

**Treatment of Classroom Oral Errors:
a Comparative Study Between Native and Non-
native Speaking Teachers**

By

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ABSTRACT

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This thesis is a qualitative study of how native and non-native speaking teachers treat classroom oral errors across three lesson types: reading, free activity and grammar in a military school in Saudi Arabia. The general purpose of this thesis is to understand error treatment from both the emic (teachers' views) and the etic (systematic study) perspectives and to relate these two perspectives to students' attitudes in order to achieve a holistic understanding of this phenomenon.

Ten teachers, divided evenly between native and non-native speakers, teaching reading, free activity and grammar lessons were observed and their lessons recorded. Six teachers were interviewed and a Likert-type scale questionnaire was administered to sixty students. A new technique called Digital HyperLinking (DHL) was devised to analyze both classroom observation and research interview data. This technique uses a database programme – Microsoft Access – and a sound editing programme – Sound Forge. This technique lessened the problems associated with transcription: representation, validity and reliability. Each set of data is analyzed separately before a holistic analysis is presented.

The findings indicate that the treatment of classroom oral errors is contingent on a host of factors including lesson type, teachers' views about error treatment, their preferred instructional techniques, learner variables and the teaching context with its organizational culture, course objectives and requirements. Error treatment is a complex process and teachers lack conscious knowledge of the available corrective feedback moves. There are more similarities than differences between native and non-native speaking teachers. In general, teachers' treatment of classroom oral errors in this study is compatible with the students' preferences.

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CHAPTER 1

INTRODUCTION

1.1 GENESIS OF THE STUDY

Twenty four years ago, I taught English as a foreign language in a primary school in Saudi Arabia. One day, after drilling a grammatical structure, I asked the pupils to re-arrange a set of jumbled sentences and write them in their copybooks. Before they embarked on the task, I explained what I expected from them: accuracy of sentences and neatness of handwriting with special attention to spacing out the words, punctuation marks and so on. As young children, they raced against each other to finish and ran to my desk for me to check their writing. One of the pupils paid very little attention to the instructions given; he did not space out the words rendering his writing illegible, he ignored punctuation marks and some of the sentences were grammatically incorrect. Having about twenty pupils jumping around my desk, each wanting me to check his writing before the rest, I made a big mistake. Instead of acknowledging the attempt, albeit full of mistakes, I angrily tore the page and told that pupil to re-write the whole task. No sooner had I done that than the pupil looked at me and, failing to curb his anger, burst into tears and started calling me ‘dog’, ‘donkey’ and other things. I immediately realized the seriousness of what I had done, took him in my arms, consoled him and admitted my mistake.

Since this incident, I have been interested in learners’ errors; their possible causes, types and, more importantly, how they should be treated taking into account both the cognitive and affective factors of this important process which pervades much of teaching and learning. During the MSc course with Aston University in 1989, I chose ‘error analysis’ from the optional courses offered. When I became a senior teacher, I had the chance to observe both native and non-native speaking teachers – from now onward the NSTs and the NNSTs – and noticed that, generally speaking, the NSTs seemed to be more tolerant of learners’ errors than the NNSTs.

Because of the points mentioned above and my deep conviction that people of the same profession should, for their mutual interest, share their own experience as a way of professional development, I chose to investigate how the NSTs and the NNSTs treat classroom oral errors, learners' preferences of error correction and the factors that determine teachers' tolerance of learners' errors.

1.2 BACKGROUND

For a number of decades, the phenomenon of language learners' errors has attracted the attention of a wide range of researchers from varied quarters: psychologists, psycholinguists, first and second language educationalists, applied linguists and teachers. The study of language learners' errors was tied to the then prevalent thinking in the fields of psychology, linguistics and language acquisition.

Influenced by structural linguistics and the audiolingual approach to language teaching and learning in the fifties and early sixties, second language educationalists perceived errors as 'sins' that should not be tolerated and their occurrences should be prevented. The emergence of the cognitive approach and the mentalist account of language acquisition paved the way for the publication of Corder's (1967) classic article "The importance of learners' errors" which marked a real shift in perception. Errors were no longer viewed as 'sins' not to be tolerated but as opportunities to gain understanding of what goes on in the 'black box'. The seventies witnessed an upsurge of interest in studying language learners' errors. Most of the research conducted at that time revolved around classifying the different types of errors and explaining their possible causes. Fanselow's (1977) study highlighted another shift of interest from analysing learners' errors focusing on what teachers do when errors are committed: error treatment.

Historically, second language acquisition researchers and specialists have held varying opinions about error correction. As mentioned above, in the fifties and sixties, behaviourists considered errors in oral production bad and always in need of correction. With the advent of the communicative approach to language teaching, the pendulum swung to a more relaxed approach with some specialists recommending no direct error

correction at all. However, recent evaluations of the immersion programmes, in Canada and elsewhere, have highlighted the need for some form-focused instruction within the domain of the communicative orientation to improve students' accuracy. Hence, a more balanced view has been taken by language learning specialists in recent years. It is believed now that judicious error correction is helpful. More recent research has focused on examining the differential beneficial effects of various corrective feedback moves (CFMs) and the conditions under which they can be more conducive to language learning. The current study falls into the realm of error treatment.

A review of the literature has shown that there are issues that have not been investigated adequately. The following gaps have been identified:

- 1- Lack of holistic error treatment studies that consider teachers' perspectives, students' preferences, the effect of the organizational culture and whether the way teachers treat learners' errors varies from one lesson type to another
- 2- Lack of comparative research regarding how NSTs and NNSTs treat learners' classroom oral errors

1.3 SIGNIFICANCE OF THE RESEARCH

Investigating error treatment holistically can enable us to understand the different variables involved in this important process. Understanding a problem is a part of its solution. For example, the issue of whether to correct or not to correct cannot be determined properly without reference to lesson type, the objective of the course, the learner's attitudes, the organizational culture and the language learning context. Such a holistic approach, it is believed, can complement observational and experimental studies that have prevailed in this area of investigation for the last four decades and that focused on one or two aspects only of error treatment.

The purpose of this study is to:

- 1- understand how oral errors are treated by the NSTs and the NNSTs in a classroom context across three different lesson types: reading, free activity and grammar.
- 2- understand teachers' and students' beliefs about and attitudes towards error treatment.
- 3- investigate what determines teachers' tolerance of learners' errors.
- 4- determine if there is a difference in tolerance between the NSTs and the NNSTs.

Furthermore, it is my conviction that, in teaching contexts where NSTs and NNSTs work together, there is a lot to share between the two groups for their mutual interest as professionals. Until we know what each group has to offer, the hoped for co-operation between the two groups cannot be achieved. It is also my belief that implicit assumptions about error treatment need to be made explicit to be evaluated and reviewed. Only when teachers' beliefs and students' attitudes are made explicit, will we be in a position to see if they converge or diverge.

The majority of error treatment studies – Appendix A summaries 51 of them – can be categorized as either observational or experimental focusing on one or two aspects only of this complex phenomenon. Isolating one or two aspects of error treatment only enables researchers to shed light on one or two pieces of the jigsaw puzzle overlooking other pieces that could be essential for the completion of the picture.

1.4 CONTEXT OF THE STUDY

The study was conducted in a military school in Saudi Arabia. It is one of the largest English language schools in the Middle East with a population of 1800 students. The school is part of a technical institute whose mission is to prepare the students for technical jobs in the air force when they graduate. The school aims to provide English language training in a disciplined environment to the students, who will pursue their technical studies, for example, aeronautics, avionics, supply, weapons, communications, electronics and air traffic control in English.

A large number of highly qualified teachers from the British Isles, Australia, USA, Canada, Saudi Arabia, Sudan, Egypt and Somalia work in this school as classroom teachers, language lab teachers, material writers and examiners. Most of the teachers hold university postgraduate qualifications varying from RSA and CELTA to Master's Degrees in teaching English. They are all male.

The students come from the host country, whose native language is Arabic and whose religion is Islam. They are false beginners with about six years of English instruction in the government schools. Their ages range from 18 to 22. Military life is very tough for most of these students who are all male.

1.5 APPROACH AND RESEARCH METHODS

The ethnographic approach has been found to be the most appropriate for a host of reasons. For example, it focuses on culture and the context of the study and it takes into account both the 'emic' and 'etic' perspectives of the subjects. Classroom observation, research interview and questionnaire were used to collect the required data. These three data collection tools made it possible to investigate the phenomenon holistically and constituted a way of triangulating the study.

A new data analysis technique was employed in this study. It is detailed in Chapter 3. It enabled the researcher to analyze both the research interview and the classroom data without the need for transcription. This technique exploits both multitasking and hyper-linking features of modern computers.

1.6 MAJOR FINDINGS

These are the major findings:

- 1- Treatment of classroom oral errors is contingent on a host of factors including lesson type, teachers' views of error treatment, their preferred instructional techniques, learners' variables, the error type and the teaching context embracing the organizational culture as well as the course objectives and requirements.

- 2- Treatment of classroom oral errors is a complex process and teachers feel they lack conscious knowledge of the available CFMs.
- 3- There are some differences between the NSTs and the NNSTs in respect of their beliefs about and their actual dealings with classroom oral errors.
- 4- Generally speaking, the NSTs are more tolerant of learners' errors than the NNSTs.
- 5- Arabic-speaking learners have a positive attitude towards error correction and they prefer elicitation over explicit correction by the teacher.

1.7 STRUCTURE OF THE THESIS

This thesis contains seven chapters and three appendices. Following this introductory chapter, Chapter 2 is devoted to defining the terms pertinent to the thesis title and the research questions, reviewing and evaluating the relevant literature. Because of the vast amount of literature available on language learners' errors, only the literature that is directly related to both the purpose of this study and the research questions is reviewed and evaluated.

Chapter 3 focuses on the issues of research design and presents a model for this study delineating how the different parts of the model are interconnected. Then, the different parts of the research design are discussed in detail theoretically and in the way they were applied in this study. The new qualitative data analysis technique used– DHL [digital-hyperlinking] – is explained in detail. This chapter concludes by considering both research ethics and validity and how they were realized in this study.

Chapter 4 presents the findings of the three data collection tools used. First the findings are presented in tables and then they are commented on. This chapter ends with linking the data with the original issues outlined in the research questions.

In Chapter 5 a holistic analysis of the data is presented. Links are made between teachers' stated preferred CFMs and the ones they actually used in the classroom, discussing any discrepancies. The CFMs used by the teachers in the observed lessons were checked against the students' preferences.

Chapter 6 subjects the findings to close scrutiny in terms of what they might mean. It highlights both the importance and the complexity of error treatment. It emphasizes the necessity of taking into account the lesson type, learner factors and also organizational culture in treating learners' errors. It also illustrates the areas of convergence and divergence between the NSTs and the NNSTs. The findings are contrasted with other research in the extant literature – especially that reviewed in Chapter 2. This chapter ends with a critique of the research methods used and their validity and reliability.

Chapter 7 delineates how the original research objectives and questions have been addressed. On the basis of the findings and their analysis, some general conclusions are drawn, for example, treating and tolerating learners' errors are contingent on a host of factors such as teachers' beliefs, lesson type, learners' culture and the organizational culture. The NSTs are generally more tolerant of learners' errors than The NNSTs. More research is needed to evaluate the effectiveness of different types of CFMs. Because the main purpose of the error treatment process is to help learners to modify or develop their underlying interlanguage rules to approximate that of the target language speakers, it is stressed that the efficacy of specific corrective feedback moves is not adequately borne out by empirical longitudinal research .

Appendix A contains a brief account of 51 error treatment studies highlighting the orientation of each study, its context, the methodology used and the major findings. It shows that most previous error treatment studies have focused on one or two aspects only. The appendix also shows that the majority of studies have relied solely on one data collection tool thus lacking triangulation in respect of data collection. Appendix B is a sample of the questionnaire administered to the students in this study. Appendix C provides detailed notes on how to use the accompanying CD. To appreciate the new data analysis technique used in this study, the thesis needs to be read on a computer screen and the hyperlinked extracts be activated. Also the two database files on the CD need to be opened and examined.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Language learners' errors have been researched from a wide range of perspectives. This has resulted in very extensive literature. Here, emphasis is given only to the literature pertinent to the research questions. Figure 2:1, p.10, lays out the different sections of this chapter and shows how each section is related to the research questions, the thesis title and to the other sections.

The thesis title has three key terms: error, treatment, and native and non-native speaking teachers. These terms have always been subjects of controversy among linguists. To avoid ambiguity, Section 1– **Defining terms** - discusses the main issues related to these terms and how they are used in this study.

Section 2 – **Learners' errors: historical background** - shows how learners' errors have been perceived and investigated and how this perception has been tied to the prevailing language learning/teaching theories. Emphasis is given to the developmental nature of error perception from prevention to acceptance and then to treatment.

To establish the importance of this study, Section 3 –**The importance of error treatment** - discusses error treatment in first, second and foreign language learning contexts. It attempts to show that the importance of error treatment varies from one context to another.

Once the key terms have been operationally defined, the theoretical contextualization of the study established and the importance of error treatment in different language learning contexts highlighted, the remaining parts of this chapter are assigned primarily to evaluating the literature pertaining to the research questions both theoretically and empirically.

As the first research question is ‘How do the NSTs and the NNSTs treat classroom oral errors?’, Section 4 – **How learners’ errors should be treated** - evaluates the relevant literature. This section is referenced in Chapter 6 where the findings of this study are discussed.

Section 5 –**Teachers’ and students’ beliefs and error treatment** - looks at the effect of culture on teaching/learning in general and error treatment in particular, focusing on the extant research findings. This section concentrates on the literature directly related to research questions 2 and 3 respectively, ‘Do the techniques used by teachers match students’ expectations in respect of error treatment?’ and ‘What makes teachers more/less tolerant of learners’ errors? Is it the lesson type, the teachers’ background culture, their experience or their attitudes to language teaching/learning or the institutional constraints?’

As this study is a comparative study, Section 6 – **Native and non-native speaking teachers and error treatment** - presents a brief historical perspective on how learners’ errors have been perceived by both native and non-native speakers. It assesses the studies conducted in this area. Firstly, it looks at error gravity studies. Secondly, it reviews and evaluates the relevant studies conducted in non-classroom settings and the value of the insights obtained from such studies. Lastly, it shows the scarcity of error treatment comparative studies in classroom settings.

Section 7 – **Summary** - summarizes the main points raised in the chapter with reference to both the thesis title and the research questions, highlighting the lacuna that this study attempts to fill.

Treatment of classroom oral errors: a comparative study between native and non-native speaking teachers

Section 1: Defining terms

1. Error
2. Error treatment
3. Native and non-native speaking teachers

Section 2: Learners' errors: Historical background

1. Error perception
2. Contrastive analysis, error analysis and error treatment

Section 3: Importance of error treatment

1. General perspectives
2. First language context
3. Second language context
4. Foreign language context

Research Questions

1. How do native and non-native speaking teachers treat classroom oral errors?
2. Do the techniques used by teachers match students' expectations in respect of error treatment?
3. What makes teachers more/less tolerant of learners' errors? Is it the lesson type, the teachers' background culture, their experience or their attitudes to language teaching/learning or the institutional constraints?
4. Are native speaking teachers more tolerant of learners' errors than non-native speaking ones?

Section 7: Summary

1. Main points reviewed in the chapter.
2. Gaps in the literature which this study attempts to address

Section 4: How learners' errors should be treated

1. Theoretical perspectives
2. Features of effective error treatment
3. Suggested techniques

Section 5: Teachers' and students' beliefs and error treatment

1. Culture and language teaching and learning.
2. Culture and error perception and treatment
3. Empirical evidence

Section 6: Native and non-native speaking teachers and error treatment

1. Error analysis and error gravity
2. Non-classroom settings
3. Classroom settings

Figure 2:1 – The structure of the literature review chapter

2.2 DEFINING TERMS

As mentioned above, the key terms in the thesis title are: ‘error’, ‘treatment’ and ‘native and non-native speaking’ teachers. In the ensuing sections, what has been said about these terms and how they are used in this study is reviewed.

2.2.1 Error

It is difficult to precisely define ‘error’. Indeed researchers have defined it in different ways depending on their theoretical positions. George (1972:2) defined ‘error’ as “an unwanted form, specifically, a form which a particular course designer or teacher does not want.” This is a subjective definition that is not based on specific criteria against which an utterance may be checked. Such a definition led the early error treatment researchers, for example, Allwright (1975), Chaudron (1977) and Fanselow (1977) to claim that teachers were inconsistent in treating learners’ errors.

Corder (1974b) defined error as a deviation in learners’ language which results from lack of knowledge of the correct rule. Corder was influenced by Chomsky’s (1965) distinction between competence and performance. To Chomsky, competence is the mental representation of linguistic rules while performance is both comprehension and production of the language. Unlike George’s definition mentioned above, Corder’s is an objective one. It implies checking the utterance against certain linguistic rules. Because what happens inside learners’ minds is impossible to see directly, Ellis (1986:6) pointed out that “the utterances that the learner produces are treated as windows through which the internalized rule system can be viewed.”

Delisle (1982:39) defined error as “a failure to communicate.” An utterance could be grammatically unacceptable yet not erroneous, as long as, it successfully communicated the intended meaning. This view was picked up in early communicative language teaching and triggered by sociolinguists, for example, Hymes (1974) emphasized the importance of the rules of use in addition to the rules of grammar for effective communication. This led second language educators, such as Widdowson (1978) to

differentiate between correctness and appropriateness. A sentence could be grammatically correct yet inappropriate in a given context. Richards et al (1985:95) defined error as, “the use of a linguistic item (e.g. a word, a grammatical item, a speech act, etc.) in a way which a fluent or native speaker of the language regards as showing faulty or incomplete learning.”

According to Richards et al's definition, errors are identified according to the rules of grammar and use accepted by fluent or native speakers of the language. Thus a sentence like “My father a teacher” is erroneous as it shows incomplete learning of the language system though the intended meaning is quite clear without the copula. The same sentence is not erroneous according to Delisle's definition. This example highlights the difficulty of giving a satisfactory definition to error.

Defining error becomes more complicated when distinctions are made between errors, mistakes, slips and lapses. Different second language researchers have used different classification systems. For example, Corder (1974b), Edge (1989) and James (1998) have differentiated between two broad types of linguistic aberration. Firstly, aberrations that are the result of fatigue or the pressure of the communicative event and that could be rectified by the learner have been termed mistakes by Corder, slips by Edge and slips, lapses and mistakes by James. James reserves the terms slips and lapses for the aberrations that the learner can correct without any outside help, and mistakes to the deviances that can only be corrected by the learner once indicated to him. Secondly, aberrations that are the result of ignorance of the rules have been termed errors by all three researchers.

It is evident from the above definitions that error has been looked at from different angles and each definition reflects a specific theoretical position. More recently, it has been acknowledged that context is an important factor in defining an error (Chaudron 1986; Lennon 1991; Allwright and Bailey 1996; and James 1998). Allwright and Bailey (1996) emphasize the importance of taking into account the immediate context of the utterance in question, the intent of the teacher and student and the prior learning of the students when determining an error. It is clear that these contextual variables need to be

considered when defining error. Because of this, researchers have tended to define error operationally. This means the definition they give applies mainly to their studies. This operational definition enables researchers to be consistent in analyzing the data.

In this study, error is operationalized as “a form unwanted by the teacher in the given teaching/learning context.” The study looks at three different types of lessons: grammar, reading and free activity. It aims to investigate, among other things, the relationship between lesson type, teachers’ treatment of errors and their degree of tolerance of learners’ errors. The study also aims to discover teachers’ beliefs about and attitudes towards learners’ errors and relate their tolerance of learners’ errors to their views about error treatment and lesson type.

2.2.2 Error Treatment

An erroneous utterance or sentence usually evokes a reaction from those who are more competent to those who are less competent. This reaction has been termed differently according to the area of research and its orientation. It has been termed repair in discourse analysis, negative evidence in psycholinguistics and mother tongue research, and corrective feedback in second language acquisition.

Teachers’ reaction to learners’ errors has been scrutinized by second language acquisition researchers. Long (1977) differentiated between feedback and correction. Feedback was equivalent to knowledge of result and its purpose was to promote self-correction. Correction happened only when learners were involved in hypothesis testing which led to modifying the underlying rule responsible for the error.

Chaudron (1977:37) differentiated between four meanings of correction (1) correction that leads to “establishing the learners’ consistent correct performance and their autonomous ability to correct themselves on the item”, (2) successful correction “when the teacher is able to elicit a correct response from the committer of the error or from one or more of his classmates”, (3) teacher’s reaction to the ill-formed utterance or sentence by disapproving of it and demanding improvement and (4) positive or negative reinforcement.

James (1998) elaborated the meanings the term correction might take on. His differentiation is essentially very similar to that of Chaudron's (1977). The only difference is that James labels the first two meanings remediation and correction, and amalgamates the third and the fourth meanings and calls them feedback. To James (1998:237) remediation "is like having a mechanic fit to your immobilized car a factory replacement part that carries a lifetime guarantee." Correction "is like doing a temporary or running repair on your car, just to get you home, but without getting to the root of the problem." To continue the analogy, feedback would mean being told that there is a problem with your car. Ideally, James (1998) believed, feedback should lead to correction which, in turn, should lead to remediation. The distinction made between correction and remediation as highlighted above is also made by Hammerly (1991) under the rubric surface correction and deep correction and by Allwright and Bailey (1996) as treatment and cure.

To sum up, there is a high degree of congruence amongst researchers on what correction actually means despite the fact that they use different labels. The ultimate goal of error correction is to enable the learner to isolate the error, correct it and modify the underlying rule that has led to it. However, modifying the underlying rule that has led to the erroneous response and ensuring that learners do not commit the same mistake again is not an easy task. Studying this would require longitudinal studies. Using James's (1998) terms, it is difficult to put a demarcation line between correction and remediation as there will be times when learners lapse back from remediation to correction and back again till the underlying rule is deeply ingrained in learners' minds and has become a part of their internalized grammar.

In this study, treatment refers to teachers' reactions when an error is committed. This reaction embraces ignoring the error completely, giving the correct response by the teacher, or eliciting the correct response from either the error maker or the whole class. Unless clearly stated, the terms treatment and correction are used interchangeably in this study. Used in this sense, treatment embraces Long's (1977) notion of feedback, Chaudron's (1977) meanings 2, 3 and 4 that he ascribes to correction as mentioned

above and James's (1998) notions of feedback and correction. It is very much the same as used by Fanselow (1977) and is, to a considerable degree, in line with Allwright and Bailey's (1996) notion of treatment.

2.2.3 Native and Non-native Speaking Teachers

The notion of native and non-native speaking teachers has given rise to vigorous debate on issues relevant to the main features of both groups. There has been wide dissatisfaction with this distinction. Kachru (1992:3) pointed out that "the traditional dichotomy between native and non-native is functionally unsightful and linguistically questionable, particularly when discussing the functions of English in multilingual societies." A number of alternative terms have been suggested to replace native and non-native speakers. Paikeday (1985) proposed using 'more or less proficient users of English'. Edge (1988:156) suggested using the phrase 'more or less accomplished users of English'. Rampton (1990:100) suggested using terms such as 'expert speakers' and 'affiliation'.

Phillipson (1992) pointed out that the native speaker ideal dates from the time when language teaching was inseparable from culture teaching and before the invention of both audio and video tape recording. With the introduction of both audio and video recording in the middle of the last century, it has become possible to bring to the classroom examples of authentic and didactic native language without traveling or even leaving school premises. Furthermore, with the emergence of widely accepted and recognized varieties of English, for example, American English, Australian English, Indian English, Singaporean English and the spread of English as an international language for business, communication and research, nobody can claim sole ownership of English. Widdowson (1994:385) noted "the very fact that English is an international language means that no nation can have custody over it." Swales (1993) voiced a similar view.

Given the fact that English has become an international language with a number of varieties, it is difficult and unpractical to single out one variety as the only acceptable model of English to follow. It seems that there has been a shift from focusing on one group – NSTs or NNSTs – to what each group can offer and what they can achieve

collaboratively. Successful examples of co-operation between NSTs and NNSTs are reported, particularly when they share the same work place, for example, Tajino and Tajino (2000) in Japan and Gill and Rebrova (2001) in Eastern Europe. Additionally, NNSTs are increasingly found teaching English in both ESL and EFL contexts. No longer are NNSTs viewed as an unavoidable fate of the profession. On the contrary, their specific contributions and their main strengths have become more relevant than ever (Enric: 2005).

In the context of this study, there are two groups of teachers as classified by the company that employs them. They are classified by nationality. The NSTs come mainly from Britain with a few from Australia, Canada and USA. The NNSTs, come mainly from Saudi Arabia, Sudan and Egypt.

Having discussed the key terms in the thesis title and their operational definitions, Section 2 – Theoretical contextualization – reviews, briefly, how errors have been perceived and the procedures that have been used to study them. It concludes with the suggestion that new procedures need to be evaluated in relation to the old ones. It also highlights the importance of contrastive analysis, error analysis and error treatment as interconnected and complimentary procedures.

2.3 LEARNERS' ERRORS: HISTORICAL BACKGROUND

This section provides a brief account of how learners' errors have been perceived and the processes used to investigate them.

2.3.1 Error Perception

How errors are viewed has invariably been tied to the teaching approach adopted, which, in turn, has reflected the then prevailing learning theories and linguistic schools of thought. In this section, learners' errors are viewed from within both the audiolingual and cognitive approaches to language teaching and learning. I am aware that there are more than two approaches to language teaching and learning. Richards and Rodgers (1986) listed eight approaches and methods used in foreign and second language teaching

and learning. However, the two approaches selected entail specific views in respect of learners' errors, what they reflect and what to do when they are committed.

The underpinnings of the audiolingual approach to language teaching and learning came mainly from behaviourism, structural and contrastive linguistics. Skinner (1957), the progenitor of behaviourism, and his followers considered language as a form of social behaviour and claimed that it was not fundamentally different from non-verbal behaviour. Learning, any kind of learning, was seen as forming habits through repetition and reinforcement. Learning a second or a foreign language was thought to be hindered by interference from the mother tongue. Old habits got in the way of acquiring new habits. Areas where the two languages – native and target – converged were thought to constitute fewer problems to learners. The structural linguists, for example, Fries (1945) viewed language as a composite of formal aspects that could be taught without too much mental reflection. Lado (1957) strongly supported contrastive analysis studies to pinpoint areas of convergence and divergence between the mother tongue and the target language. Banathy et al (1966:37) summarized the philosophy of language teaching/learning based on contrastive linguistics:

"The task of the linguist, the cultural anthropologist, and the sociologist is to identify these differences [between the target language and the mother tongue]. The task of the writer of a foreign language teaching programme is to develop materials which will be based on a statement of these differences; the task of the foreign language teacher is to be aware of these differences and to be prepared to teach them; the task of the student is to learn them."

Some proponents of the audiolingual approach to language teaching and learning such as Brooks (1960) and George (1972) were almost in complete agreement as to the meaning of language teaching and learning. The main principles were: (1) language was a set of habits, (2) language learning was not concerned with problem solving but with correct habit formation and (3) prevention was better than cure.

Learners' errors were seen as sins that were to be eradicated at all costs (Brooks, 1960). Error prevention was favoured over error treatment. Errors were to be corrected once committed for fear of them being learned.

The dissatisfaction with the audiolingual approach to language teaching and learning came from a variety of quarters. Chomsky (1959) attacked the premises of the behaviouristic account of language learning as mere habit formation. He attributed great importance to internal factors. Chomsky and his followers argued that humans were equipped with a 'Language Acquisition Device' which was responsible for language learning and that the linguistic input was just a trigger that set this device to produce novel sentences not available in the input. On the other hand, a number of empirical studies did not support the contrastive analysis hypothesis as a large number of errors were not traceable to mother tongue interference (Dulay and Burt 1974b ; Richards 1974). Most of the errors were developmental errors similar to those committed by children learning their first language.

Unlike the proponents of the audiolingual approach who viewed errors as sins not to be tolerated, Corder's (1967) ideas, contained in his seminal article 'The significance of learners' errors', made errors worthy of close scrutiny. Corder stated that learners' errors were important to teachers, researchers and learners. Learners' errors are significant to teachers as they can tell them how much their students have learnt and how much remains to be mastered, to researchers as they could give them some insights about how language is acquired, and to learners as they help them to test their hypotheses about the new language.

Some second language researchers looked at the language produced by learners, with its errors, as a system of its own. This language learner language was termed interlanguage by Selinker (1974), idiosyncratic dialect by Corder (1974a) and approximative systems by Nemser (1974). Corder (1974a:103) noted that what he referred to as idiosyncratic dialect "is regular, systematic, meaningful, i.e. it has a grammar, and is in principle, describable in terms of a set of rules, some sub-set of which is a sub-set of the rules of the target social dialect." Such a view of learners' errors sparked an interest in studying

learners' errors when they occurred, rather than describing ways of preventing them from taking place. This process is termed error analysis.

Having discussed the way that errors have been perceived by the advocates of the audiolingual and cognitive approaches and the procedures that have been used to study learners' errors, the following section is concerned with the relationships between contrastive analysis, error analysis, and error treatment.

2.3.2 Contrastive Analysis, Error Analysis and Error Treatment

Contrastive analysis is the procedure used to compare two languages. In second language learning, it is used to compare the target language and the mother tongue. Its strong version assumes a predictive power – predicting the areas that would be difficult to learn and the types of errors that might occur. The strong version of contrastive analysis has proved to be untenable and has not been adequately substantiated by empirical research findings (Dulay and Burt 1974b; Richards 1974). A lot of learners' errors could not be traced back to mother tongue interference. The weak form of contrastive analysis does not assume any predictive power but can help us to determine if an error is an interference error or not. Contrastive analysis, in its weak form, is used after an error has occurred and thus enables us to analyze it in respect of its possible causes and its classification.

Richards (1974:32) defined error analysis as “dealing with the differences between the way people learning a language speak, and the way adult speakers of the language use the language.” The late seventies and the beginning of the eighties witnessed a real upsurge of interest in analyzing learners' errors. The purpose was threefold: to prove that second language learners' errors were similar to first language learners' ones and that transfer played little role in accounting for learners' errors (Richards 1974; Dulay and Burt 1974b), to identify and classify different types of errors (Burt and Kirparsky 1974; Flick 1980; Zobl 1980), and to pinpoint their possible sources and causes (Jain 1974).

Error analysis was criticized by a number of researchers for several reasons. Schachter and Celce-Murcia (1977) listed areas in error analysis which exhibit potential

weaknesses. Among them were studying learners' errors in isolation, the problem of properly classifying errors and the difficulty of ascribing causes to systematic errors.

From the aforementioned discussion, it is obvious that neither contrastive analysis alone nor error analysis by itself can account adequately for learners' errors. Indeed, Schumann and Stenson (1974) believed that the two approaches to learners' errors are not incompatible. They complement each other. Both contrastive analysis - in its weak form - and error analysis take learners' errors as their point of departure. Contrastive analysis - in its weak form - could help error analysis to determine what could be the cause of learners' errors. The dissatisfaction with both contrastive analysis and error analysis led to the emergence of error treatment.

Error treatment refers to what teachers or the more competent speakers of the target language do when learners make mistakes. Since the pioneering work of Fanselow (1977), a great number of studies have been carried out to investigate how teachers treat learners' errors (Chaudron 1977; Yoneyama 1982; Lyster and Ranta 1997), the effect of error treatment on language learning (White 1991; Carroll et al 1992) and the efficacy of specific error treatment techniques (Tomasello and Herron 1988 and 1989).

Error treatment is not a simple, straightforward process. A host of factors come into play when an error occurs such as determining the type of error committed, its possible causes and the best way to treat that error. If both contrastive analysis and error analysis are necessary to diagnose the types and possible causes of learners' errors before treatment is prescribed, then the three processes: contrastive analysis, error analysis and error treatment go hand in hand and it is suggested that they should never be viewed as three distinct discrete procedures. This view is recently shared by Salem (2007) when she states that sharpening error-analysis skills might improve the quality of error feedback

Now that the different procedures used to investigate learners' errors have been evaluated and it is argued that contrastive analysis, error analysis are important for successful error treatment, the following section focuses on the importance of error treatment.

2.4 THE IMPORTANCE OF ERROR TREATMENT

In this section, the importance of error treatment is discussed. First, it is dealt with in general terms without reference to a specific language learning context. Then, it is evaluated from within the three major contexts in which a language may be learned: the first, second and foreign language contexts.

2.4.1 General Perspective

The importance of error treatment in language learning has long been recognized. (Annett 1969; Corder 1974b; Chaudron 1977; Schachter 1981 and James 1998). Corder (1974b) highlighted the importance of error treatment as it enables learners to judge the accuracy of their hypotheses. Chaudron (1977) stated that the feedback learners get from their teachers or target language speakers could contribute to their rate and manner of learning. Schachter (1981), among many others, pointed out that the feedback given to learners enables them to know whether they have succeeded in their efforts or not. James (1998) comments that error treatment works, learners want it and it does not affect learning adversely.

The importance of error correction is acknowledged among a large number of second language educationalists. Error correction, as a form of intervention, is clearly an intrinsic element in teaching. Widdowson (1990:48) stated that “ The very concept of pedagogy, whether defined as art or science, presupposes invention and intervention which will direct learners in ways they would not, left to their own devices, have the opportunity or inclination to pursue.”

In the following sections, error treatment is evaluated from within the three major language learning contexts. I am aware that context involves variables other than whether the language is learned as a first, second or foreign language. Because of the lack of space to pursue the issue of context further, the emphasis here is primarily on the purpose of language learning, the quantity and quality of the input available to learners in the three main contexts and the role that error treatment may play in each context. First language context is included as a case was made that second language learners would

learn the target language as children do the mother tongue in a predetermined order and hence error correction would hinder rather than facilitate language development as a result of interrupting learners to correct their errors.

2.4.2 First Language Context

In the first language context, children are exposed to numerous examples of language. Language is a social need without which life would be quite difficult. It was believed that parents' responses did not differ significantly, whether children's utterances were ill-formed or well-formed. Basically, parents continued talking to the children and did not provide them with feedback about the ill-formedness of their utterances. Brown and Hanlon (1970), among others, believed that neither error correction nor explicit teaching of language rules was relevant to language acquisition. It was a widely held view that children built up their linguistic competence from positive feedback - ample exposure to correct language forms.

However, more recent research findings from the first language learning context contradict the previously-stated hypothesis that parents' responses did not vary according to their children's grammatical or ungrammatical utterances. Demetras et al (1986), Penner (1987), and Bohanon and Stanowicz (1988) all reported that parents' responses to children did differ according to the well-formedness or the ill-formedness of the children's utterances. Forms of what could be termed corrective feedback, for example, repetition, recasts, clarification requests and confirmation checks are used by parents more often after erroneous utterances than after correct ones. Penner (1987:382) notes that parents' expansion to children's utterances is more likely to follow ungrammatical utterances than grammatical ones. "The corrections and completions they [expansions] contain may suggest to children that their utterances are inadequate and, at the same time, provide models of how to alter the utterances." Saxton (1997) pointed out that the juxtaposition of children's incorrect utterances and adult correct models could enable children to notice the difference between the two. This could provide the basis for rejecting incorrect utterances.

2.4.3 Second Language Context

The difference between the second and the foreign language context is problematic. Richards et al (1985) illustrated the main differences between foreign language and second language. According to the authors, a foreign language is taught as a school subject and is not used as a means of instruction or a means of communication outside the classroom. Richards et al (1985:109) pointed out that “in Britain and North America, the term second language would describe a native language in a country as learned by people living there who have another first language.”

However, it is not always easy to stick to this differentiation between second and foreign language learning. What about learning English in Quebec? It is neither of these. It is a bilingual context. The majority of the people in this Canadian province speak French as L1 but it is possible to find people who speak English. This context is neither second language nor foreign language context proper as illustrated by Richards et al (1985). English language learners in Quebec have more opportunity of using English outside the classroom than English language learners in Egypt, for example. Despite their definition, Richards et al (1985:108) pointed out that “in North American applied linguistics usage, foreign language and second language are often used to mean the same.”

The most important difference between second and foreign language contexts appears to be the degree of exposure to the target language. Unlike foreign language learners who can practise the target language only in the classroom, the chances are there for second language learners to use the target language outside the classroom if they wish to do so.

