfalls of making inappropriate preconceived assumptions.

As an illustration of some of the major UK literature reviewed by this author, Brown and McIntyre's study (1988) explored the professional/craft knowledge and thought which 16 teachers used in their day-to-day classroom teaching. Their aim was to find out the nature of 'good teaching' using classroom observation followed by interviews. The more comprehensive study by Cooper and McIntyre (1996) covered respondents which include pupils in addition to teachers using participant observation during lessons, and subsequent interviews with teachers and pupils. The aim was to enable teachers and pupils to articulate their understanding of

effective classroom teaching and learning. All these studies essentially employed a qualitative grounded theory approach. Overall, such UK studies have been able to discover or highlight in detail the roles played, the perception of effectiveness by students and/or teachers, and the interdependence of teacher-student influence and the ‘transactional view of teaching and learning’ which “involved the integration of pupil concerns and interests with teachers’ pedagogical goals” (Cooper and McIntyre 1996). This level of fine details may not be achieved by employing research methods in the more quantitative or positivistic research paradigm.

The relation of the current study to the various teaching effectiveness approaches

An overview of the various approaches in the search for teaching effectiveness has been given in the previous section. In essence, each outlined approach has contributed differently in a unique manner toward a more comprehensive understanding of teaching effectiveness from particular perspectives.

For an easy comparison of the various approaches, their major assumptions, main focus, contributions, weaknesses, etc., they are summarized by the author in Table 2.1 which is as follows:

Table 2.1: Comparison of the various teacher/teaching effectiveness approaches

Name of Approach/ Conception/Paradigm	Assumptions	Main Focus	Importance/Major Contribution	Weaknesses	Citation (Author/Year)	Remarks
The personal characteristics approach/ personal trait approach or the trait view of teaching effectiveness	There are certain personal characteristics possessed by effective teachers which serve to distinguish between effective and ineffective teachers. It is what teachers are that makes them effective or ineffective.	To identify the 'desirable' traits, largely through collecting the judgments of former students and educators, and then incorporating the 'desirable' traits into rating forms. The rating forms could then be used to judge the likely effectiveness of teacher candidates and practising teachers.	Pioneer and dominant approach in teaching effectiveness research resulting in large volumes of literature.	Tended to be subjective and assumed that anyone can be a good judge of effective teachers and teaching The research design tended to be crude and is not supported by a sophisticated and well-documented validated method.	Connelly and Clandinin (1998), Ryan (1986), Medley (1982), Thomas and Montgomery (1998), Charters and Waples (1929), Barr et al. (1952), Mitzel (1960)	There are variations of this approach.
The input-output approach	Teaching and teachers are considered one of the input, and are effective only in so far as there is residual output variance not accounted for by other input variance on such matters as economic levels, student ability, and socioeconomic status.	Student achievement in relation to school differences, and not to teacher or classroom differences	It reminds educators at all levels to be more conscious of the limitations of teachers or of teaching as one of the input variables.	Only considers the final output or product and neglects the process or intervening/interacting factors Possible flaws in methodology Teacher and teaching effectiveness not investigated directly The proposition that the school makes no difference in student learning and achievement is not compatible with reality and common belief.	Coleman et al. (1966), Ryan (1986), Connelly and Clandinin (1998), Averch et al. (1972), Good, Biddle, and Brophy (1975), Fuller (1990), Good et al. (1983)	
The process-product approach	Teachers differed in their use of instructional behaviours that are characteristic of effective teachers. It is what teachers do rather than what they are that makes them effective or ineffective, or that makes a difference to educational outcomes.	Identifying 'desirable' teacher behaviours through observation and analysis of the relationship between the average frequency of use of various teacher behaviours and average student learning	This is actually a more comprehensive approach, especially the full model approach which consists of four sets of variables: presage (e.g., teacher characteristics), context (e.g., student characteristics), process (e.g., teacher and student behaviour, classroom interactions), and product (e.g., pupil change, achievement).	The more elementary approach concentrated mainly on the behavioural aspects as the intervening process variable which may be considered as too simplistic. The more sophisticated approach took into account a large number of more intervening variables such as students' cognition, classroom ecology, and even teachers' cognition and decision-making processes which are difficult to observe and keep track of.	Ryan (1986), Mitzel (1960), Gage (1963, 1978), Dunkin and Biddle (1974), Burns (1984), Connelly and Clandinin (1998), Doyle (1978), Shulman (1986), Clark and Peterson (1978), Peterson (1988)	

Table 2.1: Comparison of the various teacher/teaching effectiveness approaches(Continued)

Name of Approach/ Conception/Paradigm	Assumptions	Main Focus	Importance/Major Contribution	Weaknesses	Citation (Author/Year)	Remarks
Teaching method research	There are effective or single best teaching methods, instructional design and processes, or educational technology for benchmarking.	Teaching methods, not teachers, are the focus of study.	Highlights the importance of the teaching method versus other input or intervening variables in relation to student learning	Ignores the role of teachers in student learning.	Ryan (1986)	
The expertise in teaching approach/expert-novice model	There are distinctive differences in the skills, strategies, cognitive structures, and models of teaching employed by effective expert teachers and novice teachers.	Identifying the skills, strategies, cognitive structures, and models of teaching that effective expert teachers employ	Provides new perspectives/fresh insights to the study of teaching effectiveness	Possible subjectivity, and validity and reliability issues in the choice of expert criteria	Tang (2001), Berliner (1994), Hunter (1984), Connelly and Clandinin (1986)	
The teachers' knowledge model	Effective teachers should possess and be able to make use of general pedagogical knowledge, subject matter knowledge, and pedagogical content knowledge.	Highlights the importance of the three kinds of knowledge for expert effective teachers and advocates that teachers' performance should be evaluated in action/practice	Provides new perspectives/fresh insights to the study of teaching effectiveness	Mainly concerned with teaching evaluation and development More dependent on self-judgment and peer evaluation Viewpoints of other stakeholders such as students are often not taken into account. Not readily subject to measurement	Leinhardt (1988), Shulman (1986), Tang (2001), Grossman (1990), Borko and Putnam (1995)	
The reflective practice	Teaching could be improved or more effective teachers could be developed through self-reflection and evaluation of one's own teaching practice	Development of teaching or teacher expertise through reflective teaching practice	Provides new perspectives/fresh insights to the study of teaching effectiveness	Mainly concerned with teaching evaluation and development More dependent on self-reflection and judgment, as well as peer support and evaluation. Not readily subject to measurement	Schon (1983), Tang (2001), Duckworth (1986), Van Manen (1977), Marland (1992), Brown and McIntyre (1988), Calderhead and Robson (1990)	
Concurrent UK studies	By adopting a grounded theory approach, UK researchers have by and large avoided the pitfalls of making inappropriate preconceived assumptions.	Makes use of an interpretive research paradigm, and provides a complementary perspective in the search for understanding of effective teaching and learning	Highlights the roles played and the perception of effectiveness by students and/or teachers, the interdependence of teacher-student influence and the 'transactional view of teaching and learning'	Primarily interpretative approach Tends to be small-scale based on specific contexts May not be readily generalized for application to different situations	Galton et al. (1999), Brown and McIntyre (1993), Cooper and McIntyre (1996)	Shared some but not all commonalities with some of the approaches or paradigms described above

The literature reviewed in previous sections influenced the research undertaken in this thesis. The approach of the current study as contrasted to the various approaches reviewed is elaborated below.

Approach of the current study

As implied by the thesis title with focus on the perceptions of effective tutors/tuition, it appears that the current study bears very close resemblance to the personal characteristics approach described in the previous sections. However, the current study does not limit itself to the identification of the personal traits of effective teachers (i.e., what effective teachers “are”) as in the personal characteristics approach. Rather, by making no preconceived assumptions, the current study which is more respondent centred (an inherent characteristic of the repertory grid approach) would allow the substantive focus of the current study to be broadened—that is, to take into account other variables which were the focus of many other approaches so far described as, for example, teachers’ behaviour, skills, knowledge, classroom management, and the like. In other words, without prompting a specific category of attributes by the researcher, the respondents are free to list whatever attributes they considered essential in order to qualify someone to be an effective tutor. As such, the current study is to some extent a synthesis of the various approaches described above and can be considered an elementary attempt to integrate the various approaches to teaching effectiveness.

The associated interviews conducted with repertory grid respondents also enabled the researcher of the current study to probe further into the context. As a result, it would help provide more substantive information/explanation to understand the various connections which were not explored in some previous quantitative research studies. As it is generally

understood, quantitative research studies tended to rely more on survey instruments which targeted cross-sections of the heterogeneous survey samples.

It is also understood that the validity of many previous research studies employing the personal characteristics or the trait view of the teaching effectiveness approach has been questioned including the choice of “judges” used and the less robust procedures used to produce the list of characteristics (see the discussion on the approach above and the weaknesses as outlined in Table 2.1 above). The literature review of empirical research studies based on other research approaches such as the input-output and process-product approaches did not seem to yield more reliable results or findings either (Connelly and Clandinin 1998; Ryan 1986; Powell 1980). With the current study carried out in a specific context (i.e., the Institution) using the qualitative case approach, and administered to a specific sample of respondents employing a sophisticated and vigorous Repertory Grid Method, it is hoped that new insights and useful findings can be gathered with improved validity.

It is to be noted that the majority of literature and studies reviewed were conducted in the West, and/or were generally administered to large groups of students in primary or secondary school settings. This is in sharp contrast to the current study which focused on small groups of adult learners in a local distance-learning degree-granting university catering mostly to Hong Kong citizens with ethnic Chinese origin. As such, some of the approaches, meanings, and concepts of effectiveness of teachers or of teaching identified in the elementary or secondary school settings may not all be relevant or applicable to the high-school/college/university teaching setting. (Nevertheless, the literature review would not be comprehensive without covering the essential studies on elementary and secondary schools). It is also considered that interesting comparisons

and important insights may be derived this way. In fact, some of the literature such as Clark and Peterson's work (1986), and those of the UK studies described above (Galton et al. 1999; Brown and McIntyre 1988; Cooper and McIntyre 1996) on bi-directionality, micro-level classroom interactions, teacher-pupil relationship, and teacher-pupil mutual influence highlighted and strengthened the conceived need to investigate from the perspectives of the Institution's students for the current study.

From a practical or professional viewpoint, it is considered that a thesis for a professional doctorate such as a Doctor of Education degree should have practical application in enhancing professional practice (Cooper 2001). The focus of the current research study on learners' perception of effective tutors is considered most useful and relevant to human resource practice related to tutor administration in the author's employing organization (i.e., the Institution) in its present stage of development.

As a matter of fact, for the past 10 years since its establishment, the Institution practices a simple assessment procedure in its tutor recruitment interviews which is based only on a simple assessment form categorizing the areas of assessment of prospective tutors into 10 items (i.e., subject expertise, teaching experience, appreciation of open learning, experience with adult learners, appreciation of work involved, common sense, sympathetic attitude, language fluency, ability to grasp essentials, and others). In addition, the Institution mainly relies on annual surveys through a standard Student Evaluation Questionnaire for the collection of students' feedback on courses and tutors (the focus is on five areas: study materials, student support, assignments, tutorials/day schools, and examination). Under the circumstances, it is clear that the current study, properly administered, would help provide more valuable information for reference and validation in tutor recruitment, or would supplement the annual student evaluation exercise carried

out on an institution-wide basis. Adopting other research approaches with focuses other than those of the current study would be incompatible with the current practice or state of development of the tutor administration system in the Institution, and would therefore not be readily applicable in improving the existing practice.

Further review of some empirical researches that are relevant to the current study

A review of the literature on teacher and teaching effectiveness in general has been undertaken in the previous paragraphs. In order to be fully informed of more recent developments and studies, and to avoid unnecessary replication of similar research efforts and direction, a further review of the literature has been carried out covering two aspects:

- the specific use of the repertory grid for objectives similar to the present study (associated research), and
- the specific topic on students' evaluation of teaching effectiveness (SET).

The literature search was conducted using the computerized literature source: ERIC (Educational Resources Information Centre) Database. The ERIC search was made on July 7, 2002 without setting the limit on the year of publication and the type of literature to be searched (journal articles or full text ERIC digests). The search under advanced search with the keywords "Teacher Effectiveness and Repertory Grid" identified seven documents for further reference. One additional document was found with the search under the keywords "Teaching Effectiveness and Repertory Grid". Interestingly, all these documents were published in the last decade or so, with the earliest dating back to 1990 and the latest in 1999. There was zero return for the search made under advanced search with the keywords "Effective Tutor/Tutoring and Repertory Grid", or "Personal

Characteristics". The scarcity of empirical researches employing the repertory grid for exploring teacher/teaching effectiveness is not a surprise to the author of the current study, as it is well known that the repertory grid is a relatively complicated and time-consuming research tool. This author is pleased to note, however, that the current study would help fill a research vacuum. On the other hand, there are more empirical studies on students' evaluation of teaching effectiveness (SET). The search under ERIC with the keywords "Student Evaluation of Teaching Effectiveness" identified 45 documents for further reference. Sixteen of these 45 items (more than 30 %) were either authored or coauthored by Herbert Marsh who can be seen from this perspective as an influential expert on the subject. As such, it is necessary to cover the works of Marsh in the review of the literature on students' evaluation of teaching effectiveness.

The following is a summary review of the research literature from these two sources:

The associated Repertory Grid research literature

It was found that only three out of the eight items identified could be described as bearing some similarities to the present study.

Supported by a research grant offered by the Hong Kong Institute of Education, Yeung and Watkins (1998) reported on the use of the Repertory Grid Technique in Yeung's doctoral dissertation project to investigate how a sample of 27 student teachers in Hong Kong developed a personal sense of teaching efficacy. Personal teaching efficacy was defined as a teacher's belief that he possesses the skills and abilities to bring about student learning (Gibson & Dembo 1984). By means of a computer program (named SOCIO program) which was part of the computer package RepGrid system specifically

developed for processing repertory grid data for analysis (Shaw 1989), Yeung and Watkins were able to compare the cognitive construction of student teachers' sense of teaching efficacy as well as identify those constructs that represent the most common views (mode constructs) of student teacher efficacy in terms of various dimensions/categorized domains. The major sources for the development of a sense of teaching efficacy were also identified with the analysis by the SOCIO program of the highest aggregated rating of the common elements in relation to each mode construct. Further analysis with the SOCIO program enabled them to conclude that third year student teachers' perceptions were more homogeneous than those of first year student teachers' probably because of professional maturity and the years of experience/training.

In their explanation of the choice of methodology in using the Repertory Grid Technique, Yeung and Watkins pointed out that previous studies in teacher efficacy have largely relied on the use of questionnaires with predesigned items for responses which may not cater to the diversity in cultural, educational, or training environments. The methodological consideration by Yeung and Watkins in avoiding predesigned items is similar to the consideration of the present study in using the repertory grid. Nevertheless, the Yeung and Watkins study made use of 12 supplied common elements (i.e., contextual situations such as teachers' images, teaching practice, teaching practice supervisors, etc.) for eliciting constructs for the study, which were selected by Yeung and Watkins on the basis of a prior study with a small sample of 15 students from two colleges of education in Hong Kong. Research biases may have been reintroduced into the study through the supply of a limited number of elements as contextual situations, which were elicited originally from only 15 students. The present study is different from Yeung and Watkins', since the elements are essentially supplied by the respondents to fit the descriptions of effective or ineffective tutors.

Solas (1990) reported in his study four social work students' attitude about the criteria for evaluating teaching effectiveness using the Repertory Grid Technique. The more prevalent traditional methods of using questionnaires with prespecified and often global items were similarly questioned by Solas in his explanation for the choice of the Repertory Grid Technique. The respondents of Solas' study were self-selected groups of four undergraduate social work students—two in the first year and two in the final years of the four-year full-time social work program at Queensland University in Australia. The students were asked to compare the teachers they knew personally in order to establish their constructs (criteria of effectiveness). In other words, their personally significant teachers (that is, those teachers whom the respondents felt had a significant impact on them) were used as the set of elements in the grid. The respondents were required to select six teachers (past or present), two of whom they considered to fit the description of a 'good teacher', two 'bad teachers', and two teachers who 'fell between the extremes'. Solas adopted Kelly's (1955) minimum context card form of construct elicitation and used a 7-point Likert scale for rating the elements (teachers) on each construct by the respondents. A computer program, INGRID 72 (Slater 1977), was used for analyzing the grid matrix. It was reported that the most important component of overall teaching effectiveness was found to be the relationship between the educator and the students manifested in attributes such as 'willing to help students', 'approachable', and 'close relationship'. Solas quoted Knowles (1972) in his discussion of findings and suggested that learning could be enhanced by emphasizing more on 'process', through applications of principles and techniques of andragogy.

Despite its inherent weaknesses in generalization by using a small sample, the study by Solas bears similarity to the current study in a number of aspects. Both favoured the choice of the Repertory Grid Technique and the qualitative approach over the traditional

questionnaire approach. Both had more directly related objectives in identifying the effective teaching or tuition criteria. The other similar methodological aspects include the following: asking students to compare teachers (as elements) they know personally in order to establish the constructs (criteria of effectiveness), the use of Kelly's minimum card form (for construct elicitation), and the use of the Likert scale for rating the elements. Nevertheless, in addition to the difference from the study of Solas in terms of context, respondents, and culture, the current study is actually more than identifying the effectiveness criterion or perception or profile of effective tutors using the Repertory Grid Technique. The current study is also interested in knowing the various rationale behind the perceptions (which constitute the other objectives of the current study) as the triangulation or emerging pattern, which can only be explored through further in-depth interviews based on the repertory grid findings.

The study by Reid and Johnston (1999) was carried out in two phases. The first phase made use of the Repertory Grid Technique to elicit constructs about good teaching followed by the second phase which used the survey for the larger samples. In the first phase, 24 lecturers were randomly selected as respondents from the list of teaching staff, whereas 24 students were also selected as respondents in a stratified manner to represent the four main groups of courses taught in the Faculty of Education– Bachelors, Masters, Postgraduate Certificates, and other Certificates and Diplomas. In the second phase of the research, all 102 lecturers working in the Faculty were included in the survey with a sample of the same number of students, again stratified by type of course. In the first phase using the repertory grid interview, the elements specified were other university lecturers known to the respondents. The staff (as respondents) were asked to identify four such lecturers–the best they had ever known, the worst, the most innovative/original, and the most traditional (all four different persons), in addition to the respondent himself at

the present time (one element) and himself either at the outset of his career or at some goal state in the future (one element). Similarly, student respondents were asked to supply six lecturers—the best and the worst, the most interesting and least interesting, and the most helpful and least helpful they ever knew. In nominating the six elements, the staff and students were free to choose any university teachers they knew, and were not limited to those working in the same Faculty.

A total of 211 constructs about good teaching were elicited from the staff and 215 from the students. A computer program called Ethnograph which enabled the coding and analysis of the categories was used by Reid and Johnston to analyze the database of the constructs as a whole. The constructs were subsequently categorized into 22 codings and were classified into only six dimensions, namely, approachability, clarity, depth, interaction, interest, and organization. Reid and Johnston claimed validity for this part of the study, as the six dimensions were almost identical to the components extracted by the Principal Component analysis.

However, the major aim of the study by Reid and Johnston was to compare and contrast the perceptions of staff and students on what constitute good teaching and the staff's self-perception of the need to change in the light of the findings. The identification of constructs of good teaching from the students' perspective is similar to the current study. The other relevant part of their research which could be considered for reference is their methodology or the use of the Repertory Grid Technique, the prescribed characteristics or selection of elements, and the subsequent categorization and sorting into dimensions. Their subsequent large survey served the purpose of triangulating the findings in the first phase. In contrast, as explained in the discussion of Solas' study above, the current study is interested in knowing further the various rationale behind the perceptions as the

triangulation or emerging pattern. This could possibly be better explored through further in-depth interviews based on the repertory grid findings than by means of a large-scale survey.

Student Evaluation of Teaching Effectiveness

From consideration of its literary meaning only, it seems that the research literature under the topic of Students' Evaluation of Teaching Effectiveness (SET) should be very relevant to the current study which also has a major objective in finding out the perception of effective tutors. However, the current study deals with a particular category of students, that is, low-, average-, and high-achieving students.

Reviewing the literature subsumed under the topic of Students' Evaluation of Teaching Effectiveness (SET) showed that such approaches were essentially concerned with constructing and evaluating multidimensional SET instruments, considering that effective teaching is a multidimensional construct. Marsh and Dunkin (1992) noted that most SET instruments are based on the following two approaches: “ *(a) Empirical approaches such as factor analysis and multitrait-multimethod analysis, and (b) Logical analysis of the content of effective teaching, and the purposes the rating are intended to serve, supplemented by reviews of previous research and feedback from students and instructors* ” (Marsh and Dunkin 1992, p. 146).

Marsh (1987, 1991) also reported specifically on four SET instruments, namely, Frey's Endeavor Instructional Rating Form (Frey et al. 1975), the Student Description of Teaching Questionnaire (Hildebrand et al. 1971), Student Evaluation of Educational Quality (SEEQ, developed by Marsh himself), and the Michigan State Student

Instructional Rating System Instrument (Warrington 1973) with the following remarks:

“The systematic approach used in the development of these instruments and the similarity of factors they measure support their construct validity. Factor analysis of responses to each of these instruments provided clear support for the factor structure they were designed to measure, demonstrating that the students’ evaluations measure distinct components of teaching effectiveness” (Marsh 1991, p. 285).

With regard to the specific SEEQ instrument, Marsh (1995) made the following claim:

“The strongest support for the multidimensionality of SETs come from research based on the nine-factor SEEQ instrument. ...Developers of SEEQ relied on four sources of information. First, a large pool was obtained from literature review, forms in use, and interviews with faculty and students about what they saw as effective teaching. Second, students and faculty were asked to rate the importance of items. Third, the faculty were asked to judge the potential usefulness of the items as basis for feedback. Finally, open-ended student comments were examined to determine if important aspects had been excluded. These criteria, along with psychometric properties, were used to select items and revise subsequent versions, thus supporting the content validity of SEEQ responses”. (Marsh 1995, p. 494).

Marsh also quoted a large-scale empirical study which collected responses of about one million SEEQ surveys (Marsh and Hocevar 1991) to illustrate that the same nine SEEQ factors were identifiable through factor analysis in each of the 21 groups of classes that differed in terms of course levels (undergraduate/graduate), instructor rank (teaching

assistant/faculty), and academic discipline. He also reported six studies which were conducted outside the North American context to demonstrate that SEEQ factors may be applicable elsewhere (Marsh and Dunkin 1992).

Earlier than Marsh, Feldman (1976) also produced a list of categories of effective teaching (20 categories) which were described by Marsh (1991) as the ‘most extensive set of characteristics that are likely to represent students’ evaluation of teaching effectiveness’. Marsh (1991) compared Feldman’s categories with the empirical factors identified in responses to his SEEQ and the Endeavour Factor (Frey et al. 1975). Marsh found that there was a substantial match or overlap in the empirical factors from the two instruments. In short, it was found that all of Feldman’s categories can be subsumed under SEEQ factors, as Feldman’s categories seemed to be more narrowly defined in comparison through categorizing by reviewing research. Expressed in another way, most SEEQ factors represent more than one of Feldman’s categories (e.g., “respect for students” and “availability/helpfulness” in Feldman’s categories corresponds to the SEEQ factor “individual rapport”). Marsh also noted that Feldman derived his comprehensive categories by systematically reviewing researches that “either asked students to specify the characteristics or inferred them on the basis of correlations between specific characteristics and students’ overall evaluation” (Marsh 1991, p. 285). However, the methodology used by Feldman was questioned by Marsh (1991) for adopting mainly a logical analysis approach based on Feldman’s own examination and interpretation of the past literature on Student’s Evaluation of Teaching Effectiveness (in other words, Feldman’s own view), and therefore, the Feldman categories identified may not necessarily concur with or be readily differentiated by other students.

It is clear from the previous discussion that one of the main distinctions between the current study and the research literature on Students' Evaluation of Teaching Effectiveness (SET) is the use of methodology. The use of the repertory grid and the associated interview in the current study is essentially of a qualitative approach. In sharp contrast, the SET research studies were based primarily on empirical approaches or the logical analysis of the content of effective teaching which is supplemented by reviews of previous researches, and feedback from students and instructors.

There are also main differences in the objectives of the studies. The current study is primarily concerned with gathering learners' perceptions of effective tutors from the perspective of low-, average-, and high-achieving learners, and understanding the rationale behind such perceptions with the ultimate objective of improving teaching and learning, and facilitating future tutor selection. In contrast, the SET is used for a variety of purposes such as personnel decisions, diagnostic feedback to faculty for improvement of teaching, information for students in selection of courses and instructors, as well as outcome or process description for research on teaching (Marsh 1998). Many SET research studies are also vastly concerned with the validation of SET instruments, and the evaluation's general applicability or generalizability (Marsh 1998; Abrami et al. 1990; Marsh and Bailey 1993; Cashin 1988). In contrast, the current study is primarily interested in a local single-institution context (i.e., The Institution) by adopting a case study approach.

An even more subtle difference is that the SET approach is very much concerned with the validity of SET instruments in relation to the criterion of effective teaching to be used such as, for example, student learning, changes in student behaviour, etc. For this reason, Marsh (1987) recommended a construct validation approach whereby SETs are posited to

be positively related to a variety of other indicators of effective learning. In contrast, the current study is more interested in students' holistic perception of effectiveness *per se* but is not so much concerned with any predefined teaching effectiveness criterion or the validation of teaching effectiveness against certain criteria.

Despite the differences in intention, focus, and methodological approach from the current study, the various categories and factors identified in the methodologically vigorous SET approaches, SEEQ in particular, could well be used as reference or background information for data triangulation/cross-comparison with the present study. In short, the current study and the SET approaches can be considered as complementary to each other, because both approaches the issue of teaching effectiveness from different perspectives and focuses.

Conclusion

In this chapter, the various concepts and literature relating to teacher or teaching effectiveness were first reviewed. While due recognition was accorded to each of the approaches in the literature for their unique contribution to the effectiveness issue, the literature review has also uncovered some of their deficiencies or weaknesses. A summary of the different approaches (and their weaknesses) is provided in Table 2.1 (p.29) and would not be repeated here.

The reviewed literature has influenced the research directions of this thesis. In the substantive aspect, the methodology of the current study is more respondent-centered (compared to the traditional personal characteristics approach) which broadened its substantive focus - that is, taking into account other variables which included teachers' behaviour, skills, knowledge, classroom management and the like. The

predominantly qualitative focus, i.e., in-depth interviews of the current study also allowed the researcher of this study to probe further into the context/background of respondents which helped to provide more substantive explanation to understand the various connections which were not possible in some previous quantitative research studies. Methodologically, the current study was conducted in a specific cultural context (i.e. the Institute with adult learners – mostly Hong Kong ethnic Chinese citizens) using case approach focusing on students' perspectives and administered to a specific sample/strata of respondents - low, average and high achieving students, employing a sophisticated and vigorous Repertory Grid Method in combination with the qualitative in-depth interviews as triangulation. In contrast, the majority of previous studies were originated in the West, and generally administered to large groups of students in primary or secondary school settings. From a practical/professional standpoint, the current study's focus on learners' perception of effective tutors is most useful and relevant with respect to the author's employing organization (i.e., the Institution) in its present stage of development.

In short, the literature review explained the rationale for the current study in three aspects: substantive, methodological, and practical/professional considerations. The comparison of the current study with some more recent empirical studies using the repertory grids and SET served to provide additional justifications and comparative benchmarks for the findings of the elicited constructs of effective tutors.

The next chapter covers the research design and methodology. The sampling methods and procedures, ethical issues, choice of the Repertory Grid Technique and the associated laddering interviews as a research tool, and the case approach adopted by the current study will be elaborated and discussed.

Chapter 3 Research methodology

Introduction

In this chapter, the choice and challenges in adopting the particular research strategy and approach for the current study will first be discussed. The research instruments (covering the use of the Repertory Grid Technique and the associated laddering up interview), choice of target population, methods of sampling, and data collection/analysis will be elaborated and discussed subsequently.

The question on research access and ethics will be covered after the discussion on the chosen research instruments. The chapter will conclude with a discussion on the validity and reliability of the methodology chosen.

The aims and objectives as well as the context and rationale of the current study were explained in detail in Chapter 1 of this thesis and will not be repeated here. In a nutshell, the present research, undertaken with the target population of part-time distance-learning students in the School of Business and Administration of a local university (The Institution), focused on the views and perceptions of the respondent students on what constitute effective tutors, and sought to present an understanding and explanation of such perceptions by means of the repertory grid interview and laddering techniques.

The research strategy and the methodological challenges

Two main kinds of challenges or difficulties, epistemological and ontological, confronted the researcher in the choice of the research approach and methodology for the current study. The challenges as related to the current study could be analyzed from the epistemological and ontological perspectives as follows:

Epistemological consideration

Epistemology may be defined as “the study of how knowledge is constructed about the world, who constructs it, and what criteria they used to create meaning and methodology” (Usher 1996, 131). In brief, the epistemology of a researcher or a research framework can be differentiated into three main streams as the interpretive, positivist, or critical approach (Winegardner 2003; Gall et al. 1966). The critical approach is not relevant to the current study and hence would not be elaborated further. In the interpretive approach, the stress is on the subjective reality for individuals which is as follows:

“The principal concern is with an understanding of the way in which the individual creates, modifies, and interprets the world in which he or she finds himself or herself”.
(Cohen and Manion 1994, 8)

The interpretive approach can be contrasted with the positivist approach (alternatively referred to as the normative or objectivist approach). In the positivist approach, reality is often assumed to exist objectively which can be described by measurable properties, and knowledge is objective and measurable. It is to be gained through scientific and experimental research with primarily quantitative methods which focus on facts

searching for causality, testing theory, or in the extreme case, general laws explaining the nature of the reality that the researcher is observing and recording. As such, the positivist approach seeks generalizations from the specific, and large samples of respondents are considered more preferable (Winegardner 2003; Easterby-Smith et al. 1994; Cohen and Manion 1994). In contrast, in interpretive research:

“The task of the social scientist should not be to gather facts and measure how often certain factors occur, but to appreciate the different constructions and meanings that people place upon their experience.” (Easterby-Smith et al. 1994, p. 78)

In relation to the epistemology research orientation, the main challenge in the current study is to decide whether to use the interpretive or the positivist approach as its epistemological research approach. After much deliberation, it was decided that the current study would adopt an approach which could be considered as a kind of ‘hybrid’ of both epistemological orientation but with more elements of the interpretive paradigm. In fact, as commented by Miles and Huberman (1994) in the discussion of two opposing conceptions or dichotomy of research approaches, “we believe that all of us—realists (positivists), interpretivists, and critical theorists- are closer to the centre with multiple overlaps.” (Miles and Huberman 1994, p. 5). Following a similar logic, it may be more beneficial not to consider the categories or approaches as mutually exclusive. Instead, one should try to adopt a more flexible approach which can capitalize or leverage on the strength of the particular approaches used in combination. The rationale for the ‘hybrid’ approach is elaborated in further details below.

The rationale for the current study in adopting the mainstream interpretive approach is not difficult to understand from two perspectives. In the literature review chapter, attention was drawn to the notable and unique contribution of the UK literature in its

approach to the search for effectiveness from a more humanistic perspective based on a more sociological way of understanding—a qualitative and grounded theory stance (LeCompte et al. 1992) . This qualitative and interpretative research framework adopted by the UK studies has distinguished them from many other mainstream and more quantitative research studies. By adopting a grounded theory approach, the UK researchers have by and large avoided the pitfalls of making inappropriate preconceived assumptions. In recognition of the benefits and the capability of the interpretative approach as evidenced by the UK studies, the current study wishes to harness the power of the interpretative research methodology framework with less preconceived assumptions (which is usually not quite possible with large-scale surveys having preset questions). This is in the aim of understanding the relevant issues or real concerns from the respondents' (learners') perspectives.

The other consideration in adopting an interpretive stance is the apparent compatibility of the interpretive research approach with the purpose of this study and the research questions. The major aim of the research is to find out the views and perceptions of the respondent students on what constitutes effective tutors, and the associated research questions are concerned with an understanding or explanation of such perceptions formed by respondents of different academic achievement levels. As previously discussed, for the interpretive paradigm, the stress is on the subjective reality for individuals; the task is to “appreciate the different constructions and meanings people place upon their experience” (Easterby-Smith et al. 1994, p. 78). “...human actions have to be interpreted and understood within the context of social practices” (Usher 1996, p. 18). It follows that the interpretive approach is the most obvious, natural, and appropriate choice for the current study.

Despite the emphasis on the interpretive paradigm, the current study does not lack some important characteristics of the positivist approach. The previous discussion highlighted that a research study may be located somewhere in between the two paradigms, as a clear demarcation of the boundary between the approaches may not always be appropriate or possible. Hence, the dichotomy may be better viewed as a continuum. For the current study, the systematic and scientific aspects are evident from the methodological rigor implied by the use of the Repertory Grid Technique, and the form of data collection and analysis of the repertory grid (to be further discussed later in this thesis). In addition, as advocated by Yin (1994) who is perhaps the leading proponent of the positivist orientation of case study research, the current study is conducted closely following his recommended case study methodology and procedures. The same is the case for data collection principles in the development of the research protocol, the conduct of the study, the data collection process (collection and analysis of evidence), and the final reporting and analysis which will all be explained later.

Ontological consideration

In a way, ontological challenges could be considered as closely connected or related to the epistemological research stance (i.e., the interpretative approach) adopted by the current study. In the discussion of assumptions concerning ontology in relation to the subjective approaches to social science (i.e., the Nominalism assumption), it was pointed out that “the social world merely consists of names, concepts, and labels which are used to structure reality. Thus, there is no other reality than the language which is used to make sense of the external social world.” (Bullock and Stallybrass 1977, p. 428). Viewed in this perspective and by adopting an interpretative approach, the challenges for the current study are to ensure that the various ‘labels’ (i.e., findings such as elicited grid constructs

or grouped constructs after content analysis) which are supposed to reflect students' perceptions about effective tutors do reflect students' perceptions accurately and genuinely. In addition, the researcher should be able to discern the underlying meanings or implications behind the 'labels' (constructs/perceptions, etc.) used by the respondents, if necessary.

For the rationale explained above, it would not be too difficult to understand why the Repertory Grid Technique and the associated laddering interviews were chosen as research methods for this study from the ontological perspective. The current study aims at understanding students' perceptions of effective tutors. The methodologically robust Repertory Grid Technique could help generate large number of constructs. The grid technique and laddering interviews would provide ample opportunities for the researcher to probe the implications, underlying rationale, or what the respondents meant by the constructs elicited from them. As suggested by Kelly (1955), "it is often necessary for the examiner to test out the accuracy of understanding by conversing with the subject". In fact, in the course of grid interviews, it is often necessary to help the respondents translate (from the conversation) what they meant or articulate their views into constructs (written constructs) in order to be entered into the individual repertory grids. This process also enhances the researcher's understanding. The specific requirement imposed on the respondents for providing an opposing construct for each and every elicited construct and the use of laddering techniques (explained later) implicit in the grid interview are further aids in the search for deeper meanings.

In a way, the above discussion is concerned with the issue of construct and content validity of the current study which would be further dealt with in later parts of this chapter, and other appropriate parts of this thesis. Related measures in the data collection

and analysis processes to ensure that these ontological challenges could be suitably addressed or resolved would also be elaborated further in relevant parts. At this juncture, the primary aim is to highlight the epistemological and ontological challenges facing the researcher of this study, and to briefly justify the choice of research methodology and the research methods as a way of resolving the challenges.

The research approach

Justifications of the research methods, that is, the Repertory Grid Technique and the associated laddering interviews used in the current study to address some of the challenges in research design, were given in the previous section. By its very nature (i.e., its principal concern with the study of perceptions about effective tutors held by distance learners in the Institution, and the various relevant implications), the current study is essentially a case study based on the distance-learning Institution in an institutional context. The Repertory Grid Technique and the associated laddering interviews were adopted as research methods, as these were considered most appropriate for the purpose of addressing the research questions of this thesis.