Second language acquisition research frequently follows that of first language acquisition in respect of the topics to be investigated and the methodology used. A case was made that first and second language learning were very similar (Krashen and Terrell 1983). Findings in one area could hold true for the other area. This led some second language theorists and educationalists such as Krashen (1982) and Prabhu (1987), who had very little faith in form-focused instruction and error correction, to base their ideas on claims such as the one made above by Brown and Hanlon (1970) about the irrelevance

of error correction. Krashen (1982) believed that frequently interrupting learners to correct their errors might raise their affective-filter and discourage them from participating more in language interaction. Learners might also develop a notion that grammatical accuracy is a prerequisite for effective communication. Consequently, it was believed that withholding explicit and systematic correction would be beneficial for second language learning. Getting learners into tasks that forced them to use whatever language they had without focusing on the formal aspects and correcting only the errors that hindered the completion of the task were thought to be more beneficial to second language acquisition. As Beretta (1989:283) pointed out, “the guiding principle was that form could be best learned when the learner’s attention was focused on meaning.” The immersion programme in a number of Canadian and American schools was seen by Krashen as an ideal context in which language could be acquired through concentration on meaning rather than on linguistic forms. When learners learn science, history, geography and other subjects in the target language, the emphasis is naturally on the meaning and the content of the lessons.

Meaning focused instruction has been evaluated recently by a number of second language educationalists and researchers, for example, Allen et al (1990), Hammerly (1991), and Lyster and Ranta (1997). Allen et al (1990:77) in a study that looked at aspects of classroom treatment in a number of immersion schools in Canada, came to three main conclusions. The third conclusion interests us here. Learners would benefit if form and function were more closely linked instructionally. “Students need to be motivated to use language accurately, appropriately, and coherently. In all these respects, the how and when of error correction will be a major issue for further investigation.” Hammerly (1991: vii) pointed out that “Encouraging students to use the language to communicate without regard to its structure is not empowering them – it is disabling them, and likely permanently so.” He warned us against equating untutored language acquisition settings with classroom language learning settings. What may work in one setting may not work in the other. Lyster and Ranta (1997) advocated giving some focus on form instruction via corrective feedback. They believed that this would improve learners’ linguistic

accuracy and that their communicative ability would be enhanced when the message was both appropriate and accurate.

Research findings in the second language context show that error treatment generally works. Ramirez and Stromquist (1979), in a longitudinal study to evaluate some teaching behaviours, such as asking guided questions and correcting grammatical errors, found that correcting grammatical errors correlated positively with students' growth as language learners. Lightbown and Spada (1990:443) found accuracy and fluency could be developed "through instruction that is primarily meaning-based but in which guidance is provided through timely form-focus activities and correction in context." White (1991) found evidence to support both form-focused instruction and corrective feedback in helping learners to master some formal aspects of the language. Carroll et al (1992), in an experimental design study, reported positive effects of error correction in teaching morphological generalization. Carroll and Swain (1993) in an experimental study, compared four types of corrective feedback: giving explicit metalinguistic information about the error and its correct formulation, telling the students that their responses were wrong, giving the correct answers when mistakes occurred, and asking the students if they were sure that their responses were correct with no feedback at all. It was found that both types of feedback; direct and indirect could help adult second language learners to learn abstract linguistic generalizations. Aljaafreh and Lantolf (1994) investigated the effect of error correction from within the 'socioculture theory of mind' as originated by Vygotsky (1986). They believed that both explicit and implicit negative feedback could help learners to modify the underlying rules that led to committing the errors. Lyster and Ranta (1997:58) noted that giving corrective feedback in content lessons "provided learners with timely opportunities to make important form-function links in the target language."

From both the theoretical stances and the empirical findings reported above, it is evident that there has been a remarkable shift in second language acquisition research towards achieving a balance between form and meaning in language teaching. Even the staunchest opponents of explicit grammar teaching, for example Long, has started to accept some explicit teaching of form but within a communicative framework. Long (1991:54)

differentiates between ‘focus-on-forms’ and ‘focus-on-form’. Long is against focus-on-forms teaching where emphasis is always on specific linguistic forms. He advocates focus-on-form teaching in which students’ attention is drawn to “linguistic elements as they arise incidentally in lessons whose overriding focus is on meaning or communication.”

2.4.4 Foreign Language Context

It has been pointed out above and in the literature that the foreign and second language contexts are not identical (Walmsley 1978; Gass 1990; James 1998). In a foreign language context, the target language is not normally used as a means of instruction as is the case in the immersion education context and neither is it utilized outside the classroom as in the second language context. Walmsley (1978:31) noted "in institutionalized foreign language teaching situations, the teacher and his media constitute virtually the whole of the learners' foreign-language environment, and hence his only source of information about the new language." Gass (1990) remarked that the main difference that existed between second and foreign language learning is in the category of linguistic input.

Linguistic input is essential to language learning (Allwright 1975; van Lier 1988; Ellis 1993 & 1995 and Tsui 1995). The two questions that concern us here are: where does linguistic input come from, and what are the main features of optimal input for language acquisition? As for the first question, linguistic input in the foreign language learning context comes mainly from teachers, teaching materials and students. Allwright (1975) pointed out that what both teachers and students say in the language or about the language may be seen as input available to learners. Ellis (1993 and 1995) stressed the importance of noticing in language learning. The salient linguistic features in the input need to be noticed by the learners. Noticing, Ellis believed, facilitates the intake of unknown grammar features in the input.

To sum up, in a foreign language learning context, linguistic input needs to enable learners to observe the salient linguistic features therein, to be able to compare and notice the difference between what they say as learners and what adult speakers (teachers) say.

Furthermore, in the course of a lesson, the output of one learner could be the input for another learner. If a part of the input is faulty, it is possible that, unless it is corrected, it will be learned. This makes it essential to ensure that learners are exposed to accurate input. James (1998:248) remarked that “second language learners have more access to indirect evidence, since the language they hear around them is contextualized and meaningful. Foreign language (FL) learners have little exposure to indirect evidence, positive or negative, so they need direct negative evidence in abundance to compensate.” This means that in the classroom context, if errors are not corrected, FL learners may not have the opportunity to learn.

There is a growing body of research in support of error treatment in foreign language contexts. Tomasello and Herron (1988a and 1989b) used a technique which they termed garden path. Put briefly, it means inducing learners to make errors – for example, over-generalization errors - and then correcting them. They compared this technique with error prevention; teaching the grammar rule and warning the learners against the exception to that rule. They found evidence that the group that received corrective feedback outperformed the group that did not. DeKeyser (1993:511), in a longitudinal study, found that corrective feedback interacted with learner variables, for example, motivation, aptitude, anxiety level and previous achievement. “For students with very high or very low scores on these variables, error correction makes a significant difference.”

More recent research findings in the three language learning contexts provide some evidence in support of error correction (Saxton et al 2005; Mennim 2002; Hebusch and Lloyd 2004; Lyster 2004; Ammar and Spada 2006). In a first language learning context, Saxton et al (2005), in a longitudinal study, report that corrective input was associated with subsequent improvements in the grammaticality of children speech of some of the target structures. In a foreign language context, Mennim (2002) found beneficial effect of corrective feedback on the students’ performance in pronunciation, grammar and in the organization of content in an oral presentation course. Hebusch and Lloyd (2004) report that corrective feedback improved the students’ word reading accuracy in lists and in reading passages. In an experimental design, Lyster (2004) investigated the effect of

form-focused instruction and corrective feedback in a content-focus instruction context. The experimental groups outperformed the control group.

Language learning, like any kind of learning, requires some sort of feedback. How would learners test their hypotheses if feedback is withheld. The importance of feedback varies from one context to another. In the first language context, it is possible that children can modify their faulty utterances over the years as a result of intensive exposure to the language through different mediums. Additionally, first language learners cannot function socially if their language is not adequate. The luxury of intensive exposure to the target language is not available to second or foreign language learners and therefore explicit correction may help learners to modify their incorrect utterances. Having said that, feedback needs to vary in both quality and quantity depending on the language learning context, the pedagogic focus of the activity and the linguistic ability of the learners. The literature reviewed above illustrates that each teaching context is unique and thus research findings in one context need to be considered very cautiously when referring to them in a different context.

As reported above, it seems that there is a general acceptance that correction somehow works and emphasis is now directed to studying the conditions under which it could be more effective. This is the focus of the following section.

2.5 HOW LEARNERS' ERRORS SHOULD BE TREATED

The late seventies witnessed a significant upsurge of interest in classroom-based error treatment studies, for example, Holley and King (1974), Allwright (1975), Cathcart and Olsen (1976), Long (1977), Chaudron (1977), and Fanselow (1977). Fanselow's study was the first empirical study to look at what teachers actually did when errors occurred. It should be noted here that before Fanselow's study, most of what had been said about error treatment was presented in general terms or based on personal beliefs and hunches (Rivers 1964; George 1972).

In this section, firstly the main tenets of three theories – natural approach theory, communication theory and the culture theory of mind- are evaluated. It should be noted

that the communication theory presented here and the culture theory of mind were not conceived specifically for error treatment, but a number of researchers have found insights in them that could be useful in dealing with learners' errors. Secondly, the features of effective error treatment are presented. Finally, a number of error treatment techniques that have been reported to be empirically effective in language learning are discussed.

2.5.1 Theoretical Perspectives

2.5.1.1 Incidental Vis-à-Vis Systematic Error Treatment

Krashen and Terrell (1983) were the originators of the 'Natural Approach' to language teaching. In this approach the emphasis is on exposure to easy to understand language just beyond the learner's current capabilities which Krashen (1982) termed 'comprehensible input'. The advocates of the Natural Approach to language teaching and learning believe in withholding explicit and systematic correction on the basis that in first language research there was very little to support the idea that more competent speakers corrected the erroneous utterances produced by young children. Related to the 'Natural Approach' is the 'Natural Order Hypothesis' Burt and Dulay (1980). Error correction is pointless as grammatical structures e.g. question formation, are acquired in a predetermined incremental sequence and learners learn them when they are ready to do that. This was a major influence on attitudes to errors in early communicative language teaching.

How errors should be treated is discussed by Prabhu (1987). He distinguishes between two types of correction: systematic and incidental correction. Systematic error correction happens when the focus of the lesson is on forms and is quite the opposite of incidental error correction. Incidental error correction takes care of the error tokens only; editing the mistakes as they occur and when they impede the execution of the task in hand. No explanation of the nature of the error or of the underlying rule, no exemplification and no follow up activities are required. The main features of incidental error correction according to Prabhu (1987) are:

- 1- It is confined to particular tokens as they appear in the course of the lesson.
- 2- It is responsive. Its main purpose is not preventing errors from occurring again.
- 3- It is facilitative. It is perceived by learners as something that enables them to complete the task in hand rather than being an objective in itself.
- 4- It is transitory. It does not occupy a large portion of the lesson.

Feature 1 above contradicts Fanselow (1977), Hammerly (1991), Allwright and Bailey (1996) and Lyster and Ranta (1997) who see the primary goal of error correction as helping learners to modify their underlying rules, to create categories and to confirm or reject their hypotheses about how the system works. Arguably, this is largely unattainable if only the error tokens are corrected, especially in a foreign language context where learners are not exposed extensively to the target language.

2.5.1.2 Error Treatment and Communication Theory

Zamil (1981) looked at error treatment as a communicative event and linked it to the main tenets of communication theory as delineated by Wiener (1961). In a communicative event the three main elements are the transmitter, the receiver and the message to be transmitted. In a language learning classroom context the teacher is usually the transmitter, the student the receiver and what is said in or about the language the message. The main features of successful feedback from the point of view of communication theory as explicated by Zamil (1981) are:

- 1- Feedback should not just be right or wrong, but should allow learners to alter their future performance. It should be so designed that new information can help learners in the process of creating categories, making discriminations and testing hypotheses about the target language.
- 2- Teachers should be clear about what they require from the students.
- 3- For feedback to be effective, non-verbal behaviour should corroborate verbal behaviour not contradict it.
- 4- Focus should be on the error not on its committer.

- 5- The feedback should point out where the disparity between the response and the desired response lies.
- 6- Since communication theory stresses the use of different channels of transmission, the required information in error treatment should be provided through speech, writing and gestures.

According to Zamil (1981), the success of an error treatment event lies in its clarity, comprehensiveness and diversity. When teachers are involved in error treatment, they need to ensure that what they require from learners is clearly understood. The information they provide, i.e. why an utterance is not correct and how to correct it, should enable learners to create categories, discriminate and confirm or reject their hypotheses about how the language works. The importance of the diversity of error treatment mediums as emphasized in the communication theory in this section, is also supported by the emerging discipline Neuro Linguistic Programming (NLP). People are classified as auditory, visual and kinesthetic learners. Using different mediums when treating learners' errors can cater for these individual differences among learners. Though it is true that people are likely to be more-or-less of a combination of these features rather than falling into neat, discrete categories, such general classification can remind teachers of the importance of using different mediums when dealing with learners' errors.

Admittedly the communication theory Zamil (1981) referred to is an outdated theory and does not take into account the negotiation that takes place between the interlocutors. This would be straightforward if the interlocutors were computers. Attention resources are limited, and the overriding concern in most communication is meaning. Having said that, Zamil's guidelines cover both the cognitive and the affective aspects of successful feedback as suggested by Annett (1969).

2.5.1.3 Error Treatment and the Cultural Theory of Mind

Though the "sociocultural theory of mind" was originated by Vygotsky in the 1930's, it has been revisited recently with specific interest in the role it can play in language

learning in general and error treatment in particular (Schinke- Llano 1995 ; Aljaafreh and Lantolf 1994).

The most important tenet of the sociocultural theory of mind is that mental activities are essentially mediated processes affected by what happens between people first before they settle in the mind. These mental processes move from the social level to the mental level. Vygotsky (1978), cited in Aljaafreh and Lantolf (1994:567), stated “every function in the child’s cultural development appears twice: first, on the social level, and later, on the individual level; first between people (interpsychological), and then inside the child (intrapsychological).” The other tenet that is of relevance to our argument here is the notion of ‘zone of proximal development’. Vygotsky (1986) posited that the ‘zone of proximal development’ (ZPD) is the distance between what persons can do on their own and what they can do with some help from those who are more able than him.

Essential to the argument here is the notion of mediation and the dialogic activity that occurs when the more competent (teachers) talk to the less competent (learners). The purpose of the dialogic activity is to discover the ‘zone of proximal development’ and to provide learners with the help needed to sort out the problem at hand. Hence the question is, what are the main features of this mediation? Vygotsky (1984) presented two characteristics which Aljaafreh and Lantolf (1994) related to error treatment:

- 1- Mediation should be graduated. When an error is committed, instead of giving the correct answer, the teacher should engage the learners in a dialogue the purpose of which is to determine their ZPD and to help them self-correct their errors.
- 2- Mediation should be contingent. It should be given when needed and withheld when it is not.

Presumably, in language learning the ZPD would be the area just beyond what has been mastered and within which the learner would be most able and likely to develop their interlanguage next with the help of more competent language users.

To sum up, essential to error treatment as perceived from within the sociocultural theory of mind, are the importance of individual differences, the role of the dialogic mediation

between teachers and learners when errors are treated and that learners should be encouraged to self-correct.

Neither of the theories/hypotheses discussed above was written specifically to explain the error treatment process. Krashen, a co-progenitor of both the 'Natural Approach' and the 'Natural Order Hypothesis', considered the immersion education in Canada and the USA as ideal for communicative language teaching. However, more recent evaluation of the immersion programmes recommend paying more attention to the linguistic forms of the language and explicit error correction. Although Zamil's guidelines are sensible, the error treatment process is more complex than that and a host of interrelated variables, for example, the pedagogic focus of the lesson, the learner's variables and the organizational culture needed to be considered. The main contribution of the cultural theory of mind to error treatment is the emphasis it gives to mediation with the purpose of helping the learners to correct their errors and retrieve what they have learned before. Pushing learners to produce language may be more beneficial than just being exposed to correct responses in the feedback.

2.5.2 Features of Effective Error Treatment

Error treatment, as previously noted, refers to what teachers do when errors are committed. It includes teachers ignoring errors completely, delaying correction, giving the correct answer, seeking correction from the error makers themselves or from other students in class. The main focus of this section is how these various acts may be executed.

2.5.2.1 Error Treatment Should Promote Self- correction

Several second language acquisition researchers have pointed out that the main purpose of the error treatment process should be to enable language learners to locate errors and, through a discovery process, correct them (Corder 1974b; Allwright 1975; Hendrickson 1978; Chaudron 1988; van Lier 1988; Allright and Bailey 1996; Ellis 1997). These researchers argue that the importance of error self-correction rests on enabling the learners to test the hypotheses they make about the target language. Corder (1974b:97)

pointed out that "simple provision of the correct form may not always be the only, or indeed the most effective, form of correction since it bars the way to the learner testing alternative hypotheses." Chaudron (1988) pointed out that instruction that stressed self-correction was more likely to enable learners to monitor their own target language speech. Allwright and Bailey (1996:107) recommended that L2 classroom learners be allowed both time and opportunity for self-repair, "whether it is self- or other- initiated". Ellis (1997) believes that learners may be learning when they are given the chance to correct the mistakes they make.

There is some empirical evidence in support of using certain techniques that could lead to self-correction. Chaudron (1977) found that the use of emphasis- teacher repeats the student's answer with emphasis locating or indicating fact of error - increased the chances of successful responses from the students. Aljaafreh and Lantolf (1994) used a protocol of graduated error self-correction through dialogues. They asked the subjects in their study a set of gradual questions the purpose of which was to enable the subjects to locate the errors and correct them. Similarly, Lyster and Ranta (1997) found that using elicitation techniques enabled their subjects to self-correct their errors.

2.5.2.2 Error Treatment Should Consider Learners' Factors

Error treatment needs to take affective, linguistic and social factors into account (Holley and King 1974; Robbins 1977; Aljaafreh and Lantolf 1994; James 1998). Aljaafreh and Lantolf (1996:473), emphasize the individuality of learners. They state that it is impossible to "assume that any two learners who attain identical scores on a test are necessarily at the same stage in their interlanguage growth, if all that we assess is their actual developmental level." James (1998) believes that the effectiveness of different error treatment types depends on individual differences and some group factors, for example, attainment level.

DeKeyser (1993) also found that error treatment interacted with learners' linguistic and affective variables. The more able students benefited more than the less able ones from error correction. Furthermore, he found students with a low anxiety level welcomed error correction and profited from it more than those with a high anxiety level.

How learners perceive error treatment is critical (Allwright 1975; Cathcart and Olsen 1976; Schulz 1996 and Lee and Ridley 1999). Allwright (1975) pointed out that the effectiveness of error treatment depends on how it is perceived by learners. Cathcart and Olsen (1976:41) noted: “bias and attitude may prove to have a strong influence on the effectiveness of corrections”. James (1998) voices a similar point of view and asks why learners’ perceptions should be ignored in error treatment when we are urged to consider them in other aspects of second language pedagogy.

The research conducted so far indicates that learners generally tend to opt for more correction than they perceive they are getting (Cathcart and Olsen 1976; Chenoweth et al 1983; Shulz 1996 and Lee and Ridley 1999).

When beliefs are explicit they can be easily evaluated and discussed. One of the main purposes of this study is to make such beliefs explicit through interviewing teachers and administering a questionnaire to a group of students in the same institutional context.

2.5.2.3 Error Treatment Should Enable Learners to Notice the Gap

Comparing learners’ faulty language structures with those of the more competent speakers of that language is an intrinsic part of the error treatment process. This is in line with cognitive comparison theory (Nelson 1981, 1987). The basis of this theory as explicated by Tomasello and Herron (1989:387) is that “the most important language learning experiences are those in which it is possible for learners to compare and note the discrepancies between their own language structures and those of mature speakers.” Zamil (1981:144) also advocated making clear the difference between what was said and what should have been said. “Feedback which points out the disparity [between erroneous utterances and correct forms] transmits new information.”

Related to comparing what has been said with what should have been said is the idea of raising learners’ awareness and noticing in language learning (Schmidt 1990 and 1993; Ellis 1993 and 1995). Ellis (1993) argues that intake takes place when the salient points in the input are noticed by second language learners and the links between the linguistic

forms and the meanings are established. Ellis (1995:89) categorically states, “No noticing, no learning”. When these two principles are applied to error treatment and viewed from their perspective, they support and complement the comparison principle explained in the previous paragraph.

2.5.2.4 Error Treatment Should be Informative, Positive and Motivating

Error treatment needs to be conveyed to learners in a positive way to motivate them to be more involved in learning (Annet 1969; Rivers 1967; Vigil and Oller 1976; Zamil 1981). Decades ago, in the field of general education, Annett (1969) wrote that feedback should be informative, motivating and reinforcing. Rivers (1967) stressed that teachers should strive to acquire skills in correcting erroneous utterances without embarrassing or humiliating students. Vigil and Oller (1976) pointed out that fossilization could be attributed to the type of feedback second language learners receive. They believe that learners receive two types of feedback from their teachers when they commit errors. Cognitive feedback is the information regarding the mistake that has been committed. Affective feedback is the emotional reactions concomitant with the cognitive feedback. To prevent or minimize fossilization, Vigil and Oller (1976) believed that clear information about the error that has been committed as well as positive affective feedback are required. In line with Vigil and Oller’s views, Zamil (1981) emphasized that the focus should be on the error, not on its committer.

2.5.2.5 Error Treatment Should be Given After a Reasonable ‘Wait Time’

Rowe (1969), cited in Long (1977) stated that increasing wait time could promote language learning and render error treatment more effective. Holley and King (1974) and Allwright and Bailey (1996) voiced similar view. Wait time is the time the caretakers or teachers wait till learners or children come up with an answer to a question that has been posed to them. Rowe (1969) indicated that giving learners a few more seconds than teachers usually give could improve learners' production.

Holley and King (1974) found that prolonging wait time had an effect on the quality of the students production. They reported that corrective measures were not required in 50%

of errors noticed when the students were given ample time. Simply allowing students sufficient time to reformulate their responses led to improved performance.

2.5.2.6 Error Treatment should Enable Learners to Modify their Interlanguage Rules

The ultimate goal of error treatment is to enable learners to modify the underlying rules and not just to edit the errors that have been committed. Fanselow (1977) suggested that involving learners in both analysis and categorization tasks would enable them to modify their underlying principles and categories. Furthermore, they would be able to deal with similar problems in their future use of the language. On the other hand, Long (1977), Hammerly (1991) and James (1998) point out that correcting surface structures cannot guarantee a modification of the underlying categories, rules and plans the learner uses to organize new and old knowledge.

The general principles of error treatment have been evaluated in the previous pages. In the following pages, attention is directed to specific error treatment techniques that have been reported to have worked by a number of researchers. What these techniques involve, their applications and the research findings supporting them are the foci around which the argument of the following section revolves.

2.5.3 Suggested Techniques

2.5.3.1 Repetition

Repetition means different things to different researchers and is usually defined operationally on the basis of what the study wants to achieve. To Fanselow (1977) repetition meant the teacher repeating learners' responses containing errors with rising intonation. Chaudron (1977) divided repetition into four explicitly labeled types and three other types that could loosely be subsumed under the rubric of repetition. Spada and Frohlich (1995:24) define repetition as "Full or partial repetition of previous utterance." Lyster and Ranta (1997:46) differentiate between recast and repetition. Repetition is "Repeating student utterance with intonation adjustment highlighting error." Recast is "Reformulation of all or part of a student's utterance, minus the error."

Chaudron (1977:38) gave four different types of repetition:

- 1- *Repetition with no change*. Teacher repeats students' utterances with no change or omission of errors.
- 2- *Repetition with no change but with emphasis*. Teacher repeats students' utterances with no change of errors but emphasis locates or indicates the error.
- 3- *Repetition with change*. Teacher adds corrections and continues to other topics.
- 4- *Repetition with change and emphasis*. Teachers adds emphasis to stress the location of errors and the correct formulations.

The third and fourth types are recasts as defined above by Lyster and Ranta (1997). They are also equivalent to paraphrase as used by Spada and Frohlich (1995). They defined paraphrase as reformulation of previous utterance. In first language context, Demetras et al (1986) presented four types of repetition that are not completely different from those of Chaudron's (1977). They are exact repetition, contracted repetition, expanded repetition and extended repetition. Contracted or expanded repetition usually provides syntactic or morphological correction. Extended repetition adds new information to the students' utterances.

Allwright (1975) rejected the importance of merely repeating students' utterances with no change as learners could not be sure that any repetitions of what they said necessarily indicated errors or that their absences indicated correctness. Chaudron (1977) criticized repetition with change on the grounds that it fails clearly to isolate the error and to indicate its nature. Zamil (1981) noted that simply repeating students' utterances minus the error does not enable learners to form associations and relationships and does not help them to modify the underlying rules though it might strengthen the correct responses. Feedback should point out the disparity between the erroneous responses and the desired responses. Allwright and Bailey (1996: 104) note "Simple repetition or modeling of the correct form may be useless if the learners cannot perceive the difference between the model and the erroneous forms they produce." Lyster (1998) criticizes

recasts as the learner might be under the impression that that is another way of saying the same thing.

Chaudron (1977) found that the effect of repetition was contingent on its incorporation of other features such as emphasis, expansion, reduction and negation. The use of emphasis increased the chances of successful responses from the students. This was because repetition with no change but with emphasis indicated to the learners the fact of error and its location. This was believed to enable learners to correct their mistakes. In Chaudron's (1977) study, repetition with no change but emphasis was more successful in eliciting correct answers than repetition with change.

It is clear that repetition as a CFM has a number of functions depending on the type of error committed and what the teacher wants to achieve through using it. In correcting phonological errors, I believe, getting learners to repeat the correct pronunciation is more effective than explaining to them how the sound system works because an explanation is likely to be cognitively demanding. So, older students may benefit from explanation whereas younger ones from repeating the model.

Repetition with change, repetition with change and emphasis, paraphrase or recasts as defined by Chaudron (1977), Spada and Frohlich (1995) and Lyster and Ranta (1997) respectively fulfill the same discourse function: providing implicit feedback regarding learners' ill-formed utterances. Although such moves do not interrupt the flow of communication, they fail to explicitly highlight the errors and thus do not enable learners to notice the difference between what they said and what they should have said. This might explain why researchers, for example, Lyster and Ranta play down the effectiveness of recast as a CFM.

2.5.3.2 *Recast*

Recast has been found to be the most common CFM in a wide range of classroom settings: in elementary immersion classes (Lyster and Ranta 1997; Mori 2002), in university-level foreign language classes (Doughty 1994; Roberts 1995; Jimenez 2006) in

high school EFL classes (Tasang 2004) and in adult ESL classes (Ellis, Basurkmen and Loewen 2001; Panova and Lyster 2002). Because of this state, recast has been subject to close scrutiny by a number of researchers (Lyster 1998; Mackey and Philip 1998; Morris 2002; Nabei and Swain 2002; Leeman 2003; Sheen 2006 and Ellis and Sheen 2006). Discussions of recast have revolved around its definition, its effectiveness in relation to the other CFMs and the factors that affect its usefulness.

Long (1996) and Mackey and Philip (1998) agree on the basic features of recast. Recast is rephrasing an ill-formed utterance by changing one or more sentence components while retaining its central meaning. Ellis and Sheen (2006) ascribe the difficulty of defining recasts to the fact that they can take different forms and can perform varied functions not all of them are corrective.

Because of its high preponderance in classroom discourse as a CFM, researchers have recently examined the effectiveness of recast in promoting self-repair and learner uptake (Lyster 2001; Morris 2002; Lyster 2004; and Lyster and Hirohide 2006). The findings of these studies show that recasts were lower negotiation moves in repairing learners' errors. This has led Ellis and Sheen (2006) to propose that the acquisitional value of recasts in comparison with the other forms of corrective feedback might have been overestimated. They emphasize the need for research that examines the specific properties of recasts and the social and instructional conditions in which they could be conducive in the error treatment process.

As recast is an implicit corrective feedback move, research has recently focused on investigating the factors that enable learners to notice it and on determining the conditions under which it can promote self-correction. Noticing recasts was influenced by the learners' linguistic level and the length and number of changes in the recasts (Philip: 2003). Ammar and Spada (2006) report that high proficiency learners benefited equally from prompts and recasts whereas low proficiency learners benefited more from prompts than recasts. Leeman (2003), in an experimental design, investigated the variables that conflate with recast and make it more effective as a corrective feedback move. The

groups that received recast with enhanced salience performed better than the control group.

2.5.3.3 *Elicitation*

In language teaching, elicitation is defined as “techniques which a teacher uses to get learners to actively produce speech or writing (Richards et al 1982:90).” In error treatment, elicitation is defined as “the techniques teachers use to elicit the correct form from the students” (Lyster and Ranta 1997:48). So elicitation, as defined by Lyster and Ranta, enables teachers to take learners through a discovery process – locating the error and correcting it collaboratively. This discovery process is seen by many as an effective method of error treatment (Corder 1974; van Lier 1988; Aljaafreh and Lantolf 1994; Lyster and Ranta 1997; James 1998).

The majority of error treatment models discussed in Chapter 3, for example, Fanselow (1977), Cathcart and Olsen (1976), Chaudron (1977) and Lyster and Ranta (1997) include categories whose main purpose is eliciting correction from either the error maker or from someone else in the class. Elicitation, as a CFM, was not mentioned explicitly in the early models of error treatment (Cathcart and Olsen 1976; Fanselow 1977; and Chaudron 1977). However, a number of categories mentioned in those models are essentially elicitation techniques. For example, Fanselow’s category 9: Repeating students’ responses with rising intonation, Cathcart and Olsen’s categories 3 and 5: giving a partial model pinpointing the area of error and indicating the place of error respectively are all ways of eliciting a correct response after an error is committed. It was Lyster and Ranta (1997) who amalgamated those various categories under elicitation.

Holley and King (1975) found evidence that rephrasing and cueing are successful CFMs. Rephrasing means simplifying the question by emphasizing the contentives – words that have lexical meanings when they are used alone such as ‘pen’, ‘man’, ‘book’ - rather than the functors – words that have little meaning on their own but show grammatical relationships, for example, ‘and’, ‘to’, ‘the’. Cueing means that the teacher gives hints using grammatical variations of a key content word. Rephrasing and cueing as used by

Holley and King could be subsumed under the general rubric elicitation. In another study that attempted to find the differential effects of different types of error treatment and learner uptake, Lyster and Ranta (1997) found evidence that indicated the effectiveness of elicitation over both repetition and recasts in spite of the high percentage of both recasts and repetitions in the data. Similar findings have been reported by Lyster (2001) and Ammar and Spada (2006).

A number of second language acquisition researchers advocate the use of elicitation in error correction on the basis that it involves a greater level of processing on the part of the learner. This may help learners to analyze their hypotheses about the target language and draw their attention to alternative forms (Lyster and Mori 2006). Self-repair is also thought to be very beneficial as it is a type of pushed output. Loewen (2004) notes that giving learners the opportunity to produce such output during a meaning-based activity might contribute to the development of accuracy.

2.5.3.4 Metalinguistic Feedback and Explanation

Metalinguistic feedback is either comments, information or questions related to the learners' ill-formed utterances without explicitly giving the correct forms (Lyster and Ranta 1997). Explanation means providing information as to cause or type of error (Chaudron 1977).

There is some evidence in support of using metalinguistic feedback and explanation to promote learners' self-correction (Heift 2004; Ellis et al 2006). Heift reports that feedback that provides an explanation of the error and also highlights the error in the student input is effective at eliciting learner uptake. Ellis et al found some evidence of beneficial effects of metalinguistic explanation over recasts in the acquisition of the past tense –ed.

2.5.3.5 Explicit Correction

Explicit correction means that a teacher provides the correct form following a student's ill-formed utterance. It has been reported by error treatment studies as the most preferred

corrective feedback move (Fanselow 1974 and Cathcart and Olsen 1976, Lee and Ridley 1999; Lee 2002; Jeon and Kang (2007)).

Clearly, explicit correction puts learners on the receptive side and deprives them from testing their hypotheses regarding how the target language system works. High preference of this type of corrective feedback by most of the students in the above mentioned studies could be due to cultural reasons. A large number of the students in those studies came from Asian countries where teachers are considered to be the only or the main source of knowledge in the classroom.

In the above section a number of CFMs have been presented with the supporting research findings and theoretical positions. It should be noted that these CFMs are not mutually exclusive; teachers may need more than one of these moves to treat an error. For example, teachers may use explicit correction if an elicitation move fails. They may also use explanation if they perceive a need for that. Another point I would like to mention is that there is no clear cut division between these CFMs. Metalinguistic feedback and explanation are difficult to separate. Metalinguistic information could be subsumed under explanation but not the vice versa. Explanation, in an error treatment process, is usually given after an error is treated using one or more of the CFMs and its purpose is to show the disparity between what has been said and what should have been said. On the other hand, the main function of metalinguistic feedback is to elicit the correct response from the error maker or from the whole class and hence could be subsumed under elicitation.

All the CFMs have roles to play in the error treatment process. Neither of the studies reviewed in this section has investigated the relationship between the pedagogic focus of the lesson the CFMs used. I am of the opinion that the pedagogic focus of the lesson determines, to a large extent, the CFMs to use. If the main purpose of the activity is to get learners involved in genuine communication, using explicit correction, elicitation, metalinguistic feedback or explanation would interrupt the flow of the activity. Salient recasts would be more appropriate in such activities.

To sum up, although a considerable number of studies have investigated how errors should be treated, there is no consensus on which specific CFMs that are most successful in promoting learning. This is not surprising as error treatment is tied to a number of variables such as course objectives, learners' attitude and individual differences. Additionally, confirming the efficacy of a specific CFM requires longitudinal studies. These are difficult to conduct as it is not always possible to control all the variables involved over a long period of time.

In this section, error treatment has been discussed theoretically and on the basis of research findings. Some CFMs, reported to have been successful, have been evaluated. The following section focuses on the teachers' and students' beliefs about and attitudes towards error treatment. This literature is directly related to research question 2: Do the techniques used by teachers match students' expectations in respect of error treatment?

2.6 TEACHERS' AND STUDENTS BELIEFS ABOUT ERROR TREATMENT

The focus of this study is a comparison of two groups of teachers; the NSTs with the NNSTs in respect of their treatment of classroom oral errors. The study also aims at finding out if each group has distinctive views about error treatment and whether what they actually do in the classroom concurs with students' beliefs about and attitudes towards error treatment. So it is legitimate to assign some space to the issue of culture and its effect on error perception and correction. First, an overview of the effect of culture on language teaching and learning in general is given. Then the importance of teachers' and learners' beliefs about error treatment is discussed. Finally, an evaluation of some of the studies pertinent to students' and teachers' beliefs about and attitudes towards error treatment is presented.

Culture is used here to refer to both teachers' and students' beliefs about what constitutes language teaching and learning in general and error treatment in particular. It refers to issues like to correct or not to correct language errors, when, how and by whom they should be corrected. It is now acknowledged that both the teacher and the language

learner go to the classroom with implicit sets of beliefs or expectations. Cortazzi (1990:54) believes that “ where such expectations are congruent, or at least close, language learning will probably be that easier. If the expectations are very diverse they may well constitute barriers to learning.” Only when learners’ and teachers’ beliefs are made explicit can we be in a position to suggest alternative ways and be able to offer modification to the already existing ones. When beliefs are explicit they can be easily evaluated and discussed.

2.6.1 Culture and Language Teaching and Learning

Culture, as a construct, defies satisfactory definition though it is not a big problem to refer to an example of behaviour as reflecting a specific culture. For example, using titles plus first or family names in Egypt signifies respect and thus is well perceived socially. In England, this shows a degree of formality and distance between the interlocutors.

Though we can talk about eastern and western cultures, we should be aware that within each of these general cultures there are sub-cultures. Added to that and what interests us here, each profession has its own culture. In this study, teaching and learning culture refers to how teaching and learning, specifically, of the English language is perceived by teachers and students. It is believed that if both teachers and students are ‘singing from the same hymn sheet’, learning will be more effective.

Culture is manifest in the classroom. No longer can teaching and learning be separated and investigated in isolation from the other variables involved such as the social setting and the organizational culture. Gaies (1980), cited in Allwright and Bailey (1996), notes that the classroom is a crucible - the place where teachers and learners come together and language learning happens. This definition is not complete as it does not explicitly state the presence of other variables such as teachers’ and learners’ ideas about teaching and learning, the effect of the organizational culture, the country’s culture, the course objectives etc. However, the use of the word crucible is very significant here as it symbolizes the nature of the cultural interaction which takes place. To be able to

understand a specific classroom culture we need to come to grips with the elements that create that composite culture.

Teachers are urged to take learners' beliefs and expectations into account (Bossano 1986; Cortazzi 1990; Schulz 1996; Holliday 1992 & 1996, Allwright 1996; Jin and Cortazzi 1998). Researchers interested in learning strategies (Wenden 1986; Oxford 1985) also recommend that teachers identify their students' beliefs and provide activities that enable them to examine those beliefs and evaluate their impact on their language learning.

No longer is the learner perceived as a passive recipient of what is transmitted to him by the teacher or the course content. Neither is the teacher's role limited to merely imparting the content of the course. Both teachers and learners come to class with their own expectations and views of language teaching and learning. Only when these expectations and views are made explicit will we be in a position to examine and evaluate them.

2.6.2 Culture and Error Perception and Treatment

Several second language acquisition researchers have highlighted the importance of considering teachers' and learners' beliefs about errors and how they should be treated (Allwright 1975; Cathcart and Olsen 1976; Schulz 1996; James 1998; Lee and Ridley 1999). Some thirty years ago, Cathcart and Olsen (1976:41) wrote "since human attitudes and behaviour are obviously present in learning and teaching, we believe it is important to ascertain what students and teachers assume to be the most effective methods for correcting errors." In line with this, and emphasizing the learner's role, Allwright (1975) pointed out that the effectiveness of error treatment depends on how it is perceived by the second language learner rather than what it is intended to be by the teacher. James (1998:246) emphasizes the importance of consulting learners in respect of error correction even if they are wrong, "Learners may be wrong in their expectations that correction will bring about improvement, but why should we choose to ignore learners' feelings about correction when we are urged to take this into account in other domains of FL learning?"

2.6.3 Empirical Evidence

The research findings suggest that students want their mistakes to be corrected and they believe that correction is beneficial (Cathcart and Olsen 1976; Chenweth et al 1983; Schulz 1996; Lee and Ridley 1999). Using a survey design, Cathcart and Olsen (1976), Chenweth et al (1983), Schulz (1996) and Lee and Ridley (1999) set out to find out empirically what teachers' and students' beliefs were in respect of error perception and correction. Overwhelmingly the students in these studies wanted more correction than they thought they had received. Cathcart and Olsen (1976) found that 75% of the 188 subjects who participated in the study wanted correction 'all the time'. A higher percentage of students (80.67%) wanted significantly more correction in Chenweth et al (1983). Schulz (1996) found that 87% of the students in his study were in favour of being corrected in class.

Chenoweth et al (1983:85) noted that one group in their study, the Koreans, did not have a significantly positive attitude towards correction. The authors wondered "Would students from the Middle East, for example favour error correction? Do attitudes and preferences differ from country to country?" One of the aims of this study is to find out if students from the Middle East favour error correction or not. Cathcart and Olsen (1976:51) recommended further research into the possible "ethnic preferences for different kinds of corrections, by sampling larger numbers of some groups, and eliciting opinions from teachers who are members of those groups."

The empirical research that has looked at teachers' attitudes towards and views about error correction had been very scanty until recently. Fanselow (1977) recommended interviewing teachers to find out their hierarchy of errors. Teachers and students could be asked about the CFMs they prefer and why. Day et al (1984) voiced the same points of view and the need for more research into the role of the culture both teachers and students brought into classroom and its effect on error treatment.

It seems that the recommendations made by the early researchers in respect of investigating teachers' and learners attitudes towards error treatment have started to have some resonance in the more recent research, for example, Lee (2002), Drever (2007) and Jeon and Kang (2007). The findings of these studies are compared with those of the current one in Chapter 6.

2.7 NATIVE AND NON-NATIVE SPEAKING TEACHERS AND ERROR TREATMENT

As this is a comparative study between the NSTs and the NNSTs in respect of error treatment of classroom spoken errors, aspects related to error treatment involving either or both of the two groups are discussed in this section. First, error gravity studies are considered. Second, native speakers' reactions to second or foreign language learners' errors in social settings are discussed. Finally some comparative studies in classroom settings are evaluated.

2.7.1 Error Analysis and Error Gravity Studies

Corder's (1967) classic paper sparked a lot of interest in investigating different types of errors second language learners made. The main purpose was to classify learners' errors and find out their causes. With the advent of the communicative approach to language teaching, a new trend in error analysis studies emerged. This new orientation of error analysis studies came to be known as error gravity. Richards et al (1985:96) define error gravity as "a measure of the effect that errors made by people speaking a second or foreign language have on communication or on other speakers of the language." There was an assumption that the objective of language teaching was to enable language learners to communicate with native speakers of the target language. Consequently native speakers' judgments were brought into play in error gravity studies.

The ultimate purpose of such studies, as stated by their researchers, was to provide the classroom teacher with information about the relative importance attached to different aspects of the language as perceived by the native speakers of that particular language (Politzer 1978, and Ludwig 1982). Politzer (1978:426) indicated that "classroom teachers

would selectively correct those errors for which native speakers have the least tolerance, rather than attempt to correct all errors, no errors, or only a few errors in some random fashion.” Ludwig (1982) highlighted the importance of ‘error gravity’ studies as they would help teachers to establish pedagogical priorities in the development of communicative competence. It was hoped that the findings of error gravity studies would relieve classroom teachers of the need to sacrifice communication in favour of formal accuracy.

The three main foci of error gravity research were the comprehensibility, irritation and seriousness of second/foreign language learners’ errors as perceived by native speakers. Comprehensibility, refers to which type of error rendered an erroneous sentence or utterance less comprehensible. Irritation refers to the degree of annoyance an erroneous sentence or utterance had on native speakers of the target language. Seriousness refers to how serious the erroneous sentences or utterances were perceived by the nominated judges.

The main findings of error gravity studies are:

- 1- Lexical errors were reported to impede comprehension more than grammatical errors. (Politzer 1978; Chastain 1980; Delisle 1982 ; Hughes and Lascaratou 1982).
- 2- Native speakers, teachers or non-teachers, were more tolerant of learners’ errors than the NNSTs (James 1977; Hughes and Lascaratou 1982; Sheorey 1986; McCreeton and Rider (1993).

Hughes and Lascaratou (1982:180) attributed the high degree of tolerance by the NSTs to their “better knowledge of the language, particularly of the wide variety of acceptable structures.”

It should be noted that tolerance in such studies refers to the degree of accepting utterances produced by language learners that convey something in spite of being grammatically incorrect. Tolerance involves some sort of judgment and in this study it is

related to the context, the learner's age, the objective of the lesson and the teachers' and students' own views about accuracy and fluency.

All the above-mentioned studies looked at errors in isolation. No context was given. Sentences featuring predetermined types of errors by the researchers were given to the judges. The judges were asked to assess the erroneous sentences for comprehensibility, seriousness and irritability. James (1977:116) wrote, "each error had to be recognizable in no further context than the sentence containing it: in other words, supporting context was not required and not allowed."

However, Albrechtsen et al (1980) investigated the effect of context, age and education of the native speaker judges on error evaluation. Albrechtsen et al (1980) pointed out the importance of context in determining the intelligibility of erroneous utterances. "Whether an error impairs the intelligibility of the IL (interlanguage) or not is perhaps not primarily a function of its inherent qualities but of the context in which it occurs."

Albrechtsen et al's (1980) study, directed error gravity studies to investigate native speakers' reactions to learners' errors in natural social settings. This is the focus of the following section.

2.7.2 Non-classroom Settings

Kindled by sociolinguists such as Schegloff, Jefferson and Sacks (1977) who looked at how repair is organized between native speakers in social settings, second language researchers such as Gaskill (1980), Chun et al (1982), Brock et al (1986), Day et al (1983) and Day et al (1984) set out to research the following:

- 1- What types of errors native speaker tended to correct. (Chun et al 1982; Brock et al 1986; Day et al 1983)
- 2- How native speakers corrected non-native speakers' errors and the effect of the correction on subsequent non-native speaker speech in a given conversation. (Gaskill 1980; Brock et al 1986; Day et al 1983 and 1984)

The subject of this type of research came to be known as ‘foreigner talk’. It is not entirely different from error gravity research. They both investigate the seriousness of learners errors as evaluated by native speakers but they differ in two main respects. First, ‘error gravity’ studies tended to ignore the context in which errors occur. Second, ‘error gravity’ studies were not concerned with correction.

In ‘foreigner talk’ studies, native speakers rarely corrected foreign language learners in social settings. When they did, lexical errors were found to be the most frequently corrected (Chun et al 1982, Brock 1983, and Day et al 1983). Grammatical errors were the least corrected. Brock et al (1986) noted that no significant effect of corrective feedback was observed.

Day et al (1983,1984) looked at both the corrective and non-corrective feedback native speakers gave to non-native speakers in social settings. They divided corrective feedback given after a faulty utterance by non-native learners into on-record and off-record. In on-record corrective feedback, explicit correction was given and it constituted the main thrust of the turn. Off-record corrective feedback was not the main thrust of the turn and it was usually ambiguous and open to different interpretations. Besides corrective feedback, native speakers also provided non-corrective discourse devices such as clarification requests and confirmation checks to repair conversational difficulties.

I believe that foreigner talk studies give us some insights into how errors in communicative language tasks can be treated. As for the findings concerning the infrequency of error correction in such settings, I agree with James (1998:246) that there is no reason to draw pedagogical conclusions from such naturalistic observations. “Friends are friends, whose time together is meant to be enjoyed, not put to good use.” The classroom context is different from natural settings. The participants in the two contexts assume different roles. In natural settings, generally speaking, no one assumes the role of teacher as is the case in classroom settings. Hammerly (1991) warns us against equating the two contexts.

2.7.3 Classroom Settings

Very little research has been carried out to compare what NSTs and NNSTs do when errors are committed in the classroom. The only study located is that of Lucas (1975, cited in Chaudron (1986). Lucas reported that the NSTs were more tolerant of learners' errors than the NNSTs. In a small study of only two lessons, one by a NST and the other by a NNST, I conducted in 2000 as a part of the EdD programme at Leicester University, no difference was noticed in respect of the degree of tolerance. The two lessons had the same pedagogic focus which was teaching the present continuous tense. The findings of my study, tentatively, showed that tolerance of learners' errors could be subject to variables other than being an aspect of NSTs behaviour, for example, the lesson type, learners' attitudes, course objectives, and course content.

2.8 SUMMARY

In this chapter, both theoretical stances and empirical findings related to error treatment have been evaluated. It is acknowledged that error treatment has some effect on language development in all language learning contexts. What needs more research is the techniques that should be used in treating learners' errors in the long term to achieve what James calls (1998) remediation. This clearly requires longitudinal studies.

A close look at Appendix A which contains 51 studies related to the current study in one aspect or another and spanning the years 1975 to 2007 reveals:

- 1- Lack of comparative studies of how NSTs and NNSTs treat classroom oral errors.
- 2- No instances in the literature of a comparative study of how oral errors are treated in different lesson types, namely, grammar, reading and free activity.
- 2- No instances in the literature of a qualitative investigation that inspects the treatment of classroom oral errors holistically; taking into account the organizational culture and the teachers' and students' beliefs and attitudes

Comparative studies between NSTs and NNSTs could be very beneficial particularly when the two groups share the same workplace. Both groups can benefit from each other for the sake of their common profession.

It is evident that error treatment needs to be investigated from a number of perspectives in order to understand it better. Teaching and learning, it is now acknowledged, does not occur in a vacuum (Tomlinson 1990; Cortazzi 1990; Holliday 1992; Ellis 1996; Jin and Cortazzi 1998). Teaching tasks need to be reframed in order to be in line with the context culture.

To conclude this section, a number of researchers have made some recommendations that have not been followed up adequately (Cathcart and Olsen 1976, Fanselow 1977, Chenoweth et al 1983). Cathcart and Olsen recommended investigating the preferences of ethnic groups for different kinds of error correction and checking them against opinions of teachers who were members of the same group. Fanselow (1977) recommended interviewing teachers and students to ask them about the types of error treatment they preferred and why. Research interview, if used judiciously, can yield rich data in respect of error treatment. There is not a single study in Appendix A that utilized research interview to investigate teachers' views about how errors should be treated and the factors that affect their decisions. Chenoweth et al (1983) wondered if students in the Middle East favour error correction. This study attempts to investigate these issues.

It should be noted that the Literature Review chapter was written in 2003 and thus lacks references to more recent studies. Because of health problems, my study was suspended twice as I was under serious medication for more than a year. To rectify the lack of recent literature references in the Literature Review chapter, references to more up-to-date studies are included in both Appendix A and Chapter 6, the Discussion chapter.

CHAPTER 3

RESEARCH DESIGN

3.1 INTRODUCTION

A great many researchers have emphasized the importance of having a clear comprehensive research design that illustrates explicitly how the different parts of the study are related to each other (Seliger and Shohmy 1989; Holliday 2002). Maxwell (1996) defines research design as the logic and coherence of the different components of the research study and the ways in which they relate to one another. Research design can be expressed either in narrative or graphical form. The latter has some advantages over the former. Graphical form can illustrate clearly how the different components of the research design interact. It can also be used as a reference point to ensure that all the research design components are catered for.

Research design is the perceived plan that informs researchers of where they are, where they want to go and how to get there. This perceived plan is not to be followed blindly because that would be against the spirit of research. However, any changes to the research design need to be principled and justified. The research design needs to show explicitly the relationships between its different components. Nothing should be left implicit. Explicit research design is valuable to both researchers and the academic community. It is the road map for researchers as they carry out the study and it enables readers to evaluate the validity of the study.

In this chapter a model of qualitative research design is discussed and an adapted one for this study is suggested. This is followed by an explanation of how every component of the adapted model was realized.

3.2 MODEL OF RESEARCH DESIGN

Quantitative studies have always been credited with having a clear structure with a set of definite procedural rules to be followed. There are rules for designing a study, for

manipulating the different variables, for sampling and for choosing and applying statistics (Brown 1997). On the other hand, qualitative research has often been criticized because of the lack of precise processes in designing, manipulating the variables, collecting the data and performing the analysis. However, a number of qualitative researchers argue that qualitative research is scientific and follows set procedures in research design (Maxwell 1996; Woods 1996 and Holliday 2002). The qualitative research design model presented and evaluated in this section was chosen as it is relatively recent. It is presented graphically in Figure 3:1 below.

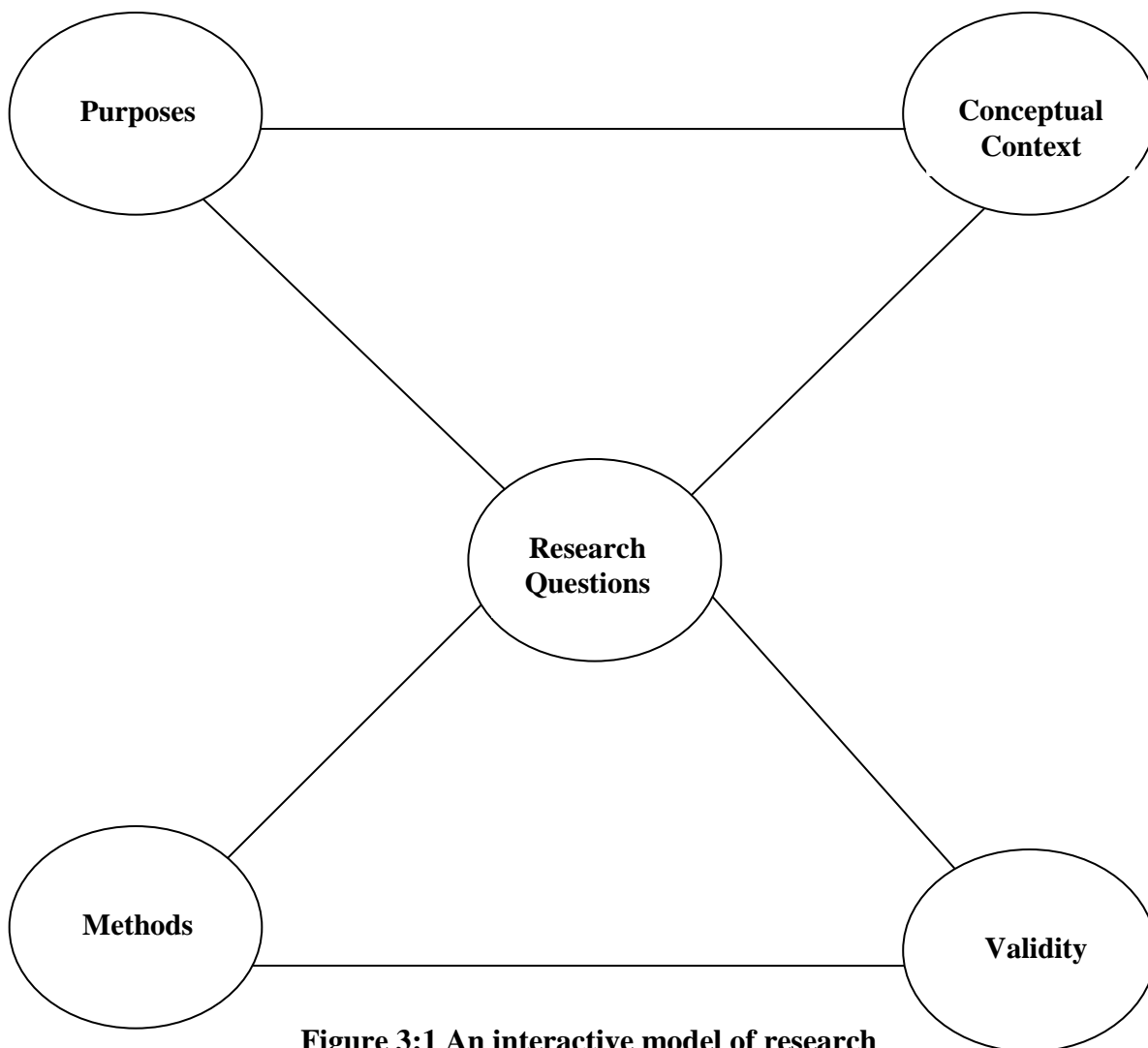


Figure 3:1 An interactive model of research design (Maxwell 1996)

It is clear that Maxwell's (1996) model depicts the major components which qualitative research design should contain. However, the model, as it stands, does not include the adopted approach, the social context of the study and the research ethics.

3.3 AN ADAPTED MODEL OF RESEARCH DESIGN

Figure 3:2 below, shows an adapted model based on Maxwell (1996). There are two main differences. First, social context, approach and research ethics have been added to the model. Secondly, double headed arrows show clearly that the model is interactive. In qualitative research, particularly with ethnographic approaches, social context is important. There are a number of approaches that are subsumed under qualitative research, for example, descriptive, naturalistic and ethnographic approaches. Though they share common ground, they differ in a number of respects. Hence, the adopted approach needs to be made explicit. Both research ethics and validity should receive adequate attention throughout the whole research process.

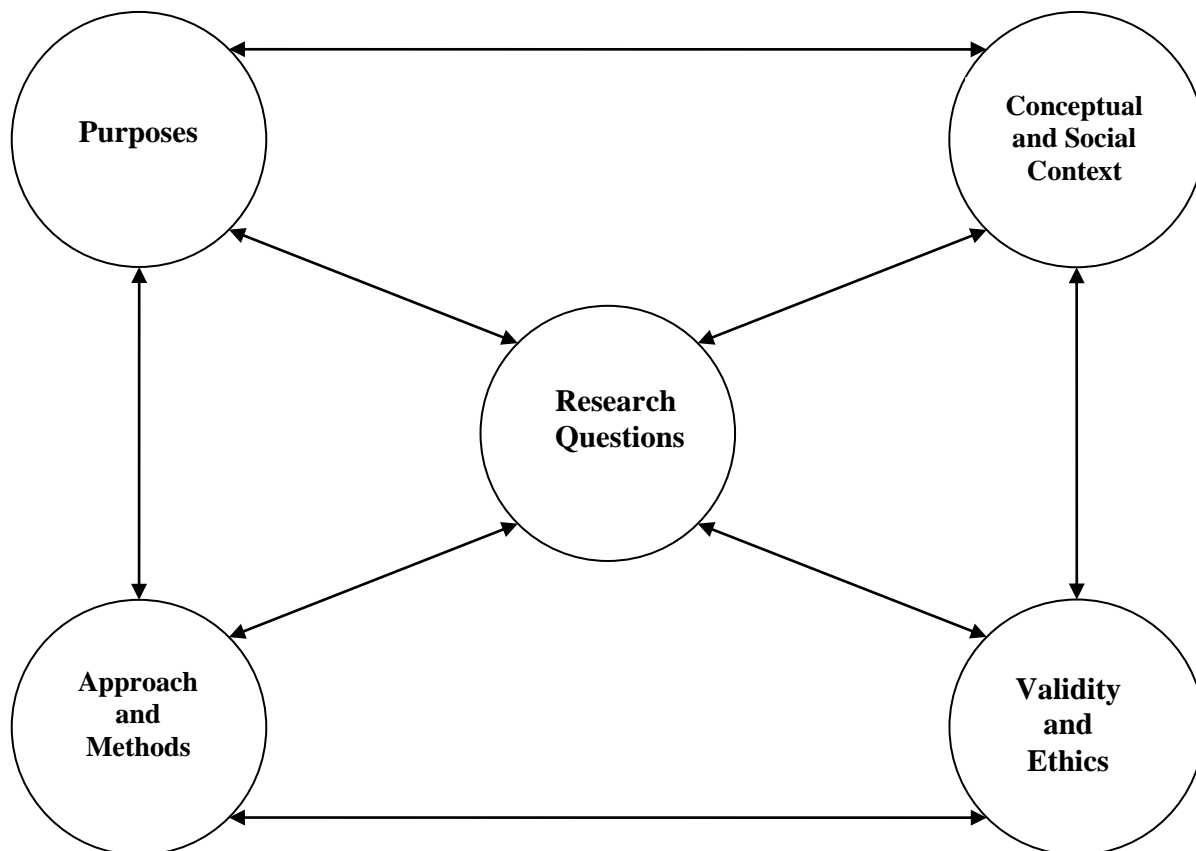


Figure 3.2 An adapted model of research design

3.4 RESEARCH DESIGN OF THIS STUDY

Figure 3:3, on page 58 below, shows how the different components of this study are mapped onto the adapted model suggested in Figure 3:2 above. In the following sections each component is discussed theoretically, then in respect of how it was realized in this study. Firstly, I start with the purposes of the study. Secondly, the research questions are examined as they are closely interconnected with the purposes of the study. Thirdly, both the conceptual and social contexts are presented. Fourthly, the adopted approach and the methods used are evaluated as they are contingent on the purposes of the study, the research questions and the conceptual and social contexts. Lastly, the issues pertaining to validity and ethics are considered. Leaving these issues to the end does not mean that they are less important. In fact, they permeate the whole study and need to be taken into account at every stage.

3.4.1 Purposes

Research is conducted for a variety of purposes. Maxwell (1996) differentiates three types of purposes: personal, practical and research. According to Maxwell, personal purposes are those that motivate researchers to carry out research projects, practical purposes focus on accomplishing something; changing some situation or attaining some goal and research purposes concentrate on understanding something.

In this study, I had all three purposes in mind. The personal purpose was my interest in learners' errors and how they were treated. The practical purpose was to improve my error treatment techniques in the classroom. The research purpose was to understand, in a disciplined way, the phenomenon of classroom oral errors and how they were treated in different lesson types.

3.4.2 Research Questions

The relationships between the purpose of the study, the researchers' conceptual frameworks and the research questions are very closely interrelated. The purpose of the

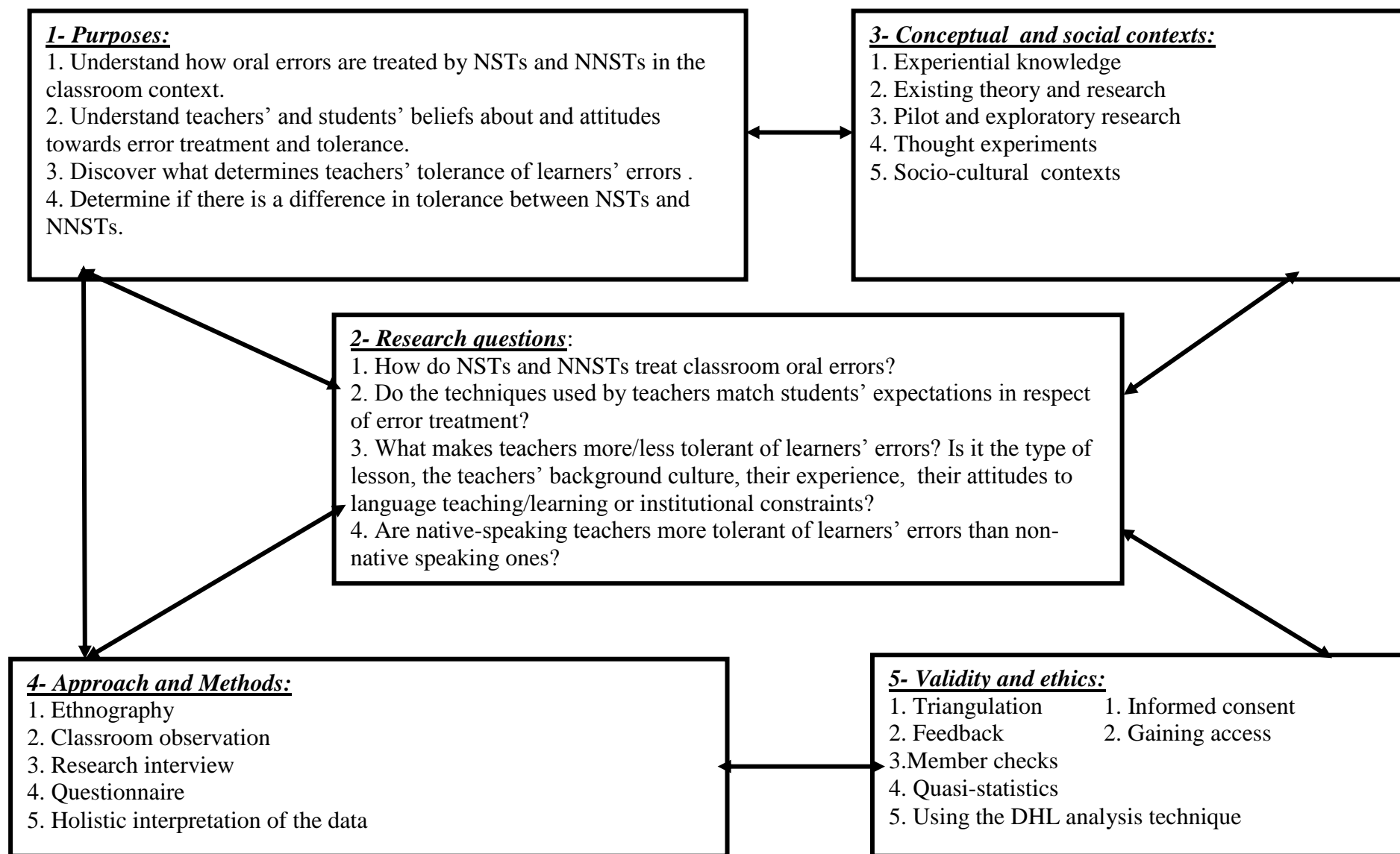


Figure 3.3 Research design used in this study

study guides researchers to specific questions responsive to their conceptual framework and the social context of the study. Research questions lie at the center of the research design model used in this study as Figure 3:3 on page 57 shows. It directs and needs to be responsive to the other parts of the study (Maxwell 1996).

In the following sections the functions and the types of research questions are considered. This is followed by a consideration of the research questions of this study.

3.4.2.1 Research Questions Functions

Research questions make underlying theoretical assumptions more explicit. They also direct researchers towards the data they need to collect, how to collect it and from whom and where it should be obtained. The formulation of research questions provides provisional boundaries of data analysis (Miles and Huberman 1994). In addition to the functions mentioned, research questions guide researchers to what literature to review.

3.4.2.2 Research Questions Types

Research questions may take a variety of forms. Miles and Huberman (1994:23) pointed out, “ Questions probably fall into a finite number of types many of which postulate some form of relationship.” They divide research questions into two broad categories: causal relationship questions and non-causal relationship questions. Does x cause y? is the form the first category questions may take. The non-causal relationship questions are more concerned with how things happen.

I believe the first category of questions is more oriented to product not process research where interest is usually in the relationship between the input and the output. The second category of questions focus on the process – how things happen and is more suited to qualitative research.

Maxwell (1996) differentiates six types of research questions: generalizing and particularizing questions, instrumentalist and realist questions and variance and process questions. Generalizing questions are posed in general terms and then operationalized to

refer to specific aspects of the phenomenon under investigation. Instrumentalist questions are formulated in terms of what can be observed whereas realist questions are couched in terms of what subjects perceive or report. Variance questions emphasize the correlation amongst variables and process questions focus on how things happen. In essence the variance/process distinction made by Maxwell (1996) is the same as the causal and non-causal relationship distinction put forward by Miles and Huberman (1994).

Research hypotheses could also be subsumed under research questions. In quantitative research, hypotheses need to be mathematically falsifiable (Guba and Lincoln 1994), formulated beforehand and confirmed or rejected by data. On the other hand, in qualitative research, hypotheses are generally formulated after the study has begun and they are grounded in the data (Maxwell 1996). Holliday (2002:33-34) differentiates between hypotheses in quantitative and qualitative research from another perspective. In quantitative research a hypothesis “is a precise relationship between two or more variables.” In qualitative research it is possible to investigate relationships in a systematic way but “The essential nature of hypotheses does not have to be restricted to the controlled world of quantitative research.”

Related to the quantitative/qualitative distinction is the notion of a research paradigm. The type of research questions researchers ask echoes the adopted paradigm. Guba and Lincoln (1994:105) defined a research paradigm “as the basic belief system or worldview that guides the investigator, not only in choices of methods but in ontological [nature of reality and what counts as knowledge] and epistemological [relationship between the researchers and the researched] fundamental ways.” For example, if researchers adopt the positivistic research paradigm, they are more likely to go for instrumental, variance questions and hypotheses that can be mathematically falsified. On the other hand, if researchers are guided by the anti-positivistic paradigm, they are more likely to opt for realist, process questions and hypotheses that are grounded in the data. In the following section the research questions of this study are presented and evaluated against the theoretical background discussed above.

3.4.2.3 Research Questions in This Study

This study set out to address the following research questions:

- 1- How do the NSTs and the NNSTs treat classroom oral errors?
- 2- Do the techniques used by teachers match students' expectations in respect of error treatment?
- 3- What makes teachers more/less tolerant of learners' errors? Is it the lesson type, the teachers' background culture, their experience, their attitudes to language teaching/learning or the institutional constraints?
- 4- Are the NSTs more tolerant of learners' errors than the NNSTs?

Because of the holistic nature of this study, the research questions were a mixture of instrumentalist, realist, variance and process questions (Maxwell 1996). Research question 1 can be classified as an instrumentalist question as it is concerned with the observed behaviour of the teachers in the classroom when errors were committed. It can also be categorized as a variance question since it attempted to investigate the relationship between teachers - being native or non-native – and the treatment of oral errors in the classroom across three different lesson types. Furthermore, it can be considered a process question because its main concern is how both groups of teachers treated oral errors in the classroom.

Research question 2 can be described as a realist question because it focused on the subjects' – teachers and students – attitudes towards error treatment in the classroom. Research question 3 is both instrumentalist and realist simultaneously. It is instrumentalist as it is concerned with classroom observation and realist because it takes into account what teachers and students say. Research question 4 is an instrumentalist question.

The different types of research questions discussed in the previous section are not mutually exclusive. A question could be instrumentalist, variance and process at the same time as is the case with research question 1 above.

Having discussed the purposes of the study and the research questions the following section focuses on both the conceptual and social context.

3.4.3 Conceptual and Socio-cultural Contexts

In qualitative research it is acknowledged that the researchers' own experiences and perspectives in respect of the phenomena under investigation are not sources of bias but are essential elements in research design and execution (Woods 1996; Maxwell 1996; Holliday 2002). The social context of the study is equally important and it has to be taken into account (Heath 1983; Nunan (1992).

3.4.3.1 Conceptual Context

Miles and Huberman (1994) state that the researchers' conceptual frameworks should explain either graphically or in narrative form the key factors and variables in the study and the assumed relationships between them. Holliday (2002: 9) includes the same concepts under a more general term - the workings - that deal with the whole structure of a qualitative study. "Showing the researchers' workings enables evaluations of the ideological and cultural appropriateness of the study."

Carefully collected and judiciously analyzed data are of little value if the underlying conceptual framework is inadequate. Maxwell (1996) points out that the conceptual context should include the researchers' experiential knowledge, critical reviews of the available literature related to the study, the different theories pertinent to the phenomena under investigation, any pilot studies the researchers may have carried out and their thought experiments. The following sections illustrate how these four elements of the conceptual context were dealt with.

Experiential Knowledge: As mentioned above, I have an interest in the phenomenon of learners' errors. When I was a student and in my early years of teaching I was under the impression that all errors had to be corrected as soon as they were committed for effective language learning. I could not see that some errors were more serious than others in impeding comprehension and communication. In 1987, I became a language

laboratory teacher and I used to administer multiple choice tests to students and analyze their errors. I was only able, at that time, to tell the classroom teacher how many students failed to answer a particular question. I was not content with that and I had no idea at that time that there had been a growing interest in learners' errors in the field of applied linguistics. In 1989, I started the MSc course in Teaching English for Specific Purposes (TESP) with Aston University. In addition to the taught courses, there was a list of options including error analysis. I opted for it and gained numerous insights into error analysis which enabled me to answer questions I had not been able to answer before and to propose a number of causes for specific errors. Furthermore, in my workplace, I noticed that the NSTs appeared to be more tolerant of learners' errors than the NNSTs. This sparked my interest in comparing the two groups in respect of both error treatment and tolerance in the classroom.

Existing Theory and Research: Chapter 2 discussed and evaluated the relevant literature. In particular, it mentioned three theories that are thought to affect error treatment. These theories are (1) the cognitive comparison theory so called by Nelson (1981) in first language acquisition studies and related to error treatment by Tomasello and Herron (1988; 1989), (2) the communication theory as proposed by Wiener (1961) and applied to error treatment by Zamil (1981) and (4) the cultural theory of mind formulated by Vygotsky and revisited to explore its potential in general education by Shinkel-Llano (1995) and in error treatment by Aljafraeh and Lantolf (1994). Also in Chapter 2, a considerable number of studies related to the current one were reviewed indicating the lacuna that this study aimed to address.

I also started this study with a number of assumptions:

- 1- The way teachers treat learners' errors may vary according to teachers being native or non-native, the lesson type and the exigency of the social setting.
- 2- Investigating NSTs' and NNSTs' tolerance of learners' errors should be based on naturalistic classroom data and across a number of lesson types.

3- What teachers do in the classroom does not necessarily reflect what they believe.

There are other factors involved such as the particularities of the sociocultural contexts in which those teachers work.

Pilot and Exploratory Research: In 2000 I carried out a pilot study to find out if the NSTs were more tolerant of learners' errors than the NNSTs and to investigate if they used different CFMs in their teaching. It was a small scale study that involved only two teachers – one NST and one NNST. The two teachers taught the same grammar lesson to two classes of very similar linguistic ability. The topic was the present continuous tense. The two teachers corrected all the grammatical errors related to the pedagogical focus of the lesson. There were some similarities and some differences in the way the two teachers treated learners' errors. The last paragraph in the pilot study states "I believe a bigger study that includes different lesson types, for example, reading, oral composition and casual conversation, more teachers, various courses, different settings and language levels can yield more convincing evidence concerning how NSTs and NNSTs treat learners' errors in the classroom".

I also conducted another pilot in 2002 study that involved an NST and an NNST, to investigate the use of research interviews in exploring teachers' perceptions of errors and how they should be treated. The interviewees opened up new avenues that were not obvious to me when I wrote the interview schedule. In their answers to the question on teachers' tolerance of learners' errors the two interviewees mentioned factors related to the learner e.g. age, attitude, linguistic ability. I had not thought of these factors when I wrote that question and some of the interview questions were subsequently revised in the light of this pilot study.

Thought Experiments: "Thought experiments draw on both theory and experience to answer "what if" questions, to seek out the logical implications of various properties of the phenomenon you want to study." Maxwell (1996:45)

Nearly all the studies that examined native and non-native speakers judgments of students' errors reported that NSTs were more tolerant of learners' errors than NNSTs

(James 1977; Hughes and Lascaratou 1982; Sheorey 1986; McCreton and Rider 1993). All these studies used discrete, out-of-context erroneous sentences as the data to evaluate. Lucas (1975) reported a similar finding in a school context. The pilot study referred to above inspected the same issue; tolerance of learners' errors, and reported that both teachers corrected all the grammatical errors related to the pedagogical focus of the lesson i.e. there was no difference. Given these findings I went through a process of "what if" questions:

- 1- What if I increased the number of lessons?
- 2- What if I included reading lessons?
- 3- What if I included free activity lessons?
- 4- What if I interviewed some of the teachers I observed?
- 5- What if I asked the students about their error correction preferences?

Finally I was convinced that diversifying the lessons observed could shed more light on how the two groups of teachers treat errors and their degree of tolerance of them.

Having discussed the conceptual context from within the four perspectives as proposed by Maxwell (1996): the researcher's experiential knowledge, the existing theory and research, the pilot and exploratory research and the thought experiments, I turn my attention to the socio-cultural context of the study.