Based on Yin (1994, p.13), Johnson provided a definition or description of a case study which is as follows:

“A case study is an enquiry which uses multiple sources of evidence. It investigates a contemporary phenomenon within its real life context, when the boundaries between phenomenon and context are not clearly evident” (Johnson 1994, p. 20).

Johnson's description is applicable to the current study, as evidenced by the following in explicating how the relevant terms used in the excerpt mentioned above could find their counterparts in relation to the current study:

Multiple sources of evidence mean that, "*Several research tools may be used to accumulate data, for example, interviewing, observation, and use of records*".

(Johnson 1994, p. 20). For the current project, the multiple methods or two types of interviews, i.e., the highly rigorous repertory grid to elicit constructs from respondents as first part, and the associated laddering up interview in the second stage, are used essentially as the research tools. The multiple sources of evidence were also provided as explained in the discussion of ontological challenges above and, in particular, were compared between respondents with different academic performance levels.

The investigation of a contemporary phenomenon means that, "*Case studies are concerned with the interaction of factors and events over a period of time. Usually, the study is a phenomenon still in evidence at the present day, though not necessarily new or present.*" (Johnson 1994, p. 20). The current study was concerned with students' perception of effective tutors—the 'phenomenon of interest'. It is obvious that perceptions (except first impressions) are usually conceived, shaped, and reshaped in the light of experience over a period of time as a result of interaction of various factors or events. In the current study, attempts were made to seek understanding and explanation of such perceptions through the comparison of respondents of different academic achievement levels.

The investigation of a phenomenon within its real life context implies that, "*The case study is a naturalistic type of enquiry. It involves the systematic gathering of evidence but does not require an experimental situation*" (Johnson 1994, p. 20). The current study is a study of students' perceptions of effective tutors in the real life contexts of the institution—The Institution (or its business school, to be exact). The systematic gathering of evidence was achieved by the use of the repertory grid method and laddering interviews with documented systematic interview protocols with no control group or manipulation of the variables of interest as in an experimental design.

In his description of case study, Johnson further mentioned that, "*The boundaries between phenomenon and context are not clearly evident*" and that "*Common sense-perceived boundaries to case studies are not ring fences. As the study progresses, the boundaries appear increasingly permeable. But where the phenomenon has an institutional form, there is more immediate sense of structure than for a more exploratory enquiry*" (Johnson 1994, p. 20). For the current study, the research context is clearly the business school of the Institution. The phenomenon of interest—the student sample's perceptions of effective tutors within this institutional context can be said to have an institutional form, which provides more structure to the study.

In contrast to Johnson's definition of a case study, a more succinct definition or description has been provided by Miles and Huberman (1994) which is as follows:

"Abstractly, we can define a case as a phenomenon of some sort occurring in a bounded context. The case is, in effect, your unit of analysis" (Miles and Huberman 1994, p. 24).

“Studies may be of just one case or of several. There is a focus or ‘heart’ of the study, and a somewhat indeterminate boundary defines the edge of the case: what will not be studied” (Ibid., p.24)

Viewing the current study in Miles and Huberman’s framework, the phenomenon is about student respondents’ perceptions of effective tutors in the bounded contexts of the institution—the business school within the Institution. The focus or ‘heart’ of the study is the perceptions of its sample students. The Repertory Grid Technique employed in the study encouraged more spontaneous responses with a somewhat indeterminate boundary of the dimensions of tutor effectiveness to be constrained only by the association with the number of elements and the prescribed standardized procedure for the technique. On the other hand, the ‘dual’ characteristics of perceptions being something ‘persistent’ but yet also ‘evolving’ and ‘self-correcting’ could be a result of the external environment or of internal influence.

To elaborate further on the current study’s aims to find out the views and perceptions of the respondent students on what constitutes effective tutors, the Repertory Grid Technique and associated laddering interviews are used. In essence, it can be interpreted that the focus of the study is mainly on the “what” (and “how”) issues, with the remaining secondary research objectives being the ‘why’ issues. As described by Robson (1993):

The essential features of an exploratory case study are “... *to find out what is happening, to seek new insights, to ask questions, and to assess phenomena in a new light*”, “..... *seeks to answer questions of how and why*” and “...*a diagnostic tool to develop a range of objective possibilities that could occur*” (Robson 1993, pp. 146-148).

In short, the preference of the current study for an induction type of approach (with focus on understanding and interpretation from the perspectives of the respondents, including the meanings people have constructed for themselves) fits the description of an exploratory case study.

To conclude, the nature of the research approach of the current study has been elaborated in the above discussion. In the following, the choice of sample for the current study is examined before further discussion of the repertory grid and the associated laddering interviews as the data collection methods in the current study.

The Choice of Sample

As indicated above, the respondents for the proposed research were drawn internally from the learners studying in the Institution. In line with the research objectives, a purposive sampling strategy was employed to select the respondents in the manner explained below.

In order to compare like with like to control for the possible influence of different strands, all respondents were chosen from within the School of Business and Administration of the Institution (The Institution has three other Schools—Arts and Social Sciences, Science and Technology, Education and Languages, and one institute of professional and continuing education). The School of Business and Administration offers higher-level courses for students in eight areas of specialization, namely, Accounting, Business Information Systems, Corporate Administration, Human Resource Management, International Business, Banking and Finance, Marketing, and Operations and Purchasing Management. One course (higher level) which is

considered the best representative of each particular concentration/strand (as evident from the matching of the course title to the strand title) was identified from each of the eight strands, so that one high-achieving, two average-performing, and one low-achieving learner(s) from each of the eight relevant chosen courses (i.e., four learners per chosen course) were further chosen for interview. A high-achieving learner is defined as an outstanding student who achieved the top score (taking the average from both examination and assignment components) in the relevant course. A low-achieving learner is defined as a student who has barely passed the course (also taking the average from both examination and assignment components) and who is the lowest in the ranking for all those who passed the relevant course. In line with the classification of academic performance of students by the Institution into six categories in descending order of academic performance (Pass 1, Pass 2, Pass 3, Pass 4, Fail-Resit and Fail (without chance of resit), the high-achieving learner is referred to the rank 1 student in the Pass 1 band, the two average-performing learners consist of one in the very bottom of Pass 2 and one in the very top of Pass 3, and the low-achieving learner is the one in the very bottom of Pass 4.

The average performing students are chosen to provide the additional benchmark for comparison with their high-achieving and low-achieving counterparts. Those learners who did not pass the course are not chosen as respondents for this project. The consideration is that the comparisons may be too drastic which means that the research results may be distorted because of the wide contrast in background, especially academic background. Bearing in mind that the Institution adopts an open entry policy, some students are very weak in language or quantitative skills, so those who failed in the courses can be considered an 'abnormal' group (which may merit separate investigation but is not the intended purpose of this research project). The latter may have very different preferences and perceptions of tutors as contrasted to those 'normal' high-achieving, average, and low-achieving students/learners.

In addition, learners studying foundation courses usually in their first year of study in the Institution are also chosen as respondents. All students in the Institution who wish to study any one of the strand courses outlined above and who graduated with a Bachelor of Business Administration degree have to study three mandatory foundation-level courses (unless they are exempted), namely Business Communication, Business Computing with Internet Applications, and Quantitative Methods for Business. Therefore, similar to the sampling strategy indicated above for higher-level strand courses, four learners will be chosen from each of the relevant course (i.e., the three foundation courses) for interview too.

In total, it was intended that 32 respondents would be chosen for interview from the higher-level courses (i.e., four from each of the eight strand representative courses) and 12 from the three foundation-level courses (i.e., also four learners from each of the three foundation courses offered by the School of Business and Administration).

In view of the length of time required for conducting in-depth interviews, the targeted total number of respondents (i.e., 44) is considered appropriate and perhaps more than adequate for this research. The first stage of the current study entailed the use of a repertory grid interview per respondent which would need one hour for elicitation of the grid constructs. The subsequent laddering up interview (to find out the rationale behind selected constructs elicited) in the second stage of the data gathering process would take another one hour per interview per respondent (this time only from the high achiever and low achiever categories). In his study of voluntary participation in adult education activities employing the interpretative research technique similar to the current one, J.

Stalker (1993) quoted Dahlgren (1987) and Larsson (1983), and argued that the “selection of 20 respondents was congruent with similar qualitative and phenomenographic research conducted by a single researcher” (Stalker 1993, 66).

Method of Data Collection and Analysis

The Repertory Grid

The repertory grid is the main research instrument for the current study. The justifications for its use have been discussed in the Literature Review and the early part of this chapter. Among all justifications, its methodological rigor and researcher/observer bias-free characteristics and, surprisingly, the scarcity of its use in previous teaching effectiveness literature (especially in a local distance-education adult learning context) are most notable in relation to the current study. In short, the current study aimed at making some contribution in the area by extending its application as a research tool in a particular context and filling in the gap in the relevant literature with implications for practice.

The Repertory Grid Technique is well established as a cognitive research method which has been thoroughly discussed in large volumes of literature and used in a variety of settings (Easterby-Smith et al. 1996; Dunn et al. 1987). Originally developed by George Kelly based on his Personal Construct Theory (Kelly 1955), it has come to be used as a technique in its own right (Alban-Metcalf 1997) and can be considered a structured interview technique largely free of observer bias (Bannister and Mair 1986). According to Kelly’s personal construct theory, mature individuals develop personal construct systems to comprehend their world in ways meaningful to them. In other words, it is postulated

that personal construct systems determine the ways in which individuals construe the people, objects, and events they encounter in their life experiences. In repertory grid terminology, the people, objects, and events that provide the focus of an individual's personal construct system are called 'elements', whereas 'constructs' are evaluative dimensions or reference axes used by individuals to discriminate between elements. The constructs are conceived as bipolar, for example, "interesting versus boring", "friendly versus hostile", and form part of a hierarchical system in which the constructs are linked in subordinate and superordinate relationships. As described aptly by Cammock et al. (1995), an individual's construct system can be viewed as containing thousands of such groupings, each with different constructs. The linking of these construct groupings provides the individual with a complete system for assessing and understanding the people, objects, and life events around them.

In a typical repertory grid interview, the specific aspects of an individual's (respondent or interviewee) construct system are explored/elicited with reference to a specific set of elements. The repertory grid interview procedure and the elements used for the current study are elaborated below.

The Elements

The respondents were briefed at the outset of the Grid interview that the purpose of the Grid was to explore their perceptions of effective tutors, and that the first step was to identify the elements or items within their range of convenience which, in this instance, were the people to be compared. In essence, the respondents were asked to think of seven elements to work out their constructs at the outset. The set of elements used for the Grid interview and construct elicitation were the following:

Element 1: The most effective tutor

Element 2: The next effective tutor (equally effective as Element 1 or the second best)

Element 3: The average tutor

Element 4: Another average tutor

Element 5: The worst (or most ineffective) tutor

Element 6: The next worst tutor (equally worst as Element 5 or the second worst)

Element 7: The ideal tutor

The ideal tutor element was supplied to aid in the elicitation of construct and comparison, as it is considered that even the most effective tutor (experienced by the learner) may not conform to the highest ideal standard desired by a specific respondent.

As their first task in the Grid interview, the respondents were asked to associate specific tutors they know in the course of studying with the Institution who conform with the descriptions of the elements 1-6 as described above. They wrote down the surname or fictitious name of each tutor (as a memory aid for the respondents) on a separate card corresponding with that particular description. For example, if Mr X is identified as the most effective tutor for a particular respondent, the respondent can write down Mr. X on the card designated as the most effective tutor. The cards were destroyed immediately after the interview to preserve confidentiality.

The construct elicitation procedure

In eliciting constructs from respondents, a number of procedures can be adopted according to the Repertory Grid Technique. For the current study, the more common triad

method is used (Kelly 1955, 61), which involved presenting the respondent with combinations of three elements/tutors at a time (in triads) and then asking in what important aspect two of the elements in the triad are similar to each other, and different from the third. In plain language, taking the triad at a time, the respondents worked out the pair and the singleton. They were to supply a word or short phrase describing how the pair was alike. The description (construct) went on the left-hand column (called emergent pole in grid terminology) of the data sheet (grid form in grid terminology. For illustrative purpose, a typical partially completed grid form is shown in Appendix 4—Figure 3.1). Similarly, they were to supply a description/construct of how the singleton was distinctive from the pair which went into the right-hand column of the data sheet. This process of elicitation was repeated for different triads until the respondent could not think of further constructs or the prescribed time for elicitation is up (one hour was prescribed for construct elicitation). The respondents were then asked to rate each element with respect to each construct on a scale of 1 to 5, with 1 denoting the highest degree of similarity and 5 the highest degree of difference. The allotted values were then recorded in the boxes in the grid form. The allocation of values (rating) was done at the very end of the grid procedure to ensure that the rating would not distract the respondents from the construct elicitation procedure. The rating of elements with respect to each construct provided a final opportunity for the respondents to reflect and review if all the elements could be appropriately rated on each elicited construct (within the respondent's range of convenience and to consider whether the constructs were really applicable for the elements). They were allowed to give up or remove the particular elicited construct from the final list of the grid constructs if they finally considered that the particular construct was not appropriate.

For standardization of the grid interview procedure, a standard interview protocol was developed for the purpose (Appendix 5).

The data analysis procedure

The following methods of analysis were employed for analysis of the grid data for the current study: frequency counts and content analysis. A number of computer packages have been developed to provide analysis of various grids (Easterby-Smith 1980). However, for the purposes and method of the current study, a computer programme for grid analysis is considered not necessary. In the words of Kelly, “Neither abstraction nor generalization has ever been computerized ... the contribution the computer makes is the economy of the language employed, not to the conceptualization...” (Kelly 1969, p. 290). In any case, the use of computer for the analysis of grid findings could not reduce the amount of work required for the interpretation of respondents’ answers during the data collection processes including the grid interview which were most time consuming. In particular, for the content analysis and categorization of constructs in the current study which inevitably involved substantial subjective judgments, it is considered that manual analysis could probably be more appropriate.

Frequency-count analysis is useful when a sample of people has been interviewed for the grid, and one wishes to look for common trends (Steward 1997). Frequency counts of constructs as compared with that made of a common set of elements are more complicated, because same or identical constructs would not be produced for every completed grid used for comparison. Nevertheless, it could still be done. For the current study, calculation was made of the number of times a particular constructs was mentioned/recorded for all the grid interviews. By finding out the accumulated frequency of each recorded construct and ranking the constructs in descending order from the most frequently mentioned to the least mentioned,

it was possible to identify those constructs (characteristics) which were most (or least) valued by the respondents as a whole. Similarly, by summing up the recorded constructs of different grids separately for each of the different groupings such as the high-achieving, low-achieving, and average-performing students, it was possible to identify, compare, or contrast the profiles of such constructs (characteristics) which were most (or least) valued by the respondents in different categories.

The content analysis for the grid was even more complicated than the frequency-count analysis. As described by Steward (1997), it involved developing different meaningful categories based on emerging patterns arising out of grouping similar constructs elicited from grid interviews, and then assigning and sorting similar elicited constructs into those developed categories. In the words of Marton and Saljo (1984, p. 55), the constructs were “brought together into groups on the basis of similarity, and the groups were ‘ delimited’ from each other in terms of differences”. Dahlgren (1984, p. 24) described that the process involved “the reduction of unimportant dissimilarities, e.g., terminology or other superficial characteristics, and the integration and generalization of important similarities, i.e., a specification of the core elements (should mean ‘constructs’ for the current study) which make up the content and structure of a given category”. This process (creating categories and assigning the constructs) was repeated until there were no further elicited constructs which could not be allotted to any categories. Interpretation could then be drawn from the pattern of the developed categories which emerged and which were, in a way, the aggregated or summarized views of the important dimensions (constructs) having bearing on the issue of tutor effectiveness as perceived by the respondents.

The Laddering Technique

In conjunction with the repertory grid, the laddering technique was also a major data collection technique used in the current study. In essence, the laddering technique is part and parcel of the repertory grid method. The technique was used in the current research with two major purposes. First, the technique helped ensure that the elicited constructs from the grid interviews were in fact the constructs considered important and relevant, if not most important and relevant, by the respondents with regard to the focus of the issue. In other words, the laddering technique administered properly served as a kind of screening device which urged the respondents to reflect or rethink if the constructs provided by them during the elicitation stage were constructs that in fact mattered to them. Thus, the constructs that were actually trivial were eliminated and hence excluded from the findings. Secondly, by exploring further the meanings or implications behind each construct elicited from the respondents (proclaimed as possible through the skilful use of the laddering up or laddering down process as part of the laddering technique), a deeper understanding and a more meaningful interpretation of the constructs as research findings were made possible.

As an important technique for the current study, the laddering technique will be further explained and elaborated with reference to the related literature. An explanation will also be made on how it was used in the current study.

The origin of the laddering technique can be attributed to Hinkle who first developed and applied the technique to the implications grid and the resistance-to-change grid (also developed by him) in his master's degree thesis in Ohio University (Fransella et al. 2002; Jankowicz 2004). The respondents of his study were 28 American university psychology students (Adams-Webber 1979). As described by Corbridge et al. (1994), laddering was developed by Hinkle as a method of clarifying the relations between the constructs which were elicited from the respondents, and whenever possible, organizing them into hierarchical relations (Corbridge et al. 1994). Hinkle developed his grids based on Kelly's personal

construct theory which postulated that an individual's personal constructs are arranged in an hierarchical system with superordinate and subordinate constructs interrelated to each other (Steward 1997). In short, through his construction of the implication grid and the resistance-to-change grid, Hinkle attempted to find out the meaning each elicited construct has for the individual respondent in terms of its implicative relationship to other constructs. More specifically, by equating the word 'imply' with 'anticipate', his theory is that the meaning of any personal construct lies in what the construct implies and what is implied by the construct. In other words, he postulated that each personal construct should have a superordinate and subordinate range of implications, and hence superordinate or subordinate constructs which may be further elicited from the original constructs by means of the laddering technique (Fransella et al. 2002).

The significance of Hinkle's implications grid lies in its ability to allow some measurement of the relationship between the constructs, whereas the resistance-to-change grid seemed to indicate that the superordinate range of implications of constructs would be directly related to their resistance to change and hence would be more essential or important to the person concerned (ibid.). However, little research has been reported in the literature using exactly the original form of either grid since 1965 (ibid.). On the other hand, the laddering technique which originated from Hinkle has been further refined and elaborated (ibid.). In fact it has become quite well established and tended to be used frequently as a technique by itself or in association with the conduct of the repertory grid interview. The current study also made extensive use of the laddering technique and hence a further elaboration of it is necessary.

In its original form, laddering is a procedure described by Hinkle as a systematic process used to elicit increasingly 'superordinate' constructs—constructs of a higher order of abstraction than those elicited originally in the beginning from elements (Fransella et al. 2002). However, Hinkle's use of the term 'superordinate' was contrary (or exactly opposite)

to the ordinary sense of the word, as he defined that “the constructs which imply polar positions on other constructs are called the subordinate constructs; the constructs whose polar positions are implied by the other constructs are called the superordinate constructs”(Hinkle 1965, p. 23 quoted in Fransella et al. 2002). As a result of the controversy over the use of the term and to avoid confusion, it was reported that the use of the term ‘superordinate’ has then been restricted to the description of ‘laddered constructs’ only as a widely adopted practice since 1969, following the initiative of Fransella (Fransella et al. 2002). This convention was followed by the current study in the explanation of this technique.

In essence, laddering is essentially a structured questioning technique. Its process consists first of eliciting the construct (original construct) in the ordinary manner, and then proceeding to ask the respondents to choose the preferred pole of the elicited bipolar construct. The respondent is then further prompted to provide a rationale or explanation by answering the question why the particular pole of the original construct is more preferable than the other. The answer given will usually produce a new construct (or constructs if the answer is more than one) which is superordinate to the first. The question ‘Why?’ is again asked about the preferred pole of the new construct to elicit an even higher superordinate construct (compared to the new construct). In short, this procedure is repeated by asking respondent the ‘why’ question repeatedly for every new construct or superordinate construct elicited in this way (i.e., increasing ladder upward in the hierarchy), until the topmost construct is found for every original construct. The topmost construct is reached when the respondent is unable to produce a further answer to the ‘why’ question (i.e., no more new construct can be elicited based on the topmost construct). The constructs on the top of the hierarchy are usually described as core constructs and are believed to relate to a person’s fundamental beliefs, personal values, or preferences more strongly. In other words, these

‘top’ constructs are more important or central to the person concerned, more value laden, and are resistant to change (Jankowicz 2004; Fransella et al. 2002).

The laddering technique originally developed by Hinkle to elicit higher order superordinate constructs (‘laddering up’ by asking the ‘why’ questions) has since been further elaborated and modified by Landfield (1971) and Fransella (1972), and other interested followers (Jankowicz 2004; Fransella et al. 2002; Adams-Webber 1979). In addition to laddering up by asking the ‘why’ question (Hinkle’s version), it was found that more and more subordinate or concrete personal constructs could also be elicited by ‘laddering down’ the construct hierarchy which consists of asking the respondent a consecutive series of ‘how’ and ‘what’ questions (ibid.). Specifically, in the laddering down process, the respondent can be asked to provide more details based on the original elicited construct. The respondent is asked questions such as ‘how, in what ways?’ or to provide examples of the elicited construct (ibid.). Langfield (1971) and Fransella et al. (2002) described this simply as a pyramid procedure or ‘pyramiding’ (Fransella et al. 2002). However, Jankowicz (2004) further distinguished between the terms ‘laddering down’ and ‘pyramiding’ depending on whether the technique is employed primarily to obtain either more concrete details/specific examples (by laddering down) or more variety of the constructs (by pyramiding or exploring the range of possible subordinate constructs).

The current study made use of all the variations of the laddering technique described above as warranted. This is in line with the rationale described earlier explaining the two major purposes in using the laddering technique. As described, the advantage of ‘laddering down’ (in the sense of Jankowicz 2004) is that more subordinate or concrete personal constructs could be elicited by asking the respondent a consecutive series of ‘how’ and ‘what’ questions. As such, the respondent can be prompted to provide more details or examples based on the original elicited construct. In practice, the details or examples would help the respondent as

well as the researcher to review further if the names of the constructs (labelling of the constructs) provided during the elicitation stage using the repertory grid actually reflect what the respondent meant and hence provide a deeper understanding to the relevant constructs. It would also help both to review further if the constructs were in fact important in the process. The ‘pyramiding’ method in the sense of Jankowicz (2004) was also helpful for respondents who find it difficult to provide constructs. Compared to ‘pyramiding’, ‘laddering up’ is an important and indispensable method in the current study (specifically the second part). By means of asking the ‘why’ questions to elicit increasingly higher-order superordinate constructs, laddering up could help in understanding more fully respondents’ fundamental beliefs, personal values or preferences, and the meanings or implications behind each original construct elicited from the respondents (Jankowicz 2004; Fransella et al. 2002). As these ‘top’ constructs or core constructs are more important or central to the person concerned, more value laden, and are resistant to change (ibid.), it is useful to understand the impact of these high-order constructs on the respondents’ perceptions of tutor effectiveness which is an important part of the current study. Hence, it is possible that sometimes, the questioning process needs to be stopped before reaching the core or personal life values for a particular ladder (based on a lower construct), as the respondent could no longer provide a further answer to the probing ‘why’ question for higher constructs.

Figure 3.2 below shows three examples each illustrating the different uses of the laddering technique—laddering up, laddering down, and pyramiding.

Laddering up: (based on the construct: examples)

Interviewer: Why do you think that an effective tutor should provide more examples?

Respondent: I will be able to use these examples readily in answering assignments or examination questions.

Interviewer: Why is this important?

Respondents: I may get good results and then impress my employer.

Interviewer: Why is that important?

Respondents: I will earn respect from my employer.

Laddering down: (also based on the construct: examples)

Interviewer: You mentioned that an effective tutor should provide examples. What do you mean by that? Can you be more specific by citing an example?

Respondents: I appreciate more real life or illustrative examples than that provided by printed course material.

Interviewer: To be more exact, that would mean (paused)

Respondents: I expect tutors to relate course concepts or models to real life situations or to the present environment, as it will enhance learning.

Pyramiding: (also based on the construct: examples)

Interviewer: You mentioned that an effective tutor should provide examples. What kind of examples?

Respondents: Examples that are related to real life or to the workplace ... that can be readily quoted or used in examinations, or examples that relate to course concepts or theoretical models.....

Interviewer: Can you elaborate more on each type of the desired examples you have just mentioned quoting examples which your tutor have provided to you (The interviewer asked for specific examples provided by effective and ineffective tutors as perceived by the respondent)?

Figure 3.2 : Three examples each illustrating the different uses of the laddering technique—laddering up, laddering down, and pyramiding

At this point, it is useful to clarify that for the current study, the laddering down method as described was primarily used at the repertory grid interview session during the construct elicitation process. By requiring the respondents to provide greater details or examples, this invoke the respondents to an active searching and reflection thought process to produce more useful and relevant constructs to complete the grid. On the other hand, the laddering up method was primarily used in the second part of the current study (a separate interview session arranged for the high-achieving and low achieving students) to seek further meanings (in terms of consequences and values which are to be explained later) behind some of the selected constructs elicited from the original grid interviews. Subsequent presentation and analysis of the findings of the current study also follows this laddering categorization order accordingly.

To recapitulate the discussion made above, the individual constructs elicited during the repertory grid session using the grid technique (including downward laddering only) were first grouped for analysis as a whole and by different academic performance groupings. Further findings from separate interview sessions using upward laddering tapping into the ‘why’, that is, the respondents’ rationale behind some important grouped constructs, were then analyzed and presented separately for clarity. For the information gathered from the laddering up interview (i.e., second part of the current study), content analysis would be used in the same manner as the first part for categorizing and coding the respondents’ answers to the ‘why’ questions. However, unlike in the first part, the categorized and coded responses to the ‘why’ questions were further classified into *desired/perceived consequences* and *perceived values*, and were then presented in the form of hierarchical value maps (HVM) to facilitate further discussion and analysis.

The Hierarchical Value Map

The idea and concept of the hierarchical value map (HVM) is not new and has actually been in use for more than two decades. However, its use for the presentation and analysis of findings from the laddering technique has been predominantly in the field of marketing and consumer research than in education research as can be observed from a review of relevant literature (Gutman & Miaoulis 2003; Grunert & Grunert 1995; Gengler et al. 1995).

The origin of the hierarchical value map can be traced back to the means-end chain model or theory first posited by Gutman (1982) who was interested in finding out why certain product attributes of a specific brand (and ultimately the particular brand product) were preferred by particular groups of consumers. In essence, the means-end theory focuses specifically on the linkages between the favoured attributes that exist in products (the “means”), the desired consequences for the consumer provided by the attributes, and the personal values (the ‘ends’) the consequences reinforce (Reynolds & Gutman 1988). Put in another way, the means-end chain theory provides a theoretical framework for investigating these subjective associations by seeking to explain how consumers mentally link perceptions of product attributes to the attainment of basic life values through self-relevant consequences (Gutman 1982; Olson 1989; Grunert et al. 1995; Bredahl 1998). More succinctly, the means-end theory allows us to see not only the rationale underlying perceived important attributes but also investigate why consequences are important, specifically, personal values (Reynolds & Gutman 1988). Laddering which was also the technique used in the current study has been widely applied to reveal means-end structures among consumers (Hofstede et al. 1998).

The final outcome of the laddering data analysis based on the means-end model as described above is usually graphically represented in a tree-like diagram which is termed as a

hierarchical value map (having content-analyzed the individual responses based on the laddering up interview, and then sorted into three categories—attributes, consequences, and values (Reynolds & Gutman 1988; Valette-Florence & Rapacchi 1991). In short, the hierarchical value map is a kind of collective mental or cognitive map which is structural in nature, and represents the linkages or associations across levels of abstraction—attributes, consequences, and values held by particular groups of respondents or consumers under study (Valette-Florence & Rapacchi 1991). There are many ways to study and analyze a hierarchical value map (Gutman 1991). A qualitative approach would be mainly interested in the nature or the kind of attributes, consequences, and values elicited from particular groups of respondents, and the association between the specific paths/chains of linked up attributes, consequences, and values for the implications or meanings behind. The current study primarily adopted a qualitative approach although it is also interested in finding out and comparing the values held by most respondents (high achievers and low achievers). It is interested in what perceived consequences and values were identified from the two groups of respondents (high achievers and low achievers) based on their top five ranking constructs (preferred tutor attributes) elicited in the first part of the study. Interpretation would be made based on the findings on consequences and values, and the association between the specific paths/chains of linked up attributes, consequences, and values for the implications or meanings behind. Finally, a comparison of the findings between the two groups of respondents would be made. All these were facilitated with the use of a hierarchical value map.

For clarification, it would be useful at this juncture to define or describe in more details below, with illustrative examples as appropriate, some of the nomenclature or terms commonly used in association with the discussion on the means-end chain, the hierarchical value map, and the laddering up technique.

Ladders – the term refers to elicitation from *individual* respondents as contrasted to the term *chains* which is used in reference to sequences (or linkages) of elements (i.e., the coded constructs—attributes, consequences, values) which emerge from the aggregated data when the individual ladderred responses are categorized into codings. Figure 3.3 below shows a simple ladder (or path) based on the laddering up example shown in Figure 3.2:

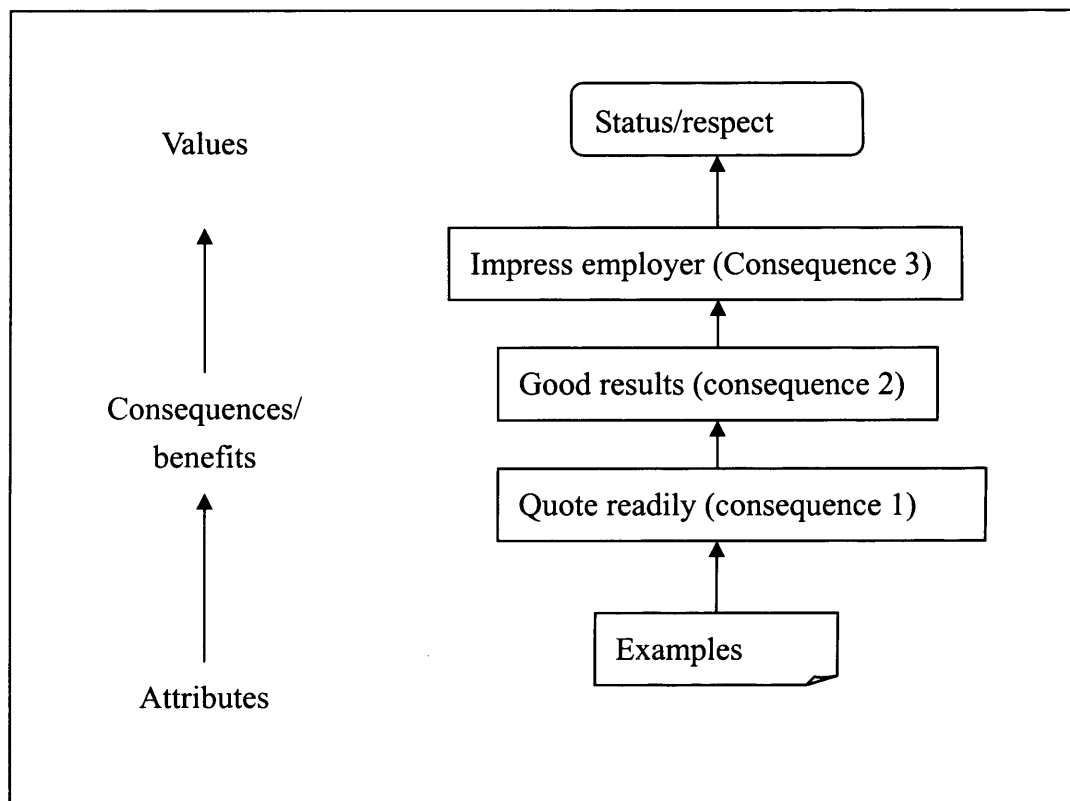


Figure 3.3: Example of a simple ladder based on the laddering up example shown in Figure 3.2

In contrast, a *chain* is an aggregate representation (with linked category codes as a result of content analysis and sorting of individual responses) of individual ladders as those illustrated above. As an illustration, the three *ladders* (Figures a, b, and c) below can be combined and represented in aggregate as a *chain*, as depicted in Figure 3.4:

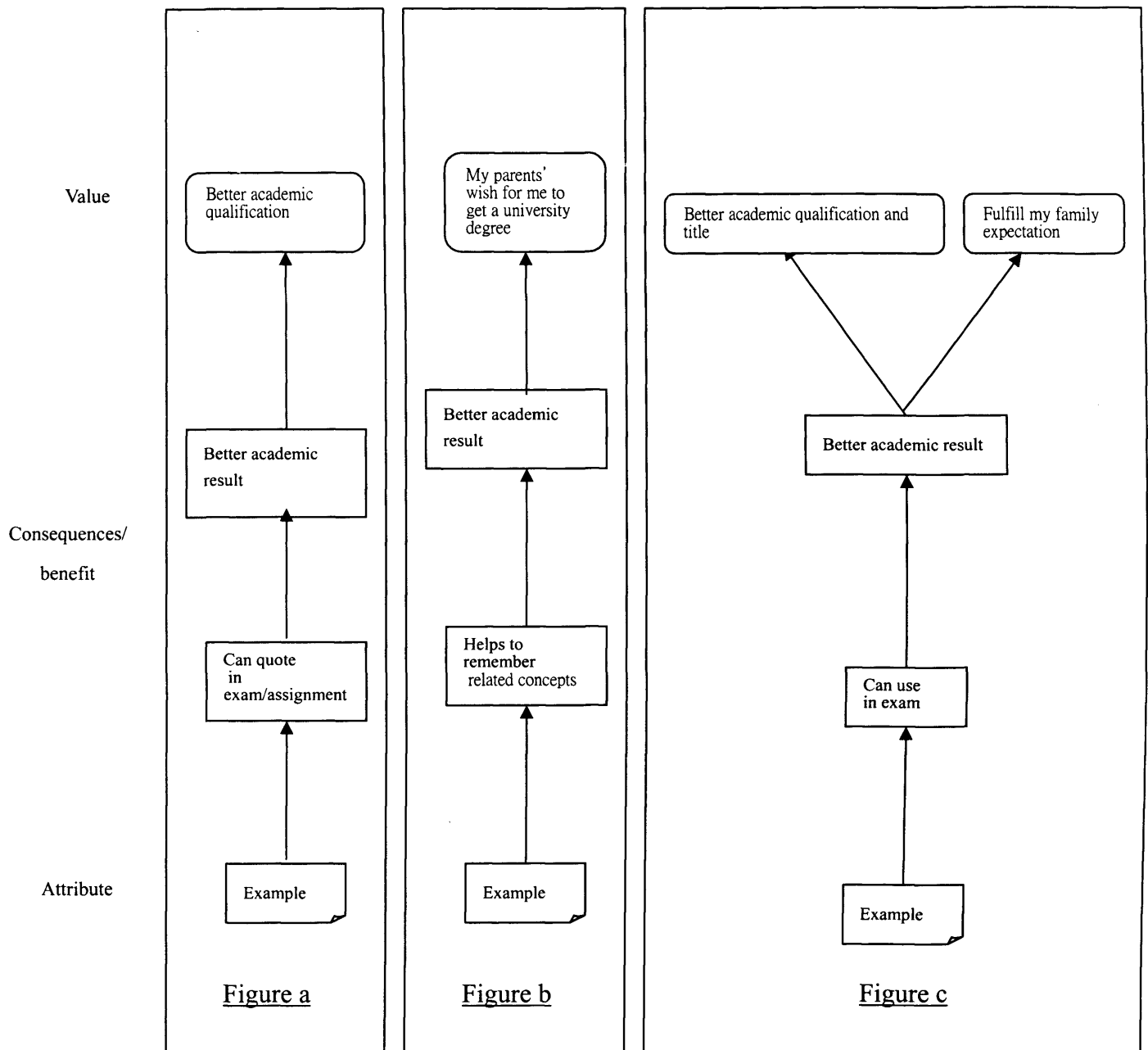


Figure 3.4 below shows a simple means-end *chain* which is an aggregate representation (with linked category codes as a result of content analysis) of the *three* individual ladders as shown in Figures a, b, and c above.

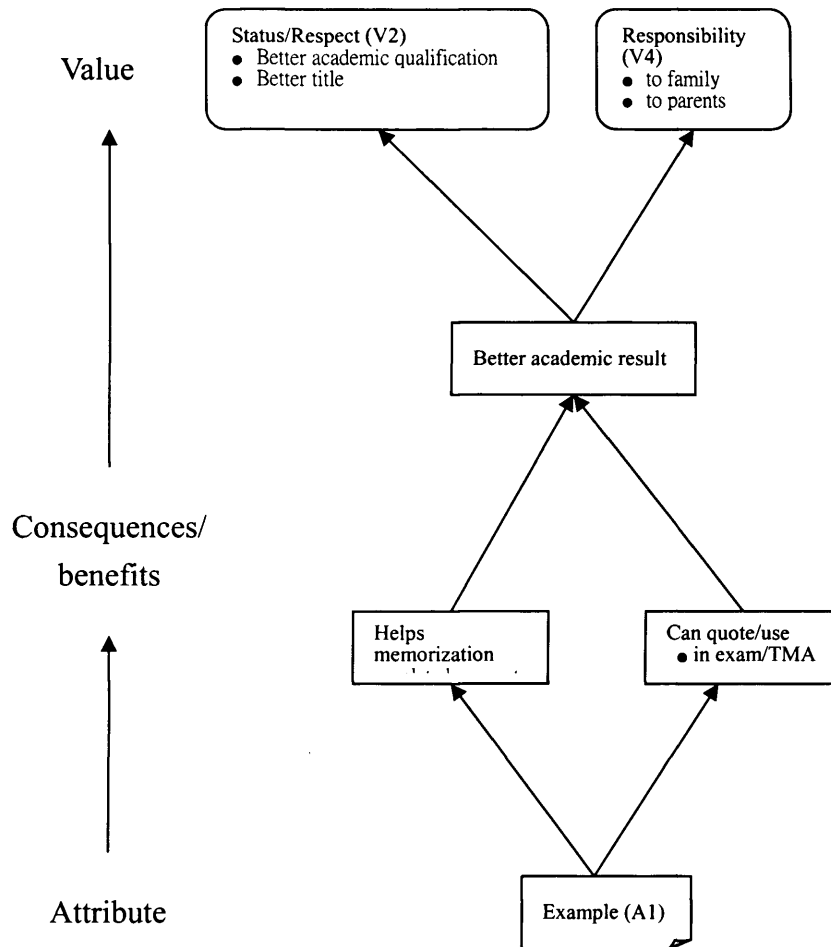


Figure 3.4: Example of a simple means-end chain constructed from aggregating the three ladders shown in Figures a, b, and c (based on a single-attribute example)

It can be noted from the example above of a simple means-end chain that the individual responses in the three ladders have been categorized into appropriate content categories with summary codes in brackets such as Status/Respect (V2), Responsibility (V4), and Examples (A1).

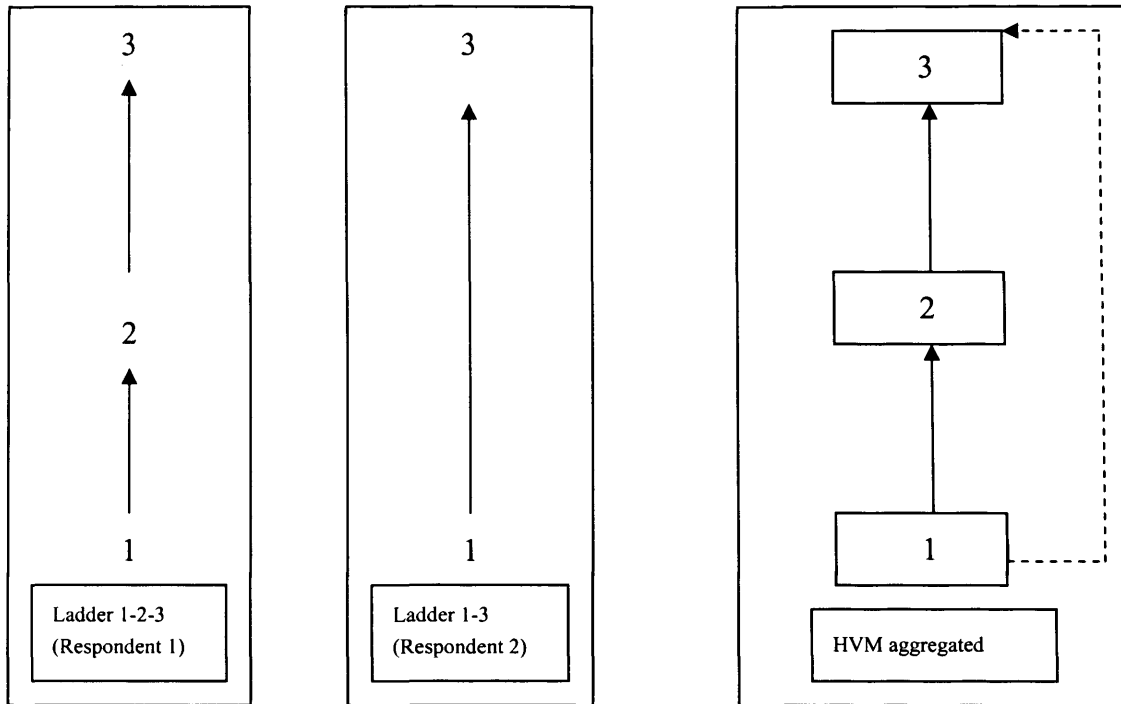
It is now time to consider and describe in details how to construct a hierarchical value map (HVM) which builds upon the concepts of *ladder* and means-end *chain* as building blocks. To recapitulate, an HVM is mainly a graphical representation of a set of means-end chains which can be thought of as an aggregate cognitive structure map for a particular group of respondents.

The HVM consists of nodes and lines (or links) which connect these nodes. The nodes of the HVM represent the important conceptual meanings (typically classified as attributes, consequences/benefits, and values) derived from data collection and content analysis. The line segments (the links) connecting these nodes represent the associations between these concepts. (As noted by Gengler et al. (1995), these associations are also often referred to as *implications*, meaning the perception of causal relationship between the concepts). However, the associations between categories are usually only presented in the HVMs if they have been mentioned directly or indirectly by a minimum number of respondents (usually with a cut-off level of three to five respondents) (Bredahl & Grunert 1998), or 10% of respondents in a small sample size (Jewell & Crofts 2001). The idea is to interconnect all the meaningful chains in an HVM in which all relevant relations (i.e., more frequently chosen, being above the minimum number or cut-off point) can be plotted without *crossing lines*, making the HVM easy to read and interpret. The use of a cut-off point serves two major purposes. It eliminates the inclusion of less salient/important links (relations) mentioned by only a handful of respondents (i.e., the minority) compared to the size of the sample. By doing so, overcrowding the map is avoided (Valette-Florence & Rapacchi 1991; Gengler et al. 1995).

Another way to avoid overcrowding a hierarchical value map (by following the usual recommended practice or convention) is to ensure ‘nonredundancy’ in drawing up the links (associations or implications) for the HVM (Gengler et al. 1995). As explained aptly by Gengler et al. (1995, p230), “nonredundancy means that if category 1 at abstraction level A (for example, attribute A1) is linked to category 2 at abstraction level B (for example, consequence C1) which again is linked to category 3 at abstraction level C (for example, value V1), then there should not be a direct link between categories 1 and 3, because such a link would be redundant (in showing the relationship between categories 1 and 3)”. (The word in brackets in the excerpts has been added by the author of this thesis for elucidation).

In short, if respondent 1 has a ladder $1 \rightarrow 2 \rightarrow 3$, and respondent 2 has a ladder $1 \rightarrow 3$, then in the HVM at the aggregate level, it is only necessary to show (i.e., draw) the link $1 \rightarrow 2 \rightarrow 3$ (which is supposed to represent as well the links $1 \rightarrow 3$ which are linked indirectly). There will then be no link $1 \rightarrow 3$ shown in the HVM, even if such links are observed at the individual level/ladder. Figure 3.5 below illustrates how the two individual ladders, i.e., $1 \rightarrow 2 \rightarrow 3$ (from respondent 1) and $1 \rightarrow 3$ (from respondent 2) would be shown in a simple HVM.

Figure 3.5: A simple HVM aggregated from two ladders



As shown above in Figure 3.5, there is no need to draw a direct link 1-3 (i.e., the dotted link) in the aggregate HVM, as it is considered *redundant* (as explained above). It is assumed that the link 1-3 is already subsumed in the chain 1-2-3 in the aggregate HVM. Note that two types of relations (also referred in various terms as either associations, links, paths, or implications in the HVM literature) have been shown in the ladders depicted in Figure 3.5, namely, *direct* and *indirect* relations. To recapitulate, *direct* relations refer to relations between adjacent nodes (i.e., categories/concepts/elements) such as the *two* direct relations $1 \rightarrow 2$ and $2 \rightarrow 3$ for respondent 1 and the *one* direct relation $1 \rightarrow 3$ for respondent 2. As such, it is obvious that direct relations refer to *pairwise* associations. On the other hand, *indirect* relations refer to nondirect associations made by virtue of the concepts/categories/elements mentioned together in the same means-end chain. Thus, the relation $1 \rightarrow 3$ is referred as an *indirect* relations in the aggregate HVM. As a further illustration based on the same rule, in a longer ladder $1 \rightarrow 2 \rightarrow 3 \rightarrow 4 \rightarrow 5$, the 1-2 relation is a direct one as it is for 2-3, 3-4 and 4-5. However, there are many more indirect relations such as 1-3, 1-4, 1-5, 2-4 and so on within the same ladder, as can be identified from any other given ladder.

Having explained the ideas of cut-off point, nonredundancy, and direct/indirect relations, the final stage in the actual construction of an HVM can be described. In short, having categorized the raw data or idiosyncratic concepts resulting from the individual laddering interviews into categories (attributes, consequences, or values) with assigned content codes, an *implication matrix* can be constructed based on the number of times each content code (categorized concepts) led into another content code. More specifically, the implication matrix is an asymmetrical dominance matrix in which the content codes (categorized concepts) constitute both the rows and columns. The cell entries indicate the frequencies across all respondents in a particular sample with which an attribute, consequence, or value (i.e., the row elements) leads directly or indirectly (through one or more other concepts) to another attribute, consequence, or value (i.e., the column elements). From the implication matrix, the HVM can be drawn or constructed (with an appropriate cut-off point) depicting the content and structure of the sample respondents' knowledge or perception about the product (effective tutors for the current thesis) in a graphical way which is in effect an aggregate network representation of the relevant means-end chains (Hofstede et al. 1998; Morris et al. 2004).

For illustration, Appendix 2 shows an example of a *simplified* implication matrix table reproduced from Reynolds and Gutman's published journal paper on a *hypothetical* wine cooler example (Reynolds and Gutman 1988, p. 21). The cell entries (i.e., the numbers) in the matrix are expressed in fractional forms with direct relations to the left of the decimal and indirect relations to the right of the decimal. (For example, in the matrix, it is shown that 'carbonation' (attribute element 1) leads to 'thirst-quenching' (consequence element 12) four times directly and six times indirectly. The cell entry is shown as "4.06"). The summary content codes for the categorized attributes, consequences, and values are shown immediately under the implication matrix in tabular form in the same appendix for

easy reference. The resulting HVM (again reproduced from their paper) is shown in Appendix 3.

In practice, the implication matrix tables would look more complicated and contain more data than the *hypothetical* wine cooler example illustrated by Reynolds and Gutman. In fact, the tedious manual work in drawing up the implication matrix and the associated HVM as described can be replaced by means of a computer software package called Laddermap specifically developed by Gengler and Reynolds for the purpose (Gengler & Reynolds 1993; Morris et al. 2004). However, the use of a computer software is not employed for the current study, as the number of respondents involved is relatively small, and the manual processing work is still manageable.

The methodology for constructing a hierarchical value map has just been explained. In line with the secondary research objective of this thesis, the second part of the current study is to seek further explanations or rationale behind the *most favoured constructs* (for effective tutors) identified by two distinct groups of respondents of different academic performance levels (i.e., the high-achieving students and low-achieving students) in the first part of the study through the repertory grid. In total, there were 22 respondents made up of 11 high-achieving students and 11 low-achieving students. The methodology for the second part of the study includes constructing a hierarchical value map for each group of respondents segmented by high academic performance and low academic performance, and then followed by the presentation and analysis of findings based on the respective HVM and the interview transcripts.

For simplicity in presenting the findings of this part (in next chapter) and the subsequent analysis (in Chapter 5), the conventional terms *attributes*, *consequences*, and *values* will

be adopted, as they are used in most other studies using HVMs. Nevertheless, it should be understood that for the current study, the term *attributes* in effect refer to the *most favoured constructs* (i.e., those constructs or tutor attributes forming important profiles of effective tutors) most valued by the students of different academic performance levels (identified with the Repertory Grid Technique in the first part). The term *consequences* then refers to the self-relevant intermediate values, benefits, or more concrete consequences derived or accrued from the particular tutor attribute (i.e., the most favoured construct) as perceived by the respondents. In the same vein, the term *values* refers to the *core values* or the fundamental values (or topmost values obtained by laddering up) perceived by the respondents as necessary to be fulfilled *albeit indirectly* owing to a particular tutor attribute (i.e., the most favoured construct) through the intervening intermediate stages of *consequences* (intermediate values or benefits). In order that the interview discussion would be more focused (and the resulting HVM be kept in manageable sizes and complexity), it should be noted that the laddering up interviews were based on the *top five* ranking constructs (representing the so-called *most favoured constructs* or tutor attributes forming the important profiles of effective tutors) identified with the Repertory Grid Technique in the first part.

As explained in the previous sections, there are many ways to analyze a drawn-up hierarchical value map. To recapitulate, the current study (secondary objective) is interested in analyzing the *content* and *structure* of the resulting HVMs drawn up based on the most favoured constructs for the two groups of respondents segmented by academic performance levels. More specifically, *content* refers to the various attributes, consequences, and values (i.e., classified as different content codes) which occur in an HVM and/or are mentioned by the respondents. In contrast, *structure* refers to the association between the paths/chains of linked up attributes, consequences, and values (different content codes). It is considered that

investigating the content and structure in this way would help enhance the understanding of the rationale behind the *most favoured constructs* (for effective tutors) identified by two distinct groups of respondents of different academic performance levels (i.e., the high achieving-students and low-achieving students), which is the secondary research objective of this thesis.

Question on Research Access and Ethics

From the previous description of the methods of data collection and analysis, it is evident that the details of the actual identity of the tutors chosen by the respondents to associate with the set of elements for elicitation of grid constructs would not be disclosed in the presentation of findings. All the respondents (not tutors) were invited to participate in the interview by means of a letter (Appendix 6) explaining the purpose and nature of the research. It was made clear that the interview would be in-depth and would use the grid technique for construct elicitation. The high-achieving and low-achieving learners (Pass 1 and Pass 4 respondents) were further interviewed using the laddering up technique.

According to Measor (1985), access is defined as not only obtaining agreement for the interview but also “the process of building relationships with people you want to interview and hence getting access to their life and view of the world” (p. 57). While time was limited for building relationships, the fact that the respondents were students of the Institution and that the researcher was an internal academic staff facilitated the establishment of a degree of rapport with them. In fact, the students of the Institution in general showed an affective relationship and respect for the academic staff probably because of the prevalent ethnic Chinese culture or because of socialization toward authority figures (or teachers) from early educational experience, although the cause has never been formally established.

Rapport with the respondents was further enhanced through the courtesy and attentiveness of the researcher. The respondents were encouraged to speak their minds freely and reminded not to provide answers simply to please the researcher because of his academic position or title held in the Institution. Johnson (1994) emphasizes the need to ensure that the respondents have a largely interesting and enjoyable experience. In the interview invitation letters sent to the respondents, a short description of the Repertory Grid Technique was included in addition to the explanation of the purposes and nature of this research in order to evoke the respondents' interest in participation. Throughout all interviews, the following advice by Johnson (1994) was also followed whenever appropriate: "A more flexible style is used, adapted to the personality and circumstances of the person interviewed" (p. 45).

In order to be free from unexpected interruption during interviews, the interviews with the respondents took place in a designated interviewing room in the Institution. The time and date of interview were decided by mutual agreement, but the convenience of the respondents was the key consideration.

In the letter to the respondents, they were assured that their anonymity and confidentiality would be kept. Their consent and assistance were also sought for recording the interview and verifying the accuracy of the transcripts of their own individual interviews. The transcripts were sent back to them for confirmation before the analysis of findings based on the transcript notes.

As the study involves collecting data about individual tutors and specifically, their possible effectiveness or ineffectiveness, it is understood that the data has to be handled in a sensitive and careful manner. Care has been taken to ensure that the study's findings should cause no adverse impact on any current academic staff or tutor working for the Institution. As indicated above, the respondents would be asked to write down only the surname of the tutors on the

cards to facilitate elicitation of constructs. The cards were destroyed after the interviews, and the true or full identity of the tutors would not be known to the researcher or further released to other parties. Nevertheless, all the academic staff in charge of those relevant courses (from which the respondents were drawn) were informed of this research as a matter of courtesy. Such academic staff include the course coordinators, the strand leader and the programme leaders. The President of the Institution, and the Dean of the School of Business and Administration (business school) of the Institution are aware of the current study, as funding was sought to cover the mailing expenses and other logistical arrangements such as the provision of air-conditioned interviewing rooms in connection with the study during and after office hours. In fact, the service of a part-time research assistant in the business school had been sought in the course of categorizing the elicited grid constructs, and in defining and refining the categories together with the researcher of this study (for both parts of the current study). The research assistant was a final year student for a doctoral degree at the University of Hong Kong. It is considered that the corroborative effort could have helped improve the construct or content validity of the categories so negotiated and defined. The issues of validity and reliability of the methodology are further discussed below.

Validity and Reliability of the Methodology

The concept of validity is concerned with whether the research accurately describes the phenomenon which it is intended to describe or, as defined by Sapsford and Evans (1984, p.259), "Validity is the extent to which an indicator is a measure of what the researcher wishes to measure". Researchers have to address several types of validity including construct validity, internal, and external validity. The relevant issues are discussed below.

Construct validity

Construct validity is concerned with whether the operational indicators chosen actually measure the concepts being studied. The current study was mainly concerned with studying the notion of tutor effectiveness, drawing respondents from different academic profiles. It closely followed three essential tactics. First, the views of students of different academic profiles were collected and analyzed, individually and collectively, by means of the grid interview method, laddering technique, and content analysis. The second tactic was the maintenance of a chain of evidence. This was achieved through the development and use of a standard interview protocol (or field guide) for data collection, the custody of notes of interview transcripts, and the citation in the final report of the evidence in the database. The third tactic was inviting respondents (interviewees) to review and comment on the data collected from his own individual interview, and ensuring that there was no major disagreement on the recorded view. The tactics described actually followed those recommended by Yin (1989, p. 33) except for the last one which was to a certain extent modified, because Yin suggested to have “the key informants (meaning respondents) review the draft study report”. However, this is considered impractical, as it would entail too much workload on the respondents (students) of the current study. Perhaps the respondents would only be interested in reading the abbreviated findings.

Internal validity

In its narrow sense, internal validity refers to the identification and establishment of a causal relationship between variables. More broadly, internal validity refers to the problem of

making inferences (Yin 1989, p. 35) or addressing the explanatory questions of ‘how’ and ‘why’ (Yin 1994, p. 8). For the current study, the latter interpretation seemed to be more relevant. It entailed making inferences from plausible explanations for the evidence being analyzed. In short, it is related to the degree of credibility of justifications/explanations provided by the respondents with regard to the different constructs elicited from them. It also related to whether the different identified profiles of effective tutors (for different academic grouping of respondents) could be further explained by virtue of the respondents’ academic performance as variables.

External validity

External validity is concerned with whether and to what extent the findings can be generalized. Yin (1989) argued that generalization is not a matter of statistical generalization but a matter of analytic generalization (using single, multiple cases to illustrate, represent, or generalize a theory). According to Feagin et al, (1991), it is not merely a question of how many units but rather what kind of unit is under study; it is the nature of the phenomenon that is more important as the true gauge of the population to which one seeks to generalize. In a way, the current study adopted the analytic generalization stance, although its main concern, being more practice oriented, was more with the applicability to the learners within the immediate context of the researcher’s institution–The Institution–and not the larger universe.

Reliability

Reliability generally refers to the fitness for purpose of the research instrument, and the possibility of replicating findings:

“Reliability is the extent to which a test or procedure produces similar results under constant conditions on all occasions.” (Bell 1987, p. 50-51)

The fitness for purpose of the specific research instruments composed of the repertory grid and the laddering interview has been discussed previously in various parts of this thesis. Regarding the possibility of replicating findings, two operational tactics were used including the use of an interview protocol to direct the data collection activities (for the grid interview), and the development of a database (custody of notes of interview transcripts) as described in the discussions on construct validity made above. The tactics followed essentially those suggested by Yin (1989, p. 33) in his discussion of ways to improve reliability (of case studies). In addition, it could be noted that a check on the robustness of the categories of grouped constructs in this study provided further evidence of the reliability or replicability of the study (or at least part of it). In that exercise, the random selection of 100 constructs were first made from the pool of all individual constructs (533 in total; see Chapter 4) elicited from individual grids. Then both the research assistant (referred to in the previous discussion) and this researcher assigned, separately and independently (i.e., without consulting each other), the selected identical constructs into the ‘construct categories’ (i.e., the 31 ‘grouped construct’ categories; which were previously determined as explained in the previous section and in Chapter 4) considered as most appropriately fitting the description and meaning. It was found that there was more than 90% agreement in terms of the number of match of same constructs assigned to the same categories by different persons (i.e., the research assistant and this researcher).

In view of the predominantly interpretive research paradigm adopted by the current study, perhaps reliability should be viewed less as a function of replicability. Instead, the credibility of the trained and informed researcher should be viewed as a strength in terms of ensuring reliability and validity. In fact, Seidman (1991, p. 16) pointed out the importance of the role

pointed out that since the interviewer is a part of the research instrument, their conceptual interest, familiarity with the research subject and investigative skills would help enhance reliability and validity. As summarized by Merriam (1988), “Rigor in qualitative research is derived from the researcher’s presence, the nature of interaction between the researcher and participants, the triangulation of data, the interpretation of perceptions, and rich, thick, descriptions” (Merriam 1988, p. 166). It is hoped that by paying attention to such salient issues in data collection and analysis, in addition to the researcher’s experience in academic research, his familiarity in the topic of study, and interest in students (the emic/insider perspective), the reliability and validity of the study can be enhanced.

Conclusion

In this chapter, the rationale for using an interpretive case study research approach was first justified. It was explained that the approach is compatible with the purpose of this study and the research questions which have an interpretative focus. Secondly this approach entails less preconceived assumptions, as distinct from large-scale surveys having preset questions. It was further pointed out that the current study is essentially an exploratory case study with a number of characteristics fitting the case study descriptions provided by Robson (1993), Johnson (1994) and Miles and Huberman (1994). Despite the interpretative emphasis, it was highlighted that the current study does incorporate some important characteristics of the positivist approach which included the methodological rigor in the use of repertory grid technique and the case study methodology/procedures advocated by Yin (1994), a leading positivist proponent.

From an ontological perspective, the grid technique and laddering interviews provided ample opportunities for the researcher to probe, verify or interpret the exact meaning,

implications or underlying rationale behind a large pool of elicited constructs about tutor effectiveness. It was made possible with the use of grid technique and laddering interviews.

A purposive sampling strategy was employed to select the sample of respondents studying specific courses in the business school of the Institute (Table 4.6 at Appendix 7, p.189). A comprehensive account of the method of data collection and analysis including content analysis, the origin and use of the repertory grid method, the laddering technique, and the hierarchical value maps (HVM) was provided on pages 59-83. In short, it was explained that for the first research objective, the respondents would be asked to think of seven elements (representing seven tutors of different levels of effectiveness) to facilitate elicitation of their constructs (representing different aspect of tutor effectiveness) by means of the triadic method. A comprehensive account was then given on how the laddering-up technique and HVM could help to elicit/identify higher-order constructs (consequences and values) from respondents to fulfil the secondary research objective- which would provide added understanding on the rationale behind the preferred tutor effective profiles identified in the first part for high and low achievers. The issue of research ethics and access was then addressed. It was explained that proper measures were taken to ensure confidentiality and to facilitate research access which included assuring respondents of their anonymity and confidentiality and that the findings should cause no adverse impact to any person including academic staff/tutor of the Institution.

The chapter concluded with a discussion of the reliability and validity of the methodology used which included the current study's analytic generalization stance and its adoption of essential tactics recommended by Yin (1989) to enhance the validity and reliability. The importance of the trained and informed researcher and the robustness of the categories of grouped constructs as credentials of reliability were also highlighted.

Chapter 4 The pilot study and findings of the main study

Introduction

In this chapter, the pilot study which led to the modification or refinement of the research instruments and data collection procedures will be discussed. It is followed by the presentation of the findings from the repertory grid and the laddering up interview.

The pilot study

The purposes of pilot study

The pilot study is considered useful with a number of main considerations. With regard to the use of the repertory grid as a research tool, the majority of the respondents are expected to be unfamiliar with its format and the use of the repertory grid for interview. The researcher of the current project was interested in knowing beforehand the difficulties that may be encountered arising from the research design and method. This is in line with the aim of eliminating or minimizing the difficulties in facilitating the grid interview, and enhancing the quality of data gathered. It was also important to ensure that the elements used in the grid were within the 'range of convenience' (Kelly 1955) of the respondents, and that they would produce the kinds of constructs that suit the research purpose. As suggested by Steward (1997), the latter kind of pilot is never to be discarded, and it should always be done.

With regard to the use of laddering up interview in the second part of the current study, the pilot test was mainly used to decide the time and the extent of difficulty involved in the elicitation of the consequences and values. In particular, the researcher was interested in knowing whether it would be difficult to elicit values from the respondents, as it has

been reported in the literature that sometimes, the values are too sensitive or somewhat unconscious for the person concerned (Jankowicz 2004; Fransella et al. 2002).

Lastly, the pilot test was useful in making an estimate of the total time or resources required to complete the work. Given that the use of the repertory grid and laddering interview is a relatively complicated and time-consuming task, it is especially important to ensure that the whole process could be carried out and managed in the most efficient manner.

The administration of the pilot study

With the above purposes in mind, the pilot study was administered to a small sample of students in the Institution who studied two high-level courses (i.e., B343 Managing in Organizations, and B341 Labour Relations and Law) which are different from the courses chosen for the main study. For the pilot test on the repertory grid, one high-achieving, two average-performing, and one low-achieving learner for each course were chosen for the interview (similar to the sampling method adopted for the first part of the current study). To recapitulate the sampling method, the high-achieving learner referred to the rank 1 student in the Pass 1 band for each of the two courses, the two average-performing learners consist of one in the very bottom of Pass 2 and one in the very top of Pass 3, and the low-achieving learner is from the very bottom of Pass 4. For the pilot test on the laddering up interview (elicitation of consequences and values), two high-achieving and two low-achieving learners for each course were chosen for the interview (as the second part of the study aimed at comparing the findings on these two groups of respondents).

In view of the considerable length of time required for each interview, only a small sample was chosen for the pilot study. It was considered that the size of the sample would not have adverse effect on the validity of the research study, in so far as the purpose of the pilot is to improve the research design and instruments. It would be useful to mention that a larger sample for the pilot study could pose other problems, because some respondents might be chosen again for the main study, as some could have obtained the same result statuses in the course selected for the main study (i.e., a Pass 1 holder for a particular course may also be holding the same status for another course). It is also preferable not to inform other potential respondents of the main study beforehand, so that they would not be able to prepare any answers beforehand.

The findings of the pilot study were not included in the main study's findings.

Modifications in light of the pilot study

For the repertory grid interview, a succinct, simplified, and partially completed repertory grid (Appendix 4) with the main features of the grid was prepared for illustration and brief explanation to the respondents before commencement of the interview. This was a pre-emptive measure to prevent the respondents from asking unnecessary questions either for clarification or out of curiosity, and to familiarize them with the format and the type of constructs they were to supply. The number of elements used for the elicitation of constructs was limited to seven elements. It was considered that the use of more elements were simply not practical, as it would take up too much time. Furthermore, some respondents might not have met a lot of tutors or found it too tedious to distinguish too many tutors. In spite of the seven elements, the respondents of the main study were asked to rank them on each construct with ratings of one to five instead of ranking them from one to seven which was also a common practice with the Likert scale. It was considered

that the respondents of the pilot study simply found it too difficult to make the fine distinction and do the seven-rating ranking.

In light of the experience in administering the grid, it was found that from time to time, it would be necessary to assist respondents in formulating appropriate wording or descriptions of a particular construct. Sometimes, it would simply take time for a respondent to arrive at a construct if left unassisted, or occasionally, a particular respondent would simply talk about a past experience with a particular effective or bad tutor, and would drift away from the main purpose of the grid. Some respondents also encountered difficulties in translating the constructs or descriptions in Chinese to English to be written in the grid. Care had to be exercised in helping the respondents so as not to distort the real meaning simply because of language barrier.

For the pilot laddering up interview, it was found that the scheduled time of about one hour per session was just adequate for the elicitation of consequences and values based on the constructs elicited from the first part of the grid interview. The respondents did need some time or help in the elicitation of values. It was found that encouragement given to the respondents and a little patience to wait for the replies would eventually pay off. It was also important not to be put-off or intimidated by short periods of complete silence while the respondents were thinking as the respondents would then usually be able to elaborate on their values. As a result, in the main interview, the respondents were often reminded about or greeted with appropriate encouraging words (such as “your genuine answer on values held would be very important for the validity of this study”). Considerable patience was also exercised by the researcher in the course of eliciting values in the main interview.

Findings of the main study

The profile of the respondents

The profile of the respondents for the study is shown in Tables 4.1 to 4.5 below and in Table 4.6 (Appendix 7). The various tables were generated using a standard SPSS software package version 10 after inputting the data based on the statistics of the background of the respondents provided by the Registry of the Institution. In essence, 34 out of the 44 prospective respondents accepted the invitation for the main study, and were interviewed for the repertory grid and the semistructured interview. This represented an overall response rate of about 77%.

More specifically, out of the eight chosen higher-level courses, all Rank 1 students in the Pass 1 band (i.e., high achievers; eight in total or representing 100% of the targeted respondents in this group) and all low-achieving students in the very bottom of Pass 4 (i.e., eight in total; representing 100% of targeted respondents in this category) accepted the invitation for the study. However, in contrast, only 12 out of a total of 16 eligible respondents in the category of average-performing students (i.e., the category consisting of one in the very bottom of Pass 2 and one in the very top of Pass 3) accepted the invitation for the study (representing a 75% respondent rate for this group). As for the three chosen lower-level courses, all Rank 1 students in the Pass 1 band (i.e., high achievers; three in total or representing 100% of the targeted respondents in this group) and all low-achieving students in the very bottom of Pass 4 (i.e., three in total; representing 100% of targeted respondents in this category) accepted the invitation for the study. In contrast, no eligible respondents (six in total; two for each lower-level course) in the category of average-performing students accepted the invitation for the

study (representing a 0 % respondent rate for this group). A breakdown of the interviewed respondents by chosen courses and result statuses out of the total prospective interviewees are shown in Appendix 7.

The relatively lower respondent rate for the average performing categories for both higher-level and lower-level courses simply reflect that the average performers were less concerned about the impact of their academic performance than the high or low achievers. In fact, this is to be expected as past experience in the Institution showed that average performers were much less interested in answering opinion surveys. Moreover, the Institution's students only tended to be more responsive if they had met some very effective tutors to their extreme liking, or they were very dissatisfied with some poor performing tutors. The relatively low respondent rate for the average performers should not have any significant impact on the validity of the research findings, as this study was more concerned with the perceptions of high and low achievers than of average performers. It is also worth noting that not all respondents accepted the invitation for the study outright. Some only agreed to participate because of repeated persuasions by the researcher.

Table 4.1: Gender of respondents

Gender	Frequency	Percent
Female	22	64.7
Male	12	35.3
Total	34	100.0

Table 4.2: Age distribution of respondents

Age	Frequency	Percent
21-30	10	29.4
31-40	22	64.7
41-50	2	5.9

Total	34	100.0
-------	----	-------

Table 4.3: Occupation of respondents

Occupation	Frequency	Percent
Clerical, secretarial	18	52.9
Managers, professionals	10	29.4
Unemployed	1	2.9
Others	5	14.7
Total	34	100.0

Table 4.4: Previous educational level of respondents

Education Level	Frequency	Percent
University	1	2.9
Subdegree / diploma	12	35.3
HK A Level / GCE A Level	7	20.6
HKCEE / High Level	10	29.4
Others	4	11.8
Total	34	100.0

Table 4.5: Length of study (in months) with the Institution

Length of study	Frequency	Percent
13-24 months	5	14.7
25-36 months	4	11.8
over 36 months	25	73.5
Total	34	100.0

Research Findings

The following were the findings of the main study which were categorized in main themes, and were presented in line with the research objectives and questions.

Elicited Repertory Grid constructs

A total of 533 (or 507 if identical/repeated constructs elicited from the same respondent were not counted) individual constructs were elicited from the repertory grid interviews from 34 respondents. On the average, about 15 to 16 individual constructs were generated from an individual grid interview, and this number was considered reasonable. In consideration of the sufficient time that had to be budgeted for the interviewees to think of suitable constructs and their appropriate wording, sometimes with the help of the researcher, the average figure could be described as even slightly better than the norm. The norm is the average number of constructs elicited per grid in past research studies using the Repertory Grid Technique for different purposes to complete the grid interview within about one hour (See for example, Reid & Johnston 1999; Hallsworth 1988; Timmermans et al. 1982 quoted in Hallsworth 1988).

A total of 34 individual grids were completed. The content analysis and categorization of all the elicited constructs revealed how different groups of respondents perceive effective tutors. The individual elicited constructs were sorted into 'different categories' (called 'grouped constructs') as a result of the content analysis. To facilitate later discussion and analysis, the grouped constructs were further classified into five categories: Skills, Behaviour, Attitude, Knowledge, and Others according to a layman's understanding of

those terms. For example, skills simply mean that certain competency had to be demonstrated or manifested in performing a task corresponding to the elicited construct/attribute. When it was in doubt if skills were involved for a certain elicited construct, the relevant construct would be ascribed to Behaviour or other categories as the case may be.

Following the classification as described in the preceding paragraph, 17 grouped constructs were classified in the Skills category, 8 in the Behaviour category (one grouped construct is named Miscellaneous which is actually consist of 11 individual mutually exclusive items), 5 in the Attitude category (also with one grouped construct named Miscellaneous which is actually consist of 5 individual mutually exclusive items), 3 in the Knowledge category, and 6 in the Others category. As such, 39 grouped constructs were identified all in all.

Table 4.7 to Table 4.11 (pages 108 to 110) show all of the grouped constructs (including the two miscellaneous grouped constructs in the Behaviour and Attitude categories, and the six items in the Others category).