3.4.3.2 Social Context

In this section I mention the main elements of the social context of this study. The mission of the school and its place in the wider context is dealt with first. Then brief descriptions of the teachers, the students, the course used and the administration of the school and how the teachers and students are evaluated are given.

The study was carried out in a military school in Saudi Arabia. The School of English Language (SEL) is a part of The Technical Studies Institute (TSI) that trains Saudi students in fields like aeronautics, avionics, supply, communication, ammunition and air

traffic controlling. The graduates work in the Royal Saudi Air Force. The stated mission of the school is to provide English language training in a disciplined environment. The school graduates pursue their technical studies in English.

On the civilian side, the school has a highly qualified and experienced chief instructor supported by six qualified senior teachers. On the military side, and this is more important, the school is divided into sections, each of which is managed by an officer, and the teaching falls in the education section. These military personnel have never been classroom teachers. Although a very small number of them hold university degrees in English, they have never been at the chalk face. They have very traditional beliefs of teaching English and are suspicious of methods that appear to lack discipline. Because of the power officers usually have in the military context, they control all policy decisions, indeed some tend to micro-manage. It is evident from my personal experience, as a senior teacher, that the following are the main learning/teaching beliefs shared by the majority of the officers in charge of the school:

- 1- Tight class control is a sign of good teaching.
- 2- Students' success is the responsibility of the teachers.
- 3- Good exam results reflect the students' ability in language.
- 4- Poor exam results mirror primarily the teacher's lack of competence.
- 5- New activities that may cause cultural problems are to be abandoned even if they are pedagogically fruitful.

The students' ages range from 18 to 22. They have studied English for about six years before joining the TSI of which the SEL is a part. Rote learning is the major strategy most of the students use. It is a strategy that they have been brought up with since they started their formal schooling. The motivation for most students is instrumental. Most of them cannot see the importance of learning English to improve their career and ensure success in their technical studies or when they start their jobs. They perceive their success in the school as passing the end of book tests and the final examination. The majority of them cannot see the connection between the different books of the course they are

studying. They don't generally understand, for example, when they are studying Book Two, that they are building up on things they have already studied in Book One.

The students study an in-house course, developed according to the needs of the students when they leave school to pursue their technical studies and when they start their jobs. It is a mixture of both general and technical English. It is more biased towards the technical aspect. Though the six-book course has been written according to a needs analysis and has replaced a culturally inappropriate course – the American Language Course (ALC) – that was written for a wider audience, the students still do not appear to perceive the relevance of the course materials to their future needs. The course focuses on topics directly related to the students' field of study in the TSI, for example, reporting workshop accidents, different types of planes etc.

At the end of each book, the students take a final examination which is made up of multiple choice, skills (listening, reading, spelling and writing) and oral tests. The tests are course specific. The graduation examination is a multiple choice test only. The teachers are formally evaluated twice a year by a relatively inexperienced Saudi teacher. Teachers, and how they teach, may be influenced by the expectations of the evaluator.

3.4.4 The Approach Adopted and The Methods Used

Qualitative research is intricate. Holliday (2002:17) points out “Any venture into the literature will reveal that qualitative research is presented under a confusing array of different and variable headings.” Others voice similar opinions (Hammersley and Atkinson 2002). Because of this, it is imperative that the approach followed be explicitly stated and the reasons for choosing it given.

I opted for using an ethnographic approach for this study. In the following section ethnography is defined, its main principles are discussed and the reasons for using it are given. Following this, is a discussion of the data collection and analysis.

3.4.4.1 Ethnography

Ethnography is a longstanding approach used in anthropological studies. Brewer (2000:6) defines ethnography as

“ the study of people in naturally occurring settings or fields by methods of data collection which capture their social meanings and ordinary activities, involving the researchers participating in the setting, if not also in the activities, in order to collect data in a systematic manner but without meaning being imposed on them externally.”

This definition captures the basic meanings of ethnography given by other ethnographic researchers (Heath 1982; Woods 1996; Fetterman 1998). Fetterman (1998) defines ethnography as “the art and science of describing a group or culture.” Woods (1996) emphasizes both the artistic and the scientific aspects of ethnographic research. However, Hammersley and Atkinson (2002) admit the difficulty of giving any hard-and-fast definition of ethnography that would isolate it from other sorts of qualitative inquiry.

To sum up, ethnography is the study of behaviour in its natural setting, emphasizing how that behaviour is perceived by the participants in that natural setting and not simply reporting what the researchers have observed. As a research approach, ethnography has a set of principles that distinguish it from other forms of qualitative enquiry. It is essential to explain these principles to be able to justify choosing the ethnographic approach for this study.

Ethnographic Research Focuses on Culture: Ethnographic research pays close attention to both materialistic and ideational aspects of culture. As explicated by Maxwell (1996) the materialistic perspective of culture is concerned with the observable patterns of behaviour and the ideational perspective of culture takes into account the ideas, beliefs and knowledge that distinguish one group of people from another. Culture, as used here, encompasses teaching/learning cultures as well as the organizational culture.

Ethnographic Research is Holistic: Holistic research means that any culture or behaviour has to be investigated not in isolation but in relation to the whole system of which it is a part. Fetterman (1998) admits that no study can be totally comprehensive and capture an entire culture or group. However, Fetterman (ibid:19) points out that the holistic orientation of ethnographic research forces the researcher to see beyond the immediate scenes or events as “each scene exists within a multilayered and interrelated context.”

Ethnographic Research is Contextual: Ethnographic research is carried out in the context in which the subjects usually work or live. Wilson (1982), cited in Nunan (1998), relates the importance of context in ethnographic research to the natural ecological hypothesis. One of its main tenets is that behaviours are context-shaped and determined. This means that if we want to understand a specific behaviour, we need to study it in its naturally occurring context.

Ethnographic Research Considers Both the ‘Emic’ and ‘Etic’ Perspectives: At the heart of ethnographic research are the ‘emic’ and ‘etic’ concepts. How the subjects of a study perceive what they do – the emic perspective - is central to ethnographic research. Accepting this principle necessarily entails accepting multiple realities. The ‘etic’ perspective is the external, scientific perspective of reality. Fetterman (1998:22) points out, “Most ethnographic researchers start by collecting data from the ‘emic’ perspective and then try to make sense of what they have collected in terms of both the native’s view and their own scientific analysis.”

Ethnographic Research Adopts a Non-judgmental Orientation: This principle prevents ethnographers from making inappropriate judgments of what they observe. This is one of the most difficult principles to apply in ethnographic research because, as Fetterman (1998:23) puts it, “We are all products of our culture. We have personal beliefs, biases, and individual tastes.” He suggests two procedures to get around this problem. Ethnographers can guard against the more obvious biases by making them explicit and by viewing other cultures impartially.

Ethnographic Research is Theory Building: Woods (1996:7) points out “Ethnography is an open approach, not pre-determined, inductive more often than deductive, with theory generated and grounded in the data.” Some ethnographers emphasize the importance of having a theory or a model before embarking on ethnographic research. Fetterman (1998:5) states, “Theory is a guide to practice; no study, ethnographic or otherwise, can be conducted without an underlying theory or a model.” Watson-Gegeo (1988) stressed the importance of theoretical frameworks in guiding and directing the ethnographers’ attention to certain aspects of the situation and to specific research questions. This theoretical frame is not static and may be developed in the field. Nunan (1998) refers to this principle when he describes ethnographic research as ‘organic’; there is interaction between the questions or the hypotheses, the data collection and the interpretation. It is evident that ethnographic research is principled, rigorous and scientific requiring the researcher to be both scientific and artistic. Ethnographic research is organic not static thus has the potential to respond to the exigencies of social research. The reasons for choosing the ethnographic approach for this study are discussed below.

The Research Questions: The research questions discussed above necessitated an approach that looks deeper to see through the observed behaviour into the perceptions of both teachers and students and the organizational culture. The study aims to find out how teachers, the NSTs and the NNSTs treat learners’ errors across three different lesson types; grammar, reading and free activity. Additionally, it seeks to discover if the error treatment types used by teachers match students’ expectations. Furthermore, it intends to find out if teachers’ observed behaviour – the materialistic aspect of culture - is compatible with their beliefs – the ideational aspect of culture. Finally, the study endeavours to determine the factors that make teachers more/less tolerant of learners’ errors. Ethnography with its emphasis on culture, context and both the ‘etic’ and ‘emic’ perspectives was the most appropriate approach to address these research questions.

Absence of Ethnographic Research in Error Treatment Studies: Holliday (2002:ix) points out, “ an important part of the accountability of qualitative research is setting what one does against what has been done before.” Appendix A is a review of fifty-one studies that are related to the current study from one aspect or another. These studies span

over the last four decades. Most of these studies have investigated the phenomenon of learners' errors from one aspect only, for example, the effect of an error treatment technique. A small number of studies investigated the learners' errors from more than one aspect, for example, what type of error got corrected and how correction was executed. A closer look at Appendix A reveals that very few studies have attempted to investigate the error treatment phenomenon holistically; taking into account both the 'emic' and 'etic' perspectives and no study has examined teachers' treatment of errors across a number of different lesson types; grammar, reading and free activity.

Dissatisfaction with Qualitative Approaches in Second Language Acquisition: An increasingly large number of second language researchers and educationalists have expressed their dissatisfaction with quantitative research designs that take the form of input-output surveys. They advocate using qualitative research designs that take into account the process, not just the product, of learning without overlooking the teaching/learning context (Erickson 1981; van Lier 1982&1988; Lutz 1986; Ellis 1990; Holliday 2002). Van Lier (1982:59-60) criticizes educational research that takes the form of input-output surveys. "Actual classroom practices, remain unexamined ... The pedagogical activity is assumed rather than described and analyzed." Lutz (1986:109) notes, "The narrow focus, while generating some important knowledge, fails to shed light on the more complex issues that account for much of what goes on (or doesn't go on) in schooling." In the same vein, Ellis (1990) notes that experimental research can shed some light on individual pieces of the jigsaw but cannot help us to understand the whole puzzle – the relationship between teaching and learning.

Now that the approach adopted has been discussed and the reasons for choosing it have been presented, the following section focuses on the data collection tools used. They are observation, research interview and questionnaire

3.4.4.2 Classroom Observation

In principle, there are no good or bad data collection tools. However, some tools are more appropriate than others in particular cases. Research questions, the adopted research

paradigm and the available resources determine the type of data needed and how it can be collected. As discussed above, the research questions for this study are a mixture of instrumentalist, realist, variance and process questions. Instrumentalist questions focus on the observed behaviour. Hence, classroom observation, as a data collection tool, was an obvious choice. Realist questions are concerned with the subjects' views, so both research interview and questionnaire were used. In the following sections, first, the basic theoretical issues related to each data collection method are discussed briefly, then the application of these methods in this study is dealt with in detail.

Classroom observation is a well-established and commonly recommended data collection method in second language acquisition studies. Allwright (1988), van Lier (1988), Nunan (1989 and 1998), Spada and Frohlich (1995) and Allwright and Bailey (1996) promote the use of classroom observation. They argue that it enables researchers to get first-hand information about what actually happens in the classroom rather than what is thought to happen. However, second language acquisition researchers differ in respect of the form that observation may take, particularly on observation schemes.

Observation schemes help researchers to concentrate on the aspects of the classroom interaction they are interested in and to uncover the patterns and regularities that may go unnoticed if observation schemes are not used. However, as Nunan (1989:81) notes, "once we have adopted a particular scheme, we are from that moment operating with a pair of mental blinkers which may well obscure other significant features of the interaction. Additionally, in many schemes, the actual language used in the interaction is lost." Van Lier (1988), who advocates the ethnographic approach to classroom research, does not endorse using observation schemes. He believes that we should allow structures to emerge from the data rather than imposing them on the data.

Though this study concentrated on an aspect of classroom interaction - treatment of oral errors in the classroom - that could have been isolated, categorized and put in an observation scheme, I did not use an observation scheme as the actual data would have been lost. Instead, I used a tape recorder. Admittedly, audio recording did not catch the

visual elements of the classroom interaction but it preserved the data to be listened to as many times as needed. This method has been used in similar studies (Chaudron 1977; Lyster and Ranta 1997; Lee 2002; Sheen 2004). I did not use a video camera for the following two reasons:

- 1- To minimize distraction to both teachers and students caused by the presence of a video camera.
- 2- To keep the identity of the students anonymous as promised when I was granted verbal permission to carry out the project.

In the following sections, the issues pertinent to classroom observation as a data collection technique are presented and the methodological decisions taken are justified.

The sampling: Qualitative researchers favour the use of sampling procedures attuned to the purpose of the research. Fetterman (1998) promotes judgmental sampling techniques i.e. researchers themselves have to decide who and what to sample. Patton (1990) cited in Maxwell (1996) endorses purposeful sampling i.e. selecting the settings and the individuals that can provide researchers with the information they need to answer their research questions. Maxwell (1996), commenting on purposeful sampling, argues for its usefulness to establish particular comparisons. Miles and Huberman (1994) point out that sampling should take into account not only the subjects but also the settings, events and processes. These parameters need to be aligned with the research questions.

On the basis of the purpose of the study – comparing error treatment of classroom oral errors across two dimensions; teachers being native or non-native speaking and across three different lesson types – grammar, reading or free activity, purposeful sampling was used.

With regard to sampling, the following three decisions were taken:

- 1- For an ethnographic study, I considered that ten lessons – divided evenly between the NSTs and the NNSTs would give me enough data to address the research questions.

- 2- As for the topics of the observed lessons, they were from the standard course book.
For grammar and reading, I chose lessons that I judged would yield the greatest degree of oral interaction. I told the teachers which lesson I wanted to observe.
Concerning the free activity lessons, the teachers were asked to choose anything they would like to teach as long as it would produce lively oral interaction.
- 3- The classes were paired. Each pair of classes were of similar linguistic competence. To achieve this end, t-tests were performed on the results of their last examination.
Teachers' participation was voluntary.

The Observation: After deciding which teachers and lessons to observe, the following procedures were followed:

- 1- I approached the teachers of the selected classes and handed them a written note explaining the purpose of the observation without telling them exactly what I was interested in. I wrote, "My main interest is classroom interaction and how it is handled by native and non-native speaking teachers."
- 2- Because of my position as a senior teacher who used to give formal class-checks which were very much evaluative, I made it clear to the teachers that this was not a class check. I wrote in my note. "The lesson I intend to observe IS NOT MEANT TO BE A CLASS CHECK. I would like it to be delivered as if I were not in the classroom."
- 3- Because the students in the classes I observed knew me, my presence was not unusual. In the lessons I observed, I only made sure that the tape recorder worked and the microphones were strategically positioned in the classroom to capture the classroom interaction

The Analysis: After recording the designated lessons, three issues had to be considered, namely the unit of analysis to use, the model of error treatment to apply and how to analyze the data. In the following sections these three issues are dealt with theoretically and practically as followed in this study.

Teaching, where this study was conducted, focused primarily on accuracy at sentence level for a number of reasons, for example, the students' linguistic level did not allow the

production of longer pieces of texts and the graduation examination was a multiple choice test only. As a result of this, the observed lessons turned out to be a series of questions and answers, each was divided into exchanges. Most of the exchanges followed Sinclair and Coulthard's (1975) model of IRF - 'Initiation, Response and Feedback'. Using 'exchange' as the basic unit of analysis had been piloted and worked satisfactorily.

Classroom based research usually requires researchers to observe and/or record a number of lessons, transcribe and analyze them. The need for a checklist or a list of categories against which data could be analyzed gave rise to the emergence of models of classroom interaction that revolved exclusively around error treatment. The word model is used here to refer to teachers' reactions when errors are committed whether these reactions are suggested as a list of CFMs (Fanselow 1977; Allwright 1975; Cathcart and Olsen 1976); incorporated in a flow diagram (Chaudron 1977; Long 1977; Lyster and Ranta 1997) or included in an observation schedule (Spada and Frohlich 1995).

Error treatment models vary in a number of respects: the researcher's focus, how detailed the model is, and whether the model is grounded in the data or not. Chaudron's (1977) model is more inclined to discourse analysis than Lyster and Ranta's (1997). The title of the article that includes Chaudron's model - "A descriptive model of discourse in the corrective treatment of learners' errors" - and the attempt made to relate the model to Sinclair and Coulthard's moves and acts (1975), substantiate this claim. On the other hand, Lyster and Ranta (1997) wanted to evaluate the effectiveness of eight CFMs on learners' uptake. Their model reflects this emphasis as it includes what other models do not show; the types of learner uptake.

In this study, I used a combination of Chaudron's (1977) and Lyster and Ranta's (1997) models. The CFMs fulfilling the same functions in Chaudron's model were grouped together using the main categories in Lyster and Ranta's model. These are the CFMs used in classroom data analysis:

- **Ignore**

Teacher ignores students' mistakes be they linguistic or content ones and goes on to the next topic.

- **Explicit correction**

Teacher provides the correct form and indicates clearly that an error has been committed.

- **Recast**

Teacher repeats student's utterance adding correction and stressing fact of error.

- **Metalinguistic feedback**

Teacher gives information about the cause and type of error and the rule that has been infringed.

- **Elicitation**

Teacher uses prompts, clues, questions, repetition of the original question or an altered version of it and clarification requests to reformulate the erroneous utterance. The purpose of this move is to elicit the correct response from the error maker, from another student in class or from the whole class.

- **Verification**

This term means that the teacher ensures, after a correction is given, that the correct response is grasped by both the error maker and the class as a whole.

The error treatment model chosen has a number of advantages. It is not unnecessarily detailed and this facilitated the comparison between the NSTs and the NNSTs. It is, nevertheless, grounded in theory in that categories like recast, metalinguistic feedback and elicitation reflect theoretical concerns of second language acquisition researchers. For example, there is a growing interest in the importance of conversational interaction in second language development. Long (1996) claims that interaction is facilitative of second language development. Implicit feedback may be one way of effecting second language development. Recast is one way of providing implicit error correction. Moreover, a number of second language researchers have emphasized the importance of enabling learners to modify the underlying rules when they commit errors. It is not sufficient to edit learners' errors (Fanselow 1977; Hammerly 1991; James 1998).

Metalinguistic feedback addresses these theoretical concerns. Allwright and Bailey (1996), and Ellis (1997) have pointed out that the main purpose of the error treatment process should be to enable language learners to locate the errors and, through a discovery process, correct them. Elicitation reflects these theoretical concerns.

The model enabled me to address the research questions. As for Research Question 1, after the lessons were coded, it was possible to count the frequency of each CFM used across lesson types. This, in turn, made it possible to compare the NSTs with the NNSTs. Research question 2 was dealt with by comparing the frequency CFMs by the NSTs and the NNSTs with the students preferences obtained from the questionnaire administered to them and discussed below. The first category in the model is “Ignore”. This category made it possible to answer Research Question 4, ‘Are the NSTs more tolerant of learners’ errors than the NNSTs? The number of ignored errors per group was counted to see which group was more tolerant of learners’ errors. The degree of tolerance was checked against the lesson type – grammar, reading or free activity to find whether being native or non-native is the determinant factor in error tolerance as has been claimed by Lucas (1975). This is directly related to Research Question 3 ‘What makes teachers more/less tolerant of learners’ errors? Is it the type of lesson, the teachers’ background culture, his experience, his attitude to language teaching/learning or institutional constraints?’

Traditionally, once a lesson is recorded on an audio or video tape, the next step researchers usually undertake is to transcribe the content of the tape and then analyze the data using the transcript. Though transcription is necessary for analyzing classroom recorded data, it is not without problems. The main problems associated with it, whether dealing with classroom recorded data or interview data, are of representation, validity, reliability and the required time and effort.

The first problem is concerned with representation. Roberts (1997:168) states, “all transcription is representation, and there is no natural or objective way in which talk can be written.” An oral message is different from a written one; each has its own set of rules and conventions. The second problem is validity. It is how we can be certain that what

is transcribed is what was actually said. Kvale (1996) points out “there is no true, objective transformation from the oral to the written mode”. Transcripts are one step away from the actual data. The third problem is reliability. From personal experience, I have found that two people will transcribe data quite differently. The fourth problem is time and effort. Classroom taped data is difficult to transcribe as students may speak simultaneously and sometimes a section of tape has to be replayed several times. From my experience one classroom lesson may require more than 15 hours to transcribe. Another very important issue is tiredness and its effect on the accuracy of transcription. After about 20 or 30 minutes of transcription in one sitting, mistakes start to creep in and this reduces the validity of the transcription dramatically (Arnold, personal communication, 2003).

To overcome the problems of transcription mentioned above or at least lessen their effect, I devised a technique which I called ‘Digital Hyper-Linking’ (DHL) analysis technique. In the following sections, the essentials of this technique, its requirements and how it was used in this study are discussed.

The DHL analysis technique capitalizes on the potential of modern computers. D stands for digital. This means converting the recorded data from analogue format to digital format using a sound editing programme. Once the lesson is saved on the computer in digital format, it is very easy to manipulate. A lesson can be divided into exchanges and each exchange can be saved as a separate sound file that can be listened to as many times as one wishes by just one mouse-click using the ‘Play Looped’ facility available in most sound editing programmes. This basically means, highlighting an exchange as you would highlight a piece of text in a text editing programme and then pressing the button ‘Play Looped’. HL stands for Hyper-Linking. The Hyper-Linking feature means that you can link a piece of text with a file, another piece of text in the same document, a picture, a sound file, or a video clip. The DHL analysis technique makes use of digitized recorded data (Using Sound Forge), the hyper-linking feature available in most computer programmes and a database programme (Microsoft Access) to manage the hyper-linked data.

The DHL analysis technique was used in two stages. First, using Sound Forge, the tape recorder was connected to the computer using a cable with ‘sound in’ and ‘sound out’ ends. You would use such a cable to connect two recorders. Each lesson was copied onto the hard disk in digital format. From within Sound Forge, the digitized lesson was then listened to and divided into exchanges. Each exchange was then saved as a separate sound file, for example, Exchange 1, Exchange 2, Exchange 3 etc., At the end of this stage, the lesson was saved again on the hard disk in digital format together with all its exchanges as separate sound files. The second stage involved using Microsoft Access (2003). A database with ten tables, one for each lesson, was created. Every table contained all the categories in the adopted error treatment model as well as the other required fields, for example, exchange number, type of error. On the basis of this table, a form was designed for easy entry of data. Every lesson had a table and a form. Figure 3:4 below, shows how the form looked on the computer screen:

- The title bar at the top-right hand corner indicates that the lesson was taught by NST 5 and the lesson was grammar.
- The navigation window at the bottom right-hand corner shows the total number of exchanges in the lesson - 95 exchanges - and the current exchange – Exchange 6.
- The form has three sections. The top section shows the exchange number, whether it has an error or not and the error type. NOE stands for Number Of Errors, NOEC for Number OF Errors Corrected and NOEI for Number OF Errors Ignored.
- In the left-hand section of the form, the numbered boxes with check boxes next to them are the CFMs of the adopted error treatment model.
- The boxes under the CFMs contain their explanations.
- In the right-hand section of the form, there are two text boxes. These two text boxes have scroll bars as they can hold long texts. The top one is used to transcribe any significant exchanges. In case a general comment is required, it goes in the bottom box labeled General Comment.

Using the database form is considerably easy. Once the form is on the screen, clicking Exchange 6 plays the sound file of this exchange. If an exchange needs to be repeated, I click on it. The relevant boxes are ticked. For example, Exchange 6 has an error. It is a grammatical error and it is corrected using elicitation. If the exchange is of specific importance, it is transcribed in the top-right-hand textbox. If a general comment on the exchange is necessary, it is written in the General Comment text box. The arrows in the navigation window at the bottom of the form enables the researcher to move between the exchanges.

NST 5 Grammar : Form

Exchange 6	Has an error? <input checked="" type="checkbox"/>	Type:	Grammatical	NOE	1	NOEC	1	NOEI	0
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1-Ignore ☐

Teacher ignores students' mistakes by they linguistic or content ones and goes on to the next topic.

2- Explicit Correction ☐

Teachers provides the correct form and indicates clearly that an error has been committed.

3- Recast ☐

Teacher repeats student's utterance adding correction and stressing fact of error.

4- Metalinguistic Feedback ☐

Teacher gives information about the cause and type of error and the rule that has been infringed.

5- Elicitation ☒

Teacher uses prompts/ clues to elicit the correct response from the error maker/ another student in class or from the whole class.

6- Verification ☐

Teacher ensures, after correction that the correct response is grasped by the error maker and the class.

T: Where does he go? Where does he go?

S: He goes to our house.

T: To your house? (Rising intonation)

S: He goes to ... He goes to you ...

General Comment

In this exchange, the teacher uses a wide range of elicitation techniques to get the correct response from the class.

Record: 6 of 95

Figure 3:4 The database form used in analyzing classroom data

The DHL analysis technique has a number of advantages. There is no representation problem as the recorded exchanges can be played back. Maxwell (1996) endorses the verbatim transcription of audio or video recordings. The DHL analysis technique, however, goes beyond Maxwell's proposition; the actual data is preserved and referred to directly in the analysis process and so validity is greatly enhanced. Reliability is also improved. No matter how many times the exchange number is played, the same recorded data is heard. When the analysis of a lesson is complete, the number of mistakes in the lesson, how many are corrected, how many are ignored and how often a CFM is used are available. Additionally, the transcriptions of any exchanges deemed necessary to the body text of the analysis chapter together with any comments on those exchanges are also accessible.

Furthermore, using the DHL analysis technique, everything is kept in one place and can be accessed by just mouse-clicks. Traditionally after transcribing the recorded data, researchers use transcripts as the basis for analyzing the data. Verification of the accuracy of these transcripts, during the analysis process, is cumbersome. It means locating the tape, the lesson, the exact exchange and checking it against the transcript. With more than 800 exchanges, following the traditional way would have been tiring, time consuming and impractical. Putting everything in one place made verification easy. Added to that, copying transcriptions or general comments that were deemed necessary into the body text of the analysis chapter of this thesis was also simplified.

Database forms are flexible. The database form – Figure 3:4 above – went through a number of modifications and was piloted. Designing the database tables and forms took some time at the initial stage. However, the same designs were copied for the other lessons and this did not take too much time. The DHL analysis technique made it possible to submit the thesis in an electronic as well as in a hard-copy format for verification by the evaluators and other interested researchers. Increasingly, these are electronically available from libraries.

When the observation data was analysed, each exchange in the observed lessons was checked to see if it had an error or not, and if that error was corrected or not. Also the CFMs used with each exchange were recorded. When the above information became available, I used quasi-statistics to compare the two groups of teachers in respect of both error treatment and tolerance. Becker (1970), cited in Maxwell (1996) was the first to use the term quasi-statistics to refer to the use of simple numerical results that can be derived from the data. Maxwell (1996) advocates the use of quasi-statistics in qualitative research as it enables researchers to assess the amount of evidence in the data. Frequency tables were used to show:

- if the two groups differed in the way they treated learners' oral errors in the classroom.
- if lesson type had an effect on the way teachers treated learners' errors.
- if teachers, regardless of being native or non-native, evinced individual differences in their treatment of learners' errors.
- the number of errors corrected or ignored by each group of teachers to confirm or reject the claims that NSTs are more tolerant of learners' errors than NNSTs.
- the number of errors corrected or ignored in each lesson type to illustrate the effect of the pedagogic focus of the lesson on teachers' tolerance of learners' errors.
- the number of errors corrected or ignored by every teacher to show the individual differences among teachers in tolerating learners' errors regardless of being an NST or an NNST and the lesson type.

Classroom observation provided the required data about the materialistic aspect of culture held by the teachers. The research interview offered data concerning the ideational aspect of culture.

3.4.4.3 Research Interview

In the following sections, the major issues pertinent to the research interview are discussed briefly to provide a theoretical background to the practical decisions taken.

Research Interview Uses: Oppenheim (1998) distinguishes between exploratory and standardized interviewing. In the former, the interview is an ideas collection tool; in the latter, a data collection one. In this study, the research interview was twofold. It was employed as a data collection tool to explore teachers' beliefs about and attitudes towards error treatment and as an ideas collection tool to help construct the questionnaire administered to a number of students in the same setting.

Research Interview Types: May (1997) enumerates five types of interviewing: structured, semi-structured, unstructured, focused and group interviewing. Cohen and Manion (1997), Fontana and Frey (1994) and Oppenheim (1998) discuss two main types of interview: structured or unstructured in addition to group interviewing. Depending on the research questions, the adopted paradigm and the resources available, researchers can choose the most appropriate interview type. I decided to use a semi-structured interview for the following reasons:

- As the study was instituted to compare the NSTs with the NNSTs in respect of oral classroom error treatment, this necessitated using an interview type that could yield categorizable data across interviewees.
- The method of data analysis I planned to use was the categorization of meaning. According to this method, the researchers seek categories across groups of interviewees.
- A semi-structured interview gives the interviewees freedom to express their opinions within the general context of the study.

Research Interview Stages: Research interview has a number of stages. Table 3:1 below, (adapted from Kvale 1996) shows the interview stages, what they entail and what was done at every stage.

Stage	Objectives	Actions taken
Thematizing	1. Formulating the purpose of the investigation. 2. Describing the interview topic concept.	1. A set of research questions, reflecting the purpose of the study, were posed. 2. The concept of teachers' attitudes towards error treatment and its importance in language teaching and learning was discussed in the Literature Review chapter.
Designing	1. Designing the intended study taking into consideration all the stages.	1. An overall design for the study was worked out in Figure 3:3 . The role of interviewing in relation to the other data collection tools used in the study is indicated.. 2. Permission was sought from school administration and was granted orally. 3. An interview guide was written, discussed in the local EdD support group and checked by my tutor. 4. The subjects were approached and their consent was obtained.
Interviewing	1. Conducting the interview on the basis of the interview schedule.	1. One teacher was interviewed each day in a formal setting. 2. Teachers were reminded of the purpose of the interviews. 3. The interview schedule was used judiciously. 4. Teachers' were allowed to digress a little if they wanted to so as not to be too rigid. 6. After asking the questions in the interview schedule, teachers were asked if they wanted to add anything.
Transcribing and Analyzing	1. Preparing the interview material for analysis. This usually entails turning the interview material from an oral form to a written one.	1. Both the transcription and the interpretation stages were amalgamated using the DHL analysis technique. 2. The 'categorization of meaning' analysis method (Kvale 1996) was employed as the study is comparative.
Verifying	1. Ascertaining the generalizability, reliability and validity of the interview findings.	1. Some interviewees were asked to check the categorization system employed. 2. Using the DHL analysis technique was considered to enhance both the validity and the reliability of the data.
Reporting	Communicating the findings of the study and the methodology used in accordance with the conventions of the field.	The thesis contains the interview findings in relation to the findings of the other data collection tools used. The interview findings are discussed in relation to similar studies and the social context of the study.

Table 3:1 Research interview stages and how they were realized in this study (Kvale 1996)

Interview Transcription: Transcription problems of representation, validity, reliability and time and effort have been discussed above. However, in interviews that deal with attitudes and beliefs representation becomes more problematic. It is difficult to punctuate spoken discourse. Where is the pause? How can giggling, nervous laughter and so on be transcribed? Using the DHL analysis technique in analyzing the interview data helped diminish the effect of the above mentioned problems.

As with the classroom data analysis, the DHL analysis technique was used in two stages. First, using Sound Forge, each interview was copied onto the hard disk as done with the recorded lessons. During this process the whole interview was listened to as recommended by researchers (Briggs 1986 cited in Seidman (1998). Then, Each interview was listened to again, and the parts corresponding to each question and answer were marked and saved. Each section was saved as a separate file. For the sake of convenience, they were labelled Answer1, Answer2 etc. Finally each answer was listened to again and categories were assigned to different sections in the sound file. Those sound portions were saved as separate files to be transcribed if the need arose. At the end of this stage, the answers to the interview questions and the sound sections supporting the categories extrapolated from the data in each answer were saved as separate sound files. I could then go on to the second stage.

Using Microsoft Access, five tables were designed so that each question had a separate table with each teacher occupying a record (a row) and the answer and the categories represented as fields (columns). Five forms were designed for the five tables. Both the answers and the categories were hyper-linked to the appropriate sound files. Figure 3:5 below shows the database form for question 3 in the interview schedule.

Notes on Figure 3:5

- The form is divided into two sections separated by the thick black line.
- There are three rows of boxes in the top section.

- The first row has boxes containing the interviewed teacher number, the question posed to him and a hyper-link to the teacher's answer.
- The second row of boxes has four boxes indicating the teachers' preferred CFMs. Next to each CFM, there is a check box to indicate the presence or absence of that CFM in the teacher's answer.
- The third row shows the factors that affect the way teachers treat learners' errors.
- The bottom section of the form substantiates the checked categories at the top of the form.
- The first column of boxes is labels for the hyperlinked sound files supporting the checked categories in the top section of the form.
- The second column of boxes shows text boxes with scroll bars. They can hold the transcriptions of the checked categories.
- The third and fourth columns have the same function as the first and the second column but regarding the factors that affect how teachers deal with learners' errors.
- The box that extends across the screen holds any comments the researcher deems key and can be copied later to the body text of a research paper or report.
- Each question has a separate form that looks more or less like the one shown in Figure 3:5.

Interview Analysis: When Answer 3 is clicked, the question posed to the interviewee and the answer given are listened to. This can be repeated as many times as necessary. The categories are checked as they unfolded in the sound file. Each category has a check box. Checking this box means that the category is present and leaving it unchecked means that the category is absent. The remaining part of the database form substantiates the checked categories.

Using the DHL analysis technique lessened the effect of the problems associated with transcription: problem of representation, reliability, validity and time and effort. The database programme enabled the frequencies of every category in each question to be

Microsoft Access - [Question 3 : Form]

NST 3 Teachers vary in respect of the way they correct learners' errors.
How do you think errors should be corrected? Answer3

Explicit Correction ☒ Elicitation ☒ Explanation ☒ Verification ☒

Error Type ☒ Lesson Type ☒ Time ☒ Learner's Culture ☒

Explicit Correction "There are various strategies I might use if, for example, something was mispronounced"

Elicitation "Writing things on the board with mistakes and then asking them to identify the mistakes they have"

Explanation "If you got something on the board as well, then you can point to something on the board if for"

Verification "Ask another student to repeat."
"Ask the whole class to repeat again rather than the individual"

Error Type "Of course there are different types of errors which slip and ..?"

Lesson Type "Again it all depends on the time available and what you are doing in a particular lesson"

Time "Again it all depends on the time available and what you are doing in a particular lesson"

Learner's Culture "For example, in Brunei, I would probably correct less, much less in public there than I would here"

"I've got the techniques but I sort of use unconsciously... I am not aware of them."
"Very difficult to sort of pin down one."

Record: 2 of 6

Form View

Figure 3:5 The database form used in analyzing the interview data

worked out very quickly. Comparisons were easy to perform in respect of the presence or absence of the categories. Task switching from Word to Access enabled data to be copied from one programme to another with little effort.

Having discussed the first two data collection tools, namely, classroom observation and research interview, the next section focuses on the third and last data collection tool used; the questionnaire. As has been the case with the first two data collection tools, the main issues pertaining to questionnaires are discussed first to provide a theoretical basis for the practical decisions that were necessary

3.4.4.4 Questionnaire

It has been mentioned above that the ‘idealist’ research questions (Maxwell 1996) focus on the subjects’ views. The subjects of this study are teachers and students in the same social context. The research interview, as explicated above, was employed to explore teachers’ beliefs about and attitudes towards error treatment. As for the students’ views about treating classroom oral errors, an attitude scale was administered.

Attitude, as is the case with all psychological concepts, is difficult to define satisfactorily. Vernon (1953), cited in Nisbet and Entwistle (1970), defines attitude as a personality disposition which determines behaviour. Oppenheim (1998) defines it as a state of readiness or a tendency to respond in a certain way when confronted with certain stimuli. Vernon’s definition emphasizes the strong relationship between attitude and behaviour whereas Oppenheim’s definition stresses that attitudes are dormant until they are activated by stimuli.

The relationship between attitude and behaviour is intrinsic as observable behaviour is the window through which we can perceive the underlying attitude. Hence, the purpose of measuring attitudes is to explicate people’s behaviour. Only when attitudes are made explicit, can links between them and certain types of behaviour be made.

Not only are attitudes difficult to define, they are also problematic to measure. Measuring attitudes requires the respondents to make explicit what is usually implicit.

Issues of truthfulness and honesty have an effect on the results. Taflinger (1996) highlights a number of problems that can affect the results of attitude scaling. They are, memory problems, self-image, and lying. People often cannot remember information and truthfulness in answering an attitude scale may clash with the person's self-image.

As for attitude scales, the Likert scale is probably the one most widely used. It involves writing statements and asking people to agree or disagree with them. The levels of agreement to the statements are then added or averaged by assigning the numbers 1 to 5 to each of the levels of agreement. On the Likert-type scales, the overall attitude is measured by a score which is the sum of the weights given to each of the responses. The Likert scale was used in this study as it is less laborious than, and correlates well with, other scales (Oppenheim 1998), it is also easy to construct, use and analyze.