Table 4.7: Grouped constructs in the skills category

Grouped constructs under the Skills category	Examples of individual constructs elicited
Examples	<ul style="list-style-type: none"> ● Real-life/practical/work-related examples ● Personal relevant examples ● Interesting example
Stimulates/motivates students	<ul style="list-style-type: none"> ● Stimulates insight ● Stimulates interest in course ● Insightful comments
Time management	<ul style="list-style-type: none"> ● Covers course in appropriate depth ● Suitable pace of teaching
Coverage of main points/difficult parts	<ul style="list-style-type: none"> ● Highlights difficult part of course ● Highlights important concepts/points
Explanation	<ul style="list-style-type: none"> ● Clear explanation ● Concise and relevant explanation
TMA comments	<ul style="list-style-type: none"> ● Pinpoint strength and weakness of TMA ● Useful/constructive TMA comments
TMA preparation	<ul style="list-style-type: none"> ● Adequate TMA guidance ● Explains TMA requirement
General teaching skills	<ul style="list-style-type: none"> ● Competent to handle student questions ● Raises questions and have appropriate answers
Communication skills	<ul style="list-style-type: none"> ● Easy to understand ● Articulates ideas well
Use of groups/activities	<ul style="list-style-type: none"> ● More active student/class participation ● Relevant in-class activities
Interaction	<ul style="list-style-type: none"> ● Cares about/attentive to student response ● Two-way communication
Presentation	<ul style="list-style-type: none"> ● Well-organized/systematic presentation ● Succinct relevant presentation
Organization	<ul style="list-style-type: none"> ● Well organized ● Well-organized lecture
Understanding of students	<ul style="list-style-type: none"> ● Understands students' study needs ● Attentive to individual student ability ● Understands students' learning difficulties
Teaching aids	<ul style="list-style-type: none"> ● Variety of teaching aids ● Suitable visual teaching aids
TMA techniques	<ul style="list-style-type: none"> ● Ways to improve TMA ● Discusses TMA technique
Exam technique	<ul style="list-style-type: none"> ● Discusses exam technique

Table 4.8: Grouped constructs in the behaviour category

Grouped constructs in the Behaviour category	Examples of individual constructs elicited
Tutorial variety	<ul style="list-style-type: none"> • More variety than following course materials • Balanced activities
Handouts	<ul style="list-style-type: none"> • Use of Cantonese (written language); easy to understand • Useful handouts (given in class)
Participation/discussion/group discussion	<ul style="list-style-type: none"> • Encourages student participation • Encourages group/class discussion
Student questions	<ul style="list-style-type: none"> • Encourages/welcomes student question • Encourages questions on difficult/higher-level concepts
Command of confidence	<ul style="list-style-type: none"> • Mature look • Confident/self-confident
Advice before tutorial	<ul style="list-style-type: none"> • Advice to prepare for tutorials • Reminds to submit assignments
Follow up on TMA performance	<ul style="list-style-type: none"> • Follows up on TMA performance by phone
Miscellaneous	<ul style="list-style-type: none"> • Easy to contact • Fast response to students • Always punctual • Reminds student to follow study schedule • Stays after class to answer questions • Prepares students for examination

Table 4.9: Grouped constructs in the attitude category

Grouped constructs in the Attitude category:	Examples of individual constructs elicited:
Teaching attitude	<ul style="list-style-type: none"> • Patient • Enthusiastic/eager to teach
Friendly/approachable	<ul style="list-style-type: none"> • Friendly/approachable
Care/concern for student	<ul style="list-style-type: none"> • Cares for student performance • Concern for individual student
Helpful attitude	<ul style="list-style-type: none"> • Helpful • Sympathetic
Miscellaneous	<ul style="list-style-type: none"> • Students feeling more relaxed • More directive style • Lively • Active • Polite

Table 4.10: Grouped constructs in the knowledge category

Grouped constructs in the Knowledge category	Examples of individual constructs elicited
Good subject/course knowledge	• Good subject/course knowledge
Well prepared	<ul style="list-style-type: none"> • Well-prepared lectures • Well-prepared tutorial
Informative	• Informative lectures

Table 4.11: Grouped constructs in the others category

<u>Grouped Constructs - Others Category</u>
Legible TMA comments
Specific TMA comments
Not overstrict in awarding TMA score
Learns more compared to other tutors
Exam oriented
High/better tutorial attendance

Table 4.12 below shows all of the 31 grouped constructs (excluding the two miscellaneous grouped constructs in the Behaviour and Attitude categories, and the six individual items in the Others category) with ranking in descending order according to the frequencies mentioned by the respondents.

Table 4.12: Grouped constructs with ranking (all respondents)

Grouped constructs	Frequencies mentioned	Ranking
Examples	49	1
Stimulates/motivates student	42	2
Explanation	29	3
TMA preparation	24	4
Tutorial variety	24	4
Handouts	23	5
Teaching attitude	23	5
Coverage of main points/difficult parts	22	6
Presentation	21	7
Well prepared	20	8
Use of groups/activities	20	8
Time management	19	9
Friendly/approachable	19	9
TMA comments	17	10
Participation/discussion/group discussion	16	11
Communication skills	14	12
Care/concern for student	14	12
Interaction	12	13
General teaching skills	12	13
Teaching aid	10	14
Organization	9	15
Student question	9	15
Good subject/course knowledge	9	15
Exam technique	8	16
Command of confidence	8	16
Advice before tutorial	8	16
Understanding of student	7	17
Helpful attitude	7	17
Informative	6	18
TMA techniques	4	19
Follow up on TMA performance	3	20

Based on the table and statistics shown above, a radar chart was generated with the Excel software and is shown as Figure 4.1 below. A radar chart is also known as a spider chart in which the radiating lines from the centre (axis) represent the categories or variables (in this case, the 'ranking' and the associated 'ranked constructs'). A point closer to the centre on any axis (distance from the centre) indicates a lower value for that category or variable, and a point farther away from the centre of the axis (or closer/nearer to the edge) indicates a higher value (Cooper & Schindler 1998).

As shown on the next page, Figure 4.1 displays the ranked constructs from rank 1 to rank 10 (denoted as 'top 10' constructs although in this instance, there are actually 14 constructs, as some were ranked equally with the same number of frequencies mentioned in the grid interviews). They are in terms of frequencies expressed as the percentage of the total number of respondents (For example, 144% for the construct 'Example' would mean that the construct was mentioned '1.44 times per respondent on the average', and 50% for the construct 'TMA comments' meant that this construct was mentioned by about half of the respondents, which was also at least mentioned once for every two respondents on the average). This could be appropriately considered as the profiling of an effective tutor by the respondents, which showed the most important attributes as represented by the top 10 constructs.

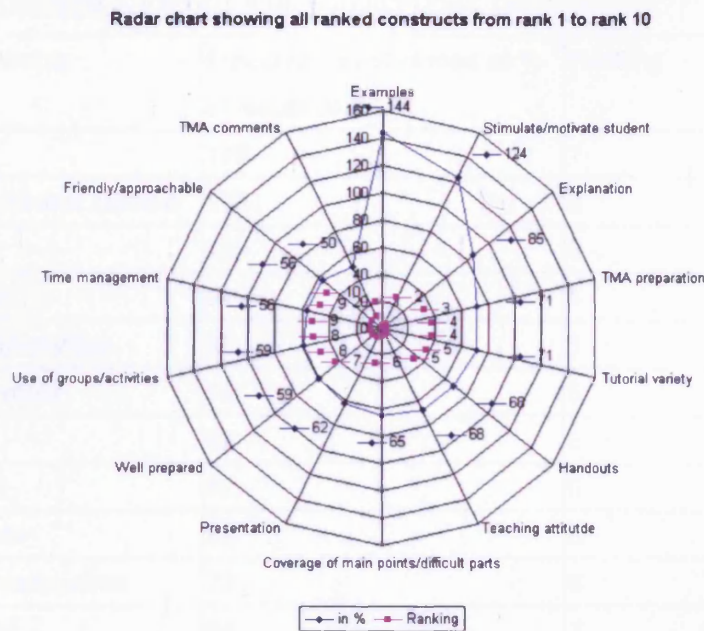


Figure 4.1: Radar chart showing all the ranked constructs from rank 1 to rank 10

Similarly, by rearranging, sorting, and extracting data from the pool of elicited constructs, it was possible to derive the profiles of effective tutors for the different groups of respondents categorized into Pass 1 (Rank 1), Pass 2 and 3 (i.e., the category consisting of one in the very bottom of Pass 2 and one in the very top of Pass 3) and Pass 4 (i.e., the very bottom in Pass 4 category). However, only the top constructs which also met the criteria of having been mentioned at least once for every two respondents on the average would be shown in the following tables and radar charts. The relevant tables/statistics and charts are shown below following this principle.

Table 4.13: Grouped constructs with ranking (Pass 1)

Grouped constructs	Frequencies mentioned as % of respondents	Ranking
Examples	173	1
Stimulates/motivates student	118	2
Explanation	109	3
Well prepared	91	4
Use of groups/activities	82	5
Time management	82	5
Handouts	82	5
Organization	82	5
TMA comments	82	5
Coverage of main points	73	6
Tutorial variety	64	7
TMA preparation	55	8
Teaching attitude	55	8

Profile generated from Pass 1 respondents

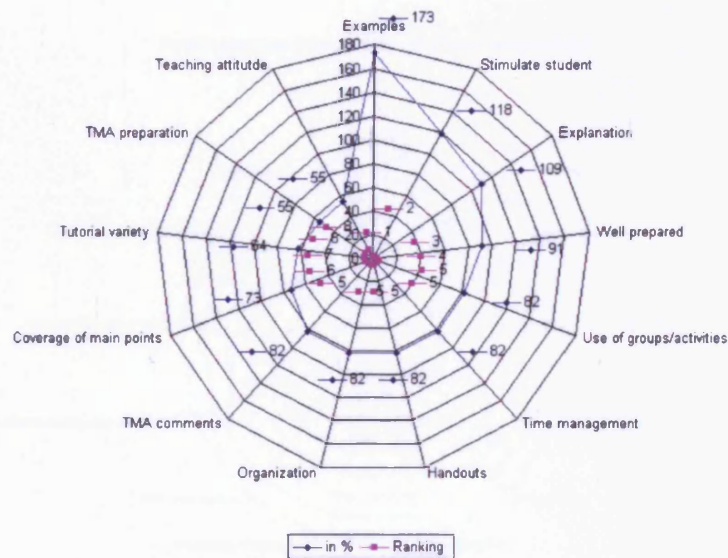


Figure 4.2: Radar chart showing the profile of effective tutors for Pass 1 respondents

Table 4.14: Grouped constructs with ranking (Pass 2 and Pass 3)

Grouped constructs	Frequencies mentioned as % of respondents	Ranking
Examples	167	1
Stimulates/motivates student	133	2
Tutorial variety	108	3
Teaching attitude	108	3
TMA preparation	100	4
Explanation	92	5
Presentation	75	6
Coverage of main points	67	7
TMA comments	58	8
Participation/discussion/group discussion	58	8
General teaching skills	58	8
Care/concern for student	50	9
Interaction	50	9

Profile generated from Pass 2 & Pass 3 respondents

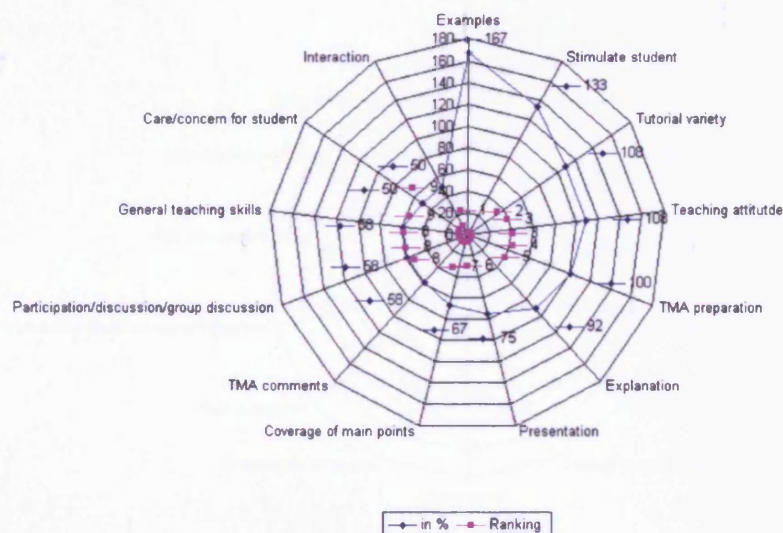


Figure 4.3: Radar chart showing the profile of effective tutors for Pass 2 and Pass 3 respondents

Table 4.15: Grouped constructs with ranking (Pass 4)

Grouped constructs	Frequencies mentioned as % of respondents	Ranking
Stimulates/motivates student	127	1
Examples	91	2
Handouts	91	2
Friendly/approachable	82	3
Presentation	73	4
Use of groups/activities	73	4
Coverage of main points	64	5
Explanation	64	5
Care/concern for student	64	5
TMA preparation	55	6
Participation/discussion/group discussion	55	6
Time management	55	6
Communication skills	55	6
Exam technique	55	6

Profile generated from Pass 4 respondents

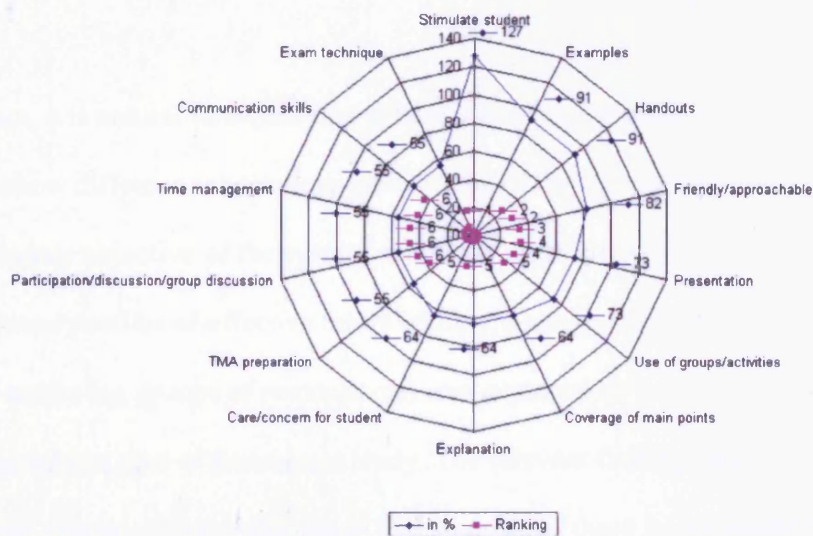


Figure 4.4: Radar chart showing the profile of effective tutors for Pass 4 respondents

It can be observed from the above-generated profiles which were categorized in frequencies (percentage form) as mentioned by all respondents (i.e., Figure 4.1), Pass 1 (i.e., Figure 4.2), Pass 2 and 3 (i.e., Figure 4.3) and Pass 4 (i.e., Figure 4.4) that certain 'universals' have emerged from the data. That is, some constructs (grouped constructs) were considered universally important by all different groupings and appeared in all profiles. For instance, the constructs 'examples' and 'stimulates/motivates students' in the Skills category were the top two constructs considered important, as exhibited in all of the four groups' profiles. On the other hand, by further comparing the different profiles in detail by looking at the relative frequency of certain common constructs (i.e., 'examples' and 'stimulates/motivates students' using the same constructs for illustration) as compared to the relative frequency of other constructs within the same profile, it could be noted that different groups might place different emphasis on those same constructs. For instance, the construct 'example' was the second most frequently chosen item for the Pass 4 group, whereas it was the first most frequently chosen item for all other groups. Similarly, the construct 'stimulates/motivates student' was the first item for Pass 4, whereas the same construct occupied only second place for the profiles of other groups.

In fact, it is natural to expect that different profiles for different groups would reveal somehow different expectations/perceptions of the respondents. In line with the secondary objective of the current study, the underlying rationale for the different preferred profiles of effective tutors (differentiated by the high-achieving and low-achieving groups of respondents) was explored by means of laddering up interview in the second part of the current study. The relevant findings are explained and presented below, whereas further discussion and analysis of these issues would be taken up in the next chapter.

Findings of the Laddering up Interview on the High-achieving Students

With the method previously explained in the methodology sections in Chapter 3 of this thesis, the findings of the laddering up interview on high-achieving students (i.e., Pass 1 Respondents) based on the top-five ranking attributes/grouped constructs (as revealed in the first part of the study) are summarized and represented as the hierarchical value map (HVM) shown in Figure 4.5 below (page 112). The top-five ranking attributes actually consist of nine grouped constructs (re-labelled as nine attributes in the HVM) as five of such constructs were equally ranked by the respondents (The nine grouped constructs could be found from Table 4.13 on page 106 counting from the top). An association (or link between the attributes, consequences, or values) was included in the HVM if it met the minimum frequency requirement (set at a cut-off point of two). In view of the small number of respondents (11 in total), the lowered cut-off point is considered appropriate.

The streamlining procedure (i.e., cut-off point at two and selective analysis of only those idiosyncratic responses related to the top five ranking attributes resulting in the consequences and values in the drawing up of the HVM) is necessary in order not to overload the HVM with less important data/information or linkages. In fact, it could be observed that the HVM drawn overleaf already look relatively complicated, notwithstanding that this streamlining measure has been taken. In addition, it is considered very adequate to find out the rationale/values of high achievers (and low achievers as well) behind their choices of the top five ranking attributes/constructs of tutors in order to fulfil the secondary objective of this thesis. It is simply too time consuming and impossible to explore all the rationale or values behind all attributes of the preferred tutor profiles.

As can be observed from the HVM on page 112, a total of 17 categorized consequences and seven categorized values (with different content codes/numbers) were identified after content analysis following the rule/methodology outlined above and in Chapter 3.

In the HVM, the top-five ranking attributes (nine Attributes in total; with assigned code numbers A1, A2, A4, A5, and A9 to A13) are shown in folded-corner rectangular-shaped boxes. All Consequences (code numbers C1, C2, C4-14, C20-C22) are shown in normal rectangular-shaped boxes, and all Values (code numbers V1-V7) are in rounded rectangular-shaped boxes. Examples of very specific idiosyncratic responses which can

be grouped/subsumed under the corresponding categories of Consequences or Values are shown in bullet points inside the relevant boxes. As an illustration, individual respondent answers or verbatim replies indicating either the value of ‘responsibility to family’ (one of the bulleted points under value content code V4) and/or ‘responsibility to parents’ (another bulleted point under the same value content code V4) are grouped under Responsibility (V4). Similarly, responses which indicate that the respondents could get consequences such as either ‘more insights’, ‘broader knowledge’, or ‘integrating theory with practice’ are shown as bulleted points under the common theme or heading Facilitate Learning (one of the 17 identified consequences with C21 as content code). The list of specific subcategories is illustrative but not exhaustive.

Table 4.16 (page 113) immediately following the HVM presents the categorized consequences identified in the laddering up interview. Similarly, Table 4.17 (page 113) presents the seven categorized values.

Figure 4.5: Hierarchical Value Map for Pass 1 Respondents

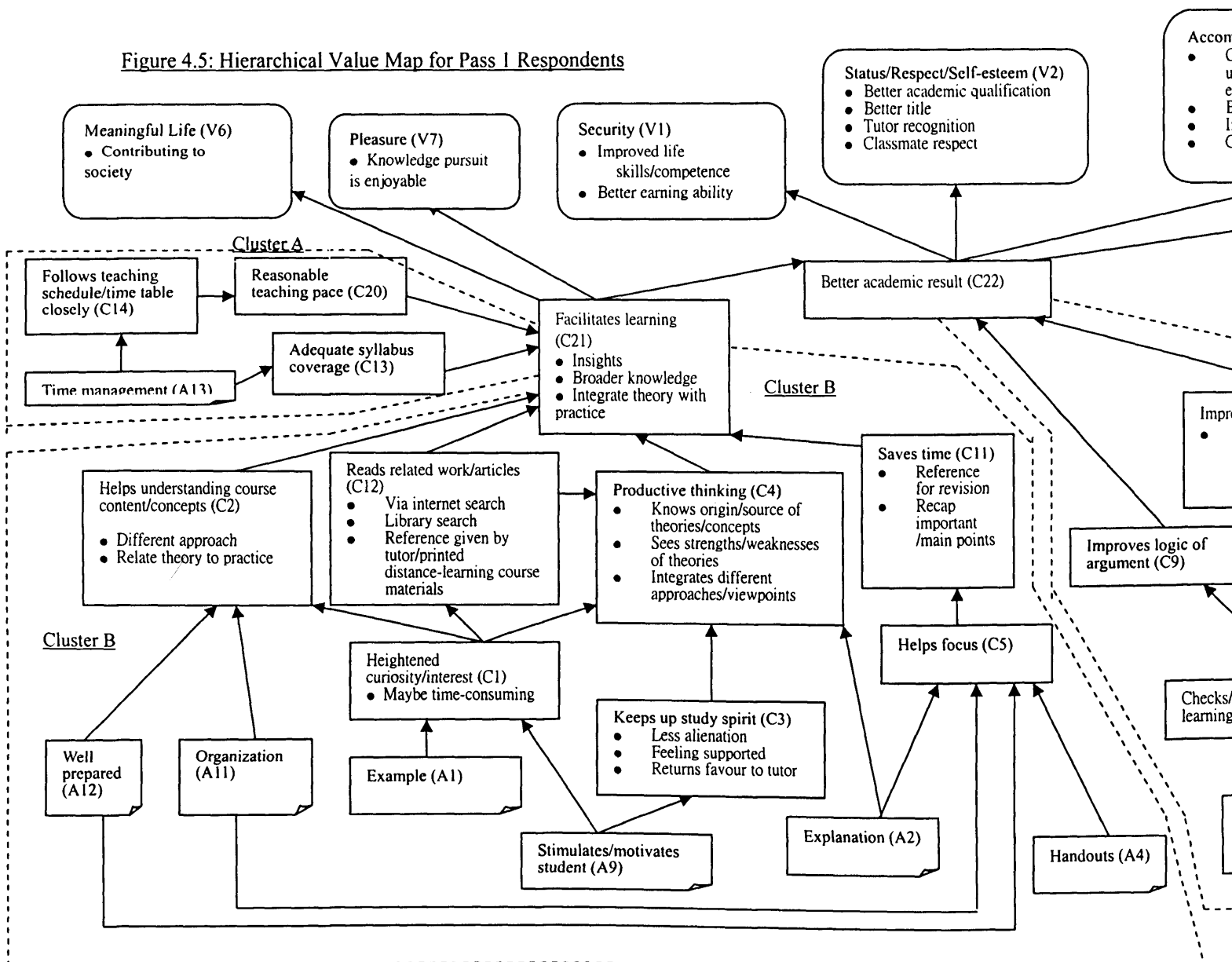


Table 4.16: Consequences derived from the ladder up interviews with Pass 1 Respondents (based on top five ranking attributes)

Consequences
Facilitates learning (C21)
Better academic result (C22)
Helps understanding course content/concepts (C2)
Productive thinking (C4)
Heightened curiosity/interest (C1)
Helps focus (C5)
Saves time (C11)
Checks/Reviews learning progress (C8)
Improves logic of argument (C9)
Reasonable teaching pace (C20)
Improves written work (C10)
Keeps up study spirit (C3)
Interacts with fellow students (C6)
Adequate syllabus coverage (C13)
Follows teaching schedule/time table closely (C14)
Builds rapport/mutual support (C7)
Reads related work/articles (C12)

Table 4.17: Values derived from the ladder up interviews with Pass 1 Respondents (based on top five ranking attributes)

Values
Accomplishment (V3)
Status/Respect/Self-esteem (V2)
Pleasure (V7)
Security (V1)
Meaningful Life (V6)
Belonging (V5)
Responsibility (V4)

The beneficial consequences as perceived by Pass 1 respondents

The HVM (Figure 4.5) shows that the consequences *Facilitate learning* (C21) and *Better academic result* (C22) are the two topmost consequences elicited. It is not surprising that these two consequences are mostly shared by the respondents, as normally, students (studying in the current university or elsewhere) should be ultimately concerned with either learning better or obtaining better academic results. As shown, these two higher-order consequences (before branching out into other identified values) occupy the last two highest positions in the hierarchy (or sequence) of consequences, with other identified consequences leading into either of these.

It was found that not all respondents who mentioned the consequence *Facilitate learning* (C21) would mention *Better academic result* (C22) as well. In other words, there were more respondents concerned with better learning than academic results. It is because some respondents may study only for the sake of study or knowledge (for example, studying for pleasure but not necessarily for better academic performance). In fact, when the respondents were asked why it would be important that effective tutors should facilitate learning, some responded that it would result in (lead directly to) satisfying life values such as *more meaningful life* (V6), *more pleasure* (V7), or satisfying indirectly (via the node C22 *Better academic result*) other values such as *security* (V1), *responsibility* (V4), and the like (as shown in the HVM).

Examples of the consequence *Facilitate learning* (C21) include facilitating the respondents to get more insights, broader knowledge, or integrating theories with practices. The following are illustrations of individual responses:

“The tutor is able to give good examples and show applications of theories to real life situations” (integrate theories with practices).

“I can always get better insights from the tutorials as the tutor would challenge our understanding of theoretical concepts. This is very interesting” (more insights).

The consequence *Better academic result* (C22) also needs more elaboration. For some respondents, it simply means good or outstanding academic/course results per se; for some others, it means better results than other courses’ (that is, the respondents are comparing the courses taught by different tutors). Some respondents have in mind the score thresholds or pass level, that is, better academic result mean getting certain definite grade in the course.

What would possibly lead to the consequence *Facilitate learning* (C21) (or hence to the consequence C22 - *Better academic result*) as perceived by the respondents? Tracing the connections in the HVM (Figure 4.5) showed that

there are two main lines (clusters or chunks) of consequences that converge into the consequence *Facilitate learning* (C21) (relevant portion extracted from HVM and reproduced in figures d and e below). The first cluster (Cluster A shown in dotted lines in HVM and reproduced as figure d below) consist of the initial attribute *Time management* (A13) (one of the top five ranking attributes) branching out into lower-order consequences such as *Reasonable teaching pace* (C20), *Adequate syllabus coverage* (C13), and *Follows teaching schedule/timetable closely* (C14). This shows that some respondents consider that an effective tutor should be adept at time management. By effective time management, they construe/expect that tutors should follow closely the teaching schedule, and should be capable of leading tutorials or lectures in a reasonable teaching pace and/or cover the syllabus adequately, which would lead eventually to more effective learning.

Figure d

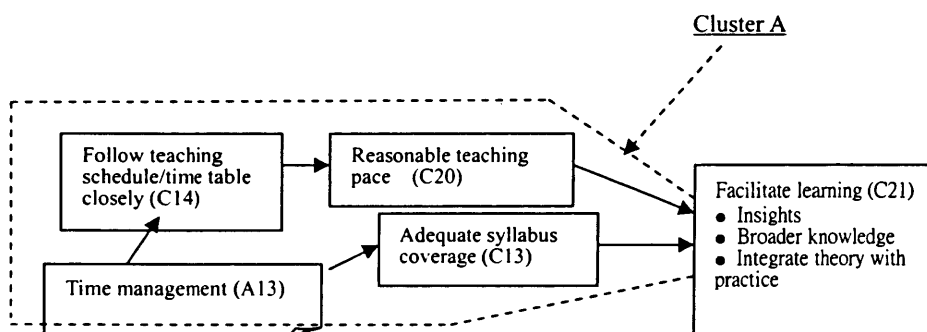
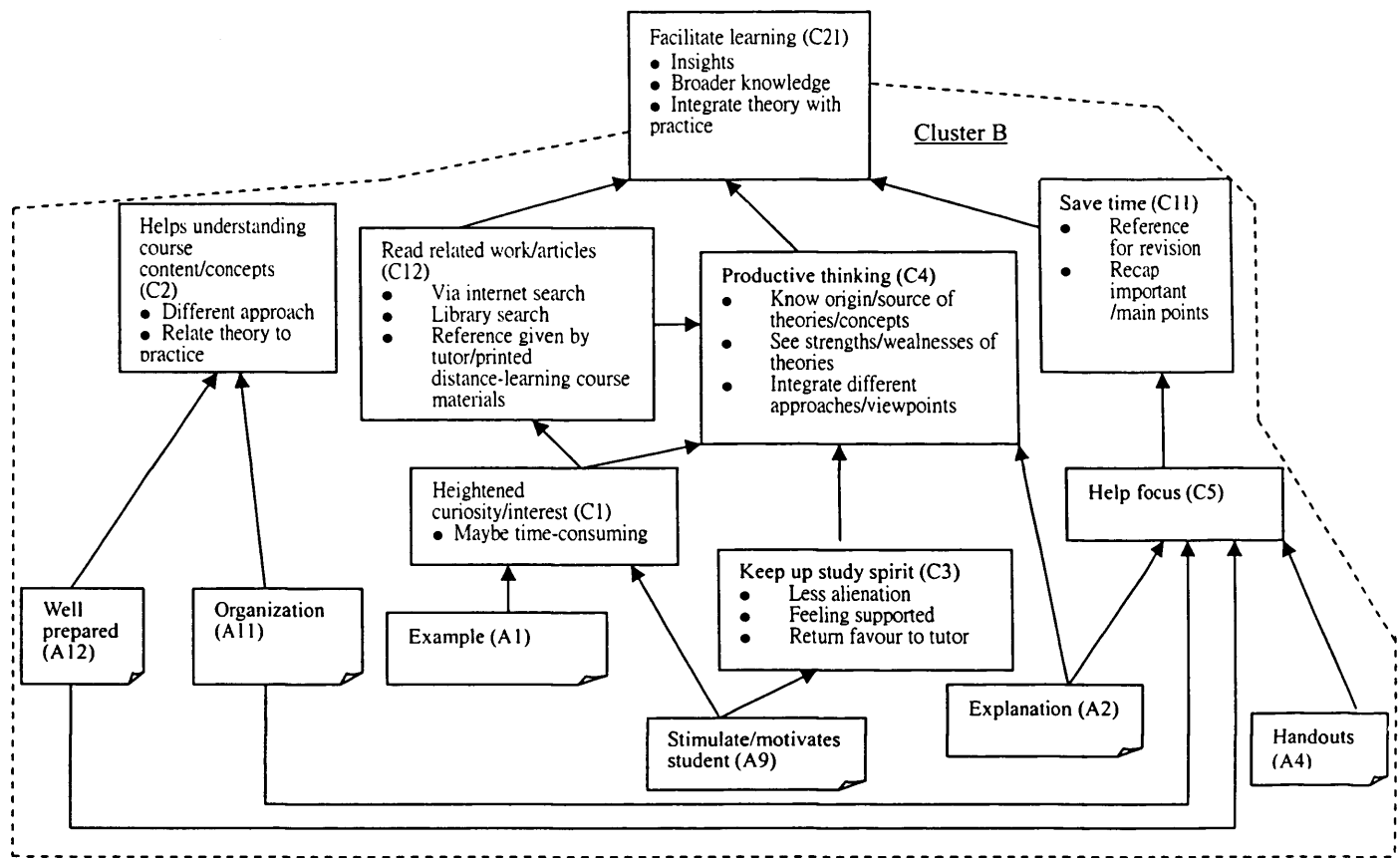


Figure e



Although the first cluster (Cluster A) represents important perceptual orientations (about time management and the associated consequences) not to be ignored lightly from a qualitative perspective, it was the second cluster (Cluster B shown in dotted lines in the HVM and reproduced as figure e above) which should receive more attention. As shown in Fig. e, the second cluster is much complicated than the first cluster elaborated above. The second cluster consists of a large web or network of implicative relationships with six attributes and seven lower-order consequences interwoven together, leading ultimately to the higher-order consequence *Facilitates learning* (C21). The complicated interweaving implicative relations demonstrate the sophisticated thinking process or thoughtfulness of the respondents. In addition, it should be noted that the elicited consequences within this cluster seemed to be most related to the learning/study approach and attitude held by the respondents. The consequences *Helps understanding course content/concepts* (C2), *Productive thinking* (C4), *Read related work/articles* (C12), and *Save time* (C11) lead *directly* to the higher-order consequence *Facilitate learning* (C21). In

contrast, the consequences *Heightened curiosity/interest* (C1), *Keep up study spirit* (C3), and *Help focus* (C5) are linked to the higher-order consequence *Facilitate learning* (C21) *indirectly* via other consequences.

Although it is deemed desirable, the word limit imposed on the current thesis meant that it would not be possible to give individual accounts illustrative examples, or to quote respondents' verbatim replies to demonstrate *each* and *every* identified consequence listed in Table 4.16. As such, any elaboration by way of examples could only be made on a selective basis. Therefore, only *a few* illustrative examples of respondents' verbatim replies could be provided below with respect to the consequences mentioned in *each* of the following means-end chains: Means-end chain $A12 \rightarrow C2$; Means-end chain $A1 \rightarrow C1 \rightarrow C12$ and Means-end chain $A9 \rightarrow C3 \rightarrow C4$ (see Table 4.18). These connect the relevant attributes and consequences in the second cluster.

The rationale for choosing these chains for further elaboration is that the corresponding illustrative examples (or extracts of responses from respondents) could help elucidate in more details certain implicit meanings of some of the consequences in Cluster B. For instance, the underlying meanings of some of the consequences such as *Help understanding course content/concepts* (C2), *Productive thinking* (C4), *Heightened curiosity/interest* (C1), etc. could be made more explicit through the examples.

Table 4.18: Illustrative examples of some elicited consequences in the means-end chains

Means-end Chain	Consequences	Corresponding illustrative examples/excerpts chosen from respondents' responses
A12→ C2	<i>Helps understanding course content/concepts (C2)</i>	<p>"His tutorials are always well prepared. We know he prepared well as he could always show different applications of the theories and relate these theories to some practical situations."</p> <p>"He prepared a lecture plan for every tutorial. He could explain clearly any topics or course concepts requested by the students right on the spot even with real examples, which helps a lot in understanding".</p> <p>"Some other tutors I met could not do so; they have to refer to the course material or textbook first before giving an answer".</p> <p>(Responses were elicited when respondents were asked what particular benefits could be accrued from a well-prepared tutor.)</p>
A1→C1→C12	<i>Heightened curiosity/interest (C1)</i>	<p>"I feel the course a lot more interesting with more real life examples discussed by the tutor".</p> <p>"Talking about examples may take away some time for other tutorial activities, but it is all right as long as it is helpful in the study".</p>
	<i>Read related work/articles (C12)</i>	<p>"I would dig up more related information and read more on the topics if I think it is useful"</p> <p>"Usually, I would begin reading references given by the tutor".</p> <p>(Responses were elicited when respondents were asked what would happen if the respondents consider the course/topics interesting.)</p>
A9→C3→C4	<i>Keep up the study spirit (C3)</i>	<p>"I am moved by her dedication that I need to study harder so her effort would not be wasted"; "I feel that I am not alone in my study". (Responses were elicited when respondents were asked why it is important for a tutor to provide motivation to students.)</p>
	<i>Productive thinking (C4)</i>	<p>"He always challenged us to think about the pros and cons of particular theories". "For example, we were required to think about whether the tragic incident reported in the news could be avoided by applying the theory. Hence, we could get better insights".</p>

Cluster C as shown in the HVM as mainly related to respondents' perceptions about consequences relating to TMA comments (one of the five top-ranking attributes of an effective tutor). As seen in Fig. f below (portion reproduced from the HVM for easy reference), Cluster C is composed of consequences *Checks/Reviews learning progress (C8)*, *Improves logic of argument (C9)*, and *Improves written work (C10)* with the latter two consequences linking to the uppermost consequence *Better academic result (C22)*. In short, two observations could be made about Cluster C. First, although it seems that respondents do value TMA comments, they do not conceive that TMA comments would lead to better learning. (The intermediating consequences did

not lead to C21 - *Facilitate learning*). The second interesting observation is that the respondents seem to treat the TMA comments as related mainly to improving the *technical* aspects of writing an assignment (such as how to improve the logic of argument, structure, and written work). In other words, the findings shown in Cluster C seem to indicate that improving the technical aspects could lead to better academic results as considered by the respondents, but this may not be conducive to learning in general.