Attitude statements need to possess certain attributes to achieve a high degree of accuracy. They need to be clear, short and free from highbrow terms (Cohen and Manion 1997). Each aspect of the attitude need to be measured using more than one statement to avoid one-sided responses (Oppenheim 1998; May 1997). Oppenheim (1998) recommends having a roughly equal number of statements dealing with each main aspect of the attitude. He also advises including as many aspects of a particular attitude as possible in the attitude scale.

In this study, the attitude statements for the scale were constructed on the basis of information from the error treatment model used and the interview data. In addition to these two main sources, similar studies, Cathcart and Olsen (1976), Chenoweth et al (1983), Schulz (1996), Lee and Ridley (1999) and Jeon and Kang (2006) were also consulted.

As for the sampling, Cohen and Manion (1997) argue for the adequateness of purposeful non-probability sampling when applied to a small scale study and when generalizing the results beyond the immediate context is not the main target of the study. In purposeful sampling, researchers use their own judgments and select the subjects to be included in

the sample. This type of sampling is quite common in qualitative research (Patton 1990; Maxwell 1996; Fetterman 1998).

Purposeful non-probability sampling was employed as this study is a small scale study. Additionally, I am of the conviction that teaching/learning contexts, albeit similar in many respects, have their own particulars that defy exact generalization beyond their contexts. The attitude scale was administered to sixty students which was considered sufficient as thirty is held by many researchers to be the minimum number of cases (Cohen and Manon 1994; Oppenheim 1998).

Because Arab students are not usually familiar with questionnaires, the classes selected were highly motivated, co-operative and of reasonable linguistic ability. This was accomplished through liaison with both the senior teachers and the classroom teachers in charge of these classes.

The scale was translated into Arabic to aid understanding on the part of the students. It was piloted on ten students before its final version was administered to the whole sample. When administered, it was made clear to the students that there were no right or wrong answers. Obtaining their own points of view concerning the treatment of classroom oral errors was the main objective.

A thematic analysis was carried out as the attitude scale statements revolved around a set of notions extracted from the error treatment model and the categories found in the teachers' interviews. They included statements about correcting or ignoring errors, who should correct them and how students like them to be corrected. Positive and negative responses were worked out, and represented in a table.

3.4.4.5 Holistic Interpretation of the Data

The main purpose of the study was to understand how classroom oral errors were treated by a group of NSTs and NNSTs holistically; from different angles, the observed behaviour, the underlying beliefs and attitudes and the socio-cultural context of the study. The ethnographic approach facilitated seeing beyond the immediate scenes as each scene

existed within a multilayered and interrelated context. In this section, the interconnectedness of data collection and analysis are discussed. Figure 3:6 below shows the interconnectedness of data collection.

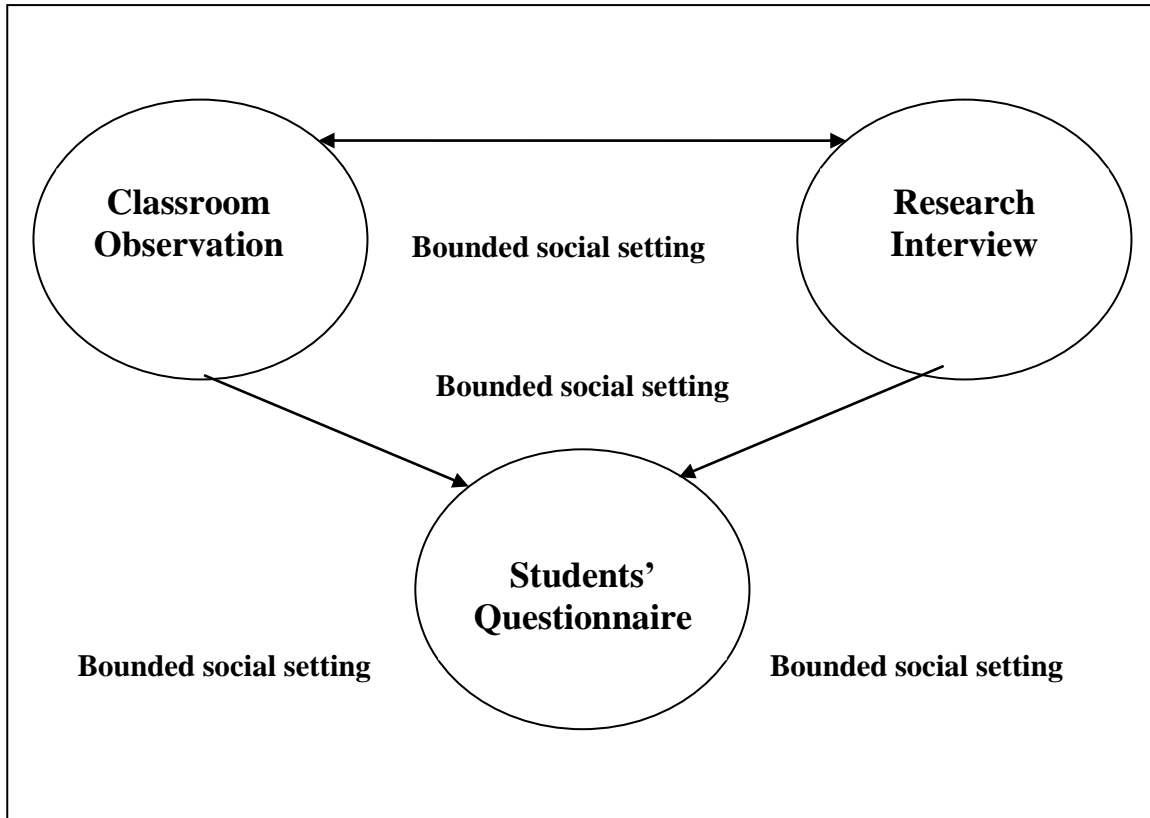


Figure 3:6 The interconnectedness of data collection (Based on Holliday 2002)

The data was collected from the same social setting. The focal points of the three data collection methods used were the same: the NSTs and the NNSTs treatment and tolerance of learners' errors. Both classroom observation and research interviews were piloted in two assignments in the EdD programme at Leicester. Each data collection tool benefited from the other. The attitude scale statements were based on both classroom observation and the interview data.

In respect of the holistic data analysis, Figure 3:7 below, shows the interconnectedness of the issues pertinent to the treatment of classroom oral errors as investigated by the three data collection tools used. I have used arrows with one example only otherwise the figure would have been cluttered with arrows and difficult to read.

In the example given, links were sought to relate the observed behaviour; how teachers treated classroom oral errors, to their stated preferred techniques in the interviews, to the students' preferences and to the constraints of the organizational culture as I am an insider researcher. Chapter 5 is devoted to the holistic analysis of the data.

Having dealt with the purpose of the study, the research questions, the adopted research approach and the data collection methods used, attention is now turned to the issues in the last box of the research design in Figure 3:3 above, namely the research ethics and validity. As has been the case with the methodological issues dealt with so far, a theoretical background is presented first to provide the basis for the necessary decisions taken.

3.4.5 Research Ethics and Validity

The importance and dilemma of research ethics are acknowledged by Bell (1987), Cohen and Manion (1997), May (1997) and Fetterman (1998). Research, particularly social and educational research, involves people other than researchers. Making sure that those other people are not harmed without jeopardizing research standard procedures is the crux of the matter. Social research involves making promises about confidentiality i.e. not revealing what knows, directly or indirectly. It also takes place in social sites. Getting access to these sites is needed. Researchers employ a host of data collection techniques: observation; participant and non-participant, with or without an observation scheme, interviews and questionnaires. Some of these data collection tools can cause more ethical problems than others.

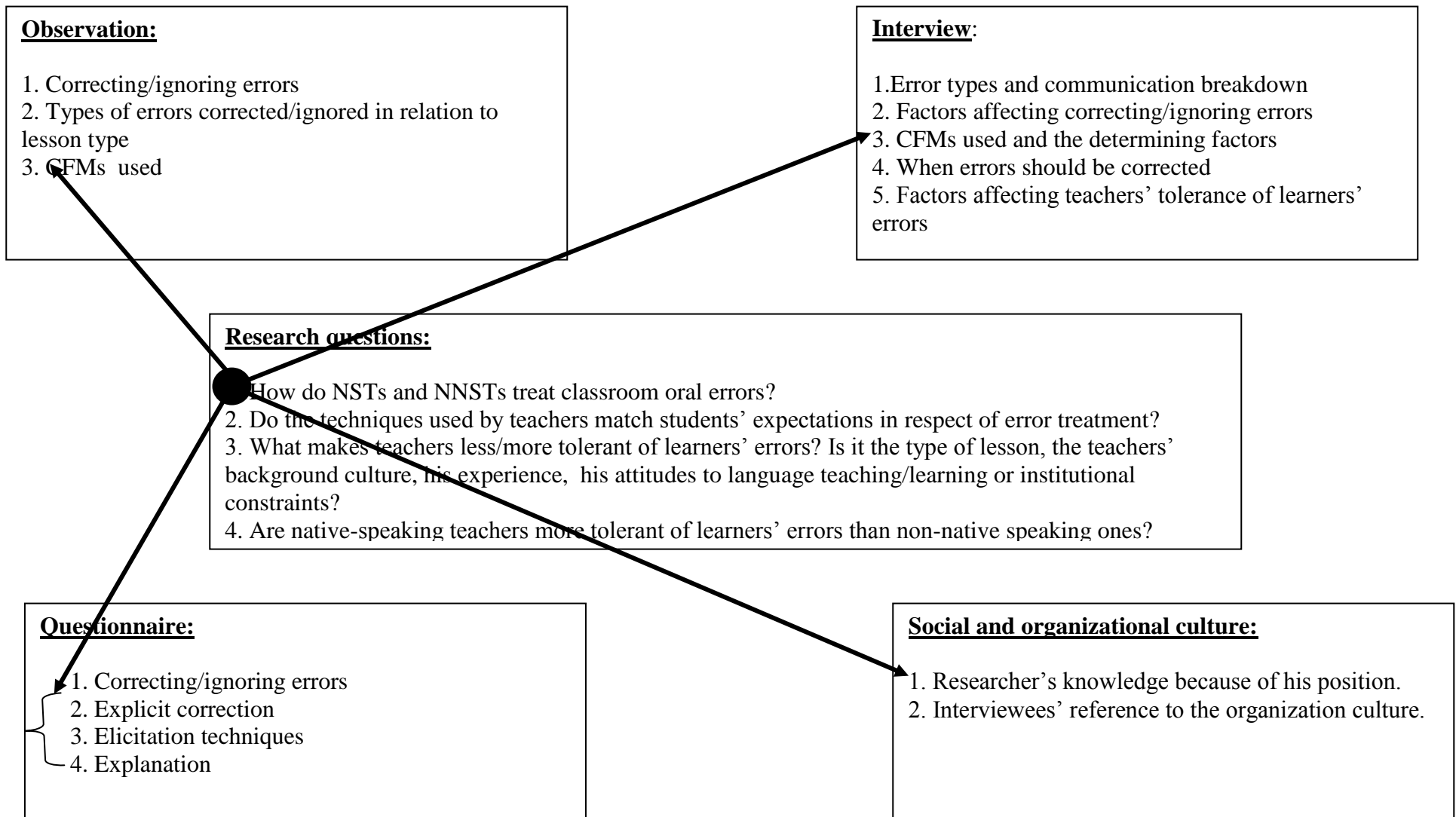


Figure: 3.7 The interconnectedness of data analysis

For example, should observation be covert or overt? In other words, should the researcher identity be disclosed to the subjects, or should it be kept secret? If it is disclosed, will the subjects behave differently and will the validity of the data be undermined? If the researcher's identity is kept secret, is this ethical? All these issues and others led Fetterman (1998) to call the chapter on research ethics, 'Walking softly through the wilderness: ethics'.

May (1997) discusses two general approaches to research ethics: the deontological approach and the consequentialism approach. The deontological approach research ethics takes on a universal form and is implemented regardless of the circumstances researchers find themselves in. The consequentialism approach is concerned with the situation which the researchers find themselves in.

Predicaments of research ethics led to the emergence of concepts like costs/benefits ratio and means/ends (Frankfort-Nachmias and Nachmias 1992, as cited in Cohen and Manion 1997 and Fetterman 1998). Cohen and Manion (1997) state that the costs/benefits concept is a fundamental one that expresses primary ethical dilemmas in social research. The question is however, who should decide if the benefits from the research justify partially turning a blind eye to some of the research ethical standards. This is a subjective decision that researchers need to be ready to defend.

Applying ethical standards in social research is a tight-rope game in which researchers need to keep a balance between the validity of the research endeavour and protecting the participants in the research process. This is easier said than done. Cohen and Manion (1997) caution that research ethical problems can multiply surprisingly and things get more complicated when researchers move from the general to the particular and from the abstract to the concrete.

To sum up, research ethics are important as they are concerned with people's rights of free determination, privacy etc. Research issues pose dilemmas as there are conflicting approaches to tackling these issues but none of them is completely satisfactory.

3.4.5.1 Research Ethics: this study

Having discussed research ethics in general terms the following sections considers the research ethical issues related to this study and how they were dealt with.

Informed Consent: People cannot be coerced or forced to participate in research. Participation should be completely voluntarily. Participants should be given the right to withdraw at any time they want for whatever reason. Participants are also entitled to know the purpose of the research and they should be informed of the benefits, rights and risks that result from taking part in the research. This is the essence of informed consent. Although the likelihood of this study posing any threats to the participants is very small, informed consent was obtained from the participants.

For the observation, after nominating a group of classes of similar in linguistic competence, the teachers teaching those classes were approached. The purpose of the study was explained to them. They knew I was interested in classroom interaction but they did not know which aspect of classroom interaction was the target. The teachers knew that their participation was completely voluntary. Three teachers did not want to participate and they were excluded. The same principle was applied to the research interview.

As for the questionnaire, its purpose was explained to the students. They were told that their participation was completely optional and the questionnaire was anonymous.

Gaining Access: Research sites are not usually places where researchers can go and do what they want. Access to the site is needed. Bell (1987) advises researchers to be honest and not to claim more than the investigation merits. This basically means, that the purpose of the study should be stated as it is. If the researcher believes that the study may yield useful information, this should be stated honestly.

Gaining access does not pose a major problem if the researcher is a member of the organization (Cohen and Manion 1997). Festinger and Kataz (1966), cited in Cohen and Manion (1997) advise for going to the very top of the organization, particularly when the

structure is clearly hierarchical and where lower levels are always dependent on their supervisors.

As previously mentioned, this study was carried out in a military school where I held the position of a senior teacher monitoring a number of teachers and students. The organization structure is hierarchical. As a senior teacher I had managed over the years to establish a good working relationship with the officers in charge of the different sections in the school. The purpose of the study, the need to record a number of lessons, interview some teachers and administer a questionnaire to a sample of students was explained to the the Commanding Officer and I was granted permission to collect the required data.

3.4.5.2 Validity

Dey (1996) contends that in qualitative research an account is valid if it could be defended on the basis of being well-grounded conceptually and empirically. Brewer (2000) argues that validity refers to the extent to which the data accurately reflects the phenomenon under study. Holliday (2002:8) endorses showing the workings every single time to enhance validity in qualitative research. “Nothing is done in qualitative research simply because it is done.” Wood (1996) maintains that the validity of a study is contingent on the interconnectedness among the different parts of the research design.

Validity entails making sure that what researchers do at one stage is attuned to the overall research design. It is a continuous test to ensure that the different parts of the research design are harmonious with each other. Throughout this chapter, attempts have been made to show the interconnectedness of the different parts of the adopted research design. Additionally, theoretical backgrounds have been given for all the methodological decisions taken. However, certain validity issues that are usually emphasized in research methods text books and are of relevance to this study merit close attention. These issues are triangulation, feedback, and member checks.

Triangulation: Both Maxwell (1996) and Holliday (2002) strongly advocate using triangulation to increase the validity of the study. Triangulation means inspecting the

phenomenon under investigation from different angles, collecting data using different methods and from different settings and individuals.

In this study, three data collection tools: classroom observation, research interview and questionnaire were employed. Each data collection tool investigated the treatment of classroom oral errors from a different angle. Classroom observation documented the observable behaviour of teachers when errors were committed. The lessons observed varied from grammar, reading to free activity. The research interview explored teachers' views of treating classroom oral errors. The questionnaire provided information about students' attitudes towards the treatment of classroom oral errors. The data from each of these data collection methods was analyzed first separately then holistically.

Feedback: Maxwell (1996) points out that feedback from a variety of people who can identify validity threats, researchers' own biases and assumptions, and flaws in their logic or methods can be invaluable. This was achieved through constant consultations with my tutor.

Member Checks: Member checks means soliciting feedback about researchers' data and conclusions from the participating subjects (Guba and Lincoln 1989). However, Dey (1996: 235) points out that "The validity of our account does not depend on acceptance by those who are subjects of it." It seems that the issue of member checks, though generally advisable, is not without problems. I believe that the researcher needs to use his own judgment in respect of when and from whom feedback should be solicited. Subjects, if they are not researchers themselves, may not be cognizant of research procedures, and their feedback, if taken at face value, may prove to be detrimental to the study.

The data for this study came from classroom observation, research interviews and questionnaires. With the interview data, some of interviewees had the chance to check my categorization and any suggested modifications which convinced me were incorporated. The students, owing to their lack of knowledge of research procedures, were not consulted about the questionnaire data.

Quasi-Statistics: Becker (1970), cited in Maxwell (1996), was the first to use the term quasi-statistics to refer to the use of simple numerical results that can be readily derived from the data. Though rigorous statistical analysis is more appropriate for quantitative than qualitative research, Maxwell (1996: 95) notes, “ Many of the conclusions of qualitative studies have an implicit quantitative component.”. When words like typical, rare or prevalent are mentioned, they have quantitative connotation. Simple quantitative support can enhance the validity of qualitative research. Throughout the study, tables were used to express tendencies of the issues mentioned. Additionally, t-tests were performed to ensure that the sampled classes were of similar linguistic competence.

The DHL Analysis Technique: In addition to triangulation, feedback, member checks and the use of quasi-statistics, using the DHL analysis technique has particularly enhanced the validity of both the observation and interview data in this study by providing easy access to the recorded data. It was possible to listen to the recorded data as many times as needed rather than to refer to transcripts, which are one step removed from the actual data.

CHAPTER 4

RESEARCH FINDINGS

4.1 INTRODUCTION

Three data collection tools: classroom observation, research interview and questionnaire were employed to obtain the required information to address the research questions. Ten teachers were observed in the classroom, six were interviewed and an attitude scale was administered to sixty students in the same school. Table 4:1 illustrates who taught what and whether he was interviewed or not.

Table 4:1 Teachers observed and interviewed

Teacher	Lesson Type	Interviewed?	Teacher	Lesson Type	Interviewed?
NST 1	Reading	√	NNST 1	Reading	×
NST 2	Reading	×	NNST 2	Reading	×
NST 3	Free Activity	√	NNST 3	Free Activity	√
NST 4	Free Activity	√	NNST 4	Free Activity	√
NST 5	Grammar	×	NNST 5	Grammar	×
			NNST 6	×	√

As mentioned in Chapter 3, purposeful sampling was employed and the teachers' participation was voluntary. Except for NNST 6, the interviewed teachers had been observed in the classroom.

In the following sections, the classroom observation, the research interview and the questionnaire findings are presented in turn. Then they are evaluated in the light of the research questions. The findings are first presented in tables, before they are commented on. The examples cited from both the classroom and interview data are hyperlinked with the actual sound files as explained in CHAPTER 3. The interview transcripts are merely indicative samples of what the interviewed teacher said and more can be listened to when the link is activated.

4.2 CLASSROOM OBSERVATION FINDINGS

Below, each lesson type is dealt with separately. First, the teaching material and the instructional techniques employed by the teachers are briefly outlined. Then, the findings are summarized in tables before they are commented on with supporting extracts from the data.

4.2.1 Reading Lessons

Four reading lessons were observed. The reading passages were selected from the course book by the researcher. NST 1 and NNST 1 taught a technical passage about road drills; what they are used for, what they consist of and so on. NST 2 and NNST 2 taught a reading passage in the form of a story. Both reading passages were followed by oral comprehension questions. No writing task was given in these lessons as the focus of the study was the treatment of classroom oral errors.

NST 1, NST 2 and NNST 2 asked their students to read the passage paragraph by paragraph. The teachers asked comprehension questions after each paragraph. In contrast, NNST 1 read the reading passage sentence by sentence himself, posing a display question after each sentence or two.

Table 4:2 below shows the distribution of the errors committed, corrected and ignored as well as the CFMs used by the four teachers. With the exception of Tolerance (T), all the figures indicate the number of occurrences. 230 errors were made in 318 exchanges. Nearly half of the errors were corrected – 111. As for the CFMs used, **Elicitation**, **Explicit Correction** and **Recast** were the most frequently employed in these four lessons. The figures also illustrate that the NSTs were more tolerant of learners' errors, ignoring 63%, than the NNSTs, who ignored only 38% of the errors.

The figures also demonstrate that NNST 1 is in stark contrast with the other 3 teachers in a number of respects:

- 1- number of exchanges in the lesson
- 2- low frequency of **Elicitation**

3- high frequency of **Recast**

Table 4:2 the NSTs and the NNSTs treatment of classroom oral errors: Reading Lessons

Teacher	NEX	NEC	NCE	NIE	T	EC	RC	MF	EL	VR
NST 1	75	54	25	29	54%	15	5	2	14	1
NST 2	43	69	20	49	71%	5	4	1	13	0
Total	118	123	45	78	63%	20	9	3	27	1
NNST 1	150	45	25	20	44%	2	28	0	5	0
NNST 2	50	62	41	21	34%	16	0	5	17	1
Total	200	107	66	41	38%	18	28	5	22	1
Grand Total	318	230	111	119	52%	38	37	8	49	2

Key for all the error treatment tables used in this chapter

NEX	= Number of Exchanges	RC	= Recast
NEC	= Number of Errors Committed	MF	= Metalinguistic Feedback
NCE	= Number of Corrected Errors	EL	= Elicitation
NIE	= Number of Ignored Errors	VR	= Verification
T	= Tolerance (% of NIE to NEC)		
EC	= Explicit Correction		

A closer look at the instructional technique employed in this lesson provides a viable explanation as to why NNST 1 stands out so sharply from the rest. The prevalent pattern in the NNST 1's lesson was that the teacher himself read the passage sentence by sentence to the students and posed a display question after each sentence or two. A display question can be answered directly from the given information. This methodology resulted in an increased number of exchanges and a smaller number of errors relative to the number of exchanges. Extract 1 illustrates these points. Errors in the example are bold-faced.

¹**Extract 1** (NNST 1, Reading, Exchange 30)

1. T: "The lever controls the flow of compressed air to a cylinder. The lever controls
2. the flow of compressed air to a cylinder. All right. Where does the compressed
3. air go to? Where does the compressed air go to? Naif.
4. Naif: **"Go to the cylinder."**
5. T: "It goes to the cylinder. All right."

¹ Underlining both lesson and interview extracts is a residue of hyper-linking. When you activate a link, the hyperlinked text is underlined automatically.

In this extract, in lines 1-3, the teacher reads one sentence from the passage twice, asks a question and repeats it before nominating a student to answer. In line 4, Naif gives a communicative answer though it is not grammatically correct as the verb lacks agreement with the implied subject of the sentence. In line 5, the teacher uses **Recast** thus adding a linguistic element to the utterance, ‘It’ and correcting the verb ‘goes’ rendering the sentence more accurate.

Posing a display question immediately after reading a sentence twice and repeating the question does not require much mental processing on the part of the learner. This was the common pattern in this lesson. This instructional technique was in stark contrast with the same lesson taught by NST 1.

NST 1 taught the same lesson as NNST 1. However, asking the students to read the passage themselves resulted in a considerable number of phonological errors which were treated using either **Explicit Correction** or **Elicitation**. The following extract illustrates these points.

Extract 2 (NST 1, Reading, Exchange 15)

1. T: “All right. Let’s look at the second paragraph. Faleh, can you read, please?”
2. Faleh: “Road drills are often seen when roads are repaired by workmen. They
3. are used for making holes in roads. Holes are often needed when work is
4. necessary under the road surface, for example, when a new ‘electricity’ cable
5. or telephone cable must be ‘installed’.
6. T: “Installed.”
7. Faleh: “Installed.”
8. T: “What is the word before cable again, please, Faleh? (No immediate response)
9. T: “A new (Teacher whistles to indicate the location of the error.)
10. Faleh: “When a new ... electricity cables or telephone cable must be ‘installed’.”
11. Teacher: “Installed.”

In this exchange, the student mispronounced two words ‘electricity’ and ‘installed’. The teacher used **Elicitation** to treat the first error and **Explicit Correction** to treat the second. Using **Elicitation** through questions – “What is the word before cable again please Faleh?” – line 13, using one of the paralinguistic features (whistling to indicate where the error is) – line 14 and increasing the wait time enabled Faleh to know where

the error was and to correct it. From my knowledge of the course, the word 'electricity' had been introduced earlier but the word 'installed' was a new word. **Elicitation** was used with the known word and **Explicit Correction** with the unknown word.

When we turn to the second pair of teachers: NNST 2 and NST 2 we find that the striking differences are in their tolerance of learners' errors and in their use of **Explicit Correction** as shown in Table 4:2 above. NST 2 ignored 71% of the errors made whereas NNST 2 ignored only 34%. This low degree of tolerance led NNST 2 to use **Explicit Correction** far more than his colleague, mainly to correct the phonological errors that occurred in the lesson. Extract 3 highlights these points.

Extract 3 (NNST 2, Reading, Exchange 21)

1. Teacher: "Khalid, can you read?"
2. Khalid: "Bill 'sit' on the.."
3. Teacher: " Bill ..sat sat"
4. Khalid: "on the 'ground'
5. Teacher: "on the ..ground'
6. Khalid: "Ground and thought and then he 'remember' the fish and he 'shouted'
7. Fish, fish help me."
8. Teacher: "Carry on Khalid."
9. Khalid: "The fish 'swim'
10. Teacher: "The fish
11. Khalid: "The fish swam to him and when Bill explained the 'problem',
12. Teacher: "Problem ... no."
13. Jaber: 'problem'
14. Teacher: "The problem
15. Khalid: 'The problem they began to look for the 'coins'
16. Teacher: " Jaber, what is the word after the..?" Jaber does not know how to
17. pronounce the word 'coins'.
18. Teacher: Nasser?
19. Nasser: Coins
20. Teacher: Coins. Very good.

In this example, NNST 2 corrected most of the phonological errors. He used both **Explicit Correction** and **Elicitation**. The other striking difference between NNST 2 and NST 2 is the number of interruptions. As Extract 3 above demonstrates, NNST 2 interrupted the student to correct his errors a number of times before he completed the sentence.

NST 2, as Extract 4 below illustrates, exercised a higher degree of tolerance of learners' errors. When he corrected students' errors, he used both **Elicitation** and **Explicit Correction**.

Extract 4 (NST 2, Reading, Exchange 13)

1. T: "Next paragraph, Falah."
2. Falah: "Bill continued walking to the 'palace' ..."
3. T: "palace"
4. Falah: "Palace and he came to a 'lake'. At the side of the 'lake', there was a fish.
5. It was 'dying' because it was out of the water. Bill put it back in the 'lake' and
6. the fish 'said'.
7. T: The fish
8. Falah: "Said when you have a problem just say, 'Fish, fish, help me
9. and I'll come."
10. T: Okay.

In this extract, Falah made six phonological errors but the teacher was very selective and corrected only two of them. 'Palace' was corrected using **Explicit correction**, and 'said' using **Elicitation**. If the teacher had corrected every single error, this would have interrupted the flow of the student's reading and might have frustrated him.

In these reading lessons, the NSTs tended to tolerate more errors than the NNSTs. With respect to how errors were dealt with, there is a high degree of congruence in the use of **Elicitation**, **Explicit Correction** and **Metalinguistic Feedback** between the two groups. High frequency of **Recast**, as explained, above could be ascribed to NNST 1 personal preference not as a general tendency by the NNSTs because NNST 2 did not use RECAST at all as a corrective feedback move in his lesson.

4.2.2 Free Activity Lessons

In the free activity lessons, the teachers chose material that lent itself to oral participation. They generally chose pictures as a springboard for oral discussion and for telling stories. The four lessons were observed after the classes had taken an end-of-book examination and before starting a new book with the assumption that the teachers would be detached from examination-oriented teaching which is, generally speaking, the norm in this teaching context as mentioned in CHAPTER 3.

NST 3 chose a picture of a girl's room, showing her possessions to stimulate oral discussion. The teacher asked the students some questions and invited them to express what they could see in the picture, encouraging them to make some simple inferences, for example, "Nicola has a car because I can see a driving license on the table." Throughout the whole lesson, the pedagogic focus of the lesson was to get the students involved in a lot of oral practice.

NST 4 also used pictures to generate oral discussion with the students. The pictures were about someone who was riding a bicycle fast and had an accident. Though the pictures were new to the students, the topic was not. The school course book contains multiple examples of accident reporting. As for the instructional technique, the teacher discussed the topic orally sentence by sentence and negotiated both the forms and meanings with the students before writing a correct version on the board.

NNST 3 used a set of pictures describing the process of making tea. From the beginning, though it was supposed to be a free activity lesson focusing on meaning and content rather than linguistic forms, the teacher paid a great deal of attention to grammatical, lexical and phonological errors. The lesson contained a noticeable number of exchanges devoted to explanations and drilling and the teacher asked a considerable number of 'display' and 'Yes/No' questions.

NNST 4 also used pictures to construct a story. However, his instructional technique was different from NNST 3. He asked the students some questions about each picture and then asked them to tell the story orally. He did not interrupt them when they made form-related errors. Instead, he commended their attempts.

Table 4:3 shows the distribution of the errors made, corrected and ignored as well as the CFMs used by the four teachers. It shows that the exchanges in the 4 lessons were similar in number. 217 errors were committed in the 314 exchanges. Out of the 217 errors committed, only 96 were corrected. The NSTs and the NNSTs, collectively, were similar in their tolerance of learners' errors. However, as will be discussed below, the instructional technique adopted by each teacher affected both the degree of tolerance and

how errors were treated. With regard to the CFMs, **Recast** surfaced as the most frequently used move although its frequency varies widely among the 4 teachers. The other CFMs used were **Explicit Correction**, **Elicitation** and **Metalinguistic Feedback**. **Verification** was also used albeit by NNST 3 only, as will be discussed below

Table 4:3 the NSTs and the NNSTs treatment of classroom oral errors: Free Activity Lesson

Teacher	NEX	NEC	NCE	NIE	T	EC	RC	MF	EL	VR
NST 3	84	87	29	58	67%	1	28	0	2	0
NST 4	72	31	22	9	29%	5	1	11	12	0
Total	156	118	51	67	57%	6	29	11	14	0
NNST 3	75	30	23	7	23%	8	3	4	16	12
NNST 4	83	69	20	49	71%	4	15	3	1	0
Total	158	99	45	54	54%	12	18	7	17	12
Grand Total	314	217	96	121	56%	18	47	18	31	12

Except in one instance, NST 3 abandoned **Explicit Correction** completely. More than two-thirds of the grammatical, lexical and phonological errors were ignored because they did not hinder comprehension. When they did, as is usually done in genuine communication, forms of clarification requests, were used. When errors were treated, **Recast** was the preferred corrective feedback move. The following extract illustrates the points mentioned.

Extract 5 (NST 3, Free Activity, Exchange 25)

1. T: “What other things can you say?”
2. S: “She has ‘an’ stereo”
3. T: “Yes.”
4. S: “Because ‘listen’ to tape.”
5. T: “Okay. That is right. Good Mohammad. She has a stereo. She listens to it.”

In the above example, in spite of the grammatical errors in the student’s production: misuse of the indefinite article, the omission of the subject in the second utterance and the lack of subject verb agreement, the general meaning of the message is clear. The teacher, instead of focusing on grammatical accuracy, accepts the content of the message, commends Mohammad and provides implicit corrective feedback in the form of **Recast**. “She has a stereo. She listens to it.” **Recast** was the most frequently used CFM in this lesson.

On the contrary, the instructional technique adopted by NST 4 resulted in error treatment moves attuned to it. **Elicitation**, **Metalinguistic Feedback** and **Explicit Correction** were the most used CFMs in this lesson. The teacher wanted to write an account of what happened on the board. So, he focused on accuracy. The following example illustrates these points.

Extract 6 (NST 4, Free Activity, Exchange 51)

(The teacher wanted the students to say a sentence about the injured man.)

1. T: "Can you tell me?"
2. S 1: "He... teacher. I think ..."
3. S 2: "Head, head, head."
4. S 4: "He cut his head."
5. (As the teacher was about to write the sentence on the board of the students said,
6. S 5: "He 'has'"
7. T: "He has, "Can we say he has cut. Maybe he has cut his head if he is here
8. now. Oh! What have you done? I have cut my face. Maybe present perfect is
9. better for now but this for yesterday, something finished so it is better with verb
10. two. (past simple)

In this exchange, the first two students failed to provide an accurate complete sentence.

The third student gave an accurate sentence and the teacher went to the board to write it to complete the account of the accident. Another student started the sentence with "He has" . The teacher knew that the student wanted to use the present perfect tense.

Though "He has cut his head." communicates the same meaning adequately, the teacher stressed the importance of using the past simple in accident reporting. This degree of accuracy shows the teacher to be the least tolerant among those who taught free activity lessons.

NNST 3, as mentioned above, focused on accuracy throughout the lesson. Hence, **Elicitation**, **Explicit Correction** and **Verification** were the dominant CFMs in the lesson. The example below illustrates this.

Extract 7 (NNST 3, Free Activity, Exchange 6)

1. T: "Now, What's your favourite drink?"
2. S 1: "I am.. 'I favourite drink.'"
3. T: "I favourite drink! What is wrong here?"

4. T: "There is something wrong. He said, "I favourite drink."
5. S 2: "My"
6. T: "My, thank you. My favourite drink. Okay." (He visually solicits the
7. error maker to repeat the sentence)
8. S 1: "My favourite drink is coffee."

In this example, although the utterance, 'I favourite drink' communicates the idea, the teacher insists on accuracy. He uses **Elicitation** in lines 3 and 4 when he says, "There is something wrong. He said, "I favourite drink". Another student in the class, line 5, starts the structure well when he says, "My...", the teacher adds to it in line 6 and visually solicits the original error maker to say the sentence again.. The teacher uses **Verification** to ensure that the error maker can produce the sentence properly. **Verification** has surfaced as one of the CFMs that NNST 3 used in his lesson. Emphasis on accuracy is evident in this exchange which is typical of the other exchanges in the lesson.

This instructional technique employed by NNST 3 with a considerable number of explanations, drillings, asking display questions and focusing on accuracy resulted in a small number of errors made by the students and a low degree of tolerance on the part of the teacher.

Unlike NNST 3, NNST 4 rarely corrected errors related to form and when he did so he used **Recast** as an implicit CFM. The extract below shows that the teacher's focus was on the meaning rather than the formal aspects of the language.

Extract 8 (NNST 4, Free Activity, Exchange 10)

1. T: "What about you? Your idea. Yes, Salman."
2. Salman: "When he 'sleeping' under the tree..."
3. S: "No. Sitting"
4. Teacher: "Picture Number 1"
5. Salman: "When he 'take a sitting' under the tree... The.... 'They are monkeys
6. playing'."
7. Teacher: "Okay."

In this example, Salman looked at the wrong picture first. A student from the class and the teacher directed Salman to the correct picture – lines 3 and 4. He made two grammatical mistakes – lines 5 and 6. The teacher accepted the attempt – line 7. The mere saying of, "Your idea", soliciting Salman to participate, carries the implicit

meaning, “Don’t worry about the accuracy of what you say, just say what you can about this picture.”

In the free activity lessons, the NSTs and the NNSTs, collectively, showed a similar degree of tolerance of learners’ errors in spite of the big difference between them. **Elicitation** again, as in the reading lessons, has surfaced as a common CFM by both groups. The NSTs used **Recast** and **Metalinguistic Feedback** more than the NNSTs. As for **Explicit Correction**, the NNSTs used it more than their NST counterparts. **Verification** was only used by NNST 3 who focused solely on accuracy.

4.2.3 Grammar Lessons

As for the grammar lessons, a grammatical structure was chosen: the present continuous tense, introduced after the present simple tense in the course. The two classes were beginners so all the teaching was at the sentence level.

NST 5 contrasted the present simple tense with the present continuous using flash cards about jobs and current happenings. For example, “Ali is a bus-driver. He drives buses. Now, he is watching television”.