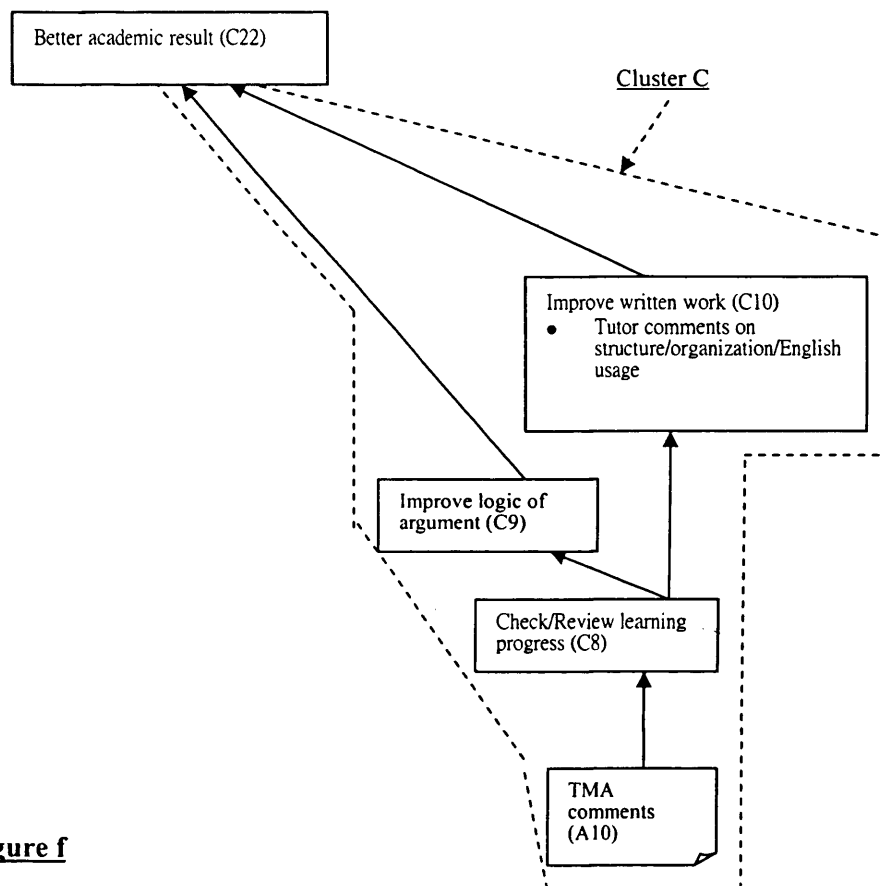
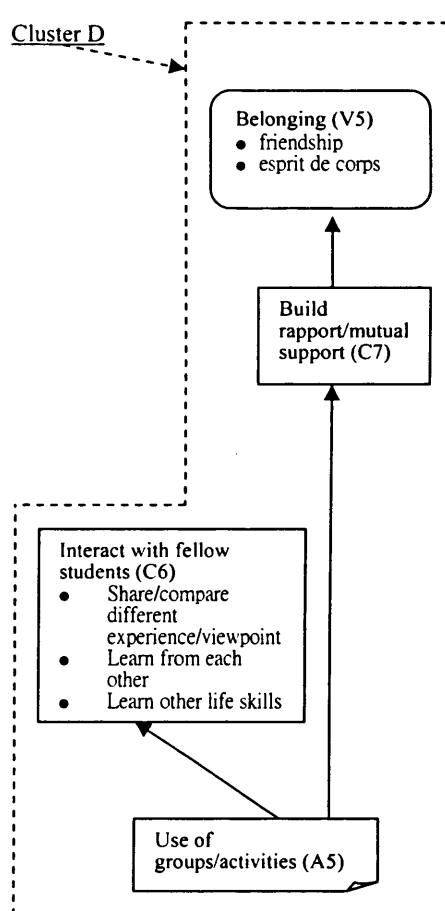


Figure f

Cluster D as shown in the HVM (portion reproduced from the HVM and shown as figure g below for easy reference) is related to respondents' perceptions about consequences and values relating to the *Use of groups/activities* (one of the five top-ranking attributes of an effective tutor). As shown in the HVM, Cluster D is an isolated cluster made up of *only* two consequences, *Build rapport/mutual support* (C7) and *Interact with fellow students* (C6), with the former connecting to the single identified personal/life value *Belonging* (V5). Qualitatively, the isolated status seems to indicate that although respondents mentioned the *Use of groups/activities* as an effective tutor attribute in the first

part of the laddering interview, they recognized upon further questioning/review that actually, the attribute may not necessarily lead to better academic results or better learning (there were no connections to C21 or C22). In fact, reading the content of the few verbatim responses show that some respondents recognized the benefits of sharing different view points and learning from each other through interaction. However, the respondents surprisingly did not link this up as conducive to learning or to better academic results. In brief, the single identified value, i.e., Belonging (V5) as shown in Cluster D (and Fig. g below) shows that respondents could only perceive the benefit of *Use of groups/activities* (tutor attribute) as fulfilling their value—feeling a sense of belonging.

Figure g



The beneficial values as perceived by Pass 1 respondents

Table 4.17 (page 121) showing the relevant categorized values identified from the laddering up interview is reproduced below to facilitate elaboration. In short,

it lists the personal or life values identified for the respondents. Amongst the values mentioned, the value *Status/Respect/Self-esteem* (V2) and *Accomplishment* (V3) were mentioned by *all* respondents. *Pleasure* (V7) and *Meaningful Life* (V6) were mentioned by over 70% of the respondents (i.e., nine and eight respondents), whereas *Security* (V1), *Belonging* (V5), and *Fulfilling Responsibility* (V4) were mentioned by only a few respondents (that is, two or three mentions only).

Table 4.17: Values derived from the ladder up interviews with Pass 1 Respondents (based on top five ranking attributes)

Values
Accomplishment (V3)
Status/Respect/Self-esteem (V2)
Pleasure (V7)
Security (V1)
Meaningful Life (V6)
Belonging (V5)
Responsibility (V4)

A clarification on the classification of the categorized values is considered necessary at this juncture. (It is more convenient to explain this here than in the methodology section). In the process of constructing the categorized values, it is necessary to decide if the two separate categories *Status/Respect/Self-esteem* (V2) and *Meaningful Life* (V6) should be created or subsumed under *Accomplishment* (V3). However, the two value categories are finally kept, as it appeared that there are important differences in their meanings which are distinct from *Accomplishment* (V3). In short, *Status/Respect/Self-esteem* (V2) appeared to be more extrinsic in nature as contrasted to *Accomplishment* (V3) which is more intrinsically motivated. In contrast to *Accomplishment* (V3), *Meaningful life* (V6) seemed to be a value too important to be considered at the same level or subsumed as just a kind of *Accomplishment* (V3). In practice, the respondents' verbatim replies were categorized into relevant categories considered most appropriate based on careful scrutiny of the meanings implied by their complete set of responses.

As can be observed from the HVM on page 120, the relevant values which were just elaborated above are shown collectively connected to the other

consequences and the initial tutor attributes (shown in Clusters A-D) through the two topmost consequences *Facilitates learning* (C21) and/or *Better academic result* (C22). As such, the specific relationship or linkages from the valued tutor attributes with the perceived values for individual respondents were not immediately apparent by reading the HVM. In fact, such relationships could only be unveiled by going through individual interview transcripts (and references to the individual summary implication matrices). A typical illustrative example with excerpts from the interview transcript which tracks such linear relationship is given below (based on the means-end chain A2→C5→C11→C21→C22→V3):

*“A tutor good at explanation could help me focus in my study”
(response to question on what benefit could be accrued from a
tutor good at explanation?).
(C5 - Helps focus)*

*“It enables me to save much time to focus on only salient
points ...I do not need to dig up additional references in order
to understand certain concepts”.
(C11 - Saves time)*

*“By saving time and avoiding reading similar topics, I could
study in a more comprehensive manner which could lead to
better examination results”.
(C21 - Facilitates learning and C22 - Better academic result)*

*“I think getting a good course result is important.” ... “Why?
Well, it shows that you really learned and achieved
something through your own hard effort. You feel good about
it”.
(V3 - Accomplishment)*

In a way, there appeared to be a close relationship between most of the identified consequences and values from a scrutiny of the interview transcripts. To be more specific, the findings of the more popular identified values and their relative importance (in terms of being mentioned by the number of respondents) seemed to be explicable (or could be readily inferred) by the identified consequences (or even vice versa). As an illustrative example, the respondents keen on earning tutor recognition/classmate respect (subcategory of V2 - *Status/Respect/Self-esteem* in the HVM) and those who desire to achieve competence (subcategory of V3 - *Accomplishment*) were concerned about/engaged in *Productive thinking* (C4)/*Helps understanding course content/concepts* (C2) and/or *Reads related work/articles* (C12), or vice versa. Similarly, many respondents engaged in *Productive thinking* (C4)/*Helps understanding course content/concepts* (C2) and/or *Reads related work/articles* (C12), because they found deeper meaning (e.g., V6 - *Meaningful life*) or derived pleasure (V7 - *Pleasure*) from these consequences (activities) (as revealed in their interview transcripts).

In fact, by careful scrutiny of all the identified consequences as a whole (either from the transcripts or the HVMs), it seems not surprising that V3 - *Accomplishment* and V2 - *Status/Respect/Self-esteem* were found to be chosen by all respondents. Except for the consequences in Cluster D, all the consequences (and the subcategories) in other clusters seemed to indicate that the respondents are quite accomplishment/achievement-oriented. In addition, the indications were that they desired to succeed with genuine effort by meaningful engagement with the content (i.e., not superficial study) and yet in an efficient or strategic manner. The evidence for meaningful engagement with content has just been discussed in the elaboration of *Productive thinking* (C4)/*Helps understanding course content/concepts* (C2) and/or *Reads related work/articles* (C12) in the paragraph above (consequences in Cluster B). The evidence of an efficient or strategic approach in the study lies in the fact that the respondents cared about time management (consequences in Cluster A) and the TMA comments for improving their written work and logic (consequences in Cluster C). They also cared about having more focus and saving time for study (C11 - *Saves time* and C5 - *Helps focus* in Cluster B).

Findings of the Laddering up Interview on the Low-achieving Students

Using the same streamlining method and cut-off point as explained in the previous section, the findings of the laddering up interview on the low-achieving students (i.e., Pass 4 Respondents) based on the top five ranking attributes/grouped constructs are summarized and presented in the hierarchical value map (HVM) shown in Figure 4.6 below (see overleaf). The top-five ranking attributes also consist of nine grouped constructs (re-labelled as nine attributes from A1 to A9 in the HVM) as some of such constructs were equally ranked by the respondents (The nine grouped constructs could be found from Table 4.15 on page 108 counting from the top).

As can be seen from the HVM, a total of 11 categorized consequences and five categorized values were identified after content analysis. As before, the top five ranking attributes in the HVM are shown in folded-corner rectangular-shaped boxes, Consequences are shown in normal rectangular-shaped boxes, and Values are in rounded rectangular-shaped boxes. Examples of summarized idiosyncratic responses which can be grouped under corresponding categories of Consequences or Values are shown in bulleted points inside the relevant boxes.

Table 4.19 immediately following the HVM presents the categorized 11 consequences identified. Similarly, Table 4.20 presents the five categorized values.

Figure 4.6: Hierarchical Value Map for Pass 4 Respondents

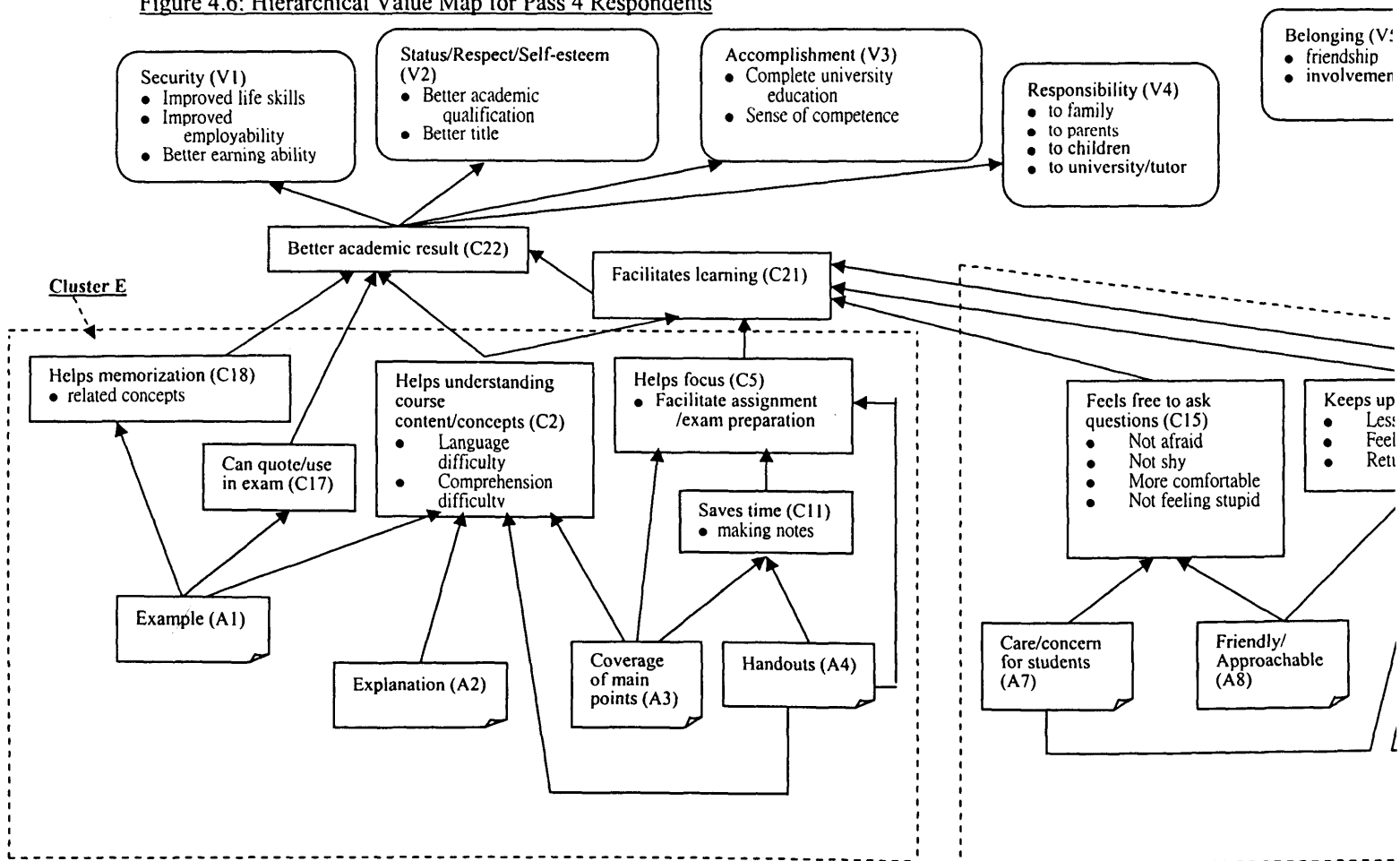


Table 4.19: Consequences derived from the ladder up interviews with Pass 4 Respondents (based on top five ranking attributes)

Consequences
Facilitates learning (C21)
Better academic result (C22)
Keeps up study spirit (C3)
Helps understanding course content/concepts (C2)
Feels free to ask questions (C15)
Less boring (C16)
Helps memorization (C18)
Helps focus (C5)
Saves time (C11)
Can quote/use in exam (C17)
Builds rapport/mutual support (C7)

Table 4.20: Values derived from the ladder up interviews with Pass 4 Respondents (based on top five ranking attributes)

Values
Security (V1)
Responsibility (V4)
Accomplishment (V3)
Status/Respect/Self-esteem (V2)
Belonging (V5)

The beneficial consequences as perceived by Pass 4 respondents

In a way similar to the findings for Pass 1 respondents as explained previously, the two higher-order consequences *Facilitates learning* (C21) and *Better academic result* (C22) (before branching out into other identified values) occupied the last two highest positions in the hierarchy (or sequence) of consequences. The other identified consequences led to either of these (see Figure 4.6).

As with Pass 1 respondents, Pass 4 respondents were also concerned with these two higher-order consequences: *Facilitates learning* (C21) and *Better academic result* (C22). It is considered natural because normally, students (adult learners in particular) should be concerned with either learning better or obtaining better academic results. Otherwise, they would have probably not enrolled as students in the first place. However, these low-achieving students seemed to differ from the high-achieving students (Pass 1 respondents) in other aspects as explained below.

First and foremost, the HVM (fig. 4.6) shows that the three consequences (i.e., *Keeps up study spirit* (C3), *Feels free to ask questions* (C15), and *Less boring* (C16)) found within Cluster F were derived from (and are mainly related to) other effective tutor attributes including *Care/concern for students* (A7), *Friendly/Approachable* (A8), *Stimulates/motivates student* (A9), *Presentation* (A6), and *Use of groups/activities* (A5). It is clear from these connections that Pass 4 respondents perceive the following as important in facilitating their learning: affection or concern from tutor(s), provision of a conducive/stimulating learning atmosphere (such as a lively/entertaining presentation/lecture, or less intimidating/inhibitory learning environment). In short, the three identified consequences and associated attributes together seem to indicate that the respondents are in need of external incentives/stimulus or encouragement (for example, from the tutor). They consider these extrinsic factors as more important for their learning than the intrinsic pleasure which may be derived directly from studying. It is probable that they could not feel the joy of studying in the learning process per se (by reading the course materials or set textbooks). They may feel that studying is a burden. They are not quite confident enough in their own ability in studying, and would hence appreciate more psychological support and cheering up along the way.

A scrutiny of the relevant interview transcripts for individual respondents' verbatim replies under the relevant consequences in Cluster F provide further elucidation and supporting evidence with regard to how these consequences are perceived by respondents as conducive to learning. Some of the typical examples are the following:

"I feel comfortable to ask him questions, as he seems to care about me and my studies". "This helps a lot in my learning process ... I do not need to sort things out all by myself."

"The tutor is so concerned about us. I think we are responsible to her for better result. We need to study harder to make her happy."

“She could keep our spirits up in studying and during tutorials. She always gives us encouraging remarks, and I feel supported. This is important, as sometimes I feel distracted or fed up with studying during the semester. I feel fortunate to have been assigned in her tutorial group.”

“He is so skilful in presentation and in leading tutorial activities that we seldom feel bored. I think this quality is very important” ... “You know, it is easy to get tired and hence difficult to concentrate. We attend tutorials after a full day’s work. Sometimes, the course material and syllabus are too boring. He could make us less sleepy by means of interesting activities. This is good for learning.”

It is clear from the illustrative excerpts above that the respondents seem to have placed a very heavy emphasis on the external/extrinsic factors for their learning. They appreciate very much tutors’ concern and support for them (i.e., tutor-student relationship). They are also very much in need of tutors’ expertise in the delivery of teaching (pedagogy). Perhaps, they do not care so much about the tutor’s expertise in the subject-matter per se, but they do care very much about the way in which the tutors present their lectures or lead tutorials/activities.

Compared to the three consequences (i.e., *Keeps up study spirit* (C3), *Feels free to ask questions* (C15), and *Less boring* (C16)) elaborated above, the explicit meaning or the title connotation of the consequence *Helps understanding course content/concepts* (C2) in Cluster E (as shown in HVM–Fig 4.6) is apparently more related to the ulterior consequences *Better academic result* (C22) and/or *Facilitates learning* (C21). However, it is interesting to note from the related interview transcripts that the respondents mentioned about difficulty in comprehension (in reading texts or course materials). Some attributed the difficulty to the use of English as the medium of study. As a result, they considered it very helpful if tutors could help them overcome such problem. They expect simplified or concise explanation, illustrative examples, or handouts. In a way, they seem to be more instrumental, utilitarian, or strategic in their attitude or motive.

In fact, the utilitarian or instrumental orientation of the respondents could also be observed through a scrutiny of other verbatim responses in the interview transcripts related to the other consequences in the same cluster (Cluster E). For example, with regard to the initial attribute *Example* (A1), some respondents considered that tutors who provide ample examples are very good tutors. It is because they think that the related examples would help them to better memorize the relevant course concepts (C18–*Helps memorization*). A few also think that it may be possible to quote or use the examples in the assignment or examination (C17 - *Can quote/use in examination*). Some other respondents considered it important for tutors to provide concise handouts and/or summarize/cover main points of lectures/topics (A3 - *Coverage of main points*; A4 - *Handouts*). They explained that it would save their time from reading the texts or making notes themselves, and it would facilitate their learning in the end (C11 - *Saves time*).

The beneficial values as perceived by Pass 4 respondents

Table 4.20 (page 126) showing the relevant categorized values identified from the laddering up interview is reproduced below to facilitate elaboration. The personal or life values identified for respondents are *Security* (V1), *Responsibility* (V4), *Accomplishment* (V3), *Status/Respect/self-esteem* (V2), and *Belonging* (V5).

Table 4.20: Values derived from the ladder up interviews with Pass 4 Respondents (based on top five ranking attributes)

Values
Security (V1)
Responsibility (V4)
Accomplishment (V3)
Status/Respect/Self-esteem (V2)
Belonging (V5)

The rationale on the construction and classification of the categorized values has been explained previously and will not be repeated here. As seen in the HVM (Figure 4.6; page 125), all relevant consequences and attributes (in Clusters E and F) were connected to the values directly or indirectly via the two intermediating higher-order consequences *Facilitates learning* (C21) and/or *Better academic result* (C22). This is the same situation for Pass 1 respondents and hence could be explained with the same rationale.

Amongst the values identified, the value *Security* (V1) was mentioned most by respondents as an important life value to be satisfied (mentioned ten times), followed by *Responsibility* (V4) mentioned by nine respondents, and *Accomplishment* (V3) and *Status/Respect/self-esteem* (V2) mentioned by six respondents. The value with least number of mentions is *Belonging* (V5).

Similar to the case for Pass 1 respondents, the findings of the more popular identified values and their relative importance for Pass 4 respondents (in terms of being mentioned by the number of respondents) seemed to be explicable (or could be readily inferred) by the identified consequences (or even vice versa). As an illustrative example, the three consequences *Keeps up study spirit* (C3), *Feels free to ask questions* (C15), and *Less boring* (C16), together with the associated preferred tutor attributes in Cluster F, seemed to indicate that the relevant respondents could not feel the joy of studying in the learning process per se. In other words, they may feel that studying is a burden. It has also been noted that the respondents are not quite confident in their own ability in studying, and that they need assurance or encouragement to ask tutor questions. In view of these challenges faced by the respondents, it seems not surprising to find that a lot of them would consider studying only to fulfil their responsibility (for example, to their family or parents), rather than to pursue education for personal accomplishment/status or pleasure. Hence, the stronger linkage with the value *Responsibility* (V4) is to be expected.

Security (V1) is the other value which was mentioned by most respondents. Perhaps the relatively low confidence exhibited toward studying, and the anxiety or concern in asking tutors questions could be a general reflection of respondents' underlying

concern or desire for more security. For example, respondents' self-reported difficulty in language and comprehension (subcategories of C2 - *Helps understanding course content/concepts* in Cluster E) and preference for ready-made examples from tutors (e.g., C17 - *Can quote/use in examination*; also in Cluster E) might have reflected respondents' low confidence toward their own ability to study. They need help and assurance for grasping the language and securing understanding through specific examples which they could readily use. Evidence of anxiety or concern in asking tutors questions could be traced to consequences in Cluster F such as *Keeps up study spirit* (C3) (subcategory - feeling supported) or *Feels free to ask questions* (C15)(subcategories - More comfortable, not feeling stupid, etc).

Further analysis and comparison of the findings of the laddering up interview with respect to high- and low-achieving students will be made in the next chapter.

Conclusion and summary of main findings

To recapitulate, the pilot study leading to some important modification of the research instruments and data collection procedures of this research project was first discussed in this chapter. It was then followed by a presentation of data and research findings from the repertory grid and laddering up interviews for the high-achieving and low-achieving respondents in accordance with the research objectives/questions of this study to facilitate further analysis.

In the next chapter, the research findings will be further discussed, analyzed, and interpreted in relation to the research questions, the literature review, and practical issues.

A summary of main findings is provided below as a succinct overview to conclude this chapter.

Summary of main findings

Repertory Grid interview findings

By rearranging, sorting, and extracting data from the elicited constructs gathered from the individual grid interviews through content analysis and the statistical software, it was possible to generate the profiles of effective tutors for the respondents as a whole and for different groups of respondents categorized into Pass 1 (Rank 1), Pass 2 and 3 (i.e., the category consisting of one in the very bottom of Pass 2 and one in the very top of Pass 3) and Pass 4 (i.e., the very bottom in the Pass 4 category).

The specific details of the findings on grouped constructs and profiles as described above are shown in Tables 4.12 to 4.15 and Figures 4.1 to 4.4 in the form of radar charts. It could be observed from the generated profiles that certain 'universals' emerged from the data. That is, some constructs (grouped constructs) were considered universally important by all different groupings and appeared in all profiles. On the other hand, by further comparing the different profiles in more details by looking at the relative frequency of certain common constructs, it could be noted that different groups might place different emphasis on those same constructs. It is understood that the respondents of different academic performance levels could have different preference or ideas for tutors which impact on their perceptions of effective tutors and the effective profiles. The second part of the current study was to explore the rationale or the implications behind such perceptions/profile or portfolio of effective tutor constructs. To facilitate analysis and to ensure that the thesis would not be unduly long or unmanageable, the second part focused mainly on comparison of high-achieving and low-achieving learners (i.e., Pass 1 and Pass 4 respondents).

Laddering up interview findings for the high-achieving respondents

Based on the initial attributes or constructs elicited from the first part of the study, a total of 17 categorized consequences and seven categorized values (with different content codes/numbers) were identified from the laddering up interview after content analysis (shown in Figure 4.5–HVM; Tables 4.16 and 4.17).

It was shown that the respondents are in general quite comprehensive in their expectations of effective tutors. For example, by effective time management, they construe/expect that tutors should follow closely the teaching schedule, should be capable of leading tutorials or lectures in a reasonable teaching pace, and/or should cover the syllabus adequately, which would lead eventually to more effective learning. Some of them could even distinguish between improving the technical aspects of an assignment and learning in general. The other important observation was that the findings of the more popular identified values and their relative importance (in terms of being mentioned by the number of respondents) seemed to be explicable (or could be readily inferred) by the identified consequences (or even vice versa).

More specifically for illustrative purposes, the scrutiny and interpretation of the consequences (or from interview transcripts) showed that the respondents seemed to be quite positive in their study attitude or were determined to succeed (with meaningful engagement with content) which in a way explained why the more popular values such as *Accomplishment* and V2 - *Status/Respect/Self-esteem* were chosen by all respondents. (The consequences referred to are *Productive thinking* (C4)/*Help understanding course content/concepts* (C2) and/or *Reads related work/articles* (C12)). The interpretation of other elicited consequences (and interview transcripts) showed that the respondents also cared about taking an efficient or strategic approach in studying. These are the consequences such as C11 - Saves time and C5 - Helps focus).

Laddering up interview findings for the low-achieving respondents

A total of 11 categorized consequences and five categorized values were identified after content analysis (shown in Figure 4.6 - HVM; Tables 4.19 and 4.20).

In short, based on the examination of the excerpts of interview transcripts and the HVM, it has been shown in the discussion of identified consequences and

associated attributes that the low-achieving respondents appear to be more instrumental, utilitarian, or strategic in their attitude or motive. They also seem to have placed a very heavy emphasis on the external/extrinsic factors as important for their learning. They value very much tutors' concern and support for them, and the way in which the tutors present their lectures or lead tutorials/activities.

With regard to the five categorized value, it was found that most respondents were concerned about *Security* (V1) as an important life value to be satisfied, followed closely by *Responsibility* (V4). Some respondents were also concerned with *Accomplishment* (V3) and *Status/Respect/self-esteem* (V2). The value which was least mentioned was *Belonging* (V5). It has been pointed out that the respondents may consider studying as a burden. It has been noted that the respondents are not quite confident in their own ability, and that they need assurance or encouragement to ask tutors questions. Therefore, a lot of respondents may consider studying only to fulfil their responsibility to their family or parents, rather than to pursue education for personal accomplishment/status or pleasure. Therefore, it was not a surprise to find that *Responsibility* (V4) ranked high amongst the hierarchy of values mentioned by respondents in terms of frequency (the number of mention) which signified its high value or importance. On the other hand, the high ranking (also signifying importance) of the value *Security* (V1) was not as obvious. Perhaps the relatively low confidence exhibited toward studying, and the anxiety or concern in asking tutors questions could be a general reflection of respondents' underlying concern or desire for more security.

Chapter 5 Discussion and analysis of findings

Introduction

In this chapter, the findings were discussed, analyzed, and interpreted in relation to the research questions, the literature review, and the practical issues. The discussion and analysis followed a similar structure as in Chapter 4.

Discussion and analysis

Repertory Grid Constructs and Profiles of Effective Tutors

To recapitulate, the main focus of this thesis is students' perceptions of effective tutors which relate to the key concepts of teaching effectiveness and other related issues. The approach used was an in-depth exploration from a small sample of students of different academic performance levels of their perceptions (and their corresponding implications) of effective tutors drawing from their actual experience with the Institution's tutors. Accordingly, one of the related research questions was to identify the essential manifested characteristics of effective tutors as perceived by the different groups of learners (low, average, and high achievers represented by Pass 4, Pass 2 and 3, and Pass 1 respondents). An associated hypothesis was that there would be some essential similarities but also differences in the perceptions among these distinct groups of learners exhibiting different academic performance levels.

As explained in the previous chapters and the findings chapter in particular, the study identified the perceived characteristics of effective tutors of different groups of learners by means of frequency counts, content analysis, and categorization of the elicited constructs from all repertory grid interviews. The results were shown in the form of data tables (Table 4.7-all respondents, Table 4.8-Pass 1, Table 4.9-Pass 2 and 3, and Table 4.11-Pass 4) with a detailed list of ranked constructs (perceived essential characteristics).

The corresponding radar charts showed the profiles of effective tutors for these different groups (Figure 4.1-all respondents, Figure 4.2-Pass 1, Figure 4.3-Pass 2 and 3, and Figure 4.4-Pass 4) in a more condensed form which excluded less frequently mentioned (interpreted as less important) constructs or characteristics.

A number of interesting observations could be made regarding the identified grouped grid constructs and profiles of effective tutors which will be discussed and analyzed below.

First, as explained in the previous chapter, a total of 533 (or 507 if identical/repeated constructs elicited from the same respondent are not included) individual constructs were elicited from the repertory grid interviews. After categorization, 17 were identified as grouped constructs in the Skills category (319 individual constructs before grouping), 8 in the Behaviour category (103 individual constructs before grouping), 5 in the Attitude category (69 individual constructs before grouping), 3 in the Knowledge category (35 individual constructs before grouping), and 6 in the Others category (7 individual constructs before grouping). From these figures of the number of constructs in each category, it seemed that the findings were quite logical, and that the respondents were quite sensible in identifying and construing constructs related to tutor effectiveness with Skills (319 individual constructs), Behaviour (103 individual constructs), Attitude (69 individual constructs), and Knowledge (35 individual constructs) in decreasing order of number or perceived importance (the number of constructs represents perceived importance; more constructs in a particular category means more importance attributed to that category).

In a way, the sense of logic described above about the ranking order of Skills, Behaviour, Attitude, Knowledge, etc. seems to lend some credibility to the collected data/constructs. On the other hand, the relatively lower rating of Knowledge as compared with the others seemed to require some explanation. Is tutors' knowledge less important as perceived by students? From the analysis of the content of the elicited constructs related to Knowledge, Knowledge was mainly perceived as subject/course knowledge, and whether the tutors were informative and well prepared in the area. Interestingly, the lower rating of Knowledge may be attributed to the high trust toward the Institution held by some respondents who answered that they assume all tutors to possess good subject/course knowledge upon appointment by the

Institution. Therefore, tutors' level of knowledge was 'taken for granted' and not considered an essential construct distinguishing the 'good' and the 'bad', or the 'effective' and 'ineffective' teacher. Another plausible explanation was that respondents tended to consider that this knowledge aspect of tutors was less important, as the respondents were already hard-pressed for time or information. They were reasonably satisfied with the supposedly 'self-contained' or 'self-sufficient' course materials (printed and audio-visual) in terms of subject content knowledge and information, as were often proclaimed by the Institution in the latter's promotional materials.

The next observation from the finding was that some similarities and differences in the perceptions (in terms of different constructs and frequency of mention) between the distinct groups of learners exhibiting different academic performance levels could be identified as expected by referring to the constructs tables and the radar charts. This was reported in the previous chapter. In a way, the emergence of some common characteristics or 'universals' shared by all different profiles (different academic performance levels) was a matter of course and should be construed as a natural happening. It should be noted that the respondents were drawn from a single learning institutional context/culture (the Institution), and they were all *homo sapiens* who would possess some basic learning psychology or common characteristics of mankind irrespective of their academic background, learning experience, or other factors. According to the stimulus-response theory or to socio-cultural psychology, whenever certain groups of people behave or see things similarly, it could be attributed to the fact that culture plays a role. People can be grouped according to similarities in their upbringing and their environment (Krech et al. 1982). The sharing of some common characteristics is also acknowledged by the commonality corollary of Kelly's personal construct theory (Kelly 1955, p. 72), except that Kelly went even further to assert that, "people can act alike even if the stimulus presented to them is different. It is in the similarity of the constructions of events that we find the basis for similar action, and not in the events being identical to each other" (Kelly 1955, p. 72)

To facilitate more direct comparison, the profiles of the constructs for the different academic performance groups (the frequency of mention of constructs over the number of respondents for the relevant groups expressed in percentage form) are displayed in the form of bar charts as shown in Figures 5.1 and 5.2 below. (Table 5.1 shows the codings and descriptions of the constructs as well).

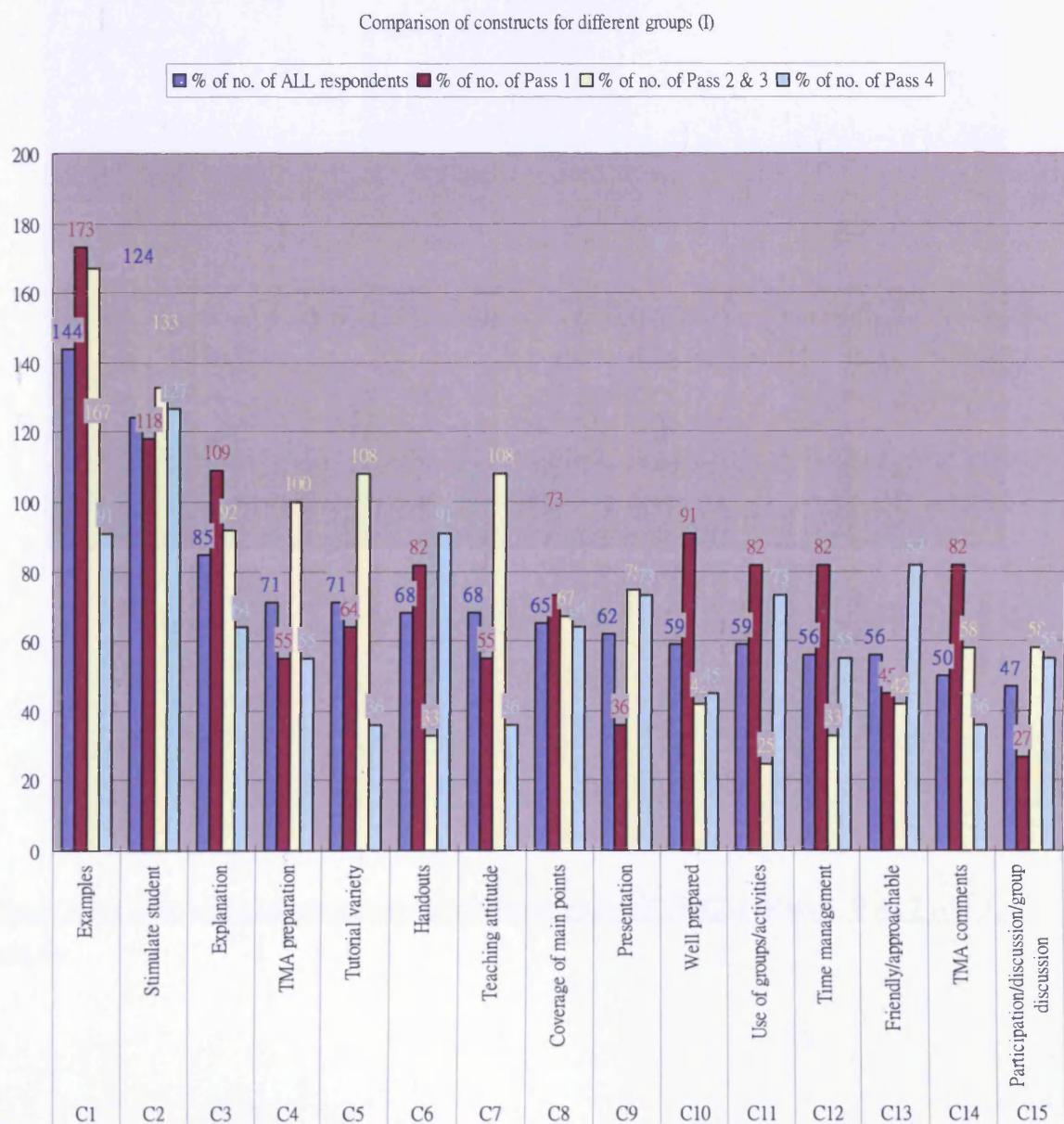


Figure 5.1: Comparison of constructs for different groups C1-C15 (Pass 1, Pass 2 and 3, Pass 4)

Comparison of constructs for different groups (II)

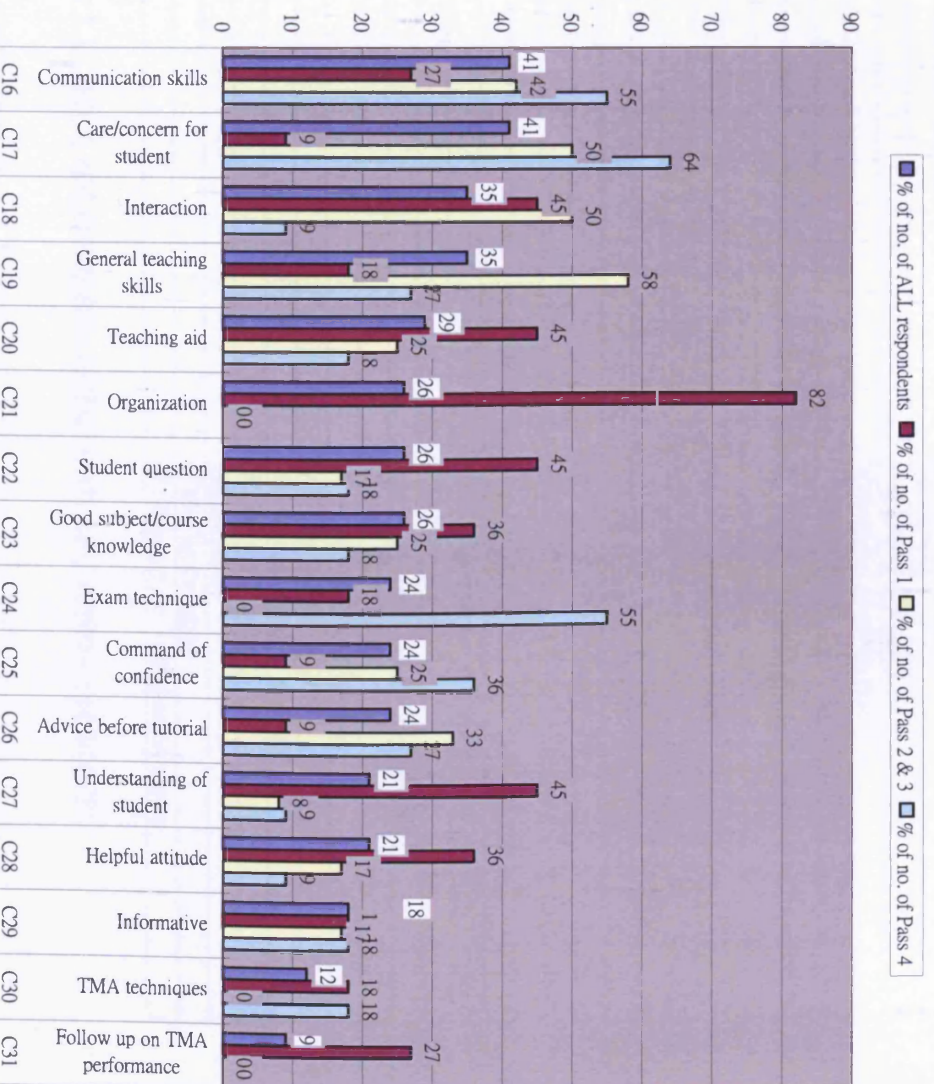


Figure 5.2: Comparison of constructs for different groups C16-C31 (Pass 1, Pass 2 and 3, Pass 4)

Construct Code	Description of Grouped Constructs
C1	Examples
C2	Stimulates/motivates student
C3	Explanation
C4	TMA preparation
C5	Tutorial variety
C6	Handouts
C7	Teaching attitude
C8	Coverage of main points
C9	Presentation
C10	Well prepared
C11	Use of groups/activities
C12	Time management
C13	Friendly/approachable
C14	TMA comments
C15	Participation/discussion/group discussion
C16	Communication skills
C17	Care/concern for student
C18	Interaction
C19	General teaching skills
C20	Teaching aid
C21	Organization
C22	Student question
C23	Good subject/course knowledge
C24	Exam technique
C25	Command of confidence
C26	Advice before tutorial
C27	Understanding of student
C28	Helpful attitude
C29	Informative
C30	TMA techniques
C31	Follow up on TMA performance

Table 5.1 Coding and description of the constructs (grouped constructs)

As could be seen above, Figures 5.1 and 5.2 showed that some constructs were ‘universal’ or commonly shared, and were ranked highly by all groups. For instance, the constructs (group constructs to be exact) in the Skills categories ‘examples’ (coded as C1 in Table 5.1 above) and ‘stimulates/motivates students’ (C2) appeared in all profiles. In contrast, C21 (Organization) and C31 (Follow up on TMA performance), which were ranked high and relatively high respectively for Pass 1, were absent from the profiles of Pass 4, and Pass 2 and 3, showing examples of differences in the perceptions (in terms of different constructs and frequency of mention) between the distinct groups of learners exhibiting different academic performance levels.

Figures 5.3 and Figure 5.4 below show another way of representing the relevant findings by means of a percentage stacked bar chart showing the relative contribution (importance) of each construct (grouped constructs) for different academic performance groups of respondents as compared to the overall total.

As could be observed from the figures, the importance of each construct for each particular group of academic performance (making up a total of 100%) was represented by the corresponding proportion (in % and in different colors or shades) of the total length of a bar representing a particular construct. For instance, for the construct C1 - 'example', it could be seen that the relative contribution by Pass 1 respondents is 40% by reading the length against the vertical axis (hence, C1 for Pass 1 respondents is interpreted as important as compared with other Pass level groups). For Pass 2 and 3, the contribution is about 40%, and for Pass 4, about 20%. If such proportion could be interpreted as capable of being compared in terms of importance, then it could be interpreted that construct C1 was more or less equally important for Pass 1, and Pass 2 and 3 groups (40% for both), but was much less important (20% and hence about half as important) for Pass 4 groups. This is another way of showing examples of differences in the perceptions (in terms of different constructs and frequency of mention) between the distinct groups of learners exhibiting different academic performance levels.

Relative importance (in %) of each construct for different groups of respondents (Pass 1, Pass 2&3, Pass 4) (I)

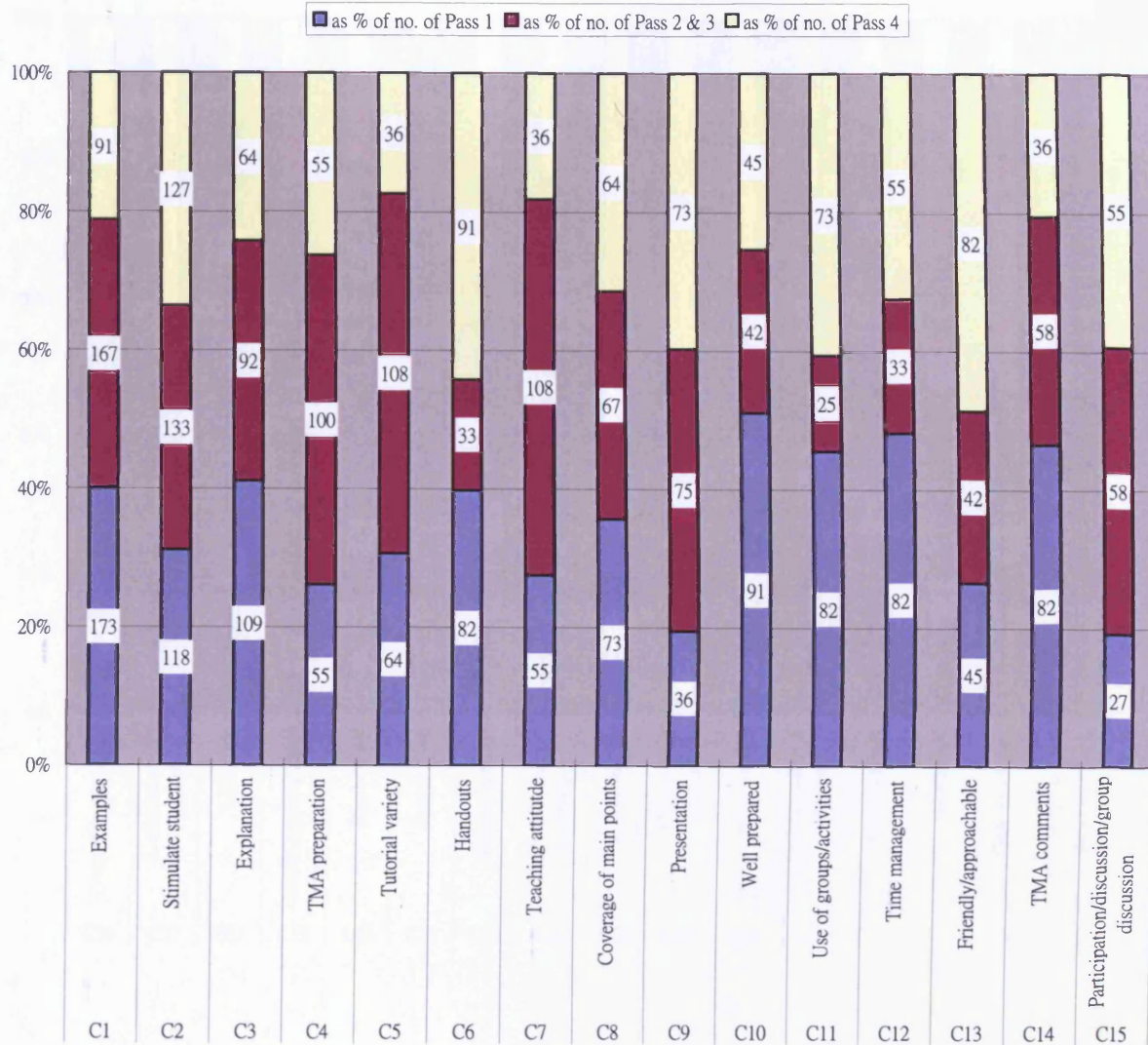


Figure 5.3: Stacked bar chart showing the relative contribution (importance) of each construct for different groups of respondents (I)

Relative importance (in %) of each construct for different groups of respondents (Pass 1, Pass 2&3, Pass 4) (II)

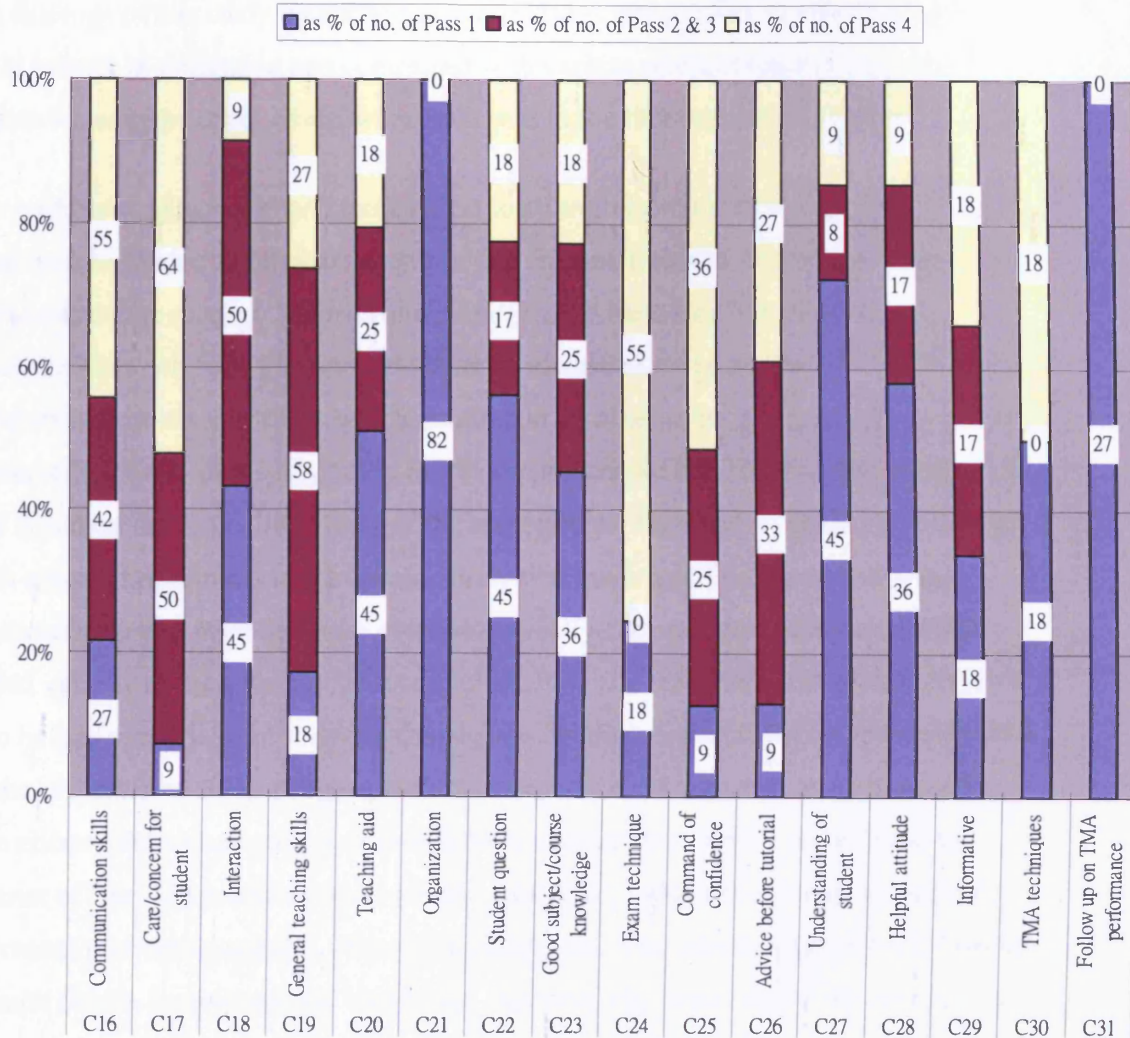


Figure 5.4: Stacked bar chart showing the relative contribution (importance) of each construct for different groups of respondents (II)

Findings as Compared with Other Teacher/Teaching Effectiveness Approaches

Findings as Compared with Other Teacher/Teaching Effectiveness Approaches

The findings of this study on elicited grid constructs and profiles of effective tutors could further be compared and contrasted with various relevant teacher/teaching effectiveness approaches which were reviewed in the literature review chapter.

The traditional personal characteristics/personal trait approach or trait view of teaching effectiveness tended to emphasize only *a few* characteristics or traits (e.g., in the literature review chapter, Thomas and Montgomery identified only four major characteristics, whereas Charters and Waples identified six in another study). In comparison, the current study which resulted in 31 constructs (grouped constructs) or characteristics was obviously much more comprehensive in many aspects, although it still relied on the subjective views of the respondents. However, it could be noted that each group of constructs in the current study was made up of different individual constructs elicited from the more methodologically-rigorous grid interviews which added validity to the data. In the course of eliciting the constructs, the grid interviews also helped identify more the finer details of what the constructs meant from the views of the respondents. Take the grouped construct of C1 - 'Examples' as an illustration. The elicited individual constructs which were subsumed under C1 were found to consist of 'real life/practical/work-related examples', 'adequate relevant examples', 'personal relevant examples', 'interesting examples', etc. which might not *all* show up in such details in conventional interviews, especially by means of survey research in which every item of the research questionnaire is drafted by the researchers. The richness and finer details of the data obtained could thus be considered as the strength of the current research as compared with the traditional personal characteristics/personal trait approach or trait view of teaching effectiveness.

In contrast to the more *elementary model* of the process-product approach (which focused on identifying 'desirable' effective teacher *behaviour* through observation and analysis of the relationship between frequency of use of certain behaviour and average student learning), the current study did not limit its scope to the identification of desirable *behaviour* only. As discussed previously, the current study generated a total of 533 individual constructs resulting in 17 grouped constructs in the Skills category, 8 in the Behaviour category (103 individual constructs before grouping), 5 in the Attitude category, 3 in the Knowledge category, and 6 in the Others category. As such, the

current study could be said to be more comprehensive in the sense that it identified more characteristics or constructs in categories *other than behaviour* alone. On the other hand, in contrast to the ordinary process-product approach, the current study did not investigate the *relationship* between *specific behaviour characteristics* and *student learning or achievement*, as this was not within the purview of the current study.

In comparison with the *full model* of the process-product approach which covered four sets of variables, namely, presage (e.g., teacher characteristics), context (e.g., student characteristics), process (e.g., teacher and student behaviour, classroom interaction) and products (e.g., pupil change, achievement), it could be noted that the current study was mainly concerned with the first three areas with particular emphasis on teacher (tutor) characteristics, and it was conducted with different methodologies or methods of inquiry. As explained above, effective tutor characteristics covering behaviour were identified and differentiated into Skills, Behaviour, Attitude, Knowledge, and Others categories.

The discussion made above compared and contrasted the findings of the current study with the elementary and full models of the process-product approaches and the traditional personal characteristics/personal trait approach or trait view of teaching effectiveness. Other teacher/teaching effectiveness approaches reviewed in the literature review chapter were less directly comparable in view of different focuses and emphasis (in particular, the input-output approach which focused on value-added or school difference and the reflective practice approach with focus on teacher development through reflective teaching). Nevertheless, it is considered that the findings of the current study on the perceptions of effective tutors could still serve as a source of useful or additional reference for such topic. This is especially true for the teaching method approach, the expertise in teaching approach, the teachers' knowledge model, and the UK studies discussed in the literature review for reasons as explained further below.

The teaching method approach as discussed in the literature review focused on the search for effective or best teaching methods or instructional technique. In a way, some of the grouped constructs relating to effective tutors identified from the current study (especially those which could be classified as Skills or Behaviour) might be further explored in detail and perhaps be developed into more specific operational techniques

to facilitate emulation by tutors or instructors. For example, the current study highlighted the importance and the kind of examples considered conducive to learning as well as the types of adult learning activities most favoured by the respondents. Hence, the findings of the current study could serve as reference in the search for effective teaching methods or instructional designs in relation to more beneficial use of examples or other adult learning activities. However, in contrast to the teaching method approach in the literature, the current study does not ignore or relegate the role of teachers in student learning (In fact those grouped constructs in the Behaviour and Attitude categories exemplified the importance of the role of tutors).

The current study bears some similarities to the expertise in teaching approach in the sense that both are, in a way, attempts in the search for excellence. Both seek more understanding of the 'tools of trade' including the teaching/tutoring skills of effective teachers (tutors for this study). However, the expertise in teaching approach mainly draws on cognitive psychological research on expert-novice differences, with emphasis on the complex and interactive nature of teaching especially in the classroom (Berliner 1992, 1994; Tang 2001). In contrast, the current study is more interested in the effective versus ineffective comparison (from the stakeholder's/learners' perspective) than the expert-novice paradigm. Some of the identified grouped constructs such as C2 - *Stimulates student* and C18 - *Interaction* were related to the complex and interactive nature of teaching. However, the other grouped constructs as identified from the current study were not confined to interactive aspects or skills. An example would be those constructs in the categories of Attitudes or Knowledge. Viewed in this perspective, it could be said that the expertise in teaching approach was more thorough/intensive and was also very much focused in its treatment or study of the complex and interactive nature of teaching, but was mainly confined to the classroom situation. In comparison, the current study was more comprehensive or broad (but probably less focused) in its coverage of the attributes and 'tools of trade' of effective tutors as evidenced by the identified grouped constructs encompassing Skills, Behaviour, Attitude, Knowledge, and the Others categories.

The teachers' knowledge model posited that effective teachers should possess and be able to make use of three kinds of knowledge: general pedagogical knowledge, subject matter knowledge, and pedagogical content knowledge (Shulman 1986; Grossman

1990; Borko and Putnam 1995; Tang 2001). An analysis of the nature and content of the identified grouped constructs (31 in total) from the findings of the current study seemed to indicate that the respondents were more concerned with first-level knowledge of the model, or the more basic or generic kind of knowledge—general pedagogical knowledge (for example, the constructs related to skills), with subject matter/course knowledge ranking relatively low in the list (Table 4.7). This finding is not surprising, because the respondents of the current study were mainly students who may not have the expertise to recognize or judge the other two kinds of knowledge. In contrast, the teachers' knowledge model is primarily concerned with how teachers make sense of their world, and with teaching evaluation and development (Shulman 1986). In fact, students' views will not be reckoned at all in the orthodox teachers' knowledge model (Shulman 1986; Tang 2001) which is certainly in sharp contrast to the current study taking only learners' view into account in the elicitation of constructs.

Compared to the current study which is concerned with the perceptions of effectiveness from students' perspective and the establishment of effective tutors profiles, the UK studies discussed in the literature review (for example, the studies by Brown and McIntyre 1993; Cooper and McIntyre 1996; Galton et al. 1999) shared the similarity in its adoption of a primarily interpretative approach. However, the UK approach differed in that it highlighted the roles played by both the students and the teachers (instead of only the students' perspective), with focus on the interdependence of teacher-student influence and the 'transactional' or 'bidirectional' view of teaching and learning. In comparison, the findings of the current study as revealed from the identified grouped constructs also contained constructs related to the interactive or transactional aspects (e.g., the constructs C2 - Stimulates/motivates students, C16 - communication skills, C17 - care/concern for students, C18 – interaction, etc). However, it is obvious that the elaboration or exploration of these constructs were not as thorough as that in the UK studies in which the specific complex and interactive nature of teaching was explored. Similar to the comparison of the current study with the expertise in teaching approach as outlined above, the current study was more comprehensive or broad (but probably less focused) in its coverage of the attributes and 'tools of trade' of effective tutors as evidenced by the identified grouped constructs covering different categories. However, the current study chose not to explore further this specific part, that is, the very details of interactive or transactional aspects (as in the UK approach).

Comparison of Findings with other Relevant Researches

Apart from comparison with various approaches in the literature, the identified characteristics/constructs of the current study could also be further compared or contrasted with other relevant significant research findings covering empirical researches as reported in the literature review chapter. These either employed the repertory grids or the SET (Students' Evaluation of Teaching Effectiveness) approaches.

The studies by Yeung and Watkins (1998), John Solas (1990), and Reid and Johnston (1999) as discussed in the literature review all made use of repertory grids in their research. However, the findings of Yeung and Watkins's study were not readily comparable to the current study in view of the different focus (student teachers' personal sense of teaching efficacy for their research) and hence would not be discussed further in here. John Solas's study (1990) was more relevant as it focused on undergraduate students' attitude about effective teaching. The most important component of overall teaching effectiveness identified in his study was the *relationship* between the educator (teacher) and the students. It was suggested by him that learning could be enhanced by emphasizing more on 'process' through the applications of principles and techniques of andragogy. In a way, there are some common grounds between Solas' findings and that of the current study in two aspects. First, some grouped constructs identified from the current study (Table 5.1) such as C13 - friendly/approachable, C17 - Care/concern for students, C18 - Interaction, C27 - understanding of student, and C28 - Helpful attitude were related to the *relationship* between the educator (tutor for the current study) and the students. Second, the current study also found that certain types of adult learning approaches (i.e., emphasis on real-life examples, integration of experience, immediate need, personal relevancy, or practical nature) were favoured by the respondents. Nevertheless, the very small sample of Solas' study and the different context and cultural background of his respondents meant that the comparison has to be viewed with caution.

The study by Reid and Johnston (1999) using a phenomenological approach was more recent. It compared and contrasted the perceptions of a group of university lecturers and students on what constituted good teaching based on data collected from repertory grid

interviews and a subsequent large-scale survey. The 24 students as respondents in their study were drawn from the Faculty of Education of a British university, and the sample was stratified in such a way as to represent proportions of four main groups of courses taught there: Bachelors, Masters, Postgraduate Certificates, and other Certificates and Diplomas. A total of 215 individual constructs were subsequently elicited from the students. By means of an Ethnograph computer analysis software, the individual constructs were categorized into 21 codings (excluding the Coding - *Research Contributes* which is the 22nd category elicited from the lecturers only). The 21 codings were then further grouped into six dimensions. The codings and the dimensions of Reid and Johnston's study as compared to the findings of the current study (the elicited and grouped 31 constructs) were shown side-by-side in Table 5.2 below to facilitate discussion and analysis.

Codings in Reid and Johnston's Study (in descending order of mention/importance)	Corresponding Constructs in the Current Study	Remarks
Interest	C2 - Stimulates/motivates student	
Lucid	C3 – Explanation C9 – Presentation C16 - Communication skills	
Approachable	C13 - Friendly/approachable	
Sensitivity	C17 - Care/concern for student C27 - Understanding of student	
Participation encouraged	C15 - Participation/discussion/group discussion	
Organised	C21 - Organization	
Knowledgeable	C23 - Good subject/course knowledge C29 - Informative	
Entertaining	C9 – Presentation Skills C16 - Communication skills	Partial matching
Caring	C17 - Care/concern for student	
Respects students	C7 - Teaching attitude	
Non-egoistic	C7 - Teaching attitude C13 - Friendly/approachable C17 - Care/concern for student C28 - Helpful attitude	Seemingly no exact match
Use of technology	C20 - Teaching aid	
Questioning attitude	C7 - Teaching attitude C28- Helpful attitude	
Experienced		Seemingly no exact match
Varied method	C5 - Tutorial variety	
Confident	C25 - Command of confidence	
Depth of treatment	C1 – Examples C3 – Explanation C29 -Informative	
Students actively involved	C11 - Use of groups/activities C15 - Participation/discussion/group discussion	
Famous		No exact matching
Exam orientation	C24 - Exam technique	
Length (of lecture)	C8 - Coverage of main points/difficult parts C12 - Time management	Seemingly no exact matching

Table 5.2: The codings and the dimensions of Reid and Johnston's study compared to the findings of the current study (the elicited and grouped 31 constructs)

Before further discussion, some comments could be made about this comparison of findings. The matching of the *codings* and *constructs* (i.e., grouped constructs) was done based solely on the subjective interpretation about their respective meanings. For each particular *code or coding* (Left column of Table 5.2), the rule of the ‘engagement’ (matching exercise) was to select the corresponding grouped *construct* (or constructs; in case of several constructs, either individually or together, those which seemed to bear close relation with a particular *coding*) which is considered as the best match with that particular *coding* in terms of meaning or relatedness. As an illustration, the code/coding Depth of Treatment was matched with C1 (Examples), C3 (Explanation), and C29 (Informative), as it was considered that depth of treatment could be achieved by more examples, more detailed or in-depth explanation, and/or more information (in different combinations). As the *constructs* (grouped constructs) of the current study were more numerous (31 constructs compared to 21 codings) and in general, seemed to be more narrowly defined than the *codings* found in Reid and Johnston’s study, it could be seen from Table 5.2 that many *codings* represented at least one *construct* or reflect two or more *constructs*.

With this background understanding, a number of interesting remarks or inferences could be made from Table 5.2 about the comparison. First and foremost, despite the cultural differences of the respondents of the two studies (UK versus Hong Kong), many of the *codings* found in Reid and Johnston’s study were similar, and in some cases, equivalent matches of the *constructs* (grouped constructs) of the current study (i.e., similarity of factors). This provided some credibility about the *content validity* or *construct validity* of the grid data (or sorted group constructs) collected in the current study. In short, *content validity* refers to the “degree to which the content of the items adequately represents the universe of all relevant items under study” (Cooper and Schindler 1998, 167), whereas *construct validity* refers to how well theoretical or conceptual construct(s) have been represented by the proposed instrument to measure them (Trochim 1996; Cooper and Schindler 1998). The characteristics of those constructs (grouped constructs) of the current study which have no exact equivalent (or was considered difficult to find an appropriate matching for which) with the codings in Reid and Johnston’s study could be noted. Except for four constructs (C10, C18, C19 and C22), all other ‘nonmatching’ constructs were found to be concerned mainly with assignments (C4, C14, C30, C31), handouts (C6),

or tutorial (C26) which could be construed as distinctive characteristics reflecting specific concerns of some of the Institution's students in this specific open/distance learning study context.

A further remark which could be made was that despite the seemingly substantial matching of *constructs* with the *codings* in Reid and Johnston's study, the 'order' or the 'ranking' (construed as reflecting 'perceived importance') of the matching *constructs* in the ordered list of the 31 grouped constructs could be quite different from that of the corresponding *codings* (*with more or less similar meaning*) in Reid and Johnston's codings list. For example, the construct C1 (Example), despite ranking high (rank 1) in the ordered list of the 31 grouped constructs in the current study, could only find its approximate 'equivalent' coding Depth of treatment in Reid and Johnston's ordered list (which was ranked quite low—fifth from the bottom) if it is interpreted that the coding Lucid (ranked second in Reid and Johnston's ordered list) could be appropriately mapped to 'examples', as the latter might also contribute to 'lucidity'. In contrast, it is interesting to note that both the *construct* C2 (Stimulates/motivates student) and its 'equivalent' *coding* Interest ranked high in their respective lists.

Some caution or qualified remarks would be necessary in noting and interpreting the observation made above and the comments in relation to construct validity and content validity arising from the comparison of the two studies. First, there was somewhat a difference in the articulated focus of the two studies, although the difference may be more *imaginary* (or a matter of nomenclature) than *real*. Reid and Johnston's focus was on what constituted *good* teaching in order to improve teaching effectiveness, whereas the main theme of the current study was on identification of *effective* tutor characteristics.

Secondly, there were more *codings* in Reid and Johnston's list which could find corresponding/matching *constructs* (elicited by the current study) than vice versa (in comparing/matching the codings with the constructs). This could imply that in a way, the *content validity* of the current study is higher if it is to be interpreted as the "degree to which the content of the items adequately represents the universe of all relevant items under study" (Cooper and Schindler 1998, 167), and if it could be established that those constructs of the current study which found no corresponding

match from Reid and Johnston's study just filled up the universe. Interestingly, it should be noted that probably, content validity could only be achieved at an expense—as a trade-off of having more constructs (31 grouped constructs) identified in the current study compared to the smaller number of codings (21) identified in the study of Reid and Johnston.

Reid and Johnston's study was primarily a localized study (UK) based on a relatively small respondent sample making use of the Repertory Grid Technique. It is relevant for comparison, as it is more recent and it employed a similar methodology to the current study in terms of elicitation of constructs using the grid technique. Further triangulation of data could be made by comparing the findings (grouped constructs) of the current study with two other well-known lists of categories more often used in the evaluation of teaching effectiveness by students, as reported in relevant literature and reviewed in Chapter 2 of this thesis. The two lists of categories were the Categories of Effective Teaching adapted by Feldman (1976, 1983, 1984) and the Students' Evaluation of Educational Quality (SEEQ) factors (Marsh 1982, 1983, 1984, 1987, 1998) which had been produced, validated, and applied to a variety of different nationalities.

Feldman's category consisting of 20 items (Feldman 1976, 1983, 1984) as compared to the findings of the current study (the elicited and grouped 31 constructs) were shown side-by-side in Table 5.3 below to facilitate better discussion and analysis.

Categories of Effective Teaching (Feldman 1976, 1983, 1984)	Corresponding Constructs in the Current Study	Remarks
Stimulation of interest (F1)	C2 - Stimulates/motivates student	
Enthusiasm (F2)	C7 - Teaching attitude C17 - Care/concern for student C28 - Helpful attitude	May not be an appropriate match
Subject knowledge (F3)	C23 - Good subject/course knowledge	
Intellectual expansiveness (F4)	C1 - Examples C2 - Stimulates/motivates student C3 - Explanation C14 - TMA comments C29 - Informative	
Preparation and organization (F5)	C10 - Well prepared C21 - Organization	
Clarity and understandability (F6)	C3 - Explanation C9 - Presentation	
Elocutionary skills (F7)	C16 - Communication skills	
Sensitivity to class progress (F8)		Seemingly no exact match
Clarity of objectives (F9)	C9 - Presentation	May not be an appropriate match
Value of course materials (F10)	C6 - Handouts	
Supplementary materials (F11)	C6 - Handouts	
Perceived outcome/impact (F12)		Seemingly no exact match
Fairness, impartiality (F13)		Seemingly no exact match
Classroom management (F14)		Seemingly no exact match
Feedback to students (F15)	C14 - TMA comments C22 - Student question	
Class discussion (F16)	C15 - Participation/discussion/group discuss	
Intellectual challenge (F17)	C2 - Stimulates/motivates student	May not be an appropriate match
Respect for students (F18)	C7 - Teaching attitude	
Availability/helpfulness (F19)	C28 - Helpful attitude	
Difficulty/workload (F20)		Seemingly no exact match

Table 5.3: Feldman's categories compared to the findings of the current study (the elicited and grouped 31 constructs)

Once again, a number of interesting remarks or inferences could be made about the comparison from Table 5.3. It can be observed that 15 out of a total of 20 in Feldman's category could find some match with the *constructs* of the current study (although three categories might not have found very appropriate equivalent matches—Enthusiasm, clarity of objectives, intellectual challenge). The general congruence or proportion of matching of Feldman's category with the *constructs* of the current study again suggested some *content validity* or *construct validity* of the grid data (or sorted group constructs) collected by the current study. A total of five Feldman categories seemed to

find no exact match with the constructs of the current study, namely, sensitivity to class progress, perceived outcome/impact, fairness/impartiality, classroom management, and difficulty/workload. However, the absence of equivalent constructs might perhaps be explained by the generally acknowledged fact that the Institution's students (as working adults) tended to take responsibility for their own learning and academic results. Hence, they would not use perceived outcome/impact and difficulty/workload as the means or constructs for differentiating between effective or ineffective tutors. Being more mature and independent (and probably well-behaved working adults or responsible parents as well), the Institution's students might also consider issues such as fairness/impartiality, sensitivity to class progress, and classroom management as less significant. This should not be too surprising in an adult learning institution as compared with more conventional universities.

Despite the fact that many items in Feldman's Category could find some matches in the grouped constructs of the current study, it was not quite the case the other way around. Attempts to find matches for grouped constructs with Feldman's items resulted in only 16 (about half of the 31 grouped constructs) matches (See Table 5.4 below). Nevertheless, some content or construct validity could still be claimed arising from the comparison, as about half of the grouped constructs could be matched. In addition, the analysis showed that six grouped constructs which could find no matches were concerned with assignments, tutorials, or examinations which could be attributed to the Institution's peculiar context. These six particular constructs might just be a reflection of the specific context which distinguishes the findings of the current study from other previous studies, as well as the current study's greater comprehensiveness (or probably resulting in higher content validity in terms of adequacy of items, as explained above).