NNST 5 concentrated on the new tense only. He used some realia and flash cards to introduce and practice the use of this structure. He focused on drilling the structure thoroughly. He limited the lesson to a small number of verbs; some of them repeated more than once.

Table 4:4 shows the number of errors made, corrected and ignored together with the CFMs used.

Table 4:4 the NSTs and the NNSTs treatment of classroom oral errors: Grammar Lessons

Teacher	NEX	NEC	NCE	NIE	T	EC	RC	MF	EL	VR
NST 5	95	63	55	8	13%	12	5	6	58	0
NNST 5	80	41	37	4	10%	15	1	8	20	6
Total	175	104	92	12	11%	27	6	14	78	6

As expected, because the pedagogic focus of the lesson was accuracy at sentence level, both teachers corrected most of the errors pertaining to the target structure. **Elicitation** was the most used CFM in the two lessons. Also **Explicit Correction** and **Metalinguistic Feedback** were employed.

NST 5 exercised a lot of patience and adhered to **Elicitation** as a CFM almost entirely throughout the lesson. The following example succinctly illustrates this point. (At the time of recording, NST 5 shared his class with another teacher, Mr.X. who taught this class every day in lessons five and six.

Extract 9 (NST 5, Grammar, Exchange 6)

1. T: "Where does he? Where does he go?"
2. S 1: "He goes to 'our' house"
3. T: "To your house?" (rising intonation)
4. S 1: "He goes to He goes to you He goes to your house.
5. T: "To my house?"
6. S 1: "He goes to house."
7. T: "Whose house? Whose house does he go to?"
8. S 2: "He goes house.
9. T: "To your house."
10. Students: "Him house."
11. S 3: "Him house. Her house. Him house."
12. S 4: "He goes
13. T: "to.....
14. S 4: "He goes to house"
15. S : "He goes to home"
16. T: "Somebody! Give me the right answer. He goes to
17. It is not my house. It is not your house. It is not Fatimah's house. It is
18. not her house. He goes to"
19. S: "Has! Has!
20. T: "Has! Has! (The teacher writes the word on the whiteboard)
21. S: "Him"
22. S: "Has"
23. S: "It"
24. S: "His"
25. Teacher: "His. He goes to his house. Together. He goes to his house.
26. He plays tennis.

In this example, NST 5 manipulates Elicitation using various methods: rising intonation in line 3, questions in lines 5 and 7, reminding the students of some of the possessive

adjectives ‘my’, ‘your’ and ‘her’ in lines 17 and 18 hoping that they would come up with the required one. When a student was close to the correct word in line 19, the teacher repeated ‘has’ with rising intonation and went to the board and wrote it. After that one of the students was able to provide the correct possessive adjective. This example shows how NST 5 exercised a high degree of patience and employed a range of elicitation techniques pushing the cadets to self-correct.

In line with his instructional technique as explicated above, NNST 5 used **Explicit Correction** and **Elicitation** to treat learners’ errors. The following example highlights these points:

Extract 10 (NNST 5, Grammar, Exchange 25)

(Holding a picture of a waiter in a restaurant with a tray and some plates)

1. T: “What is he doing now? Now?”
2. Ss: “Yes. Yes.”
3. T: “Mohammad.”
4. Mohammad: “**Put** the food on the table.”
5. T: “Again.”
6. Mohammad: “**Put** the ”
7. T: “putting “
8. Mohammad: “putting the food ...”
9. T: “on ...”
10. Mohammad: “the table.”
11. T: “Good Mohammad. Very good. Again Nassir.”
12. Nassir: “ He is putting the food on the table.”
13. T: “Very good Nassir. Mohammad.”
14. Mohammad: “He is putting ”
15. T: “He is putting ”
16. Mohammad: “the food ”
17. T: “on the table. Again Abdullah.”
18. Abdullah: “**He is put**..... “
19. T: “He is ”
20. Abdullah: “He is putting ”
21. T: “He is putting ”
22. Abdullah: ‘He is putting the food on the table.’
23. T: “ Very good. Very good. Everybody again.”
24. Ss: “He is putting the food on the table.”
25. T: “Where?”
26. Ss: “He is putting the food on the table.”
27. T: “Where?”

28. Ss: "On the table."
29. T: "On the table?"
30. Ss: "Yes."
31. T: "Or on the desk?"
32. Ss: "On the table."
33. T: "Again. What is he doing?"
34. Ss: 'He is putting the food on the table.'
35. T: 'Now?'
36. Ss: "Yes."
37. T: "Good!"

In this exchange, in line 5, the teacher used **Elicitation** hoping that Mohammad would self-correct when he asked him to repeat what he had said. When he failed at his second attempt, the teacher provided him with **Explicit Correction** in line 7 and then helped him to construct the sentence. After that, the teacher referred to another student – Nassir - to produce the same sentence as some sort of consolidation. He then went back to the original error maker – Mohammad - to verify that he could produce the sentence, then to another student and finally to the whole class.

Unlike the reading and free activity lessons, grammar lessons are meant to present and practise the formal features of the language and, by nature, they require a high degree of correction regardless of whether the teacher is an NST or not.

So far, emphasis has been on the observed behaviour of the teachers. However, observed behaviour can reflect deep beliefs or attitudes. This is the focus of the next section.

4.3 RESEARCH INTERVIEW FINDINGS

In the following sections, the categories referred to herein – in bold typeface – are first operationally defined. Then, the findings of each question are presented in tables before they are discussed using extracts from the actual data. The extracts are indicative hyperlinked samples of more detailed audio accounts of the teachers' views.

Table 4:5 below contains the categories identified in the interview data together with their operational definitions. The eighteen categories in Table 4:5 revolve around different types of errors that may cause communication breakdown and whether they can be put in rank order or not (1-6), how errors should be treated (7-10), when errors should be treated

(11 and 12) and the factors that affect the process of error treatment and tolerance (13-18).

4.3.1 Question 1

Language is sometimes divided into grammar, words, and pronunciation. Which of these aspects do you think is the most important for effective communication i.e. which mistakes in it may cause communication breakdown?

Table 4:5 Interview categories definitions

No	Category	Definition
1	Grammar	Effect of grammatical mistakes on communication
2	Vocabulary	Effect of lexical mistakes on communication
3	Pronunciation	Effect of phonological mistakes on communication
4	Language functions	Effect of functional errors on communication
5	Culture	Effect of cultural errors on communication
6	Order	Putting the above aspects of language in a rank order
7	Explicit Correction	Provision of direct explicit correction by the teacher
8	Elicitation	Whatever the teacher uses to lead the error maker or the whole class to self-correction
9	Explanation	Identifying error, highlighting the rule that has been infringed and enabling learners to notice the difference between what has been said and what should have been said
10	Verification	Making sure that the error-maker and the whole class understand the difference between the error and its correction
11	Prompt Correction	Correcting the errors as and when they occur
12	Delayed Correction	Ignoring errors completely or delaying correction to a later stage of the lesson
13	Learner	Attitude, age, linguistic ability, culture or the effect of a certain procedure on the learner
14	Activity Type	Classroom activities or lesson types e.g. free discussion, controlled practice, grammar lessons, etc.
15	Teaching Context	Organizational culture, course objectives and requirements, teaching environment etc.
16	Error Type	Grammatical, lexical, phonological, functional or cultural error
17	Time	The effect of time on treating learners' errors
18	Teacher	Personality, beliefs, culture, nationality and his relationship with his students

Using the categories above, Table 4:6 shows the frequencies with which they were mentioned across the six teachers, calculated by type not token. It illustrates whether or not a particular error type was explicitly mentioned by each teacher.

Table 4:6 Error categories and their frequencies of mention

Categories	NST 1	NST 3	NST 4	NNST 3	NNST 4	NNST 6	Total
Grammar	✓	✓	✓	✓	✓	✓	6
Vocabulary	✓	✓	✓	✓	✓	✓	6
Pronunciation	✓	✓	✓	✓	✓	✓	6
Functions		✓					1
Culture		✓					1
Categories order				✓	✓	✓	3

It seems that when errors are mentioned, attention is directed to the ones that are most frequently committed by elementary learners. Functional and cultural errors are more difficult to spot or are considered less important. Also the question is leading – it would tend to bias the teachers’ answers towards the three categories it mentions.

The main objective of **Question 1** was to investigate which language aspect or aspects language teachers believe to be most important for effective communication. The implied assumption is that some errors are more serious than others depending on their types i.e. whether they are grammatical, lexical or phonological.

In their responses to **Question 1**, the interviewees report that mistakes in grammar, lexis or pronunciation can cause communication breakdown. Only one teacher, NST 3, added two more types of error not implied in the question. They are errors related to language functions and errors that evince cultural differences between the target language and learner’s mother tongue.

When asked if communication breakdown is contingent on the error type i.e. grammatical, lexical or phonological, the three native speaking teachers answered negatively. For example, NST 3 said, "Well all of themdepending on the communication situation which you are in." The NSTs agree that it depends on the individual mistake and the context in which it has occurred. Hence, the seriousness of an error is not inherent in its type but dependent on the context in which it has occurred.

On the other hand, the NNSTs were quick to attach more seriousness to lexical errors than to the other types. They believe that grammatical errors, in general, could be ignored as they don't generally affect communication. The same applies to phonological errors. NNST 4 expresses this opinion when he says, "First class, I think, is words then pronunciation, last thing is grammar."

4.3.2 Question 2

Some researchers and educationalists believe that if learners' errors are not corrected promptly, learners may learn these errors. What do you think of this?

Table 4:7 below displays the factors that determine correction or no correction.

Table 4:7 Factors that determine choice between immediate and delayed correction

Categories	NST 1	NST 3	NST 4	NNST 3	NNST 4	NNST 6	Total
Learner	√	√	√	√	√	√	6
Activity Type	√	√	√	√			5
Teaching Context	√	√	√				3

The main objective of **Question 2** was to consider the teachers' views regarding immediate error correction. Instead of agreeing or disagreeing with the statement, the interviewees elaborated on the factors that determine prompt error correction. The responses revolve around three major factors: **Learner** (his age, attitude, linguistic ability and culture), **Activity Type** (controlled practice, grammar lesson or genuine communication) and **Teaching Context** (course objectives, course requirements and the organizational culture).

All six teachers believe that **Learner** is an important determining factor in correcting or ignoring learner's errors. NNST 3 stresses the linguistic ability of the learner. "The teacher should know much about the learners he teaches, their abilities, their points of weakness and such things..." NST 4 mentions both the learner's attitude and linguistic ability when he says, "You as the student, you have to want to do or you have to be ready to do it or capable of doing it." He continues and recounts stories from Germany, Italy

and Brunei to substantiate his point of view, emphasizing the effect of learner culture on error correction.

Activity Type is reported by five teachers to be another determining factor. In controlled practice and grammar lessons, errors pertaining to the focal point of the lesson are corrected promptly whereas when the object of the lesson is communication, errors that do not hinder comprehension or communication are generally ignored or corrected later. NST 1 illustrates this when he says, "There are instances where, you know, for the sake of just, what I would like to be able to do, is to make an utterance which is understood by me as an English speaker and by the other cadets as, who are learning English as a second language to make an utterance in English that communicates something, so if it is not exactly accurate, it does not matter."

Teaching Context is only reported by the NSTs as a determining factor in whether to correct immediately, later or to ignore committed errors completely. NST 3 says, "As I say, a lot depends on the learner, on the requirements of the teaching situation. All goes back to, to that really." NST 1 attributes prompt error correction, and emphasis on accuracy, to the **Teaching Context** of this study as the students need to be accurate in what they say since health and safety issues are involved when they start their jobs and use the language. Some of them may be air traffic controllers. "They (students the teacher teaches) need English to work, for use in a technical environment where sometimes accuracy and especially being unambiguous is very, very important and there is a safety issue here." "And ..., so you're continually seeking to meet a course requirement that is dealt with ... a barrier test." "What I consider to be, anyway, the limited structure of the course we have here and learning environment that we have within the school."

The teachers' responses to **Question 2** show a high degree of agreement among both the NSTs and the NNSTs in respect of immediate or delayed error correction. However, the striking difference is the **Teaching Context** category which was not mentioned by the NNSTs. The NNSTs had had experience of only one teaching context – teaching English to Arabic speaking learners. By contrast, the three NSTs mentioned at least 4 other

teaching contexts; in Germany, Italy, Spain and Brunei. One explanation could thus be that familiarity with only one teaching context obscures the fact that there are other teaching contexts which limit the NNSTs appreciation of the possible range of variation.

4.3.3 Question 3

Teachers vary in respect of the way they correct learners' errors. How do you think errors should be corrected?

Table 4:8 below shows the different CFMs the teachers reported using when treating classroom oral errors and the factors that affected their choice.

Table 4:8 Corrective feedback moves and the factors that determine the choice among them

Feedback moves	NST 1	NST 3	NST 4	NNST 3	NNST 4	NNST 6	Total
Elicitation	✓	✓	✓	✓	✓	✓	6
Explicit Correction	✓	✓	✓	✓	✓	✓	6
Explanation	✓	✓	✓	✓	✓	✓	6
Verification		✓				✓	2
Determining factors							
Time	✓	✓		✓	✓		4
Error Type		✓			✓	✓	3
Activity Type		✓	✓		✓		3
Learner		✓	✓				2

The six teachers maintain that the three most common CFMs are **Elicitation**, **Explicit Correction**, and **Explanation**. Only two teachers; one native and one non-native mentioned **Verification**.

Elicitation is viewed by the six teachers as the first step they take when an error is committed. They hold the view that learners should be active recipients rather than being passive ones in all aspects of the learning process. NST 1 justifies and elucidates the use of **elicitation** when he says, "To me, in the learning process, anything that you can get the learners to do, you know, is rather than them being passive recipients but anything you can do to encourage (them) to be more active in their learning experience. NNST 3 mentions peer correction as an example of using **Elicitation** in error treatment. "In my classes, while any student is talking, I give the chance to his classmates first to correct whatever the mistakes he has done." However, because **Elicitation** involves, among other

things, giving clues, asking questions and repeating the original question, it is used when teachers are not under time pressure.

Explicit Correction replaces **Elicitation** when time is pressing or when **Elicitation** techniques have failed. NST 1 notes, "Time is also a factor, you know, if you are under pressure to complete a certain amount of work. Then I might switch to No, no, that is wrong. Remember it's and so be more directive." NNST 4 observes, "I'll give them the answer, if they couldn't find the answer."

Explanation is reported to be used when teachers judge that the underlying rule is not fully grasped or when the error is common among the learners. NST 1 explains that he uses **Explanation** when the error is persistent or when the class is making a similar kind of error.

Only two teachers: NST 3 and NNST 6 report that they use **Verification** when dealing with learners' errors. However, close scrutiny shows that Verification is not an error treatment technique in itself like **Elicitation**, or **Explicit Correction**. It is used to verify that the correction provided is understood by the error maker and by the class as a whole. It is, to some extent, similar to **Explanation**; both of them can be used after **Elicitation** and **Explicit Correction**.

The six teachers report that choosing an error treatment technique is dependent on a host of factors, for example, **Time**, **Error Type**, **Activity Type** and **Learner**. Both NST 1 and NNST 4 mention **Time** as a determinant factor in selecting appropriate error treatment techniques. **Learner**, as a determinant factor in how errors are corrected, is reported by two native speaking teachers who have had similar experience. Both NSTs 3 and 4 worked in Brunei where public error correction has a detrimental effect on learners. They had to modify their error correction techniques to cater for such situations.

As mentioned above in **Question 2**, having teaching experience in different cultural settings raises teachers' awareness of what may be appropriate in one culture but not necessarily so in another culture. As a result of this, teachers need to vary their error

treatment techniques to match the learners' culture. This may explain, why the NNSTs did not mention **Learner** as a determinant factor.

The most interesting finding is that half of the interviewees did not have an immediate answer when asked about how learners' errors should be corrected. They admitted that they use them unconsciously. This is what NST 1, NST 3 and NNST 4 respectively said, "I cannot off the top of my head." "I've got the techniques but I sort of use them unconsciously... I am not aware of them. Very difficult to sort of pin down one." "I cannot think of it here, now, but when you have the problem, you find the solution very quickly."

4.3.4 Question 4

When should learners' errors be corrected? For example, should they be corrected once committed, some time during the lesson or later?

Table 4:9 below shows the distribution between **Prompt** and **Delayed Correction** and the factors that affect this choice.

Table 4:9 When error should be corrected and the determining factors

Timing	NST 1	NST 3	NST 4	NNST 3	NNST 3	NNST 4	Total
Prompt Correction	√	√	√	√	√	√	6
Delayed Correction	√	√	√	√	√		4
Determining factors							
Activity Type	√	√	√			√	5
Learner		√	√				3
Teaching Context	√	√	√				3

Both **Prompt Correction** and **Delayed Correction** were reported to be used by both the NSTs and the NNSTs. The choice between them depends on **Activity type**, **Learner** and **Teaching Context**. **Activity Type** is seen by all the teachers as the major determinant between **Prompt Correction** and **Delayed Correction**. **Prompt Correction** is reported to be the obvious choice when the focus of the lesson is on form rather than on meaning such as reviewing a multiple choice test or introducing a new grammatical structure. On the other hand, if a teacher is doing an activity in the classroom which involves the students being interactive, such as trying to develop dialogue skills, he would probably

hold back and would be more of an observer until the task has been completed when he might go through some of the errors he has noted.

The second factor that determines the choice between the timing of the correction is the **Learner**. NST 3 gave examples of three different types of learner in Saudi Arabia, in Morocco and in Brunei. NNST 6 gave a similar view; no point in insisting on **Prompt Correction** if the learner is not capable of it "And also it depends on the learner himself. For example, if a person cannot pronounce such a sound or such a phone, I don't have to stress on him."

Teaching Context is reported by the NSTs as having a direct effect on the timing of the correction. NST 1 deplores the fact that he uses more immediate error correction than he should and attributes this to the lack of opportunities for true dialogues that develop fluency. "Unfortunately, I don't, you know, a lot of my activities are, what I would say, the wrong end of the spectrum. Where it's a very kind of opportunities for true dialogues, development of fluency, are very limited. And so my error correction tends to be of the immediate type, but I don't, I am saying that is a good thing. In fact, I don't believe it is in most instances but that is what happens in my own classrooms. Unfortunately, sometimes I think we are a bit, ideally we would like to be another person in the classroom than the person we are. But your environment is very often a powerful influence and limits your activities really."

4.3.5 Question 5

Some teachers are more tolerant of learners' errors than others. i.e. they don't correct every mistake their students make. Why do you think this is the case? What determines teachers' degree of tolerance?

Table 4:10 below shows the factors believed to determine teacher's tolerance of learners' errors. **Learner**, **Teacher** and **Teaching Context** were reported to be the main factors followed by **Activity Type** and **Time**. Learners' age, attitude, linguistic ability and culture are reported to determine teachers' tolerance of their errors. This finding is very similar to that mentioned above in **Question 2**. NNST 3 stresses the learner. "I think also

the level of the learner, if a beginner commits a mistake of course, I will be more tolerant with him than an advanced learner because this one still has a lot to learn."

Table 4:10 Factors believed to determine teacher's tolerance of learners' errors

Tolerance Factors	NST 1	NST 3	NST 4	NNST 6	NNST 3	NNST 4	Total
Learner	✓	✓	✓	✓	✓	✓	6
Teacher	✓	✓	✓	✓	✓	✓	6
Teaching Context	✓	✓	✓				3
Activity Type		✓			✓	✓	3
Time				✓	✓	✓	3

A **Teacher's** views of language learning, his personality type and experience are seen as affecting the degree of tolerating learners' errors. NST 4 stresses the teacher's personality as having a greater influence on being more or less tolerant of learner's errors. "Just from my experience, I think, individual personality. If you are fussy, then, you will want everything correct. If you're more relaxed, easy-going, you say, basically his English is okay. There is one or two things you can do and then you say it is up to him."

Teaching Context as defined above (Organizational culture, course objectives and requirements, teaching environment etc.) is seen by the NSTs as a major factor to being tolerant or not when errors are committed in the classroom. NST 1 highlights this point very clearly with reference to the teaching context of this study. "Unfortunately, everything [referring to the teaching context] seems to focus on the utterance, you know, and it's like ...is the word order correct or is the inflection of the verb correct or whatever, you know, I mean, it's a very dry learning environment unfortunately."

Both **Time** and **Activity Type** are also reported by half of the interviewed teachers to affect tolerance of learners' errors. When exams are close and teachers want their students to pass, they confirm that they become more concerned about accuracy particularly when dealing with multiple choice exercises.

Having examined what teachers actually do when oral errors are committed in a number of lessons and their attitudes towards error treatment, focus is now directed to learners' beliefs about errors and how they think they should be treated.

4.4 QUESTIONNAIRE FINDINGS

Sixty students from the same school completed an attitude scale. Table 4.11 summarizes the results.

Table 4:11 Students' preferences for error correction

	FEC	FTEC	FEX	FEL
Agree	59 (98%)	27 (45%)	55 (92%)	52 (87%)
Disagree	1 (2%)	29 (48%)	2 (3%)	4 (6%)
Undecided	0	4 (7%)	3 (5%)	4 (6%)
Total	60	60	60	60

Key:

FEC = Favours Error Correction
FTEC = Favours Teacher Explicit Correction
FEX = Favours Explanation
FEL = Favours Elicitation

As Table 4:11 demonstrates, the students in the school have a positive attitude towards error correction. They want their errors to be corrected. They also want their teachers to explain to them what went wrong. They are more in favour of **Elicitation** than **Explicit Correction** from the teacher.

In respect of explicit correction from teachers, the students were divided nearly equally between those who want their teachers to provide them with the correction explicitly and those who want their teachers to guide them through a discovery process with the purpose of enabling them to self-correct. Table 4:11 also demonstrates that the students were biased towards both elicitation and explanation.

The following extract, written by one of the students, summarizes the students' preferences for error correction, "The teacher should not provide me with the explicit correction when I make a mistake. He should help me first to self-correct. If I fail to do that, the teacher should give me the correct response. Explanation and examples are important in error correction."

Now that the findings have been analyzed in their own right, the following section evaluates them in the light of the research questions.

4.5 FINDINGS AND THE RESEARCH QUESTIONS

The following research questions were raised in Chapter 2:

- 1- How do the NSTs and the NNSTs treat classroom oral errors?
- 2- Do the techniques used by teachers match students' expectations in respect of error treatment?
- 3- What makes teachers more/less tolerant of learners' errors? Is it the lesson type, the teacher's background culture, his experience, his attitudes to language teaching and learning or the institutional constraints?
- 4- Are the NSTs more tolerant of learners' errors than the NNSTs?

To address research question 1, let us examine closely how the NSTs and the NNSTs treated classroom errors. Table 4:12 below illustrates the frequency of each corrective feedback move against lesson type and between both the NSTs and the NNSTs.

Table 4:12 Distribution of corrective feedback moves across lesson type and between the NSTs and the NNSTs

Lesson Type	EC			RC			MT			EL			VR		
	NSTs	NNSTs	Total	NSTs	NNSTs	Total	NSTs	NNSTs	Total	NSTs	NNSTs	Total	NSTs	NNSTs	Total
Reading	20	18	38	9	28	37	3	5	8	27	22	49	1	1	2
Free Activity	6	12	18	29	14	43	11	7	18	14	17	31	0	12	12
Grammar	12	15	27	5	1	6	6	8	14	58	20	78	0	6	6
Total	38	45	83	43	43	86	20	20	40	99	59	158	1	19	20

Table 4:12 shows that **Elicitation** was by far the most frequent CFM in the data as a whole. **Explicit Correction** and **Recast** were of similar frequency values. **Metalinguistic Feedback** comes next and **Verification** is the least used CFM.

However, if the data in Table 4:12 is checked against the data in Tables 4:2, 4:3 and 4:4 and the explanation provided after each lesson type above, it becomes evident that lesson type is an important factor that can determine the choice of the available CFMs. Teachers' instructional techniques and beliefs about error treatment are two other important variables.

Recast is an implicit corrective feedback move. It is more attuned to communicative language teaching. This may explain its high occurrences in both the reading and free activity lessons and its low frequency in the form-focused lessons.

The high frequency of **Explicit Correction** in the reading lessons can perhaps be ascribed to the considerable number of phonological errors in the data as Extracts 3, 4 and 5 above demonstrate. Phonological errors, particularly if the words are new, lend themselves more to **Explicit Correction** than any of the other CFMs.

Strictly speaking, **Verification** is not a corrective feedback move in itself. It is used to ensure that the correction is understood by the error maker and the class as a whole. Its high frequency in the grammar lessons is also understandable.

Table 4:12 also demonstrates that there are points of convergence as well as points of divergence in the way the NSTs and the NNSTs treat learners' errors. The NSTs, generally speaking, tend to withhold **Explicit Correction** till they have exhausted all the other possible ways of eliciting the correction from the error-maker. Extracts 2, 4 and 10 above highlight this very clearly. The NNSTs scored slightly higher than the NSTs in their use of **Explicit Correction**.

As for research question 2, when classroom observation findings are checked against the questionnaire findings, it becomes evident that, generally speaking, there is a considerable degree of congruence between what teachers do in the classroom and the students' preferences with regard to **Elicitation**, **Metalinguistic Feedback** and **Explicit Correction**. It is true that **Metalinguistic Feedback** is not identical to explanation but it is a part of it as it provides the error maker with some clues that may help him self-correct, particularly when dealing with performance rather than competence errors.

Regarding research question 3, both classroom and research interview data provide enough information about what determines tolerance of learners' errors. This includes lesson type, teacher's background culture, experience and views of language teaching and learning. Learners' culture, age, linguistic ability and attitudes are also determining factors.

As for research question 4, the data available provides a tentative answer. The NSTs, generally speaking, tend to tolerate sentence level errors more than the NNSTs. However, as explained above there are other factors that need to be taken into account.

CHAPTER 5

The NSTs and The NNSTs TREATMENT of CLASSROOM ORAL ERRORS: A HOLISTIC ANALYSIS

INTRODUCTION

In Chapter 4, the findings of each data collection tool are presented separately and then evaluated in the light of the research questions. In this chapter, the data is analyzed holistically with the purpose of coming to grips with the factors that determine both treatment and tolerance of classroom oral errors as perceived and practised by the NSTs and the NNSTs. The data is also analyzed with reference to the students' preferences. But before this, a cross-question analysis of the interview data is essential for two reasons:

- 1- There is considerable degree of overlap among the questions, leading to a similar degree of overlap amongst the responses.
- 2- The ticks in the boxes represent explicit statements in the interviewees' answers rather than implicit ones inferred by the researcher.

INTERVIEW DATA: CROSS QUESTION ANALYSIS

Table 5:1 below amalgamates the categories identified in the interview data and the frequency of each in the interviewees' answers. This is a somewhat narrow-focus, superficial analysis as it does not really scrutinize the interview data holistically. Checking the categories across the interviewees' answers, rather than focusing on just one question at a time, can give a more accurate account of the teachers' views. In the following section, a number of examples are given and discussed to highlight the issue of overlap in the teachers' responses and the importance of this holistic analysis.

In their responses to **Question 1**, the groups seem to be far apart in respect of the weight they give to error type: grammatical, lexical or phonological in causing communication breakdown. Whereas NNSTs play down the effect of both grammatical and phonological

Table 5:1 Interview categories and their frequency of mention by the NSTs and the NNSTs

Question 1: Error categories and their frequency of mention							
Categories	NST 1	NST 3	NST 4	NNST 3	NNST 4	NNST 6	Total
Grammar	✓	✓	✓	✓	✓	✓	6
Vocabulary	✓	✓	✓	✓	✓	✓	6
Pronunciation	✓	✓	✓	✓	✓	✓	6
Language functions		✓					1
Culture		✓					1
Categories order				✓	✓	✓	3
Question 2: Factors that determine choice between correction or no correction							
Factors							Total
Learner	✓	✓	✓	✓	✓	✓	6
Activity Type	✓	✓	✓		✓	✓	5
Teaching Context	✓	✓	✓				3
Question 3: CFMs and the factors that determine the choice among them							
CFMs	NST 1	NST 3	NST 4	NNST 3	NNST 4	NNST 6	Total
Elicitation	✓	✓	✓	✓	✓	✓	6
Explicit Correction	✓	✓	✓	✓	✓	✓	6
Explanation	✓	✓	✓	✓	✓	✓	6
Verification		✓				✓	2
Determining factors							
Time	✓	✓		✓	✓		4
Error Type		✓			✓	✓	3
Activity Type		✓	✓		✓		3
Learner		✓	✓				2
Question 4: When error should be corrected and the determining factors							
Timing	NST 1	NST 3	NST 4	NNST 3	NNST 4	NNST 6	Total
Prompt Correction	✓	✓	✓	✓	✓	✓	6
Delayed Correction	✓	✓	✓	✓	✓		5
Determining factors							
Activity Type	✓	✓	✓			✓	5
Learner		✓	✓				3
Teaching Context	✓	✓	✓				3
Question 5: Factors believed to determine teacher's tolerance of learners' errors							
Tolerance Factors	NST 1	NST 3	NST 4	NNST 3	NNST 4	NNST 6	Total
Learner	✓	✓	✓	✓	✓	✓	6
Teacher	✓	✓	✓	✓	✓	✓	6
Teaching Context	✓	✓	✓				3
Activity Type		✓			✓	✓	3
Time				✓	✓	✓	3

errors, the NSTs believe that all types of errors can potentially cause communication breakdown, depending on the communicative situation and the gravity of the error committed.

However, a close examination of the teachers' responses to the other questions reveals that the NNSTs may have interpreted the question differently from the NSTs. It seems to me that the NNSTs interpreted the question as meaning, "Which language aspect is most important for effective communication: grammar, lexis or pronunciation?" The implied assumption is that some errors are more serious than others depending on their type. The NNSTs caught the explicit meaning of the question and missed the implicit one which was readily accessible to the NSTs.

In fact both the NSTs and the NNSTs are in agreement that grammatical errors that do not hinder communication can be ignored. NST 4 states that a learner needs vocabulary and phrases to be able to communicate effectively and grammar does not matter too much. "You really want phrases and vocabulary. The grammar doesn't matter too much." NNST 3 voices the same view. " To use a certain phrase in a certain situation, this is the most important." NST 3, in his response to **Question 2**, reports that grammar and pronunciation mistakes that do not hinder the flow of communication could be ignored.

So, both the NSTs and the NNSTs are in agreement that vocabulary and phrases are more important for effective communication than grammar or pronunciation as long as the message is comprehensible. Consequently, grammatical or phonological errors that do not impair the message could be ignored and thus are less serious than lexical errors.

It is true, I believe, that all sorts of errors, as the NSTs explicitly stated in their responses to **Question 1**, can cause communication breakdown depending on the context in which they occur. However, local grammatical errors are less likely to cause communication breakdown than lexical errors as lexical items are essentially meaning loaded. For example, a sentence like "My father smoke 30 cigarettes a day." is not grammatically perfect, yet the meaning the sentence intends to convey is clear and it is unlikely to cause communication breakdown or misunderstanding. However, an Arabic speaking learner,

because of mother tongue interference (particularly Egyptian dialect), may produce a grammatically correct version of the above sentence that can cause either communication breakdown or misunderstanding by changing just one word. “My father drinks 30 cigarettes a day.” In Egyptian dialect the verb ‘drink’ is used with liquids and to mean ‘smoke’.

Another example of overlap is that the interviewees’ responses to **Question 2** show a high degree of agreement among both the NSTs and the NNSTs in respect of the factors that determine correction or no correction. Both groups report **Learner** and **Activity Type** as two major factors. **Teaching Context** is explicitly mentioned only by the NSTs who gave numerous examples from Germany, Italy, Spain and Brunei.

However, the NNSTs report that **Exams** and **Time** affect error treatment and tolerance. In their answers to **Question 5**, the three NNSTs emphasize the role of **Time** and **Exams** in tolerating learners’ errors. NNST 3 says, “If the exams are so close there is not enough time, this will also affect the situation here.” NNST 4 expresses a similar point of view when he says, “In general, learners like to study what they are going to be tested in.” “The test is, has an important role here.” NNST 6 reports the time factor when he says, “I would like to add the time factor.”

Teaching Context can embrace a wide range of factors, as defined in Table 4:6 in CHAPTER 4, including but not limited to, the organizational culture, the course objectives and requirements and the teaching environment. I believe that both **Time** and **Exams** can be subsumed under the category of the **Teaching Context**. This means that the two groups are in near complete agreement in respect of the factors that determine correction or no correction. The main difference between the NSTs and the NNSTs is the emphasis each group gave to certain elements of **Teaching Context**. The NSTs concentrated on the course requirement, the organizational culture and the prevailing general culture whereas the NNSTs focused on the effect of **Exams** and **Time**. The mere mention of exams by NNST 3 and NNST 4 in itself illustrates the effect of the organizational culture, particularly regarding exam results, as mentioned in Chapter 3.

Good exam results reflect the students' ability in language and poor exam results mirror primarily the teacher's lack of competence.

A third example is that none of the NNSTs explicitly mentions the **Learner** as a factor determining how errors should be treated in their responses to **Question 3**. On the face of it, this gives the impression that the NNSTs play down the **Learner's** role in the error treatment process. However, in their responses to **Question 2**, the three NNSTs recognize the **Learner's** role. Here is what NNST 3, NNST 4 and NNST 6 say respectively, "The teacher should know much about the learners he teaches, their abilities, their points of weakness and such things..." "If you stop him every time and say this is wrong. You must this. You must that. He will stop talking and that means he will not learn." and "If the learner is interrupted repeatedly, he will be frustrated. This frustration will stop him from giving what he really wants to do or to say."

A final example is that NST 1, NST 4 and NNST 3 did not explicitly mention **Activity Type** as a determining factor in being tolerant or non-tolerant of learners' errors and so the relevant boxes are not ticked in their answers to **Question 5**. However, in his answer to **Question 4**, NST 1 explicitly reports that if he is doing something which is fairly restrictive, like reviewing a multiple choice test, he would obviously correct the mistakes as they are made. The same teacher, in his answer to **Question 2**, states that, when students try to communicate something, he would accept utterances from them that are not exactly accurate as long as they are understood by him as a teacher and by the students in class. In these two examples, obviously NST 1 is referring to the effect of **Activity Type** on the tolerance of learners' errors. The same thing applies to NNST 3. In his answer to **Question 2**, NNST 3 reports that **Activity Type** determines correcting learners' errors immediately or not. He states that in a grammar lesson, learners should be corrected promptly. It is clear that the NNST 3 is referring to the **Activity Type** as a determining factor in the tolerance of learners' errors.

In summary, cross-question analysis, as detailed above, shows that there is a high degree of convergence between the NSTs and the NNSTs in respect of their beliefs about the error treatment process. Error treatment and tolerance are influenced by a host of factors

including the lesson type, the teacher's perception, the teaching context and the learners' variables e.g. age, linguistic ability and culture. Regarding the CFMs, **Elicitation**, **Explicit Correction** and **Explanation** are reported by both the NSTs and the NNSTs as viable ways of treating classroom oral errors.

Ethnographic research takes into account both the ideational and materialistic aspects of culture. The NSTs and the NNSTs perception of error treatment and tolerance represents the ideational aspect of error treatment culture (participants' beliefs). How teachers actually treated classroom oral errors constitutes the materialistic aspect of error treatment culture (participants' observable behaviour). In the previous section, teachers' beliefs are holistically analyzed. In the following sections, relationships between both aspects of the culture – ideational and materialistic – are explored and then related to the students' preferences.

TREATMENT OF CLASSROOM ORAL ERRORS

Table 5:2 below integrates the CFMs employed by both the NSTs and the NNSTs across the three lesson types. The CFMs are discussed in the order they are mentioned in the table. Below, the frequency of each CFM is analyzed in the light of the lesson type, teachers' instructional techniques used in these lessons, being NST or NNST and the interview and questionnaire findings.

Explicit Correction

Explicit Correction surfaced as the third most frequently used CFM in the classroom observation data. It was used more in the grammar lessons (only two grammar lessons were observed) than in the reading or the free activity ones. **Explicit Correction** frequency in the NNSTs' lessons (45) is slightly higher than that in the NSTs' lessons (38).

It should also be noted that **Explicit Correction** was used either in combination with other CFMs or in isolation. In the grammar lessons, it was used in combination with **Elicitation**. When teachers exhausted the ways to elicit the correction from the error

maker himself or from the whole class, they used **Explicit Correction**. Extract 1 below illustrates this point. NST 5 was teaching the present continuous tense and in this exchange, he wanted to drill the question form of this tense.

Table 5.2 The frequency of CFMs across lesson types and among teachers

Teacher	EC	RC	MF	EL	VR
Reading Lessons					
NST 1	15	5	2	14	1
NST 2	5	4	1	13	0
NNST 1	2	28	0	5	0
NNST 2	16	0	5	17	1
NSTs	20	9	3	27	1
NNSTs	18	28	5	22	1
Total	38	37	8	49	2
Free Activity Lessons					
NST 3	1	28	0	2	0
NST 4	5	1	11	12	0
NNST 3	8	3	4	16	12
NNST 4	4	15	3	1	0
NSTs	6	29	11	14	0
NNSTs	12	18	7	17	12
Total	18	47	18	31	12
Grammar Lessons					
NST 5	12	5	6	58	0
NNST 5	15	1	8	20	6
Total	27	6	14	78	6
NSTs Total	38	43	20	99	1
NNSTs Total	45	47	20	59	19
Grand Total	83	90	40	158	20

Key:

EC = EXPLICIT CORRECTION
 RC = RECAST
 VR = VERIFICATION

MF = METALINGUISTIC FEEDBACK
 EL = ELICITATION

Extract 1 (NST 5, Grammar, Exchange 53)

1. T: Question. Question. You ask me the question. Is?
2. S: He is
3. T: Question.
4. S: Is he.....
5. T: Abdulrahman. Is he?
6. Abdulrahman: Is he fix a car?

7. T: (Reading out the answer while writing.) Is he fixing a car now? Is he fixing a car now?

In line 2 the student missed the point and started a statement. In line 3 the teacher used **Metalinguistic Feedback** to redirect the student to what is required. In line 5, the teacher provided Abdulrahman with the first two words in the question hoping that he would be able to complete the question. In line 6 the student failed to make the question. Consequently, the teacher provided **Explicit Correction** both orally and in writing. Telling the student that what is required is a question rather than a statement, is **Metalinguistic Feedback** and providing the first two words in the desired question functioned as **Elicitation**.

In the reading lessons, **Explicit Correction** was, generally speaking used alone to correct either phonological errors the teachers judged to be either new to the students or difficult to pronounce themselves. Extract 2 below shows this.

Extract 2 (NST 1, Reading, Exchange 44)

1. T: "What happens when the piston moves down? Yes, please, M.M.
2. S: "It hits the **anvil**."
3. T: " It is what?
4. S and other students: "The **anvil**"
5. T: "The anvil."

In line 2, the student mispronounced the word ‘anvil’ which is a new word in the reading passage. When the students failed to give the correct pronunciation in line 4, the teacher used **Explicit Correction**.

The high frequency of **Explicit Correction** (38) in the reading lessons can perhaps be ascribed to the considerable number of phonological errors in the data as Extracts 3 , 4 and 5 in Chapter 4 demonstrate. Phonological errors, particularly if the words are new, lend themselves more to **Explicit Correction** than any of the other CFMs particularly if the teacher decides to focus on accurate pronunciation in that lesson or activity.

So the frequency of **Explicit Correction**, as the data of this study illustrates, is contingent on both the lesson and error type. It was usually used in combination with

Elicitation in the grammar lessons and alone in the reading lessons to correct phonological error of new or difficult words. This is in line with what teachers reported in the interview. For example, NNST 4 said, "I'll give them the answer, if they couldn't find the answer. First, the student must try himself, give him clues, after that myself."

Furthermore, time is another factor that affects choosing **Explicit Correction**. In the interview, a number of teachers, as cited above, mentioned **Time** as another determinant factor on error treatment. NST 1 succinctly expressed this point when he said, "Time is also a factor, you know, if you are under pressure to complete a certain amount of work. Then I might switch to Say no, no, that is wrong. Remember it's And so be more directive."

The way both the NSTs and the NNSTs viewed and executed **Explicit Correction** is in line with their students' preferences. The figures of Table 4:14 in CHAPTER 4 show that the students favour **Elicitation** (87%) over **Explicit Correction** by teacher (45%). This is also supported by the notes written at the end of the questionnaire. One of the students wrote, "The teacher should not provide me with the explicit correction when I make a mistake. He should help me first to self-correct. If I fail to do that, he should give me the correct response."

Recast

As Table 5:2 illustrates, **Recast** was the second most frequently used CFM in the observed lessons (90). It was more used in the free activity (47) and the reading lessons (37) than in the grammar ones (6). **Recast** was nearly equally used by the NSTs (43) and the NNSTs (47).

However, the instructional technique adopted by the teachers affected the choice between the different CFMs. For example, in the reading lessons, it was the main CFM used by NNST 1 throughout his lesson whereas the other three teachers rarely used it. NNST 1, instead of asking the students to read parts of the reading passage, read the passage sentence by sentence and then posed either a display or a 'Yes/No question'. This

resulted in a smaller number of errors in that lesson in comparison with the other three reading lessons and whenever there was an error, **Recast** was the preferred CFM.

Due to their preferred instructional techniques in the free activity lessons, NST 4 and NNST 3 rarely used RECAST. NST 4, after discussing the pictures orally with the students collaboratively, wrote an account of what had happened on the board. He had to focus on accuracy and used CFMs other than **Recast**. NNST 3 decided to focus more on the formal aspects of the language than on engaging the learners in genuine communication, albeit at an elementary level. Consequently, he rarely used **Recast** in his lesson.

In contrast, NST 3 and NNST 4 consistently used **Recast** in their free activity lessons. This is compatible with what they reported in the interview although neither of them mentioned the term **Recast** explicitly. They both reported that they would not correct grammar or pronunciation in communicative activities as the focus of the lesson would be on fluency rather than accuracy. This is what NST 3 and NNST 4 said respectively. "If an activity for example is genuinely communicative and there is an exchange of communication, then I probably won't correct pronunciation or grammar although if I didn't understand anything, I would try to seek clarification from the interlocutor." "While talking, I think I will not stop the student. I want him just to say the words; any words. He must talk very fast."

To sum up, when a teacher recasts an ill-formed utterance, he adds correction to it, stresses fact of error and moves on to the next question, topic or phase of the lesson. Recast is an implicit CFM and does not cause any interruption to the flow of the lesson and hence it is more attuned to communicative language teaching when focus is on the content of the lesson rather than on the formal aspects of the language. This can explain its high occurrences in both the free activity and reading lessons and its low frequency in form-focused lessons.

Metlinguistic Feedback

Metalinguistic Feedback was the second least employed CFM in the observed lessons. It was used more in the grammar (14) and free activity (18) lessons than in the reading (8) lessons. It was used nearly equally by the NSTs and the NNSTs.

Metlinguistic Feedback is defined here as “the teacher gives information about the cause and type of error and the rule that has been infringed.” In this sense, it is difficult to differentiate between it and **Explanation**. **Explanation**, in this study is restricted to the phases of the lesson when the teacher focuses on an error through examples, explanation, practice and drilling. Extract 3 (NNST 5) and Extract 4 (NST 5) from the data may help illustrate this point:

Extract 3 (NNST 5, Grammar, Exchange 41)

1. T: (Holding a chart showing the present continuous form) “What’s this?”
2. Ss : “am. Am.”
3. T: (Pointing to the verb in the chart) “What is this?”
4. Ss: (Inaudible and incomprehensible answer given collaboratively.)
5. T: “Verb or a noun?”
6. Ss: “Verb.”
7. T: “Verb. This is a verb. And what is this?”
8. Ss: “ing”
9. T: “ing. So this is the presentpresent..... What..... What is this?”
10. Ss: “Now.”
11. T: “So this is the presentcontinuous. Everybody, Present Continuous.
12. Ss: “Present Continuous.”
13. T: “Present Continuous”
14. Ss: “Present Continuous.”
15. T: “What is the Present Continuous?”
16. Ss: (Inaudible and incomprehensible answer given collaboratively.)
17. T: “It is (Pointing to the form of the present continuous tense) What is this?”
18. Ss: “is”
19. T: (Pointing to the verb) Verb (Pointing to ing) ‘ing’
20. Ss : “Verb. ing.”
21. T: (Pointing to am) “What is this?”
22. Ss : “am”
23. T: (Pointing to the verb) Verb. (Pointing to ‘ing’) ‘ing’
24. (The students repeat the different components of the form after the teacher.)

This is the fortieth exchange in the lesson after the teacher, using flash cards, elicited numerous sentences featuring the present continuous tense from the students. The main purpose of this exchange was not to correct an error that had been committed. It was to ensure that the students understood the formal aspect of the grammatical structure designated for the lesson. This is an example of explanation as used in this study.

Extract 4 (NST 5, Grammar, Exchange 8)

1. T : (Holding a flash card of a nurse) "What is Susan's job?"
2. S : "He is a"
3. T : "It's a woman. It's a woman."
4. S : "She ...She....She nurse."
5. T : (Prolonging his voice) "She"
6. S : "She works"
7. T : "What is her job?"
8. S : "She a nurse."
9. S : "She is a nurse."
10. T : "Good. Good. Together, 'She's a nurse.'"
11. Ss : "She is a nurse."

When the student in line 2 made a wrong choice of subject pronoun, the teacher, in line 3, gave information about the cause of the error. The student recognized that he needed a feminine subject pronoun and used it in line 4. In line 6, the student failed to provide the appropriate answer so the teacher, in line 7, repeated the original question. Repeating the original question constitutes **Elicitation**. Hence, in this extract both **Metalinguistic Feedback** and **Elicitation** were used.

As it is more attuned to the accuracy of the utterance rather than its content, **Metalinguistic Feedback** was more recurrent in grammar lessons than in other types of lessons. However, the instructional technique adopted by the teacher is another factor. NST 4 was observed teaching a free activity lesson – the teacher chose both the topic and the learning materials. After discussing the pictures orally with the class, he wrote a correct account of the accident on the board. This necessitated a high level of accuracy thus choosing CFMs compatible with the instructional technique adopted.

Metalinguistic Feedback can be subsumed under **Explanation** as it provides the learner with some information about the cause of the error. The interview data reveals that nearly

all the teachers, the NSTs and the NNSTs alike, believe that some sort of explanation is necessary particularly if the error committed is a common one. This is what both NST 1 and NNST 3 reported about explanation in dealing with learners' errors. "I'll use the blackboard and write sentences, well leave gaps, I do variations if I find that an error is persistent, or if I find that somebody is making, in general, the class is making a kind of similar error." "I tend to write the area where he made the mistake and then discuss it with them." In the questionnaire, the students favoured some explanation when an error is committed. "When a student makes a mistake, the teacher should show the learner the erroneous utterance and the rule that has led to the error should be explained." Other students made it clear that they did not want lengthy explanations as this would be at the expense of practising the target item.

In short, **Metalinguistic Feedback** is concerned with the accuracy of the utterance and its main function is to help learners self-correct. Though it occurred more in the grammar lessons than both reading and free activity lessons, the teacher's preferred instructional technique determined the CFM to use. **Metalinguistic Feedback** differs from explanation in respect of both their functions and the time each takes. In this study, the NNSTs tend to provide lengthy explanations as the case mentioned above with NNST 5. Lengthy explanations are not compatible with the students' preferences.

Elicitation

Elicitation was by far the most frequent CFM in the data as a whole. It was used by the NSTs and the NNSTs alike. It was used across the three lesson types. However, NST 5 stands out from the rest as the one who used **Elicitation** for more than one third of all the occurrences. Except for NST 3, NNST 1 and NNST 4 who scored high in using **Recast** for reasons explained above, the rest scored high in using **Elicitation** regardless of the lesson type. **Elicitation** was used after grammatical and phonological errors. Extract 5 exemplifies using Elicitation after grammatical errors and Extract 6 illustrates using it after phonological errors.

Extract 5 (NST 5, Grammar, Exchange 3)

1. T : In the afternoon, what does he do?
2. S : In the ... Mr. Naylor 'play' tennis.
3. T : What does he do in the afternoon?
4. S : Playing
5. S : He plays tennis.
6. T : Good! He plays tennis.

In line 2 the student failed to observe subject-verb agreement in the present simple tense. In line 3 the teacher repeats the original question with minor modification emphasizing the auxiliary verb 'does'. In line 5, the student managed to produce the correct form of the verb.

Extract 6 (NST 3, Free Activity, Exchange 33)

1. T : "What other things can you say, Nasser?"
2. Nasser: "She has **shelf**, **shelf**."
3. T : "I am sorry, I don't understand that."
4. Nasser: "He has **shelf**."
5. T : "I can't understand."
6. Nasser: "A shelf."
7. T : "A shelf. Ah, right. She has some shelves."

In line 2, Nassir mispronounced the word 'shelf' to the extent that it was unrecognizable to the teacher. Using a clarification request the teacher wanted Nassir to repeat the word hoping that he would be able to self-correct. Finally, in line 6, Nassir was able to pronounce the word to a recognizable extent.

Elicitation was reported by all the interviewed teachers as their preferred CFM and it was also preferred by the students in this study. NST 1 reported that **Elicitation** is an important principle in learning in general. "Then, when they make the mistake, you know, you should be able to get them to correct their own mistakes and I can, very often, I do that by fairly structured routine which will kind of guide them to their mistake, and then a little eye ball.... Yes, that is right." The same idea was expressed by NNST 6, when he emphasized both self and peer correction as important ways of dealing with learners' errors. 87% of the students who completed the questionnaire favoured **Elicitation**.

Verification

Verification was the least used CFM in the classroom data. It also marks a significant difference between the NSTs and the NNSTs as it was employed 19 times by the NNSTs and only once by NST 1. However, its high occurrence does not represent a strong tendency among the NNSTs as it was mainly used by NNST 3 (12 times), who, as I have explained above, paid more attention to accuracy than fluency in a free activity lesson. The following two consecutive extracts from NNST 3 lesson illustrate this point.

Extract 7 (NNST 3, Free Activity, Exchange 6)

1. T : “Now, What's your favourite drink?”
2. Student: “I favourite drink.”
3. T : “I favourite drink. What is wrong here?”
4. T : “There is something wrong. He said, I favourite drink.”
5. Student: “My ...”
6. T : “My, thank you. My favourite drink. (He solicits the error maker to repeat)”
7. Original error maker: “ My favourite drink is coffee.”

In Extract 7, the student committed a grammatical error in line 2 when he did not use the possessive adjective ‘my’. In lines 3 and 4 the teacher used **Elicitation** by repeating the student’s utterance and saying, ‘What is wrong here? There is something wrong’. Another student, in line 5, provided the correct possessive adjective. In line 6, the teacher completed the phrase ‘My favourite drink’ and summoned the original error maker to say the sentence which he did successfully.

Extract 8 (NNST 3, Free Activity, Exchange 7)

1. T : “What's your favourite game?”
2. Student: “I favourite game.”
3. T :Again!
4. Student: “My favourite game is chess.”
5. T : “Chess, very good, very good.”

Extract 8 was consecutive to Extract 7 in the lesson. Instead of moving to another topic or idea, the teacher wanted to verify that the students could use the possessive adjective properly. In Extract 8, the teacher asked a question similar to the one he asked at the beginning of Extract 7 and the purpose of the question is clear: practising the phrase “My favourite is”. He solicited the student who failed to use the possessive

adjective in Extract 7 and the student failed to remember that he had to use the possessive adjective “my” not the subject pronoun “I” before favourite. In line 3, the teacher, surprised that the student made the same mistake, said, “Again!” After that the student provided the correct possessive adjective in line 4.

Verification is not a CFM in itself. Its main function is to ensure that the error maker has understood what went wrong when he committed the error and it is sometimes directed to the whole class. It is one of the categories in Chaudron’s model (1977) and it was recognized by NST 3 and NNST 6 in the interviews though they did not explicitly mention **Verification** as their quotes illustrate. NST 3 explains in this quote what he would do after giving a model pronunciation to a mispronounced word. “Ask another student to repeat. Ask the whole class to repeat again rather than the individual. And then ask the one who made the error.” After correcting an error, NNST 6 says, “And then have some kind of practicing?” Here, NNST 6, I believe, refers to **Verification** that could be directed to the whole class to ensure that the point that has led to the error is well grasped by the students.

Generally speaking, regardless of whether they are NSTs or NNSTs, the lesson type, the teachers’ preferred instructional techniques, their beliefs, the teaching context and the learners’ variables influence both error treatment and tolerance in the classroom. For example, **Elicitation** was the most frequently CFM used by both groups of teachers and across the three lesson type as Table 5:2 illustrates. However, some individual differences among the ten teachers were obvious reflecting their own preferred instructional techniques which in turn necessitated compatible CFMs. **Elicitation** requires a considerable degree of patience and expertise on the part of the teacher . Another factor is **Time** as mentioned above. When teachers are under pressure to finish a certain amount of work within a specific period of time, they may resort to **Explicit Correction**.

CHAPTER 6

DISCUSSION

6.1 INTRODUCTION

In Chapter 4 the findings of each data collection tool are presented separately and then evaluated in the light of the research questions. In Chapter 5 a holistic analysis of the data linking the different findings together is presented. In this chapter, first, the findings are subjected to scrutiny in terms of what they might mean. Second, they are compared and contrasted with similar studies particularly those reviewed in Chapter 2 and summarized in Appendix A. Finally the approach adopted and the methods used are evaluated in respect of validity, reliability and generalizability.

6.2 MAJOR FINDINGS

This study has yielded the following findings:

- 1- Treatment of classroom oral errors is contingent on a host of factors including lesson type, teachers' views of error treatment, their preferred instructional techniques, learners' variables, the error type and the teaching context embracing the organizational culture as well as the course objectives and requirements.
- 2- Treatment of classroom oral errors is a complex process and teachers feel they lack conscious knowledge of the available CFMs.
- 3- There are some differences between the NSTs and the NNSTs in respect of their beliefs about and their actual dealings with classroom oral errors.
- 4- Generally speaking, the NSTs are more tolerant of learners' errors than the NNSTs.
- 5- Arabic-speaking learners have a positive attitude towards error correction and they prefer elicitation over explicit correction by teacher.

It is evident that examining the error treatment phenomenon from a number of different perspectives: teachers' actual practice, their beliefs as well as the students preferences has produced more in depth findings. Their implications are discussed in the following section.

6.3 IMPLICATIONS OF THE FINDINGS

The immediate general implication one gets from these findings is that error treatment is a complex and intricate process and that to do it justice and to reasonably understand it, one needs to be cognizant of a whole range of variables that affect teachers' decisions in the classroom.

6.3.1 Factors That Affect Error Treatment

Most error treatment studies have focused on one or two aspects of this phenomenon. Appendix A summarizes fifty-one error treatment studies spread over four decades. It shows that they have investigated issues like the types of CFMs teachers use when errors are committed (Fanselow 1977, Lyster and Ranta 1997, Panova and Lyster 2002 and Sheen 2004), the types of errors that get corrected by native speakers in non-didactic settings (Chun et al 1982 and Brock et al 1986), the differential effects of negative feedback (Tomasello and Herron 1988, White 1991, Carroll et al 1992, Takimoto 2006, Ammar and Spada 2006 and Ellis et al 2006), the CFMs that lead to learner uptake (Lyster and Ranta 1997, Lyster 1998) and the relationship between error type and CFMs used (Lyster 2001 and Morris 2002). Very few studies have investigated error treatment holistically. Examples of these are Catchcart and Olsen (1976), Lee (2002) and Drever (2007). The findings of these studies will be compared and contrasted with those of this study later in this chapter.

Understanding what CFMs teachers employ when dealing with learners' errors is beneficial but we need to know why some CFMs are used more than others. It seems that none of the reviewed studies has explored the relationship between the CFMs teachers use and the pedagogic focus of the lesson though this was recommended by some of the researchers. Sheen (2004) and Jimenez (2006) underscore the importance of the pedagogic focus, the teaching context and the participants' organization on the percentage of errors corrected and the types of corrective feedback given. In this study, lesson type determined to a great extent the CFMs the teachers utilized.

Recast was more used in the free activity and reading lessons than in the grammar lessons. Recast is an implicit corrective feedback move. It enables teachers to provide some sort of corrective feedback regarding the ill-formed utterances (grammatical, lexical or phonological) produced by the learners while maintaining the communicative focus of the lesson.

Though lesson type governed which CFMs teachers used, teachers' beliefs and their preferred instructional techniques are two other important factors. Both NST 3 and NNST 4, in the interview, stated that they would not explicitly correct grammatical or phonological errors that did not impede communication and, in the observed lessons, they focused on getting the learners engaged in producing utterances that communicated something to them regardless of the accuracy of what was said. On the other hand, NST 4 and NNST 3 also taught free activity lessons and used sets of pictures as a springboard for oral activities, as NST 3 and NNST 4 did, but their instructional techniques were different. NST 4, after discussing the pictures orally with the students, wanted to write an account of the accident on the board. This instructional technique necessitated CFMs that are attuned more to accuracy than to fluency. NNST 4 paid more attention to the accuracy of what the students said. Surprisingly, grammar explanation and drilling surfaced in the lesson. These two instructional techniques rendered NST 3 and NNST 4 the least tolerant of learners' errors – 29% and 23% – as Table 4:3 shows and they had to use CFMs other than recast – metalinguistic feedback, elicitation and explicit correction – even though the pedagogic focus of the lesson was on engaging the students in oral communication. So far, we have seen how lesson type, teachers' views of error treatment and their preferred instructional techniques control the CFMs they use. Learners' attitudes is another factor.

Both NST 3 and 4 in the interview reported that learners' attitudes and culture have an effect on how errors are dealt with. NST 3 did not correct learners' errors in public in Brunei because students would lose face. NST 4 compares Italian students with German ones in respect of their attitudes towards accuracy and the impact of this on error treatment. German students are reported to be keen on the accuracy of what they say or write but the Italians are not.

A teaching context with all its components e.g. organizational culture, course requirements, the exams and time were reported by both the NSTs and the NNSTs in the interview to affect both error treatment and tolerance. Teachers' may have views about how errors should be treated but other factors affect their choices.

As argued above, the pedagogic focus of the lesson controls the CFMs teachers use. If the focus is on accuracy, then teachers will be more inclined to use explicit correction, metalinguistic feedback and elicitation but if the focus is on fluency, teachers may use recast which provides some feedback on the accuracy of the utterance without interrupting the flow of communication. Other teachers mentioned the time factor. When teachers are under time pressure to complete a certain amount of work, they may be more directive and use explicit correction not elicitation.

Error type was also seen to affect the choice of CFM to use. When students, particularly in the reading lessons, made phonological errors because the words in the reading passage were new to them, teachers usually used explicit correction.

In summary, as it is evident from the previous discussion, a host of variables affect both error treatment and tolerance and research findings need to be taken very cautiously as they have usually concentrated on only one or two pieces of the jigsaw puzzle overlooking other pieces that could be very instrumental in the behaviour of the ones focused on.

6.3.2 Complexity of Error Treatment

Treatment of classroom oral errors is an important yet complex process and many teachers seem to lack conscious knowledge of the available CFMs. Truscott (1999) highlights the complexity of grammar correction and enumerates a host of practical problems that undermine its effectiveness. Teachers need to understand the error, present the correction, be consistent, tailor the correction to the students' need and at the same time maintain a communicative focus on the lesson. Students need to notice and recognize the correction, take the correction seriously, understand and accept the

correction and then incorporate it in their interlanguage grammar. These problems led Truscott (1999) to call for abandoning grammar correction completely or at least to be very selective (Truscott 2001).

Though many would agree with Truscott's (1999) thesis in respect of the complexity of error treatment and the numerous factors that need to be considered in treating learners' errors, I would disagree with him in his call for abandoning grammar correction completely. In Chapter 2, it is argued that error treatment has benefits in the three language learning contexts: first, second and foreign. Many other more recent studies have confirmed the benefits of corrective feedback. (Saxton et al 2005a and 2005b, Han 2002, Mennim 2002, Hebusch and Lloyd 2004, Ellis et al 2006 and Ammar and Spada 2006) In this study error treatment is perceived as important by teachers and learners alike.

In spite of the importance of error treatment as indicated above, this study shows that teachers lack conscious knowledge of the various available CFMs. When asked to talk about the CFMs they used to deal with learners' errors, 50% of the interviewed teachers did not have immediate answers and reported that they used CFMs unconsciously. This raises the question: Is explicit knowledge important in the process of error treatment.

Explicit conscious knowledge of what we do in the classroom is useful because only when such conscious knowledge is available will we be able to evaluate what we do and be ready to accept alternatives. More than thirty years ago, Burt (1975) noted that most teacher training programmes had failed to prepare teachers to handle learners' errors adequately. More than 20 years later, Lyster and Ranta (1997:38) noted that "The neophyte second language teacher finds so little in research literature to help deal with the very practical issue of what to do when students make errors in the classroom." It seems that the situation has not changed at all.

What is really needed is more research that clarifies satisfactorily the conditions under which error treatment is effective and the differential effects of CFMs. Though recent studies in first, second and foreign language contexts increasingly suggest beneficial

effects of error treatment, researchers have not translated these findings into practical guidelines yet.

6.3.3 The NSTs and The NNSTs Treatment of Oral Errors

In Chapter 5, it is argued that cross question analysis shows that both the NSTs and the NNSTs in this study hold similar views about the factors that affect the various aspects of error treatment. The major difference is the particular aspect of the teaching context each group perceived to be influential in error treatment. The NSTs, because of their wider world experience, having taught many different courses and dealt with more different cultures, regard learners' culture and the course objectives and requirements as major determinants in the decision making process when error are committed. On the other hand, the NNSTs are, generally speaking, test oriented in their teaching and all of them mentioned the influence of exams on their dealings with learners' errors. As an insider researcher I share the same general culture with the NNSTs. I strongly believe, having learnt via structural courses, taught similar ones for long periods of time and lived in a culture that values exam results highly one is bound to be influenced by that. We are the products of our culture. As I mentioned in Chapter 1, my observation that the NSTs were tolerant of learners' errors was what initially triggered my interest in error treatment. Previously I had held an accuracy-oriented view regardless of the other factors.

As for the actual treatment of classroom errors by the NSTs and the NNSTs, they all used elicitation, recast, explicit correction and metalinguistic feedback. The lesson type, teachers' views and their instructional techniques, learners' variables and the teaching context rather than being NST or NNST determined the choice between the different CFMs they use. However, the NNSTs, particularly NNST 3 and 5 allotted a great deal of time to lengthy grammar explanations and drilling and were more accuracy-oriented and thus less tolerant of learners' errors.

In a workplace where NSTs work alongside with NNSTs, there is a valuable opportunity of benefiting from each other. Only when the two groups realize their differences, appreciate their existence and take the necessary steps to learn from them, will they be able to enrich their knowledge and develop their practice.

6.3.4 Tolerance of Learners' Errors

NSTs have overwhelmingly been found to be more tolerant of learners' errors than NNSTs in a number of studies. Examples of these, as illustrated in Chapter 2, are the error gravity studies, the foreigner talk studies and the classroom oriented studies.

This study partially confirms the early findings but also highlights other important factors. Tables 4.2, 4.3 and 4.4 in Chapter 4 demonstrate that the NSTs were notably more tolerant of learners' errors in the reading lessons whereas the difference between the two groups in the free activity and the grammar lessons was not that noticeable. Close examination illustrates that the factors that most affect tolerance of learners' errors are the lesson type, the teachers' preferred instructional technique and their own beliefs about language learning in general and error treatment in particular. For example, Table 4.4 in Chapter 4 shows that both NST 5 and NNST 5 treated all the errors pertaining to the pedagogic focus of the lesson (the present continuous tense). Table 4.3 demonstrates that although both NST 4 and NNST 4 taught the same type of lesson, a free activity lesson, NNST 4 was twice more tolerant than NST 4 due to a difference in the instructional technique adopted by each teacher. NNST 4 paid very little attention to the accuracy of the students' utterances and encouraged them to express their ideas whereas NST 4, after discussing the pictures orally, wanted to write an account of the accident on the board elicited from the students and this made him concentrate to a great extent on the accuracy of what went on the board.

6.3.5 Arabic-Speaking Learners and Error Treatment

In Chapter 2 it is reported that Chenoweth et al (1983), after evaluating the attitudes of different students from varied cultural backgrounds in their study, noted that Korean students did not have a positive attitude towards correction and they wondered if students from the Middle East would favour correction. The students in this current study clearly had a very positive attitude towards error correction (98%). Also, NST 3, who had had experience in Morocco, reported that the students there also had a positive attitude towards error correction.

As for how the Arabic-speaking students in the present study wanted their errors treated, they were in favour of elicitation over explicit correction by the teacher. They also wanted the teachers to help them notice the gap between what they produced and what they should have produced. Except for recast, generally speaking the CFMs used by the teachers in this study were compatible with the students' preferences.

Having scrutinized the major findings of this study in terms of what they might mean, the following section compares and contrasts these findings with similar ones found in previous studies.

6.4 CURRENT AND PREVIOUS RESEARCH FINDINGS

As mentioned above, most of the error treatment studies have examined only one or two aspects of this phenomenon and only three studies in Appendix A which contains fifty-one studies have attempted to investigate this phenomenon holistically. In the following sections, the findings are compared and contrasted with previous research findings in respect of three aspects: CFMs used, teachers' beliefs about and students' preferences regarding error treatment.

6.4.1 Corrective Feedback Moves (CFMs)

In this study, teachers used a range of CFMs that suited the pedagogic focus of their lessons and their preferred instructional techniques. The CFMs most frequently used were elicitation, recast, explicit correction, metalinguistic feedback and verification in the order given.

Apart from verification, all the above CFMs were reported to have been observed, though not necessarily in the same order or under the same names, by previous studies (Cathcart and Olsen 1976; Fanselow 1977; Bruton and Samuda 1980; Lyster and Ranta 1997; Lyster 2001; Panova and Lyster 2002; Morris 2002; Lee 2002; Sheen 2004).

However, the choice of the CFMs in this study was found to be closely linked to, among other things, the pedagogic focus of the lesson and the teachers' preferred instructional techniques. These two factors seem to be absent in all the error treatment studies

reviewed in Chapter 2 and summarized in Appendix A, but found to be determining in this study as explained in 6.3.1 above. It seems reasonable to suggest that if a lesson is dedicated to presenting and practising grammatical structures, the teacher will most likely focus more on the accuracy of the utterances rather than on their content. This, in turn, necessitates selecting the CFMs attuned to the particular pedagogic focus. metalinguistic feedback and explicit correction were used more in the grammar lessons than in the free activity ones. On the other hand, recast was used in the reading and free activity lessons more than in the grammar lessons. Recast is an implicit CFM that, while not conspicuously interrupting the flow of the lesson, nevertheless provides some information about the accuracy of the utterances. Elicitation was extensively used across the three lesson types and was mentioned by all six teachers in the interview as their preferred CFM.

Lyster (2001) and Morris (2002) claimed that recast was used after grammatical errors and negotiation of form moves (elicitation) after lexical ones thus relating CFM to the error type. In this study, it was the lesson type not the error type and also the teachers' preferred instructional techniques that determined the choice between the available CFMs. The high frequency of recast in the free activity lessons of this study when the teachers focused on the content rather than on the formal aspect of the utterance is supported by similar findings of the studies conducted in content-focused instruction contexts (Lyster and Ranta 1997; Drever 2007).

6.4.2 Teachers' Views

In Chapter 2, section 2.6, the importance of considering teachers' views of and students' beliefs about error treatment was discussed. Table 6:1 below presents the findings of the studies summarized in Appendix A in addition to the current one. Teachers' views are dealt with first.

Regarding the previous research findings cited in Table 6:1, there are two points I would like to take up. The first one is the narrow focus of those studies. They nearly always concentrated on the CFMs that teachers stated they preferred to use. In all cases, except for Drever's study, teachers' stated preferences were for explicit correction, elicitation

Table 6:1 Students attitudes towards and teachers beliefs about error treatment

Study	Context	Findings/Students' attitudes	Findings/Teachers' beliefs
Cathcart and Olsen (1976)	Adult ESL learners Mostly Asians	1- Students had a strong positive attitude towards error correction in speaking. 2- Explicit correction, metalinguistic feedback and elicitation were the three most preferred CFMs.	1- Teachers' preferred CFMs were explicit correction, elicitation and metalinguistic feedback.
Schulz (1996)	Adult multinational EFL learners	1- Students had a strong positive attitude towards error correction in class.	1- Teachers were divided over correcting pronunciation or grammatical errors that did not interfere with comprehensibility in speaking.
Lee and Ridley (1999)	Adult Chinese EFL learners	1- Students were well disposed towards error correction. 2- Direct and indirect methods of correction were preferred by students. 3- Explicit correction by teacher was regarded as more effective than peer or self-correction	
Lee (2002)	Adult multinational ESL learners	1- Explicit correction, recast and grammatical explanation were the most preferred CFMs. 2- Students were divided over self-correction.	1- Teachers considered learners' ages and native culture as more important than gender in dealing with their errors.
Jeon and Kang (2007)	Adult students learning Korean	1-Students had a strong positive attitude towards error correction. 2- Giving explicit rule explanation by teacher was the most preferred CFM.	1- Linguistic accuracy was valued highly by 90% of the teachers. 2- Teachers preferred using elicitation over explicit correction.
Drever (2007)	English in multilingual classrooms in England	1- Students had a positive attitude towards error correction. 2- They mainly wanted teachers to be consistent. 3- They did not mention any specific CFMs	1- Teachers preferred covert feedback moves, for example, recast over the other CFMs.
This study	EFL in a military school in Saudi Arabia	1- Students have a positive attitude towards error correction. 2- Elicitation was favoured over explicit correction by teacher. 3- Short and simple grammar explanation was regarded as important in error treatment.	1- Error treatment was seen as a complex process and teachers felt they lacked explicit knowledge of the available CFMs. 2- Error treatment and tolerance was contingent on a host of factors including lesson type, teachers' views, students' beliefs and the teaching context.

and metalinguistic Feedback when dealing with learners' errors. Drever's study was concerned with error treatment in multilingual primary classrooms in England. In this case, learner's age, I believe, determined the preferred CFMs. Recast was the most preferred CFM in this study.

Adult learners may benefit from explicit correction and metalinguistic feedback but primary school pupils, in the long run, can probably benefit more from modeling and implicit CFMs such as recast.

Although this study reports similar findings in respect of the preferred CFMs, it throws more light on the factors that affect teachers' preferred use of CFMs because the teachers were invited to elaborate on them. These factors included lesson type, teachers' beliefs, learners' variables e.g. culture, age and attitude and the exigency of the teaching context.

The second point is concerned with the data collection tools used. Nearly all the previous studies relied heavily on questionnaire as a data collection tool. Although questionnaires are a good way of collecting certain types of information quickly and cheaply, they do not lend themselves to probing and thus do not yield rich data. Even the two studies that claimed to have used interview did not present in-depth analysis of their interview data. For example, Drever (2007:9) reports, "In each school one teacher completed a questionnaire and a second teacher in a separate school was interviewed. The questionnaire and interview were cross-validated." It seems to me that the study used a structured interview, which is very close to a questionnaire to, cross-validate the questionnaire used. This assumption is supported by Drever's (2007:9) statement "A sample of eight teachers was selected from the questionnaire respondents for the observation study which told me if teachers did in reality what they said they did in the questionnaire." As for Lee's study, the interview was used informally and concentrated on only one aspect: whether or not teachers varied their way of dealing with errors according to gender.

The Research interview was an integral part of this study and has provided rich data about both error treatment and tolerance. The findings of this study were particularly

enriched by the NSTs who, from past experience gained in different parts of the world stressed the effect of both learners' attitudes and teaching context on error treatment.

The idea of interviewing teachers is not an original idea claimed by this study. It was a recommendation made by one of the first systematic error treatment studies (Fanselow 1977) but not adequately used in error treatment studies. This may have been because of the problems concomitant with using the research interview, for example, the time and effort needed to conduct, transcribe and analyze qualitative data. Using the DHL analysis technique explained in Chapter 3 enabled the researcher to minimize the problems associated with transcription. It is even possible to analyze the data without any transcription at all.

6.4.3 Students' Attitudes

Table 6:1 also indicates that regardless of the language learning context, students showed a positive attitude to error correction but differed slightly in respect of how they wanted their errors treated. A closer examination of the studies cited above reveals that most of the students surveyed in the first four studies were Asians. Their preference for explicit error correction by the teacher may reflect their culture of learning and teaching and particularly their perception of teacher. Jin and Cortazzi's (1998) extensive research in China shows that the students in that culture regard the teachers as the source of knowledge and expertise in the classroom. The same view is shared by Lee and Ridley (1999) and perceived by the interviewed teachers in Lee's (2002) study. So, learners' culture is clearly a determinant factor in error treatment. Similar views were expressed by NST 3 and NST 4 in the interviews when they reported on their teaching experience in Brunei, Morocco, Italy and Germany

As mentioned previously, learner's age is also a factor. Young learners, as in the case of Drever's study cited above, were unable to explicitly state their preferences and so they could not specify any particular CFMs but their main concern was the teacher's consistency in dealing with their errors. Consistency is desirable but different activities require different CFMs errors. Learners' age was reported in the interviews of this study by a number of teachers as a determining factor.