Construct Code	Corresponding Feldman's Category	Remarks
C1 - Examples	F4 - Intellectual expansiveness	May not be an appropriate match
C2 - Stimulates/motivates student	F1 - Stimulation of interest, F2 - Enthusiasm	
C3 - Explanation	F4 - Intellectual expansiveness	May not be an appropriate match
C4 - TMA preparation		
C5 - Tutorial variety		
C6 - Handouts	F10 - Value of course materials F11 - Supplementary materials	
C7 - Teaching attitude	F2 - Enthusiasm	May not be an exact match
C8 - Coverage of main points/difficult parts		
C9 - Presentation	F6 - Clarity and understandability	
C10 - Well prepared	F5 - Preparation and organization	
C11 - Use of groups/activities		
C12 - Time management		
C13 - Friendly/approachable		
C14 - TMA comments	F4 - Intellectual expansiveness	May not be an appropriate match
C15 - Participation/discussion/group discussion	F16 - Class discussion	
C16 - Communication skills	F7 - Elocutionary skills	
C17 - Care/concern for student	F2 - Enthusiasm	May not be an appropriate match
C18 - Interaction		
C19 - General teaching skills		
C20 - Teaching aid		
C21 - Organization	F5 - Preparation and organization	
C22 - Student question	F15 - Feedback to students	
C23 - Good subject/course knowledge	F3 - Subject knowledge	
C24 - Exam technique		
C25 - Command of confidence		
C26 - Advice before tutorial		
C27 - Understanding of student		
C28 - Helpful attitude	F2 - Enthusiasm	May not be an exact match
C29 - Informative	F4 - Intellectual expansiveness	May not be an appropriate match
C30 - TMA techniques		
C31 - Follow up on TMA performance		

Table 5.4: Matching of grouped constructs with Feldman's categories

Feldman's categories were not ranked and hence the distribution of individual items could not be compared to that of the current study in terms of 'ranking' or 'order of importance' (which was possible for the Reid and Johnston's codings). The SEEQ factors were also not ranked and so could not be subjected to comparison with the current study in the same manner.

Table 5.5 below shows the Students' Evaluation of Educational Quality (SEEQ) factors consisting of 9 items (Marsh 1982, 1983, 1984, 1987, 1998) as compared with the findings of the current study (the elicited and grouped 31 constructs) which are shown side-by-side to facilitate discussion and analysis.

Students' Evaluation of Educational Quality (SEEQ) Factors (Marsh 1982, 1983, 1984, 1987, 1998)	Corresponding Constructs in the Current Study	Remarks
Instructor Enthusiasm (S1)	C2 - Stimulates/motivates student C7 - Teaching attitude C18 - Interaction	
Breadth of Coverage (S2)	C3 - Explanation C10 - Well prepared C23 - Good subject/course knowledge C29 - Informative	
Organization/Clarity (S3)	C9 - Presentation C21 - Organization	
Assignments/Readings (S4)	C30 - TMA techniques C31 - Follow up on TMA performance	
Learning/Value (S5)	C1 - Examples C3 - Explanation	Seems not an exact match
Examinations/Grading (S6)	C24 - Exam technique	
Group Interactions (S7)	C15 - Participation/discussion/group discussion C18 - Interaction	Seems not an exact match
Individual Rapport (S8)	C13 - Friendly/approachable C17 - Care/concern for student C27 - Understanding of student C28 - Helpful attitude	
Workload/Difficulty (S9)		No exact match

Table 5.5: SEEQ factors compared to the findings of the current study (the elicited and grouped 31 constructs)

In comparison with Feldman's category, and Reid and Johnston's study, it was found that most of the SEEQ factors (except one—workload/difficulty) could find some matches with the *constructs* of the current study. The general congruence or proportion of matching of the SEEQ factors with the *constructs* of the current study again suggested some *content validity* or *construct validity* of the grid data (or sorted group constructs) collected by the current study. On the other hand, fewer matchings (15 out

of a total of 31 grouped constructs were matched; about 50%) could be found when reverse matching was attempted (i.e., attempts to match the 31 grouped constructs identified by the current study with the nine SEEQ factors) (See Table 5.6 below). Assuming that the qualifying remarks in the Remarks column could be accepted, the 50% match was still quite substantial, and this could give some claim to a certain degree of content validity (and construct validity). Sixteen grouped constructs could not find equivalent matching with SEEQ factors. Amongst these 16 nonmatching constructs, four were concerned with tutorials or assignments which might be attributed to the Institution's open learning context. The discrepancy in matching might also be attributed to the Institution's unique institutional and student characteristics, and the plausibility that the findings of the current study were more comprehensive (and with higher content validity in applying to the Institution) than SEEQ factors.

Construct Code	Corresponding SEEQ Factors	Remarks
C1 - Examples		
C2 - Stimulates/motivates student	S1 - Instructor Enthusiasm S5 - Learning/Value	May not be an appropriate match
C3 - Explanation	S3 - Organization/Clarity S5 - Learning/Value	May not be an appropriate match
C4 - TMA preparation		
C5 - Tutorial variety		
C6 - Handouts		
C7 - Teaching attitude	S1 - Instructor Enthusiasm	May not be an exact match
C8 - Coverage of main points/difficult parts		
C9 - Presentation	S3 - Organization/Clarity	
C10 - Well prepared	S3 - Organization/clarity	May not be an appropriate match
C11 - Use of groups/activities	S7 - Group interactions	
C12 - Time management		
C13 - Friendly/approachable	S8 - Individual rapport	May not be an appropriate match
C14 - TMA comments		
C15 - Participation/discussion/group discussion	S7 - Group Interactions	
C16 - Communication skills		
C17 - Care/concern for student	S1 - Instructor Enthusiasm S8 - Individual Rapport	May not be an appropriate match
C18 - Interaction	S7 - Group Interactions	May not be an appropriate match
C19 - General teaching skills		
C20 - Teaching aid		
C21 - Organization	S3 - Organization/Clarity	
C22 - Student question		
C23 - Good subject/course knowledge	S2 - Breadth of Coverage S5 - Learning/Value	May not be an appropriate match
C24 - Exam technique		
C25 - Command of confidence		
C26 - Advice before tutorial		
C27 - Understanding of student	S8 - Individual Rapport	May not be an appropriate match
C28 - Helpful attitude	S1 - Instructor Enthusiasm S8 - Individual Rapport	May not be an exact match
C29 - Informative	S2 - Breadth of Coverage S5 - Learning/Value	May not be an appropriate match
C30 - TMA techniques		
C31 - Follow up on TMA performance		

Table 5.6: Matching of grouped constructs with SEEQ factors

To conclude, the comparison/triangulation of the list of grouped constructs of the current study with Feldman categories, SEEQ factors, and the codings found in Reid and Johnston's study was useful in helping assess and evaluate the content and

construct validity of the findings of the current study. To seek further understanding about the rationale or implications behind the elicited constructs in terms of perceived consequences and values, the following section provides further analysis and comparison of the laddering up interview findings on high-achieving and low-achieving students.

Further Analysis and Comparison of the Laddering up Interview Findings

Due to the difficulty in separating the analysis and discussion from the presentation of findings which are essentially qualitative in nature, the laddering up interview findings for both high-achieving and low-achieving students were by and large discussed and analyzed in separate sections in the previous chapter. As such, the ensuing discussion in the following paragraphs focuses mainly in comparing the laddering up findings of these two groups of students to highlight further the rationale and implications behind the essential differences in perceptions of effective tutors. In short, explanation is first sought for the different perceptions of effective tutor profiles by comparing the perceived important consequences and values of these two groups of students. Implications and recommendations would then be made based on the comparisons.

Analysis and comparison of the differences in findings on perceived consequences

The findings on the perceived important consequences of Pass 1 and Pass 4 respondents (representing high- and low-achieving students, respectively) were presented and discussed separately in the previous chapter. Table 5.7 below lists side-by-side the perceived important consequences of these two different groups to facilitate further discussion and comparison.

Consequences	Pass 1 Respondents	Pass 4 Respondents
Facilitates learning (C21)	✓	✓
Better academic result (C22)	✓	✓
Helps understanding course content/concepts (C2)	✓	✓
Productive thinking (C4)	✓	
Heightened curiosity/interest (C1)	✓	
Helps focus (C5)	✓	✓
Saves time (C11)	✓	✓
Checks/Reviews learning progress (C8)	✓	
Improves logic of argument (C9)	✓	
Reasonable teaching pace (C20)	✓	
Improves written work (C10)	✓	
Keeps up study spirit (C3)	✓	
Interacts with fellow students (C6)	✓	
Adequate syllabus coverage (C13)	✓	
Follows teaching schedule/time table closely (C14)	✓	
Builds rapport/mutual support (C7)	✓	✓
Reads related work/articles (C12)	✓	
Keeps up study spirit (C3)		✓
Feels free to ask questions (C15)		✓
Less boring (C16)		✓
Helps memorization (C18)		✓

Table 5.7: Comparison of perceived important consequences of Pass 1 and Pass 4 Respondents

As seen from Table 5.7 above, there are similarities and differences in the perceptions of Pass 1 and Pass 4 respondents with respect to the listed consequences. Six consequences which were common between the two groups include *Facilitates learning* (C21), *Better academic result* (C22), *Helps understanding course content/concepts* (C2), *Helps focus* (C5), *Saves time* (C11), and *Builds rapport/mutual support* (C7). The significance or implications of the consequences-in-common are discussed below.

As explained in the previous chapter, the significance of the first two consequences-in-common (i.e., *Facilitates learning* (C21) and *Better academic result* (C22)) is almost axiomatic and hence no further elaboration is needed. A scrutiny of interview transcripts showed that the consequence-in-common *Builds rapport/mutual support* (C7) was only mentioned sparingly by both groups of respondents and hence is not an important consequence. It is nevertheless interesting to note that the majority in both groups of respondents did not consider it important to seek support from each other/other students. In contrast, the consequence-in-common *Helps understanding course content/concepts* (C2) would need more elaboration.

On the surface, it seemed that both groups of respondents consider the consequence *Helps understanding course content/concepts* (C2) as conducive to learning or better academic result. However, it is to be noted that some different meanings or connotations were implied in the discussion of the same term by the respondents in the two different groups. This was observed in the discussion in the previous chapter. In particular, Pass 4 respondents were found to be holding a utilitarian perspective or a narrow conception of what constitutes understanding or learning. Pass 4 respondents generally interpreted the consequence as helping to reduce the difficulty with regard to their ability in reading and comprehension or to overcome their problem on command of language. In contrast, it was observed that Pass 1 respondents had different interpretations or connotations of what contributes to greater learning or more helpful understanding. They conceived *Helps understanding course content/concepts* (C2) as helping them to relate theories to practice, or seeing the problem in a new light or new perspective.

Helps focus (C5) and *Saves time* (C11) are the remaining consequences-in-common which need some more elaboration. As *Helps focus* (C5) and *Saves time* (C11) are apparently more strategic in nature as related to studying, it seems that Pass 1 respondents are also concerned with taking a strategic approach in learning. Pass 1 respondents, however, seemed to be less utilitarian and are mindful of their own responsibility in studying. For example, a scrutiny of their related transcripts revealed that they would like more focus to facilitate their revision of course materials or to recapture main points of theories and concepts. In contrast, some

Pass 4 respondents would like tutors to focus more on materials mainly related to course assessment or examination and to save time in making their own notes.

Some interesting observation could be made about the differences in perceptions of Pass 1 and Pass 4 respondents with respect to the consequences which are not common between the two groups. In presenting the HVM findings for Pass 1 respondents in the previous chapter, it was noted that Pass 1 respondents seemed to be relatively sophisticated in their thinking process, as evident from the more complicated implicative relationships shown in their HVM. Table 5.7 above and the comparison of the HVMs (Figures 4.5 and 4.6) seemed to provide further evidence that this is in fact the case. In particular, Table 5.7 shows that numerically, Pass 1 respondents were able to produce more higher-order as well as lower-order consequences than Pass 4 respondents (17 versus 11 in number).

Qualitatively, in the discussion of consequences, it was noted in the previous chapter that Pass 4 respondents seemed to be in need of more external incentives/stimulus or encouragement (for example, from the tutor). It was also pointed out that Pass 4 respondents seemed to be more instrumental, utilitarian, or strategic in their study attitude or motive. In contrast, Pass 1 respondents seemed to be more concerned with studying for its own sake, and they seemed to be more serious in their learning efforts. For example, *Reads related work/articles* (C12) and *Productive thinking* (C4) are two elicited consequences unique to Pass 1 respondents. It is obvious that these two consequences would only be appreciated by respondents who are serious in their study. *Productive thinking* (C4) means that respondents would like to think about or know further about course concepts and theories learned, including their origins, strengths, and weaknesses which were revealed in the transcripts of the respondents' answers. *Reads related work/articles* (C12) implies that the respondents are willing to invest more efforts in studying about the relevant topics.

Analysis and comparison of the differences in findings on perceived values

The discussion made above on the comparison of consequences elicited from Pass 1 and Pass 4 respondents showed that there are essential differences between the two groups. Some further interesting observations could be made based on a comparison of the values elicited from the two groups which are shown in Table 5.8 below.

Table 5.8: Comparison of perceived important values of Pass 1 and Pass 4 Respondents

Values	Pass 1 Respondents	Pass 4 Respondents
Accomplishment (V3)	✓	✓
Status/Respect/Self-esteem (V2)	✓	✓
Pleasure (V7)	✓	
Security (V1)	✓	✓
Meaningful Life (V6)	✓	
Belonging (V5)	✓	✓
Responsibility (V4)	✓	✓

As seen from the table, there are also similarities and differences in the perceptions of Pass 1 and Pass 4 respondents with respect to the listed values (which was noted in the previous discussion). The five values which are common between the two groups are *Security (V1)*, *Responsibility (V4)*, *Accomplishment (V3)*, *Status/Respect/self-esteem (V2)*, and *Belonging (V5)*. For some Pass 1 respondents, *Pleasure (V7)* and *Meaningful life (V6)* are additional values to be satisfied.

In spite of the findings which show that the two groups do share some values in common, it should be noted that in general, the two groups do not perceive the same values as equally significant. For illustration, it was noted in a previous discussion that most Pass 4 respondents are concerned with the values *Security (V1)* and *Responsibility (V4)*, whereas the values *Accomplishment (V3)* and *Status/Respect/self-esteem (V2)* are only moderately important (in terms of the number of mentions). In comparison, it was noted that most Pass 1 respondents showed concern with values such as *Accomplishment (V3)* and *Status/Respect/self-esteem (V2)*.

The popularity of the chosen values for the two groups of respondents as outlined above appeared to be generally compatible with the findings previously noted in the separate discussion of elicited consequences and values for these two groups. For example, in the discussion of the three consequences *Keeps up study spirit* (C3), *Feels free to ask questions* (C15), and *Less boring* (C16) which were identified for Pass 4 respondents, it was pointed out that Pass 4 respondents seem to be not quite confident enough in their own ability in studying, and that they are clearly in need of more external incentives/stimulus or encouragement (for example, from the tutor). This helped explain the mostly chosen value *Security* (V1) which reflected their inner insecurity feelings. In a way, it also helped explain why most were concerned with fulfilling *Responsibility* (V4), as it seemed that Pass 4 respondents could not feel the joy of studying in the learning process per se. Therefore, they perceive studying as their responsibility instead. The values *Status/Respect/self-esteem* (V2) and *Accomplishment* (V3) received moderate number of mentions which reflect that Pass 4 respondents are also concerned with achievement and status. However, it was noted that they generally hold a more instrumental or utilitarian attitude toward studying and that they hope to fulfil these values by adopting a strategic approach in their study.

For Pass 1 respondents, it was already noted that values such as *Accomplishment* (V3), *Status/Respect/Self-esteem* (V2), and *Pleasure* (V7) are congruent or compatible with consequences such as *Helps understanding course content/concepts* (C2), *Productive thinking* (C4), and *Heightened curiosity/interest* (C1). These findings of values show that Pass 1 respondents are more concerned with achievement and status, but they could also derive pleasure from studying, and they hope to fulfil these values by studying seriously. A review of transcripts showed that they are more willing to adopt a *deep learning* approach in the sense of being involved in more productive thinking, and investing time and effort in understanding the depth and breadth of course content and theories, etc. Lastly, it should be noted that the values *Security* (V1) and *Responsibility* (V4) are not quite treasured by Pass 1 respondents. Perhaps some Pass 1 respondents also have some insecurity feelings but such feelings are not pervasive amongst them (and are much less compared to Pass 4 respondents). The low level of concern with *Responsibility* (V4) by Pass 1 respondents is less susceptible to explanation. However, it was recognized that in general, Pass 1 respondents could

derive intrinsic pleasure or motivation from studying (as already discussed above). As a result, they probably do not (or only to some extent) share the view of Pass 4 respondents who tended to perceive studying as some kind of a burden or responsibility to be fulfilled.

The implications arising from the analysis and comparison of the findings will be discussed in the next chapter.

Conclusion

To recapitulate, the research findings were further discussed, analyzed, and interpreted in relation to the literature review and research questions in this chapter. The discussion and analysis first centred on the repertory grid constructs and then proceeded to the analysis and comparison of the findings on consequences and values elicited from the high-achieving and low-achieving respondents.

With reference to the findings in Chapter 4, the observation that the elicited constructs from the respondents could be ordered according to the number of constructs in each category of Skills, Behaviour, Attitude, Knowledge, and Others was first noted. It was also observed that the ranking of Skills, Behaviour, Attitude, Knowledge, and Others in descending order (perceived importance) seemed to lend some creditability to the collected constructs. The respondents seemed to be quite rational in providing more constructs in the Skills category than in the next Behaviour category and so on, which meant that they could discern the importance of each construct in the hierarchy. The anomaly (low rating) as exhibited by the category Knowledge was explained which further revealed some interesting supplementary findings.

The perceived characteristics or profiles of effective tutors of different groups of learners (academic performance) were then further compared and contrasted in a more comprehensive manner. This was done by means of bar charts and stacked bar charts showing more clearly the similarities and differences in the perceptions (in terms of different constructs and frequency of mention) between these distinct groups of learners. In particular, it was shown that some constructs (grouped constructs) such

as ‘examples’ (C1) and ‘stimulates/motivates students’ (C2) in the Skills category were ‘universal’ or commonly shared in all profiles, and were ranked highly by all groups. In contrast, C21 (Organization) and C31 (Follow up on TMA performance) which ranked high and relatively high for Pass 1 were absent from the profiles of Pass 4, and Pass 2 and 3, showing examples of differences in the perceptions (in terms of different constructs and frequency of mention) between the distinct groups of learners exhibiting different academic performance levels.

The findings on elicited grid constructs and profiles of effective tutors were then compared and contrasted with various relevant teacher/teaching effectiveness approaches which were reviewed in the literature review chapter. The more methodologically rigorous grid interviews, and the richness and finer details of data obtained were pinpointed as the strength of the current research compared to the traditional personal characteristics/personal trait approach or trait view of teaching effectiveness. The similarities and differences in research approaches or focuses between the current study and the elementary/full models of the process-product approaches were then noted. It was considered that other teacher/teaching effectiveness approaches (such as the input-output approach and reflective practice) reviewed in the literature review were not readily comparable in view of different focuses and emphasis. Nevertheless, the findings of the current study on students’ perceptions of effective tutors could still serve as a source of useful reference, especially for the teaching method approach, the expertise in teaching approach, and the teachers’ knowledge model.

The identified characteristics/constructs (grouped constructs) of the current study were then compared and contrasted with other relevant significant research findings, in particular, with the studies of Reid and Johnston (1999), Feldman’s category (1976, 1983, 1984), and the SEEQ factor (Marsh 1982, 1983, 1984, 1987, 1998). In general, the analysis revealed that many items in Reid and Johnston’s codings, Feldman’s category, and the SEEQ factor could find similar, and in some cases, equivalent matches with the constructs (grouped constructs) of the current study (i.e., similarity of factors). Although ‘reverse matching’ (i.e., in comparing/matching the codings/Feldman’s category, and SEEQ factors with the constructs) seemed to yield fewer equivalent matches, those construct (group constructs) items which could not

find equivalent matches seemed to be more characteristic of the specific open learning context of the Institution. The fewer (though still significant) equivalent matches could be due to the fact that the constructs of the current study were more comprehensive but more narrowly defined than their counterparts. As such, it was asserted that the substantial matching in both situations provided more credibility about the *content validity* or *construct validity* of the grid data (or sorted group constructs) collected in the current study. Nevertheless, in interpreting the findings and analysis, some cautionary remarks were also made in view of the difference in cultural contexts of the studies. Specifically, the focus of Reid and Johnston's study was 'good teaching' (in contrast to 'effective teaching' in the current study) and the possible difference in perceived importance despite equivalent matching of Reid and Johnston's codings with the constructs (i.e., grouped constructs) of the current study.

The focus of the discussion then turned to the analysis and comparison of the laddering up findings on high-achieving and low-achieving respondents. As previously discussed, the findings highlighted the similarities as well as essential differences between the two groups of students in terms of desired consequences, and personal or life values they considered important or necessary to be fulfilled. Table 5.7 and Table 5.8 show the comparison of the findings side-by-side.

Generally, in the comparison of consequences elicited from the respondents, it was found that there were essential differences between the two groups. In presenting the HVM findings for Pass 1 respondents in the previous chapter, it was noted that Pass 1 respondents seemed to be relatively sophisticated in their thinking process as evident from the more complicated implicative relationships shown in their HVM. In fact, Pass 1 respondents were able to numerically produce more higher-order as well as lower-order consequences than Pass 4 respondents (17 versus 11 in number). Qualitatively, based on the interpretation of relevant interview transcripts on the elicited consequences as noted above, Pass 4 respondents seemed to be in need of more external incentives/stimulus or encouragement (for example, from the tutor).

It was also pointed out that Pass 4 respondents seem to be more instrumental, utilitarian, or strategic in their attitude or motive toward studying. In contrast, Pass 1 respondents seemed to be more concerned with studying for its own sake, and

they seemed to be more serious in their learning efforts.

In the comparison of values elicited from the respondents, the major differences between the two groups were also uncovered. The five values found to be common between the two groups were *Security* (V1), *Responsibility* (V4), *Accomplishment* (V3), *Status/Respect/self-esteem* (V2), and *Belonging* (V5). For some Pass 1 respondents, *Pleasure* (V7) and *Meaningful life* (V6) are additional values to be satisfied. While the two groups do share some values in common, it was noted that they did not perceive the same values as equally important (in terms of number of respondents in each group showing concern about the values). The review of the relevant interview transcripts and links in the HVMs showed that the values identified for each group of respondents could be very much related to (or generally compatible with) the findings on the consequences, and favoured tutor attributes/constructs which were elicited in the earlier stages. In effect, the comparison and discussion of the identified values provided evidence in showing that the two groups of respondents (high-achieving and low-achieving learners) could be quite unique or distinct in their study approach and preferences (as manifested and seemed to be explicable by the identified values, consequences, and preferred effective tutor attributes, and their interlocking relationships).

In the conclusion chapter which follows next, an overview of the main findings, the implications for theory and practice, the major limitations of the current study, and the contributions to the field and suggestions or directions for future research will be presented and discussed.

Chapter 6 Conclusions and implications

Introduction

In this chapter, an overview of the main findings will be presented with regard to the main research objective as well as how the findings added to our understanding with respect to the literature review. The implications of the findings for theory and research, and for practice, including the overall remarks on the limitations of this study, were also discussed.

The chapter concluded with the highlights on the major contributions of the current study in extending the knowledge base in the field.

Overview of main findings

This study showed that it was useful and possible to study students' perceptions of effective tutors in a distance-learning institutional context by means of the Repertory Grid Technique. The use of the grid in combination with the interview and content analysis resulted in the systematic categorization of the constructs elicited from the respondents who participated in the grid interviews. As a result, the study succeeded in generating different detailed lists of ranked grouped constructs and profiles representing perceived characteristics of effective tutors for all respondents as a whole and for respondents segmented by different academic performance groupings. The study also showed that some similarities and differences in the perceptions (in terms of different constructs and frequency of mention) between the distinct groups of learners exhibiting different academic performance levels could be identified from the respective profiles by referring to the constructs tables and different charts.

The findings on profiles of effective tutors and ranked constructs served to complement the existing knowledge base on teacher/teaching effectiveness in the relevant literature. Apart from its unique context (institutional, cultural, and study mode of respondents) and methods of inquiry as distinct from other approaches or

previous relevant studies, the current study was more comprehensive in terms of the richness and finer details of data obtained when compared to traditional personal characteristics/personal trait approaches or trait view of teaching effectiveness.

The findings on profiles of effective tutors and ranked constructs were compared and contrasted for data triangulation with other relevant or significant research findings covering empirical research, which either employed the repertory grids or used the SET (Students' Evaluation of Teaching Effectiveness) approaches. In particular, the findings were compared to those in the studies of John Solas (1990), Reid and Johnston (1999), Feldman's category (1976, 1983, 1984), and the SEEQ factor (Marsh 1982, 1983, 1984, 1987, 1998). Generally, a partial or substantial matching of the constructs of the current study with the codings, Feldman's categories, and the SEEQ factors provided credibility to the construct and content validity of the findings.

The findings based on the laddering up interviews of the high-achieving and low-achieving respondents provided further explanation and understanding of the findings from the first part on perceptions/constructs of effective tutors from the grid interviews. In essence, by means of scrutiny of individual transcripts and HVMs, it was found that by and large the profiles of effective tutor constructs (for each group which were represented by the top-five ranking constructs in terms of number of mentions) were useful for elicitation of the respective group's perceived beneficial consequences and the values held by the respondents.

Apart from adding to the knowledge or understanding of the two respondent groups per se (such as uncovering the underlying meanings of the different effective tutor attributes/constructs of the two groups), the analysis and comparison of the consequences and values highlighted their similarities and essential differences. Such differences (in consequences and values) not only helped in clearly distinguishing between these two groups (the high and low achievers) in their study approaches/preferences or attitudes, but it also helped in providing further justifications and rationale for the differences in preferred profiles of effective tutor attributes which were identified for the two groups of respondents.

Implications for theory and research

The study demonstrated that the Repertory Grid Technique, in addition to being methodologically rigorous, is a powerful research tool. One of its main strengths is its ability to generate a rich array of data. It was shown that a large number of individual constructs were generated with it, and these were categorized and ranked into grouped constructs which produced the profiles of effective tutors for different groups of learners. In addition, even the finer details and underlying meanings of respondents' answers could be elicited with the use of the associated laddering technique. However, the use of the Repertory Grid Technique was very time-consuming both in the data collection stage and especially in later data analysis owing to the large number of data/constructs elicited. A long interview session could cause fatigue for both the interviewer and interviewees, which could consequently affect the accuracy of the answers and the probing processes. With little manpower resource, studies employing the grid technique are therefore bound to be conducted on a small-scale basis as revealed in the literature reported, as in the case of the current study with only one principal investigator. To some extent, proper prior briefing to familiarize the potential respondents with the basic format of the grid interview would help prevent unnecessary questions and thereby save some valuable interview time. However, in light of the experience gained from this study, it is recommended that studies which use the Repertory Grid Technique are best carried out with a team of investigators, especially for large-scale studies.

Next, the current study succeeded in generating different detailed lists of ranked grouped constructs and effective tutor profiles showing that some similarities and differences do exist in the perceptions (in terms of different constructs and frequency of mention) between the distinct groups of learners. By means of the laddering up interview and the hierarchical value maps (HVM) which were not commonly used in educational research, the study also succeeded in seeking some general explanations (in terms of consequences and values) for the differences in effective tutor profiles for high-achieving and low-achieving learners. Hence, further educational researches may contemplate on making use of similar technique, the HVM in particular, which was demonstrated to be a viable and useful technique.

Moreover, the second part of the current study was essentially more qualitative in its orientation in the use of HVM, and future researches in similar directions could consider its application on a more quantitative basis. It could also cover respondents from *all* different academic performance groups (i.e., including Pass 2 and 3 respondents in the laddering up interviews).

Resource permitting, the findings on the 31 grouped constructs might also be subjected to further empirical investigation in the future by seeking respondents' explanations for each and every grouped construct through semantic differentials (through questionnaires) as a means of triangulation of the elicited constructs. This is in line with the aim of understanding better the rationale behind the choices of constructs by the respondents.

Similar to the Reid and Johnston's study, the current study showed that the elicited grouped constructs could be ranked which indicated perceived importance by the respondents. This is more meaningful as well as facilitative of further comparison with other studies. Interestingly, the more commonly used Feldman's category items and SEEQ factors were not ranked. To provide further comparison, triangulation, or validation of the different instruments as indicators of teaching/teacher or tutor effectiveness, perhaps future researches can consider inviting the same groups of respondents to rate and rank the relevant items/constructs in different instruments for better comparison.

The last implication from the study is that it might be a dilemma to strike a proper balance between producing many (or too many) grouped constructs as in the current study as compared with probably too few items like the SEEQ factors. Content validity may be improved with more constructs, but it will divert attention and focus in contrast to highlighting only a few important or effective attributes of tutors. It was noted in Chapter 5 that some grouped constructs which could not be appropriately matched to Reid and Johnston's codings, Feldman's' categories, or SEEQ factors were more or less specific to the Institution and to the distance learning context. Perhaps, this type of Catch-22 or Pandora's box situation could be further explored in future studies.

Implications for practice

In addition to the theoretical and research implications, the findings of the current study have implications for practice as well. First, the perceptions of effective tutors as encapsulated in the list of grouped constructs and profiles could be appropriately related or communicated to the serving tutors of the Institution for reference. In addition, the course coordinators and course developers of the Institution might also take note of the findings which could be useful for guiding and advising tutors, or for developing courses for students.

The findings could also serve as reference for the Institution's human resource unit and business school administrators in their tutor recruitment process, and in their formulation of personnel specifications, and guidelines for tutor recruitment or interview checklist for tutor appointment. Tutor training and development could also focus on enhancing those attributes considered most important or valuable by the respondents as revealed by the ranked constructs/findings. Likewise, teaching evaluation, tutor appraisal, and tutorial inspection visits could be designed or modified based on the findings. It is nevertheless not the intention of this researcher to advocate that only students' views or perceptions should be taken into account. However, appropriate attention or recognition given to the findings would probably better serve students' needs and contribute to effective teaching, tutoring, and learning in the long run.

The essential differences between the two groups of high-achieving and low-achieving respondents uncovered by the laddering up findings showed that they could have different perceptions, needs, attitudes, aspirations, and approaches to studying. These were revealed by their different preferences about consequences and values. For example, Pass 4 respondents seemed to employ a more surface or shallow approach to studying, whereas Pass 1 respondents appeared to be more likely involved in more in-depth learning. A legitimate question is whether something needs to be done to help low-achieving respondents (Pass 4 respondents) to change their values (or their current approach in studying) which seems to be questionable or undesirable from an educational point of view. However, would the change really

help low achievers attain better learning and academic results? This is a practical issue or implication which needs to be further addressed.

Limitations and generalizability of findings

The preceding chapters has already dealt with specific issues on validity and reliability in the use of the Repertory Grid Technique and the laddering interviews as methods and research tools for inquiry, as well as the specific procedures or measures taken to ensure validity in the collection and analysis of data. As a final remark, it would be useful to note the following discussions pertaining to certain limitations of the current study caused by the difficulty in administration of the repertory grid and the issue of generalizability of the research findings.

The time limit allowed for each administered grid interview was very taxing for both the researcher and the interviewees. Depending on the necessity of each case, it might be better if flexibility in time allocated for each interview session would be allowed so that the respondents would have more time to think and explicate about their constructs in less hurried/pressurized situations. However, it was finally decided not to extend the time beyond the schedule for all interviewees for two main reasons. First, it was considered that more potential respondents would be put off by the possibility of lengthening the interview time (they need to be informed in advance of the estimated time as a matter of courtesy). Second, it seems that there is no precedent case in the literature with regard to the flexibility of lengthening the interview time on a discretionary basis.

Another related issue in connection with the use of the grid was that although seven elements (including one representing the ideal tutor) were used as stimulation to elicit the constructs, the seven elements represented in effect the *universe* of tutors for the grid interview. This could be considered as a sort of artificial *constraint* on the respondents in their construction of the meaning of effectiveness. However, this problem is not unique to the current study and probably could not be satisfactorily resolved (because the inclusion of more elements will even be more time-consuming in completing a grid).

It was previously noted that 34 respondents were interviewed for this study, and the cognitions generated were specific to the Institution's business school and its distance-learning context. While it is prudent to bear this in mind in considering the applicability of the findings to other institutional contexts, it is also useful to note that the number of respondents should be considered normal or adequate for typical repertory grid research studies, as explained in previous sections. To the extent that other competing distance-education institutions have similar contexts as in the author's researched institution, the findings of the current study should be relevant and generally applicable.

In fact, it is considered that the findings of the current study could become even more significant with greater generalizability. It has now become evident that more distance-learning higher-education programmes are being offered in Hong Kong than ever. Such programmes are being offered by community colleges or distance-learning subsidiaries of local traditional universities/educational institutions as well as competitors from overseas. The majority of such programmes are related to business disciplines which have proven to be most appealing to prospective students.

Contributions of the current study and concluding comments

The current study can be considered as an attempt to rekindle the seemingly dormant interest on students' perceptions of effective tutors or teachers. As explained above, the findings of the current study on profiles of effective tutors and ranked constructs served to complement the existing knowledge of teacher/teaching effectiveness in the relevant literature. The findings with the ranking of constructs were much more comprehensive in terms of richer and finer details of the data obtained as compared with other traditional personal characteristics/personal trait approaches or trait view of teaching effectiveness. In addition, the combination of the Repertory Grid Technique with the associated laddering up interviews and hierarchical value maps contributed to a further and deeper understanding of students' perception of effective tutors with implications for theory and research, and for practice as explicated above. This could be considered as one of the major

contributions of the current study in extending the knowledge base.

In addition, the current study is, by way of case approach, relatively unique in the sense that it is an indigenous study carried out in a specific institutional distance-learning context, with the respondents being learners of ethnic Chinese origin. As explained in Chapter 1, it is believed that the focus on students' perceptions serves the unique needs of the Institution at its current stage of development and tutor administration. The unique context coupled with the practical and immediate relevancy of the current study is another evidence of its usefulness.

Albeit not the pioneer in the use of Kelly's (1955) grid methodology in search for students' perceptions of effective tutors, the current study could be one amongst only a few of similar studies using this technique for this purpose. As such, the current study did not only take advantage of the methodological rigor of the grid technique, but it has in the meantime also contributed to the growing knowledge base of the grid approach per se and the related literature. This is considered as another major contribution of the current study. It is hoped that the current study would initiate more interest and thereby serve as a catalyst for more research studies in this direction to be conducted using repertory grids. The same could be said about the use of the laddering up technique and the hierarchical value map in the current study, since it was pointed out in earlier discussions that there were many studies using these techniques and tools in marketing and consumer research than in the field of education.

With more distance-learning higher education programmes being offered in Hong Kong and with greater competition for students amongst competing educational institutions based locally and overseas, it is expected that researches on students' perceptions of effective teachers or teaching would become more prevalent in the future. This is in light of institutions realizing the need to be more responsive to students' needs and expectations, with students being recognized as their *clients* or *customers*. Hence, the current study can be considered as a roadmap as well pointing out possible avenues for further research.

Appendix 1

Table 2.2 - Comparison of current study with associated research studies using Repertory Grid and SET related

Title/Approach of Research Study	Author/Year	Main Focus/Objectives	Major Methods/Research Tools	Respondents /Information sources	Major Similarities to Current Study
Hong Kong Student Teachers' Personal Construction of Teacher Efficacy	Yeung & Watkins (1998)	To investigate how student teachers in Hong Kong developed a personal sense of teaching efficacy	Repertory Grid technique; Data processed by RepGrid (SOCIO program and socionets diagram)	27 student teachers in Hong Kong	Repertory Grid technique; Methodological considerations: unlike other studies largely rely on use of questionnaires with pre-designed item may not cater for diversity in cultural educational or training contexts
Effective Teaching as Construed by Social Work Students	John Solas (1990)	Study of four social work students' attitude about criteria for evaluating teaching effectiveness	Repertory Grid technique; Data processed by INGRID 72 (Slater 1977)	Four undergraduate social work students; two in the first year and the other two in the final years of the full-time social work program at Queensland University, Australia.	Repertory Grid technique; qualitative approach over traditional questionnaire more directly related objectives identifying the effective criteria, and particularly, methodological aspects such as students to compare teaching elements) they know procedure to establish their criteria of effectiveness

Appendix 1 (Continued)

Title/Approach of Research Study (-ies)	Author/Year	Main Focus/Objectives	Major Methods/Research Tools	Respondents /Information sources	Major Similarities to Cu
Improving Teaching in Higher Education: student and teacher perspectives	Reid and Johnston (1999)	<p>To compare and contrast the perceptions of staff and students on what constitute good teaching;</p> <p>To explore the staff's self-perception of the need to change in the light of the findings.</p>	<p>Repertory Grid technique in the first phase followed by large sample survey in second phase.</p> <p>A computer program Ethnograph enabling coding and analysis of categories was used to analyse the database of the constructs as a whole.</p>	<p>In the first phase, twenty-four lecturers AND twenty-four students were selected as respondents</p> <p>In the second phase, all 102 lecturers working in the Faculty were included in the survey with a sample of the same number of students, again stratified by type of course.</p>	<p>Besides the identification of constructs of good teaching from students' perspective, the relevant part for reference in current study is the method as use of Repertory Grid prescribed characteristic of elements, and the sub-categorization and sorting dimensions.</p>

Appendix 1 (Continued)

Title/Approach of Research Study (-ies)	Author/Year	Main Focus/Objectives	Major Methods/Research Tools	Respondents /Information sources	Major Similarities to C
Students' evaluation of teaching effectiveness (SET)	Marsh and Dunkin (1992); Marsh(1987); (Marsh and Hocevar, 1991); Feldman (1976); (Frey et al 1975) etc	The approach and related studies are essentially concerned with constructing and evaluating multidimensional SET instruments	Empirical approaches such as factor analysis and multitrait-multimethod analysis; and/or logical analysis of the content of effective teaching and the purposes the rating are intended to serve, supplemented by reviews of previous research and feedback from students and instructors	Students and/or faculty staff including teaching staff and literature sources	Categories and factors i the methodologically vi approaches, SEEQ in p well be used as referenc background information triangulation with the p

Appendix 1 (Continued)

Title/Approach of Research Study (-ies)	Author/Year	Main Focus/Objectives	Major Methods/Research Tools	Respondents /Information sources	Major Similarities to C
Current Study : In search of excellence: A study of students' perceptions of effective tutors in a part-time distance-learning context	Kenneth Chao (2005)	To identify the effectiveness criterion / perception or profile of effective and ineffective tutors using Repertory Grid technique. The current study is also interested in knowing the rationale behind the perceptions	Repertory Grid technique followed by further interviews based on Repertory Grid findings and using means-end chain/hierarchical value map for analysis	Small samples of respondents by means of stratified sampling from within the business school of a major distance learning institute in Hong Kong	NA

Appendix 2

An implication matrix table reproduced from Reynolds and Gutman's journal paper
Source: Reynolds, T.J., & Gutman, J (1988), Laddering Theory, Method, Analysis, and Interpretation, Journal of Advertising Research 28, 1: 11-31

Summary Implication Matrix*																
	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1 Carbonation	1.00		10.00		4.06			.01	.14		.04		.06			.04
2 Crisp	3.00		4.00		.04				.04	.03	.04	.01			.07	
3 Expensive	12.00								2.04	1.01	1.09		1.06		.05	.05
4 Label	2.00					2.02				2.04	.02		.01		.02	.03
5 Bottle shape	1.00		1.00			2.02				1.03					.02	.03
6 Less alcohol			1.00		1.00		5.00		.01		.01	1.01		.04	.01	
7 Smaller				1.00			.01	3.00				.01		.02	.01	
8 Quality						3.00		1.00	4.00	4.03	4.04	.01	3.02		.09	.04
9 Filling				4.00			.04						1.03		.03	.02
10 Refreshing					10.00	1.00			5.10	.01	.06		.04		.05	.02
11 Consume less								5.00				.04		.02	.03	
12 Thirst-quenching									14.00		.08		.06		.04	.04
13 More feminine										7.00	.02				1.03	.04
14 Avoid negative											1.00	5.00		4.01	.04	
15 Avoid waste														2.00		
16 Reward											11.00		8.00		.06	1.05
17 Sophisticated											4.00	1.00	1.00		4.02	5.03
18 Impress													1.00		10.00	9.00
19 Socialize														3.00	5.00	
20 Accomplishment																
21 Family																
22 Belonging																
23 Self-esteem																

*No relations exist between the attribute elements.

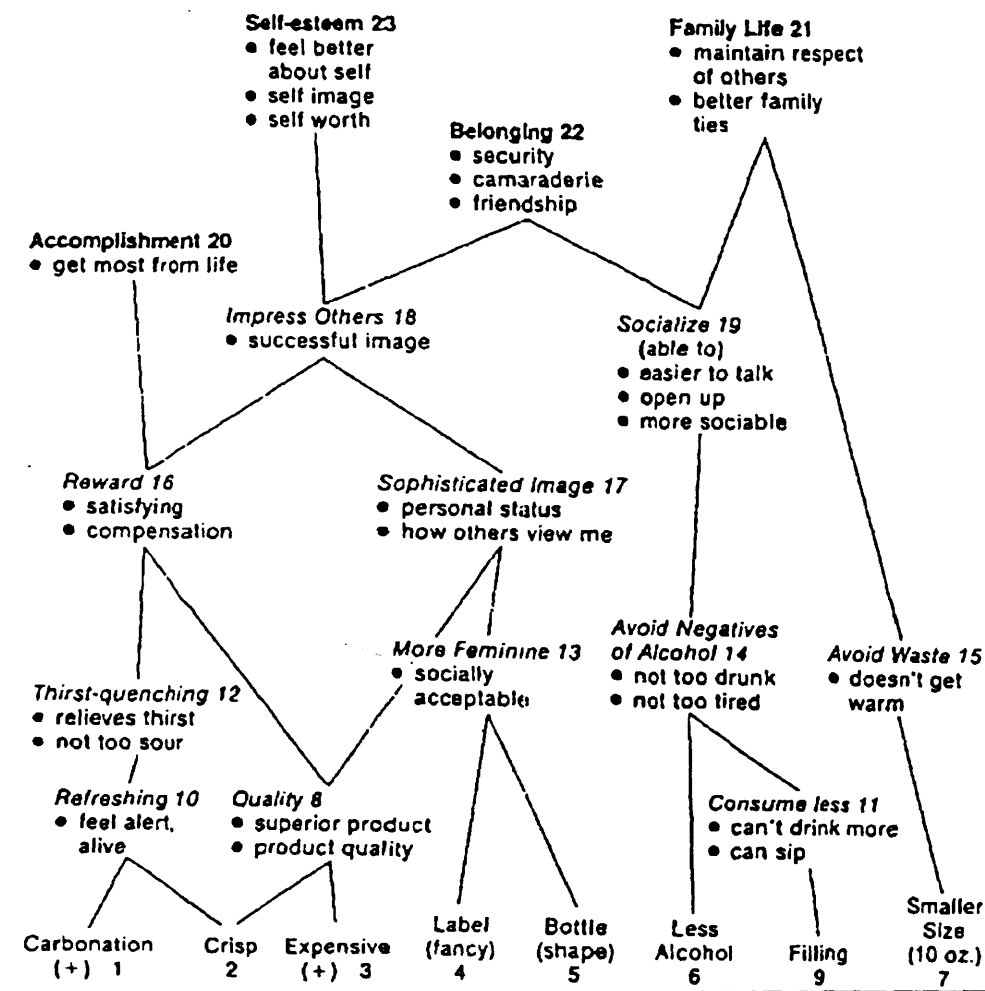
Summary Content Codes for Hypothetical Wine Cooler Example	
Values	(20) Accomplishment (21) Family (22) Belonging (23) Self-esteem
Consequences	(8)Quality (9)Filling (10)Refreshing (11)Consume less (12)Thirst-quenching (13)More feminine (14)Avoid negatives (15)Avoid waste (16)Reward (17)Sophisticated (18)Impress others (19)Socialize
Attributes	(1)Carbonation (2)Crisp (3)Expensive (4)Label (5)Bottle shape (6)Less alcohol (7)Smaller

Appendix 3

A hierarchical value map reproduced from Reynolds and Gutman's journal paper

Source: Reynolds, T.J., & Gutman, J (1988), Laddering Theory, Method, Analysis, and Interpretation, Journal of Advertising Research 28, 1: 11-31

Hypothetical Hierarchical Value Map of Wine Cooler Category



Appendix 4

Figure 3.1: A partially completed grid. Constructs elicited with reference to the triads of elements indicated by those marked with T.

Emergent Pole (Left hand column) Rating Score 1: highest degree of similarity to the emergent construct list in this column below	The ideal tutor	The most effective tutor #	The next effective tutor (equally effective as # or the second best)	The average tutor	Another average tutor	The next worst tutor (equally worst as * or the second worst)	The worst (or most ineffective) tutor *	Rating Score 5: highest degree of difference from the emergent construct list in the left hand column
Gives adequate explanation	T (1)	T (2)	(2)	(3)	(3)	(4)	T (5)	Poor explanation
Friendly and approachable	T (1)	(4)	(4)	T (3)	(2)	T (3)	(1)	Nonchalant
Lessons well-organized	T (1)	T (1)	T (2)	(2)	(2)	(4)	(5)	Difficult to follow his/her lecture
Uses a variety of teaching aids	T (3)	(4)	(3)	T (2)	T (2)	(1)	(2)	Limited use of teaching aid
Encourages student participation	(2)	T (2)	(1)	T (1)	(2)	T (1)	(1)	Does not care about classroom dynamics
Etc.								

Note: The number shown inside brackets indicates the rating of the elements with reference to each bipolar constructs on the same row.

Appendix 5

Interview Protocol

This interview guide forms part of the data collection activities.

Indicative standard interview briefing/questions for the respondents:

- Please note that a relatively well-known semistructured interview technique called the Repertory Grid Technique developed by George Kelly (1955) is used in this part of the interview. The main objective (i.e., focus) of the grid is to find out your own perceptions of effective tutors. This technique entails certain specific procedures to be followed to elicit your view. If you have not heard of or personally experienced this technique before, you may find it interesting, extraordinary, or even weird. It involves the use of cards to represent some specific tutors nominated by you as the set of 'elements' from which you will be asked to generate a number of 'constructs' (or perceived similarities and differences) using a method called 'triad method'. In essence, you will be presented with three elements (i.e., cards representing tutors from the pool nominated by you) at a time, and then you will be asked to 'tell me one way/characteristic/aspect in which two of these tutors are similar (for example, in carrying out their task(s) as tutors) and how the third one is different'.

- Please note that during this interview, sometimes you will be asked additional questions such as 'why is that important?' or 'tell me more about that' to clarify the relevant issue or further meaning, and the importance of a particular 'construct'. On the other hand, you are welcome to ask me questions to clarify any doubt you may have with regard to any particular process/aspect of this method, or if my question to you is not clear or specific enough to you.

- If you are ready, let us begin preparing some tools for the grid interview. As explained, in order to find out your perceptions of effective and ineffective tutors from your actual/real experience, first of all, please identify six tutors (i.e., elements) who have served as your tutors during your study with this university (irrespective of the name of the course studied and the course level). The tutors identified should fit the following descriptions respectively:

1. The most effective tutor you have ever known;
2. The second best (effective) tutor you have ever known;
3. The average (effective) tutor you have ever known;
4. Another average (effective) tutor you have ever known;
5. The second worst (effective) tutor you have ever known;
6. The most ineffective tutor you have ever known;

- Please then write the name of each of the specific tutor identified in the above manner onto six cards, with one card for each specific tutor. There is one additional special card (7th card) which represents the most ideal tutor who meets your specifications as the most ideal tutor. Three cards (out of the seven) will be selected at random (Triad method) and you will be asked in what aspect two (tutors) of the selected triad are alike, and what is different from the third. Your response (or confirmed construct) will then be entered on a specially prepared grid for this project.

- For the elicitation of constructs (from randomly chosen triads), the process will be stopped when the prescribed time is up (one hour prescribed for this activity), or you can tell me to

stop if you cannot think of further constructs.

- Please note that you will then be asked, after elicitation of all constructs, to rate each element on each elicited construct using a five-point scale, so that a full rating grid can be completed. That is, treating the poles of the construct as the extremes of a five-point scale, instead of the original two-point scale. The rating of 1 pertains to the left-hand pole of the construct and the rating of 5 to the right-hand pole. You may give the same rating to elements on a particular construct if you consider them very much alike on this particular construct.

(The actual interview commences.)

Appendix 6: Invitation Letter for Interview (Sample)

(Date)

Dear Mr./Miss/Ms. (Student Name):

I write to invite you cordially to participate as an interviewee in a research project, which aims to identify the perceptions of effective tutors from the perspective of business school students of this university. The findings will have important practical implications for improving tutors' effectiveness in teaching at the university in addition to potential contribution to academic knowledge.

In view of the research format, only a small sample of prospective respondents who have satisfied the special selection criteria have been chosen for the interview. Therefore, your participation is very important as the validity of the research may be seriously affected without your participation.

It is estimated that you may need to spend from two to three hours as an interviewee with the use of the repertory grid in the elicitation of answers. In return for your time invested, you will get to know what a repertory grid interview is (which is well established as a cognitive research method free from researcher bias and which can be used in a variety of situations including market research, etc. for exploring perceptions of respondents). You will also have the opportunity to discuss and reflect on your own study strategies and learning preferences which may be useful in your future learning endeavours.

Please be assured that your anonymity would be kept in strict confidence. The information collected would only be used for the purpose of this research. As the research schedule is tight, please indicate if you are interested (or not interested) to participate in this research as soon as possible by any of the following means:

Email to kchao@ (email address) (Please use this for faster communication if possible);
Fax to xxxxxx (Attn: Kenneth Chao) using the attached slip at the bottom of this letter; or
Mail to A834, (Name and address of university)

Should you have any queries, please contact me at xxxxxxxx (or mobile xxxxxxxx). Thank you very much for your time in reading this letter.

Yours truly,

Kenneth Chao
Assistant Professor
School of Business and Administration

Reply Slip: (By fax or normal mail)

To: Kenneth Chao (fax xxxxxxxx)
From: (Your name) (contact phone/email:)

Please tick or indicate your choice by any means as appropriate.

A.

() I would like to participate in the research as an interviewee AND

() I prefer to be interviewed at the university or (), my chosen venue, AND

() I prefer to be interviewed during office hours or

() I prefer to be interviewed weekday evenings (Mon/Tues/Wed/Thu/Fri); or

() I prefer to be interviewed during weekends–Saturday or Sundays.

B.

() I would not like to participate in the research.

Appendix 7:

Table 4.6: Research sample of respondents

Name of Courses	Rank 1 student (high achieving) in the Pass 1 band	The average-performing student - very bottom of Pass 2	The average performing student - very top of Pass 3	The low-achieving student bottom of Pass 4
#B301 Company Accounting	1	1	(1)	1
#B318 Information Systems Management	1	1	1	1
#B410 Corporate Administration and Secretarial Practice	1	1	1	1
#B440 Strategic Human Resource Management	1	1	1	1
#B390 International Business Management	1	1	(1)	1
#B380 Banking and Financial Systems in Hong Kong	1	(1)	1	1
#B469 International Marketing and Strategy	1	1	1	1
#B371 Logistics	1	(1)	1	1
*B100 Business Communication	1	(1)	(1)	1
*B121 Business Computing with Internet Applications	1	(1)	(1)	1
*B170 Quantitative Methods for Business	1	(1)	(1)	1
Total Number of respondents interviewed	11	6	6	11

Note: The number in brackets shows the number of eligible respondents who did not participate in the study. Those courses marked with * are lower-level courses.

References:

- Adams-Webber, J. (1979). *Personal construct theory—concepts and applications*. Bath: John Wiley & Sons.
- Alban-Metcalf, R.J. (1997). Repertory grid technique. In J.P. Keeves (Ed.), *Educational research, methodology, and measurement: an international handbook* (pp.315-318). Oxford: Pergamon Press.
- Abrami, P.C. & Cohen P.A. (1990). SEEQ and ye shall find: A review of marsh's student evaluation of university teaching. *Instructional Evaluation*, 9(2), 19-27.
- APA Monitor Online (1999). *Cognitive psychology sees a return to Power*, American Psychological Association (APA), Volume 30, Number 11.
- Averch, H.A., Caroll, S.J., Donaldson, T.S., Kiesling, H.J., & Pincus, J., (1972). *How effective is schooling: critical review and synthesis of research findings*. Santa Monica, California: Rand.
- Bannister D. & Mair J. (1970). *The evaluation of personal constructs*. London: Academic Press.
- Bannister, D. & Mair, J.M.M. (1986). *The evaluation of personal constructs*. London: Academic Press.
- Barr, A. et al., (1952). Report of the committee on the criteria of teacher effectiveness. *Review of Educational Research*, 22(3), 238-63.
- Bell, J. (1987). *Doing your research project*. Milton Keynes: Open University Press.
- Berliner, D.C. (1992). The nature of expertise in teaching. In F.K. Oser et al. (Eds.), *Effective and responsible teaching* (pp.227-248). San Francisco, California: Jossey-Bass.
- Berliner, D.C. (1994). Teacher expertise. In T. Husen & T. Postlethwaite (Eds.), *International encyclopaedia of education (2nd ed.)* (Vol.10, pp.6020-6026). Oxford: Pergamon.
- Berman, P., McLaughlin, M., Bass, G., Paully, E., & Zellman, G. (1977). *Federal programs supporting educational changes, Vol. VII: factors affecting implementation and continuation*. Santa Monica, California: Rand Corporation.
- Borko, H. & Putnam, R.T. (1995). Expanding a teacher's knowledge base: a psychology perspective on professional development. In T.R. Guskey & M. Huberman (Eds.), *Professional development in education: new paradigm and practices* (pp.35-61). New York: New York Teachers College Press.
- Bredahl, L. (1998). *Consumers' cognition with regard to genetically modified foods: results of a qualitative study in four countries*. MAPP Working Paper 59, Centre for Market Surveillance, the Aarhus School of Business, Haslegaardsvej, Denmark.

- Bredahl, L. & Grunert, K.G. (1998). *Are genetically modified food products safe? What do consumers think?* A Research Paper based on the project funded by the European Commission entitled, "Consumer attitudes and decision making with regard to genetically engineered food products". Paper presented at the 3rd nutrition symposium entitled, "European research towards safer and better food, October 18-20, Germany.
- Brown, S. & McIntyre D. (1986). *Making sense of teaching*. Buckingham: Open University Press.
- Brown, S. & McIntyre D. (1988). The professional craft knowledge of teachers. *Scottish Educational Review*, Special Issue, 39-47.
- Bullock, A. & Stallybrass, O. (1977). *Dictionary of modern thought*. London: Fontana.
- Burns, R.B. (1984). The process and content of teaching: a conceptual framework. *Evaluation in Education: An International Review Series*, 8, 95-112.
- Burns, R.B. (1992). Paradigms for research on teaching. In Husen, T. & Postlethwaite, T. (Eds.), *International encyclopaedia of education* (2nd ed.) (pp. 6202-08). Oxford: Pergamon Press.
- Calderhead J. & Robson, M. (1990). Images of teaching: student teachers' early conceptions of classroom practice. *Teaching and Teacher Education*, 7(1), 1-8.
- Cammock, P., Nilakant, V., & Dakin, S. (1995). Developing a lay model of managerial effectiveness: a social constructionist perspective. *Journal of Management Studies*, 32(4), 443-74.
- Cashin, W.E. (1988). *Student ratings of teaching: a summary of research*. IDEA Paper No. 20, Kansa State University, Division of Continuing Education, Manhattan, Kansas ERIC Document Reproduction Service No. ED 302 567.
- Charters, W.W. & Waples, D. (1929). *The commonwealth teacher training study*. Chicago: University of Chicago Press.
- Clark, C. & Peterson, P. (1978). Teachers' reports of their cognitive processes during teaching. *American education research journal*, 15(4), 555-65.
- Clark, C. & Peterson P. (1986). Teachers' thought processes. In M. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp.255-296). London: Macmillan.
- Cohen, L. & Manion, L., (1994). *Research methods in education*. (4th ed.) London: Routledge.
- Coleman, J.S., Campbell E.Q., Hobson C.J., Mc Partland, J., Mood, A.M., Weinfeld, F.D., & York, R.L. (1966). *Equality of educational opportunity*. Washington, DC: US Government Printing Office.
- Connelly, F.M. & Clandinin, D.J. (1994). Teacher preparation, conceptions of teaching, and

evaluation: alternative policies. *International encyclopaedia of education* (2nd ed.) (pp. 6035-44). Oxford: Pergamon Press.

Cooper, P. (2001). *What is a doctoral thesis*. Leicester, UK: School of Education, University of Leicester.

Cooper, D. & Schindler, P. (1998). *Business research methods*. (6th international ed.) Singapore: McGraw-Hill.

Cooper P. & McIntyre, D. (1996). *Effective teaching and learning*. Buckingham: Open University Press.

Corbridge, C., Rugg, G., Major N.P., Shadbolt, N.R., & Burton A.M. (1994). Laddering technique and tool use in knowledge acquisition. *Knowledge Acquisition*, 6, 315-341.

Dahlgreen, L.O. (1984). Outcomes of learning. In F. Marton, D. Hounsell, & N.J. Entwistle (Eds.), *The Experience of Learning*. Belfast: The Universities Press.

Doyle, W. (1978). Paradigms for research on teacher effectiveness. In L.S. Shulman (Ed.), *Review of research in education* (5th ed.) (pp. 163-194). Itasca, IL: F E Peacock.

Duckworth, E. (1986). Teaching as research. *Harvard Educational Review*, 56(4), 481-95.

Dunkin, M.J. & Biddle, B. (1974). *The study of teaching*. New York: Holt, Rinehart, & Winston.

Dunn, W.N., Pavlak T.J., & Roberts G.E. (1987). Cognitive performance appraisal–mapping managers' category structures using the grid technique. *Personnel Review*, 16(3), 16-19.

Easterby-Smith, M. (1980). The design, analysis, and interpretation of repertory grids. *International Journal of Man-machine Studies*, 13, 3-24.

Easterby-Smith, M., Thorpe, R., & Holman, D. (1996). Using repertory grids in management. *Journal of European Industrial Training*, 3-30.

Easterby-Smith, M., Thorpe, R., & Lowe, A. (1994) The philosophy of research design. In N. Bennett, R. Glatter, & R. Levacic (Eds.), *Improving educational management through research and consultancy* (pp. 27-57). London: Paul Chapman.

Feagin, J., Orum, A. & Sjoberg, G. (1991). (Eds.). *A case for the case study*. Chapel Hill, NC: The University of North Carolina Press.

Feldman, K.A. (1976). The superior college teacher from the student's view. *Research in Higher Education*, 5, 243-88.

Feldman, K.A. (1983). The seniority and instructional experience of college teachers as related to their evaluation received from students. *Research in Higher Education*, 18, 3-124.

- Feldman, K.A. (1984). Class size and students' evaluation of college teachers and courses: a closer look. *Research in Higher Education*, 21, 45-116.
- Fransella, F., Bell, R., & Bannister, D. (2004). *A manual for repertory grid technique*. (2nd ed.). West Sussex: John Wiley & Sons Ltd.
- Frey, P.W., Leonard, D.W., & Beatty, W.W. (1975). Student ratings of instruction: validation research. *American Education Research Journal*, 12, 327-36.
- Fuller, B. (1990). What investment raise achievement in the third world? In D.W. Chapman & C.A. Carrier (Eds.), *Improving educational quality: a global perspective*. NY: Greenwood Press.
- Gage, N.L. (Ed.). (1963). *Handbook of research on teaching*. Chicago: Rand Mc Nally.
- Gage, N.L. (Ed.). (1978). *The scientific basis of the art of teaching*. New York: Teachers College Press.
- Gall, M.G., Borg, W.R., & Gall, J.P. (1966). *Educational research: an introduction*. (6th ed.). White Plains, NY: Longman.
- Galton et al. (1999). *Inside the primary classroom: 20 Years On*. London: Routledge.
- Gengler, C.E., Klenosky, D., & Mulvey, M. (1995). Improving the graphic representation of means-end results. *International Journal of Research in Marketing*, 12(3), 245-56.
- Gengler, C.E. & Reynolds, T.J. (1993). *Ladder map: a software tool for analysing laddering data*. Means-End Software Copyright.
- Gibson, S. & Dembo, M.H. (1984). Teacher efficacy: a construct validation. *Journal of Educational Psychology*, 76(4), 569-82.
- Good, T., Biddle, B., & Brothy, J. (1975). *Teachers make a difference*. New York: Holt, Rinehart, & Winston.
- Good, T.L., Grouws, D.A., & Ebmeier, H. (1983). *Active mathematics teaching*. New York: Longman.
- Grossman, P.L. (1990). *The making of a teacher: teacher knowledge and teacher education*. New York: Teachers College Press.
- Grunert, K.G. & Grunert, S.C. (1995). Measuring subjective meaning structures by the laddering method: theoretical considerations and methodological problems. *International Journal of Research in Marketing*, pp. 209-25.
- Grunert, K.G., Sorensen E., Johansen L.B., & Nielsen N.A. (1995). Analysing food choice from a means-end perspective. *European Advances in Consumer Research*. 2, 366-71.
- Guskey, T.R. & Passaro, P.D. (1994). Teacher efficacy: a study of construct dimensions. *American Educational Research Journal*, 31, 607-43.

- Gutman, J. (1982). A means-end chain model based on consumer categorization processes. *Journal of Marketing*, 46(2): 60-72.
- Gutman, J. (1991). Exploring the nature of linkages between consequences and values. *Journal of Business Research*, 22, 143-48.
- Gutman, J. & Miaoulis, G. (2003). Communicating a quality position in service delivery: an application in higher education. *Managing Service Quality*, 13(2), 105-11.
- Hallsworth, A.G. (1988). Repertory grid methodology and the analysis of group perceptions in retailing. *International Journal of Retailing*, 3(4), 43-54.
- Hildebrand, M., Wilson, R.C., & Dienst, E.R. (1971). *Evaluating university teaching*. Berkeley, CA: Centre for Research and Development in Higher Education, University of California, Berkeley.
- Hilgard, E.R. (1989). *Psychology in America: a historical survey*. New York: Harcourt Brace Jovanovich.
- Hofstede, F.T., Audenaert, A., Steenkamp, J.B., & Wedel, M. (1998). An investigation into the association pattern technique as a quantitative approach to measuring means-end chain. *International Journal of Research in Marketing*, 15, 37-50.
- Hong Kong SAR Education Commission (2000). *Reform proposals for the education system in Hong Kong*. Hong Kong Government Information Service, September, 2000.
- Hong Kong Annual Report 2002*. Hong Kong Government Information Service, 2002.
- Hunter, M., (1984). Knowing, teaching, and supervising. In P. Holford (Ed.), *Using what we know about teaching* (pp. 169-193). Alexandria, Virginia: Association for Supervision and Curriculum Development.
- Jankowicz, D. (2004). *The easy guide to repertory grids*. West Sussex: John Wiley & Sons Ltd.
- Jewell, B. & Crotts, J. (2001). Adding psychological value to heritage tourism experiences. *Journal of Travel and Tourism Marketing*, 11(4), 13-28.
- Johnson, D. (1994). *Research methods in educational management*. Harlow: Longman.
- Kelly, G. (1955). *The psychology of personal constructs*. (Vol. I and II). New York: Norton.
- Kelly, G.A. (1969). The role of classification in personality theory. In B. Maher (Ed.), *Clinical psychology and personality: the selected papers of George Kelly* (pp. 289-300). New York: Wiley.
- Krech, D., Crutchfield, R., Livson, N., Wilson, W., & Parducci, A. (1982). *Elements of psychology*. (4th ed.). NY: Alfred A. Knopf.

- Kundu, C.L. (1986). *Adult education*. India: Sterling Publishers Private Ltd.
- LeCompte M., Millroy W., & Preissle J. (1992). *The Handbook of Qualitative Research in Education*. San Diego: Academic Press.
- Leinhardt, G. (1988). Situated knowledge and expertise in teaching. In J. Calderhead (Ed.), *Teachers' professional learning* (pp. 146-148). London: Falmer.
- Marland, P.W. (1992). Teaching: implicit theories. In T. Husen & T. Postlethwaite (Eds.), *International encyclopaedia of education (2nd ed.)* (pp. 6178-82). Oxford: Pergamon Press.
- Marsh, H.W. (1982). SEEQ: A reliable, valid, and useful instrument for collecting students' evaluations of university teaching. *British Journal of Educational Psychology*, 52: 77-95.
- Marsh, H.W. (1983). Multidimensional ratings of teaching effectiveness by students from different academic settings and their relation to student/course/instructor characteristics. *Journal of Educational Psychology*, 75: 150-66.
- Marsh, H.W. (1984). Students' evaluation of university teaching: dimensionality, reliability, validity, potential biases, and utility. *Journal of Educational Psychology*, 76, 707-54.
- Marsh, H.W. (1987). Students' evaluation of university teaching: research findings, methodological issues, and directions for future research. *International Journal of Educational Research*, 11(3), 253-88.
- Marsh, H.W. (1991). Multidimensional students' evaluation of teaching effectiveness: a test of alternative higher-order structures. *Journal of Educational Psychology*, 83(2), 285-96.
- Marsh, H.W. (1995). Students' evaluation of teaching. In L.W. Anderson (Ed.), *International encyclopaedia of teaching and teacher education*. Elsevier Science Ltd.
- Marsh, H.W. (1998). Students' evaluation of teaching. In *The complete encyclopaedia of Education*. Elsevier Science Ltd.
- Marsh, H.W. & Bailey, M. (1993). Multidimensionality of students' evaluations of teaching effectiveness: a profile analysis. *Journal of Higher Education*, 64(1), 1-18.
- Marsh, H.W. & Dunkin, M.J. (1992). Students' evaluation of university teaching: a multi-dimensional perspective. In J. Smart (Ed.), *Higher education: handbook of theory and research* (pp. 143-233). NY: Agathon.
- Marsh, H.W. & Hocevar, D. (1991). The multidimensionality of students' evaluation of teaching effectiveness: the generality of factor structures across academic discipline, instructor level, and course level. *Teaching and Teacher Education: An international Journal of Research and Studies*, 7, 9-18.
- Measor, L. (1985). Interviewing: A strategy in qualitative research. In R. Burgess, *Strategies*

- of educational research: qualitative methods*. London, The Falmer Press.
- Medley, D.M. (1982). Teacher effectiveness. *Encyclopaedia of Educational Research*, Volume 4, (pp. 1894-1903) NY: The Free Press.
- Merriam, S.B. (1988). *Case study research in education: a qualitative approach*. San Francisco, CA: Jossey-Bass Publishers.
- Microsoft Encarta Dictionary (2003), *Microsoft Encarta World English Dictionary*, Bloomsbury Publishing Plc.
(<http://encarta.msn.com/dictionary/effective.html>)
- Mills, J.A. (1999). *Control: A history of behavioural psychology*. New York: New York University Press.
- Miles, M.B. & Huberman, A.M. (1994). *Qualitative data analysis: an expanded sourcebook*. (2nd ed.). Thousand Oaks, CA: Sage.
- Mitzel, H.E. (1960). Teacher effectiveness. *Encyclopaedia of Educational Research*, 3rd Edition). NY: Macmillan.
- Morris, D., McCarthy, M., & O'Reilly, S. (2004). *Customer perceptions of calcium-enriched orange juice*. Discussion Paper # 42, Department of Food Business and Development, National University of Ireland, Galway, Ireland.
- Murphy, D. (1987). Offshore education: a Hong Kong perspective. *Australian University Review*, 30(2), 43-44.
- Nicholson, I.A.M. (1998). Gordon Allport, Character and the Culture of Personality. *History of Psychology*, 1, 52-68.
- Olson, J.C. (1989). Theoretical foundations of means-end chains. *Werbeforschung and Praxis*, 5, 174-78.
- Peterson, P. (1988). Teachers' and students' cognitional knowledge of classroom teaching and learning. *Educational Researcher*, 17(5), 5-14.
- Powell, M. (1980). The beginning teacher evaluation study: a brief history of a major research project. In C. Denham, A. Lieberman (Eds.), *Time to Learn*. Washington, DC: National Institute of Education.
- Reid, D.J. & Johnston, M. (1999). Improving teaching in higher education: student and teacher perspectives. *Educational Studies*, 25(3).
- Reynolds, T.J. & Gutman, J. (1988). Laddering theory, method, analysis, and interpretation. *Journal of Advertising Research*, 28(1), 11-31.
- Robson, C. (1993). *Real world research: a resource for social scientists and practitioner-researchers*. London: Blackwell.

- Ryan, D.W. (1986). *Developing a new model of teacher effectiveness: lessons learned from the IEA Classroom Environment Study*. Province of Ontario, Canada: Ontario Ministry of Education.
- Sapsford, R. & Evans, J. (1984). Evaluating a research report. In J. Bell et al. (Eds.), *Conducting small-scale investigations in educational management*. London: Harper and Row.
- Seidman, I.E. (1991). *Interviewing as qualitative research*. New York: Teachers College Press.
- Sanford, C.W. & Trump, J.L. (1950). Preservice Selection. In W.S. Monroe (Ed.), *Encyclopaedia of educational research* (p.1390-95). NY: Macmillan.
- Schon, D., 1983. *The reflective practitioner*. New York: Basic Books.
- Shaw, M.L.G. (1989). Interactive elicitation and exchange of knowledge. *International Journal of Personal Construct Psychology*, 2(2), 215-38.
- Shulman, L.S. (1986). Those who understand: knowledge and growth in teaching. *Educational Researcher*, 15(2), 4-14.
- Slater, P. (1977). *Dimensions of interpersonal space*. London: Wiley.
- Smith, L.M. (1978). An evolving logic of participant observation, educational ethnography, and other case studies. In L. Shulman (Ed.), *Review of research in education* (pp. 316-377). Itasca, IL: Peacock.
- Solas, J. (1990). Effective teaching as construed by social work students. *Journal of Social Work Education*, 26(2).
- Stalker, J. (1993). Voluntary participation: deconstructing the myth. *Adult Education Quarterly*, 43(2), 63-75.
- Steward, V. (1997). *Business applications of repertory grid*. Retrieved November 10, 2002 from www.EnquireWithin.co.nz
- Tang, K.W. (2001). *Evaluation of teaching, professional skills: teaching Mathematics*. Hong Kong Open University Course Materials.
- The Institution (2002). *Facts and figures 2002*, Public Affairs Unit of the Institution.
- The Institution (2002). *Performance management handbook*, Human Resource Unit of the Institution.
- Thomas, J.A & Montgomery, P. (1998). On becoming a good teacher: reflective practice with regard to children's voices. *Journal of Teacher Education*, 49(5), 372-80.
- Trochim, W. (1996). *Research methods knowledge base*. (2nd ed.). Ithaca, NY: Cornell University Publishing.

- Usher, R. (1996). A critique of the neglected epistemological assumptions of educational research. In D. Scott & R. Usher (Ed.), *Understanding Educational Research* (pp.9-32). London: Routledge.
- Valette-Florence, P. & Rapacchi, B. (1991). Improvements in means-end chain analysis: using graph theory and correspondence analysis. *Journal of Advertising Research*, Feb./March 1991, 30-45.
- Van Manen, M. (1977). Linking ways of knowing with ways of being practical. *Curriculum Inquiry*, 6(3), 205-28.
- Warrington, W.G. (1973). Student evaluation of instruction at Michigan state university. In A.L. Sockloff (Ed.), *Proceedings: the first invitational conference on faculty effectiveness as evaluated by students* (pp. 164-82). Philadelphia: Measurement and Research Centre, Temple University.
- Winegardner K.E. (2003). *The case study method of scholarly research*. Retrieved January 8, 2003, from http://www-rcf.usc.edu/~wdutton/303_readings.html
- Wright, R. & Lam, S. (2000). *Eliciting personal constructs of Chinese respondents: grid applications in human resources*. Hong Kong: Chinese Management Centre, University of Hong Kong.
- Yeung, K.W. & Watkins, D. (1998). *Hong Kong student teachers' personal construction of teacher efficacy*, Doctoral Research Report, University of Hong Kong, Pok Fu Lam Road, Hong Kong.
- Yin, R.K. (1989). *Case study research: design and methods* (Rev. ed). Newbury Park, CA: Sage.
- Yin, R.K. (1993). *Applications of case study research*. Newbury Park, CA: Sage.
- Yin, R.K. (1994). *Case study research: design and methods*. (2nd ed.). Thousand Oaks, CA: Sage.