It is possible that the findings of this study might hold for Arab students in general but further research is needed. Though the questionnaire was concerned only with Saudi students, NST 3, who had had experience in other Arab countries such as Qatar and Morocco, observed a similar positive attitude in those countries towards error treatment.

However, a word of caution needs to be injected here. The questionnaire data of this study is related to the ideational aspect of culture (participants' actual beliefs) and NST 3 observation was concerned with the materialistic aspect of culture (what is observed). In this study, students claimed that they preferred elicitation over explicit correction. My own experience is at odds with the students' replies. In this teaching context, students usually prefer explicit correction by the teacher but, I believe, for a different reason than the Asian students. The question is, why did they report that they preferred elicitation more than explicit correction? A number of researchers caution us against using attitude scale as truth and honesty are sometimes at stake (Openheim 1992; Taflinger 1996). Self-esteem, pride and self-image are involved. Elicitation for the purpose of self correction gives the impression of maturity and independence. Explicit correction may connote laziness and dependence on others. Therefore, these students may have stated a preference for elicitation over explicit correction in order to save face. In depth interviews of these students and observing their behaviour when errors are treated could throw more light on this issue.

Investigating learners' beliefs and their attitudes towards different aspects of language teaching and learning begs two questions regarding the purpose of the exercise and what should follow after that. Researchers have divergent views in this respect. Lee and Ridley (1999:34) pointed out, "Since this is students' preference, we should include it in our pedagogic programme." On the other hand, Shulz (1996:343) stresses the need "to establish a fit between teachers' and students'" expectations. Jeon and Kang (2007) recommend that teachers need to explain to the students why they use certain types of CFMs, particularly when the learners are adults and have learned a second or a foreign language before.

Language learners are not, even if they are adults, necessarily cognizant of what language teaching and learning entail. However, if their beliefs are not made explicit, then they cannot be evaluated. I agree with Jeon and Kang (2006) that learners need to know why certain CFMs are used. This study highlights the close relationship between the CFMs teachers use and the lesson type. This could be explained to the students so that they do not feel that they have been cheated if the teacher does not correct their errors in free activity lessons when the emphasis is on the content of the message rather on the form of the utterance.

6.5 THE APPROACH AND THE METHODS USED

In general, there is no good or bad research method. The objectives of the study, the adopted research paradigm, the available resources and the sensitivity of the issue being researched, are among the factors that determine both the approach and the methods. In Chapter 3 it is emphasized that the research design should explicitly show the interconnectedness of the different parts and the coherence of the study as a whole. Figure 3:3, in Chapter 3, highlights the interconnectedness of the different parts of the research design, Figure 3:6 illustrates the strong relationship between the three data collection tools used and Figure 3:7 demonstrates the holistic analysis of the data. A critique of both the approach and methods used is presented in the following sections.

6.5.1 Different Approaches to Error Treatment

The studies summarized in Appendix A can be classified into three main categories: observational, experimental and holistic. The observational studies focused on the observed behaviour of the teachers when errors were committed, recording different types of errors made and the CFMs employed. Some of these studies attempted to relate self-correction to the CFMs utilized. Others tried to link error types with the CFMs used. On the other hand, the experimental studies examined the effect of a specific treatment by manipulating the variables involved and conducting pre, after and sometimes postponed tests to measure the effect of the treatment. More than 90% of the studies in Appendix A are either observational or experimental.

Both observational and experimental studies have enriched our knowledge about the error treatment phenomenon. Thanks to the observational studies, we are better acquainted with what teachers usually do when errors are made in different language learning contexts. Also the observational studies have recently focused on the relationship between CFMs and learner self-correction. Self-correction is strongly advocated by second language theorists as it is supposed to enable learners to check their hypotheses and retrieve what they have learned before through their pushed output. Experimental studies have, among other things, focused on testing the effect of different CFMs in leading learners to self-correct. Experimental studies, generally speaking, have reported positive effects of explicit negative feedback moves such as explicit correction, metalinguistic feedback and elicitation over implicit feedback moves such as recast (Lyster 2004; Takimoto 2006; Ammar and Spada 2006; and Ellis et al 2006).

A small number of studies investigated error treatment holistically (Cathcart and Olsen 1976; Lee 2002; Jeon and Kang 2007 and Drever 2007). Holistic studies tend to examine error treatment from more than one aspect including both the observed behaviour and the underlying beliefs of the participants and the environmental factors. Such studies can enlighten us of the interconnectedness of the factors involved in error treatment. This study falls in this category.

6.5.2 General Purpose of the Study

Coming to grips with what the error treatment process entails, how it is regarded and executed by the NSTs and the NNSTs and the students' perception was the main objective of this study. This, in turn, required examining the phenomenon from different perspectives. As for the research paradigm adopted, I am a strong believer in the natural ecological hypothesis as explicated by Wilson (1982), cited in Nunan (1998). The main tenet and the one that concerns us here is that behaviours are context-shaped and determined. Added to that, I also believe that we generally behave in a principled way on the basis of our own beliefs and attitudes. Blending the two notions together, one can say that our behaviours reflect our beliefs and are responsive to the context we find ourselves in. Projecting this to error treatment, I believed examining the two aspects of culture: the

ideational and the materialistic, as explicated by Maxwell (1996) would provide me with relevant data to understand the error treatment process. The general objective of the study was translated into a set of research questions outlined in Figure 3:3.

6.5.3 The Approach, Methods and Techniques Used

The ethnographic approach was selected for reasons defined in Chapter 3 including the research questions, the absence of ethnographic research in error treatment studies and the general dissatisfaction with the quantitative approaches in second language acquisition. The basic principles of this approach are also outlined in Chapter 3. They all revolve around the importance of culture, the holistic and contextual nature of ethnographic research in addition to taking into account both the ‘emic’ and ‘etic’ perspectives.

These principles were realized in this study in the following manner:

- 1- Observing teachers teaching different lesson types and analyzing the classroom data according to a flexible model of error treatment satisfies the ‘etic’ perspective, the materialistic aspect of culture (the observed behaviour) as well as the principle of context which is concerned with studying people in natural occurring settings.
- 2- Interviewing teachers regarding their beliefs about error treatment fulfils the ‘emic’ perspective as well as the ideational aspect of culture on the part of the teachers.
- 3- Administering a questionnaire to a sample of students in the same school satisfies the ideational aspect of culture and the ‘emic’ perspective on the part of the students.
- 4- Analyzing the data holistically – Chapter 5 – meets the holistic principle of ethnographic research.

In my view, a major contribution of this study is the DHL analysis technique, as explained in detail in Chapter 3. This technique helped the researcher minimize representation, reliability, validity and time and effort problems usually associated with transcription. Representation basically means how the researcher represents the voices of the subjects.

Transcripts, in addition to being one step further from the actual data, are dead texts; devoid of essential elements such as the tone of the voice which can communicate more than what scattered words on the surface of a page can do. A very clear example in this study is NST 1 comments on the effect of the teaching context of the study and how dry the course is with the result of being not himself in the classroom. Listening to the NST 1 hyperlinked sound files communicates more than just reading a transcript of what he said. Using this technique, I did not have to represent the voices of the subjects. Throughout the research process, I was able to access the original data at any time.

Traditionally, after the research interview data and classroom observation data is transcribed, the analysis is usually based on the transcripts thus it is one step further from the actual data. Added to that, if there were any discrepancies between the actual data and the transcripts (which is possible), they cannot be rectified. Thanks to the DHL technique both the transcription and the analysis stages were amalgamated into one stage with both the interview and classroom data. Only the parts that the researcher deemed important for inclusion in the body of the thesis were transcribed. Day (1996) explains the concepts of reliability and validity in simple language. He gives an example of telling time. "If my watch is reliable, it will be consistent, going fast nor slow. If my watch is valid, it will tell the right time" Here, the actual data was accessed in the analysis stage, during the writing up of the thesis and examples of it are available now for the academic community to check any claims made.

Another procedure that is believed to enhance reliability of ethnographic research is reported by LeCompte (1982). He recommends detailed representation of the methods used so that other researchers can use the original report as an operating manual by which to replicate the study. In Chapter 3 the DHL technique is described in detail for other researchers to replicate.

As for validity, Hammersley (1992:69) states, "An account is valid or true if it represents accurately those features of the phenomena that it is intended to describe, explain or theorize." In this study, all the three data collection tools examined the same phenomenon from different perspectives, thus providing triangulation. Using the DHL analysis

technique enabled me to divide each lesson into exchanges that included the features of the classroom discourse structure of IRF. With the help of the Play Looped function in the sound editing programme, I listened to each exchange as many times as needed. The same procedure was followed with the research interview.

Having said that, there are other procedures that could have increased the reliability of the findings such as member-checks for the research interview data and tests of inter-rater reliability for the classroom observation data. Asking the interviewed teachers to check my categorization system of what they said could have enhanced the reliability of the findings.

Finally, I would like to point out that the major drawback of the DHL analysis technique, and one that was not a time saver at all, is the danger of losing the links. If either the location of the sound files or of the word document files is changed, the links are disestablished. It is a time-consuming process to re-establish the links. This is a technical problems that needs sorting out. Keeping the same directory structure on the hard disk throughout seems to be the solution.

CHAPTER 7

CONCLUSION

7.1 RESEARCH OBJECTIVES AND FINDINGS

Since the incident with the primary school pupil mentioned in Chapter 1, I have been interested in studying learners' errors. My interest has developed from error analysis to error treatment as perceived and practiced by the NSTs and the NNSTs. The two pilot studies referred to in Chapter 3 and which were concerned with the treatment of classroom oral errors as perceived and practiced by two teachers, one NST and one NNST, convinced me that increasing the number of lessons to observe, diversifying the lesson types and interviewing more teachers would provide me with enough data to understand the phenomenon of error treatment holistically, which was the main objective of this study.

This study has yielded a number of findings discussed in detail in Chapter 6 and summarized here. The first major finding is that error treatment is a complex phenomenon and, to do it justice, it needs to be investigated holistically. The study also shows that teachers seem to lack explicit knowledge of how to deal with learners' errors, indeed, such knowledge is taken for granted. Observational and experimental studies tend to focus on one piece of the puzzle overlooking other pieces of the puzzle that can be as important.

The second main finding is that how teachers treat learners' errors may not be contingent primarily on whether teachers are native speakers or not. It depends mainly on the lesson type, the teachers' preferred techniques and their views about error treatment and the impact of the teaching context.

The third important finding is that all CFMs have functions to perform and the effectiveness or the appropriateness of one CFM cannot be decided a priori. The pedagogic focus of the lesson should be the guiding principle in choosing which CFM to use. For example, recast has been found by a number of researchers to be the least likely

CFM to lead to self-correction and hence they, either explicitly or implicitly, recommend that teachers should use other CFMs, for example, elicitation or metalinguistic feedback that enable learners to self-correct their errors. I would argue here that recast is the most appropriate CFM when the focus of the lesson is on communication and not on the accuracy of the utterances. Using elicitation and metalinguistic feedback moves in communicative oriented teaching would interrupt the flow of the lesson and the students' attention would be diverted to focusing on the formal aspects of the message rather than on its content. In the teaching context of this study emphasis is nearly always on the accuracy of the utterances. There would seem to be a need for some teaching in which explicit error correction is relaxed, thus giving more room for communicative teaching. This is in line with Lyster and Mori's (2006) *counterbalance hypothesis* which means that connections between changes in long-term memory and actual language use may be strengthened when attentional focus is shifted from form to meaning in a form-oriented context and from meaning to form in a meaning-oriented context.

Though the study partially confirms previous research findings particularly the error gravity research, the fourth finding highlights the other factors that make teachers' more or less tolerant of learners' errors. They include the pedagogic focus of the lesson and the teachers' preferred instructional techniques.

The last finding is that Arabic speaking students may hold a positive attitude towards error correction and they claim that they prefer elicitation over explicit correction. The students' perceived preferences need to be checked against their actual behaviour when teachers treat their errors.

7.2 GENERAL CONCLUSIONS

The findings discussed briefly above indicate the following:

- Generally speaking, lesson type, teachers' views about language learning in general and error treatment in particular and their preferred instructional techniques determine the CFMs they use regardless of being NSTs or NNSTs.

This complements findings reported by Lyster (2001) that related CFM types to error types.

- It is important to note that teaching context, including course objective and requirements and learners' variables e.g. culture and linguistic abilities, came out as having a direct impact on error treatment as expressed forcefully by the teachers, particularly, the NSTs in the interviews. None of the studies summarized in Appendix A examined the effect of the teaching context on error treatment. It was a recommendation made by some researchers and this study confirms the impact of the teaching context on error treatment.
- Each teaching context is unique. In Chapter 2 a case was made with regard to the danger of generalizing research findings from a first language context to a second or a foreign language context. What is possible in the context of this study was not possible in, for example, Brunei though the two contexts can be subsumed under the foreign language context. This means that research findings in error treatment need to be treated very cautiously because of the number of variables involved.
- NSTs and NNSTs, together, are worth more. Given the international status of English now, the issue of NSTs and NNSTs is not as contentious as it used to be. Medgyes (1992 and 1994) pointed out the advantages enjoyed by each group and the title of his article (1992) "Native or non-native: who's worth more?" gives the impression that one group should be better than the other. The situation is rather different in 2007. It is not who's worth more, but what can we achieve together? Each group of teachers has something to offer to the other group. Only when we appreciate and respect our differences, can we benefit from each other when we work in the same workplace. Gill and Rebrova (2001) report several successful examples of co-operation between the two groups in Central Europe in the fields of course design and implementation, materials production, assessment and teacher training. I strongly support Gill and Rebrova's (2001:12) call for cooperation between NSTs and NNSTs and agree with their conclusion, "We prefer to think that all teachers, whether NESTs or non-NESTs, are worth a lot and that we are worth even more when we work together."

There is room for co-operation between NSTs and NNSTs in the area of error treatment. For example, James (1998) noted that principled error correction is applied error analysis. Mother tongue interference is one of the sources of errors. NNSTs can help NSTs in this area. On the other hand, as explained in Chapter 6, NNSTs have learned English via structural courses and most of their experience has been in teaching similar ones and this has made them less tolerant of learners' errors than NSTs. Many NSTs have taught courses of all types as a result of working in different contexts. They can help NNSTs in this area.

7.3 LIMITATIONS OF THE STUDY

Though the study's title is "Treatment of Classroom Error Treatment: A Comparative Study between NSTs and NNSTs", generalization beyond the context of this study must be approached with caution as teaching contexts are not entirely compatible. For example, Japanese NNSTs may be different from Arab NNSTs and English is learned for varied purposes. What can be generalized is the framework this study suggests which is: Error treatment and tolerance are contingent on a host of factors, including but not limited to, lesson type, teachers' views about error treatment, the organizational culture and the learners' variables. This is the type of knowledge that, I believe, can be generalized.

Though the DHL analysis technique used in this study was very useful in lessening the problems of representation, validity and reliability which are usually associated with transcription, it is not without problems. It requires the researchers to be quite familiar with two other computer programmes in addition to Microsoft Word . Understanding how the different objects, particularly tables and forms, in a database work and being able to design and modify these two objects are imperative. Also knowing the basics of sound editing is essential. Converting analogue format sound files into digital, marking sections of the sound file and saving them separately, reducing the level of noise are among the required skills. This is in addition to being familiar with the concept and know-how of hyper-linking. The Possibility of losing links as a result of relocating files is high. I believe it is a technical problem that requires help from more specialized computer

people. This study could also have benefited from comparing the DHL analysis technique with the available commercial programmes used to analyze qualitative data.

Though the main objective of the study is to examine the process of error treatment holistically, the students' actual behaviour during the error treatment process has not been investigated. The survey data gave the researcher information about what the students believed they preferred. This perceived preference needs to be checked against actual practice. In this study, most the students stated that they preferred elicitation over explicit correction by teacher. As an insider researcher, my observation tells me the opposite. The students in this context usually want teachers to give them the correct answer and few of them demonstrate a preference for self-correction of errors.

Only half of the observed teachers were interviewed. I believe interviewing all the teachers could have made the comparison between the two aspects of culture: ideational (beliefs) and materialistic (observed behaviour) on the part of the teachers more reliable.

The study lacks some reliability and validity measures. For example, member checks and inter-rater reliability measure could have enhanced both the validity and the reliability of the findings of this study. Member checks, in this study, would have meant going back to the interviewed teachers and seeking feedback from them on the interview categories. This measure was taken with one teacher only for reasons beyond my control. Though some researchers, for example, Dey (1996) states that the validity of the researchers accounts does not depend on acceptance by those who are subjects of it, I believe that such a procedure could have enhanced the validity of the account given. Inter-rater reliability measure could have been applied to classroom data analysis. This would have meant giving some exchanges to someone who is familiar with classroom research to analyze using the model used in this study and then comparing his analysis with mine to reach an acceptable inter-rater reliability measurement.

7.4 DIRECTION FOR FURTHER RESEARCH

Nearly 40 years ago Annet (1969) recommended that feedback needed to be both informative and encouraging. Vigil and Oller (1976) pointed out that the type of feedback learners get may be responsible for fossilization. When errors are committed learners get two types of feedback: cognitive and affective. Cognitive feedback is the information given regarding the errors committed. Affective feedback is the emotional reactions concomitant with the cognitive feedback. The incident reported at the beginning of Chapter 1 was more related to the affective than to the cognitive aspect of feedback. In fact, I was not encouraging at all. I was too hard on that young pupil. I will never know how much and in what way this incident affected that pupil. Our common sense and experience tell us that the effectiveness of a message is dependent not only on its content but also on how it is delivered.

Nearly all the error treatment studies referred to in this study and this one have investigated error treatment from the cognitive perspective: the CFMs teachers use, the relationship between CFMs and self-correction etc. The effect of affective variables has not been examined. Cognitive and affective factors need to go hand in hand.

With the DHL analysis technique it is possible to study the emotional reactions associated with cognitive feedback as the problem of representing the voices of the subjects in written form will no longer exist. Even better, Tsutsui and Kato (2007) present a new multi-media feedback tool which is designed to provide learners with both written and oral feedback to their videotaped performance and to link those comments to corresponding portions of the video. This multimedia feedback tool is called *Language Evaluator* developed by the University of Washington's Technical Japanese Program. The *Language Evaluator* is based on the same idea as the DHL analysis technique: digitizing analog video material and dividing the lesson into video clips which are linked to both the written and oral feedback given by the teacher but it was developed for a different purpose. It is easy to modify this technique for research purposes and this will make investigating the affective aspects of feedback more possible than ever before particularly as video digital cameras are more readily available and cheaper than before.

Using video digital cameras will provide researchers with digitized lessons that can be imported easily into a video editing programme such as Windows Movie Maker, divided into clips or exchanges and both the cognitive and affective aspects of feedback can be studied.

Increasing wait time has been reported by some researchers to be effective in enabling learners to self-correct. It has been observed in this study that repeating the question emphasizing the key word or words in the question and increasing wait time helped the students to self-correct. Extract 5 in Chapter 5 above illustrates clearly the effectiveness of increasing the wait time. Using the DHL Technique or a modified version of *Language Evaluator* referred to above could be very useful in studying this aspect. Once the recorded data is in a digital format, it is very easy to count the wait time accurately.

7.5 RECOMMENDATIONS

Corrective feedback permeates classroom discourse regardless of the pedagogic focus of the lesson, particularly in foreign language learning contexts where learners do not have enough exposure to the target language outside the classroom. However, this aspect of classroom discourse, albeit important, has not been investigated properly and teachers, as this study has illustrated, seem to lack conscious knowledge of this important process. Knowing how to treat learners' errors is no less important than knowing how to teach the different language skills. This study underscores the complexity of the error treatment process and the need for a holistic approach for studying it properly. I believe it is beyond the capabilities of individual researchers to achieve well attested findings. I suggest that schools of education should pay error treatment the attention it deserves by setting up error treatment research projects in different language learning contexts and by increasing the would-be teachers' awareness of this phenomenon through seminars, workshops, assignments etc.

The general purpose of applied linguistics research is to understand and improve how languages are taught and learned. It has been reiterated in this study that language learning contexts: first, second and foreign, are not identical and within the same

language learning context each teaching situation has its unique features. This makes generalization more difficult. I believe action research can be the ideal solution. Both error treatment and action research are context-related. This research orientation can provide practical solutions to already felt problems.

In this study, the research interview has provided very rich data about error treatment and I believe more use of the research interview can increase our knowledge of error treatment. It is the teachers who deal with the errors in the classroom and focusing on what they do without listening to their views gives us half-truths.

Because of their widespread use in discourse analysis, first, second and foreign language acquisition, feedback moves are used under different names and this confuses new researchers. For example, if a teacher recasts a student's ill-formed utterance but the student does not repeat the correction and the teacher moves on to a new topic, can recast be subsumed under corrective feedback moves or not? Are prompting and clarification requests ways of eliciting the correct response from the error maker or not? There is a need to standardize the terms used in error treatment research if not across the disciplines that study feedback, within each discipline. This, I believe, will make comparison across different studies more accurate.

In spite of the time this study has taken, it has been stimulating and interesting. Confronting problems such as transcription and being able to come up with a solution was very rewarding. The study has contributed to the body of research in error treatment particularly in the area of methodology. It has given me greater understanding of how errors should be treated and the different factors that affect teachers' decisions. I hope it can also provide a framework for others to research their own teaching.

APPENDIX A

<i>No</i>	<i>Author(s) & Year</i>	<i>Purpose</i>	<i>Context</i>	<i>Methodology</i>	<i>Findings</i>
1	Holley and King (1975)	Compare imitation with error correction through increasing students' perception of the patterns being taught	Foreign language	Transcripts of video recorded lessons	1. Cueing, rephrasing and increasing wait time proved to be more beneficial than merely giving the correct patterns.
2	Cathcart and Olsen (1976)	Investigate students' and teachers' beliefs about error correction and how errors were corrected in classroom	Second language	Questionnaires Transcripts of recorded lessons	1. Students wanted more correction than they thought they had received. 2. Giving the correct answer was the preferred error treatment type by students and the most used by teachers.
3	Fanselow (1977)	Find out what type of error gets corrected and how	Foreign language	Transcripts of recorded lessons	1. Grammatical errors were the least corrected errors. 2. Explicit correction by the teacher was the norm.
4	Chaudron (1977)	Investigate how errors are corrected. Design a model to reflect teacher's reactions to learners' errors	Content focused instruction	Transcripts of recorded lessons.	1. The use of repetition with emphasis increased the chances of successful responses from the students.
5	James (1977)	Compare native and non-native speaking teachers' judgments of the seriousness of learners' errors	Discrete out- of- context sentences containing errors	A questionnaire around 10 categories was given to 20 NSTs and 20 NNSTs judges.	1. NSTs were more tolerant of learners' errors than NNSTs. 2. There was a remarkable difference between the two groups in respect of their assessment of the errors presented to them.
6	White (1977)	Analyze a sample of learners' errors. Find out which type of error (developmental or transfer learners can be corrected) when presented to learners in written form.	Second language	Responses to Bilingual Syntax Measure were recorded Errors were given to students to correct	1. More developmental errors than transfer were found. 2. 50% of the errors were corrected by the students. 3. Advanced students corrected more errors.
7	Politzer (1978)	Find out how errors are perceived and evaluated by native speakers	Discrete out-of- context sentences containing errors	Reactions of 146 teenagers to 60 pairs of sentences containing errors were analyzed.	1. The errors were perceived in the following rank order: Vocabulary, verb morphology, word order, gender, phonology and case ending.
8	Guntermann, (1978)	Find out which type of error impedes communication more	Discrete out of context sentences containing errors	30 native speakers of Spanish listened to recorded discrete sentences containing errors to determine which type of error	1. Grammatical errors were not serious impediments to comprehensibility.

				impeded communication most.	
9	Bruton and Samuda (1980)	Investigate what type of errors learners correct their peers and how they do that	Second language	Observation Videotaped lessons. Errors identified by native speaking teachers.	1. Formal errors passed unnoticed. 2. Lexical errors were the most corrected ones. 3. The most frequently used error treatment was straight alternative by peer. 4. The least type was :correction by self
10	Chastain (1980)	Gauge native speakers' reaction to errors identified by classroom teachers in respect of comprehensibility and acceptability of sentences containing errors	Discrete out-of-context sentences containing errors	40 Spanish university students evaluated 35 sentences containing errors	1.Comprehensibility was most affected by lexical errors, for example, the use of the wrong word or the addition or omission of content words.
11	Piazza (1980)	Determine the effect of grammatical errors on comprehensibility Determine the degree of irritation caused by such errors	Discrete out-of-context sentences containing errors	264 French native speakers residing in Paris evaluated sentences containing errors.	1. Irritation caused by learners' errors was judged more severely than lack of comprehensibility.
12	Albrechtsen et al (1980)	Assess native speakers comprehension of stretches of discourse containing errors	Stretches of discourse containing errors in an interview context	150 native British informants evaluated stretches of discourse produced by Danish learners in interview context	1.The intelligibility of learners' sentences containing errors were contingent on the context in which they occurred.
13	Delisle (1982)	Evaluate the seriousness of different error types	Discrete out-of-context sentences containing errors	193 German native speaking students evaluated 60 pairs of sentences containing errors.	1.Lexical errors were found to be more serious than grammatical errors.
14	Hughes and Lascaratou (1982)	Evaluate the perception of NSTs, native speakers non-teachers and NNSTs.	Discrete out-of-context sentences containing errors	30 judges evaluated 35 sentences containing errors.	1. Native speakers were more tolerant of learners errors. They judged for comprehensibility. 3. Non-native speakers judged for accuracy. 4. Lexical errors were the most serious type of errors.
15	Ensz (1982)	Assess degree of irritation different types of errors cause to native speakers	Discrete out-of-context sentences containing errors	French native speakers evaluated errors produced by American students learning French.	1. Grammatical errors were found to be the least tolerable type of error made by American speakers of French.
16	Chun et al (1982)	Find out what type of errors gets corrected by native speakers when they communicated with non-native speakers	Second language Free conversations	Transcripts of recorded material	1. Native speakers rarely corrected errors in natural conversations. 2. Factual, discorsal and lexical errors were corrected more often than grammatical ones.
17	Yoneyama (1982)	Compare novice with experienced teachers in their treatment of learners'	Foreign language Form focused	Transcripts of recorded lessons	1. In-experienced non-native speaking teachers tended to give lengthy grammar explanation in the

		errors	instruction.		learners' language.
18	Chenoweth (1983)	Evaluate ESL students' preference for error correction by their native speaker friends	Second language Free conversations	A questionnaire to group of ESL students with different mother tongue backgrounds	1. Except for the Koreans, students showed positive attitude towards error correction.
19	Brock et al. (1986)	Find out the relationship between the errors corrected by native speakers in natural settings, the treatment given and any effect in the same conversation	Second language. Free conversations	Transcripts of recorded material	1. Lexical errors were the most corrected type. 2. No effect of error correction in the same conversation was traced.
20	Day et al. (1983)	Find out what type of error is corrected by native speakers and how errors are corrected	Second language. Free conversations	Transcripts of recorded material	1. Lexical, factual and discoursal errors were corrected. 2. Only 9% of the errors were corrected. 3. Three correction types were used: focused correction, embedded correction and confirmation checks.
21	Day et al. (1984)	Investigate how native speakers provide corrective feedback to their non-native speaker friends	Second language Free conversations	Transcripts of recorded material	1. Less than 8% of all errors were corrected. 2. Two types of corrective feedback were identified: on record and off record.
22	Sheorey (1986)	Judge the seriousness of different types of errors	Discrete out-of-context sentences containing errors	Two groups of judges; 62 native speaking teachers of American English and 34 college-level ESL teachers from India	1. Native speaking teachers were more tolerant of learners errors than non—native speaking ones. 2. They agreed that verb -related errors were the most serious type of error but differed in rating lexical and spelling errors.
23	Tomasello and Herron (1988)	Compare two techniques of teaching grammatical exceptions: error prevention and inducing learners to make errors and then correct them	Foreign language Form focused instruction.	Experimental design	1- The group that were induced to make errors and then correct them outperformed the group that were warned against exceptions during the presentation stage of the lessons.
24	Herron and Tomasello (1988)	Compare feedback with modeling in learning grammatical structures	Foreign language Form focused instruction	Experimental design.	1.The feedback condition group made fewer errors in the post test than the modeling group.
25	Bereta (1989)	Find out if teachers teaching task based syllabus attend to form or meaning	Foreign language Task based course	Transcriptions of 21 lessons	1. Content errors were corrected. 2. Formal errors were ignored. 3. Very few explanations and exemplifications were given.
26	White (1991)	Compare both negative evidence with positive input alone	Foreign language Form focused instruction	Experimental design	1- The group that received negative feedback outperformed the group that did not receive negative feedback in the three tests given.
27	Carroll et al (1992)	Examine the effect of explicit error	Second language.	Experimental design	1. Experimental group outperformed the control

		correction on learning morphological generalizations			group in the feedback responses. 2. The learning of absolute exceptions was more likely among advanced learners.
28	Dekeyser (1993)	Test the relationship between aptitude, motivation and anxiety and the effect of error correction as manifested in grammar knowledge, oral fluency and oral accuracy	Foreign language	Experimental design	1. Error correction had no effect on the whole. 2. Error correction was found to interact with other learner variables: linguistic level, motivation, and anxiety level.
29	McCreton and Rider (1993)	Evaluate NSTs and NNSTs perceptions of learners' errors To find out if a universal hierarchy of errors could be built regardless of being native or non-native of English.	Discrete out-of-context sentences containing errors	Evaluation of 25 sentences containing errors by 20 judges: 10 NSTs and 10 NNSTs	1. NNSTs evaluated errors more seriously than the native speakers counterparts. 2. There was a close correlation in the rank order of the seven grammatical categories included in the examined sentences.
30	Ellis et al (1994)	Replicate Tomasello's and Herron's study (1988) above	Foreign language Form focused instruction	Experimental design	1. No significant statistical difference was found between the two conditions.
31	Aljaafreh and Lantolf (1994)	Examine the correction/learning interface from within the 'sociocultural theory of mind'.	Second language	Interviewing 3 students and discussing their written mistakes	1. Individual difference are important. 2. Necessity of dialogic interaction between teachers and learners.
32	Schulz (1996)	Investigate students' and teachers' beliefs about the importance of grammar and error correction	Second language	Questionnaire	1. 86% wanted to be corrected in class when they make mistakes. 2. 95% of the Arab students wanted to be corrected in class when they make mistakes. 3. Teachers and students disagreed in respect of correcting orals errors with 90% for students and 34% for teachers.
33	Lyster and Ranta (1997)	Find out the different types of feedback used in immersion schools in Canada and which feedback type lead to learner uptake	Content focused instruction	Transcripts of recorded lessons	1. Recast prevailed though led to less learner uptake. 2. Elicitation led to more learner's uptake.
34	Lyster (1998)	Look at the pragmatic functions of both recasts and non-corrective repetitions	Content focused instruction	Transcripts of recorded lessons	1. Recast was the most frequently used feedback type. 2. Elicitation, metalinguistic feedback and clarification requests led to more student generated repair than recast.
35	Lee and Ridley (1999)	Investigate learners' views about learning standard English and error	Foreign language	Questionnaire	1. Both groups were well-disposed towards error correction.

		correction.			
36	Lyster (2001)	To investigate the relationship between error type, corrective feedback move and learner repair	Content focused instruction	Transcripts of recorded lessons	1- Recasts were used after grammatical and phonological errors and negotiation of form after lexical errors. 2- Overall, negotiation of form proved to be more effective at leading to immediate repair than recast or explicit correction.
37	Panova and Lyster (2002)	Investigate the relationship between corrective feedback and learner uptake	Second language	Transcripts of recorded lessons	1- Teachers preferred forms of implicit feedback e.g. recast and translation leaving little opportunity for other feedback types that encourage learner-generated repair.
38	Mennim (2002)	Examine the effect of self-correction of oral presentation transcripts on learners' later performance	Foreign language	Transcripts of the rehearsal were checked first by learners and then by teachers Transcripts of the rehearsal were compared with those of students' presentation two weeks later.	1- A considerable improvement in grammar and pronunciation was noticed in the students' final presentation. The organization of content also improved.
39	Morris (2002a)	Examine the relationships among error types, feedback types and immediate repair	Foreign language	Transcripts of recorded interaction between students working in pairs.	1- Negotiation moves proved more effective in immediately repairing errors than did recasts.
40	Morris (2002b)	Study the relationships among error types, feedback types and immediate repair	Foreign language	Recording and coding interactions between students working in pairs on the same jigsaw puzzle in a computer mediated lessons	1- Learners did not provide explicit negative feedback. 2- Learners used recast and negotiation. Negotiation was used mainly after lexical and syntactic errors and it proved more effective at leading to immediate repair of errors than did recasts.
41	Lee (2002)	Examine the effect of gender on teachers' error treatment	Second language	Classroom observation Survey of students Interviews of instructors	1- Male students received more error treatment than female ones. 2- Explicit correction, requests, metalinguistic explanations were the most frequently used corrective feedback moves. 3- Students were in favour of explicit correction and grammatical explanation. They were undecided about self-correction and against after class correction or correction via e-mail. 4- Teachers reported that they considered learner's

					age and native culture when correcting errors.
42	Philip (2003)	Investigate the extent that learners may notice native speakers' reformulation of their interlanguage grammar in the context of dyadic interaction	Second language	Second language learners received recasts of their non-target like forms from their native speaker peers.	1- Learners were able to recall 60-70% of recasts. 2- Accurate recall of recasts was constrained by the level of learners, the length and number of changes in the recast.
43	Leeman (2003)	Investigate the variables that conflate with recast and make it more effective as a corrective feedback move	Foreign Language	Experimental design	1. The groups that received recast with enhanced salience performed better than the control group.
44	Sheen (2004)	Examine the similarities and differences between corrective feedback moves and learners' uptake	Four settings: French Immersion, Canada ESL, New Zealand ESL and Korean EFL	Transcripts of recorded lessons	1- Recast was the most frequently used feedback in the four contexts. 2- The rates for both uptake and repair following recasts were greater in the New Zealand and Korean settings than in the Canadian contexts
45	Lyster (2004)	To investigate the effect of form-focused instruction and corrective feedback	Form focused instruction	Quasi-experiment design	1- The three experimental groups outperformed the control group. 2- Corrective feedback was more effective when combined with prompts than when it was combined with recasts.
46	Saxton et al (2005)	Investigate the effect of corrective input on the grammaticality of child speech for 13 categories of grammatical error	First language	Recorded material at two points in time	1. Corrective input was associated with subsequent improvements in the grammaticality of child speech for three of the target structure.
47	Takimoto (2006)	Examine the effect of explicit feedback on the development of pragmatic proficiency	Foreign language	Experimental design.	1. The treatment groups performed better than the control group.
48	Ammar and Spada (2006)	Investigate the potential benefits of two corrective feedback moves: recasts and prompts	Second language	Experimental design.	1- The three groups benefited from the intervention. 2- Prompts were more effective than recasts. 3- The effectiveness of recasts depended on the learners' proficiency. High proficiency learners benefited equally from both prompts and recasts whereas low- proficiency learners' benefited significantly from prompts than recasts.
49	Ellis et al (2006)	Investigate the effect of both explicit and implicit corrective feedback on the acquisition of L2 grammar.	Second language	Experimental design	1-Explicit correction was more effective than implicit correction.
50	Jeon and Kang (2007)	Investigate students' and teachers' preferences of error correction	Foreign language Korean	Questionnaire	1- Students always wanted their errors corrected. 2- Explicit correction with explanation was the most

					<p>preferred corrective feedback move followed by elicitation.</p> <p>3- Teachers' frequency of error correction was below what students had expected.</p> <p>4- Teachers used elicitation more than explicit correction.</p>
51	Drever (2007)	Study how teachers taught English and corrected errors	Multilingual classrooms	Questionnaire Interview Observation	<p>1- Covert feedback emerged as the overall feedback type in both the questionnaire and the interview.</p> <p>2- Teachers, generally speaking, corrected learners' errors in the same way mentioned in the interview and questionnaire.</p> <p>3- Students did not mind their mistakes being corrected but they wanted teacher to be consistent.</p>

Appendix B

Attitude Survey of **Spoken** Classroom Language Errors and How They should be Treated

I would be grateful if you could take a few minutes to complete this questionnaire.

This questionnaire is about language errors and their correction in the classroom.

I am interested in knowing your views of language errors and how, you think, they should be corrected. There is no correct answer. This is not a multiple choice test. I am just interested in your opinion.

The results of this survey will be used as a part of my own academic studies.

If you have any comments you would like to add, please write them in space provided after the scale.

The questionnaire is anonymous, and the replies will be treated in strict confidence.

Instructions:

1. Read each statement carefully.
2. Put a √ in the circle that best matches your own view

Question	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1 I want my oral mistakes to be corrected in class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 I want the teacher himself to provide me with the correct answer when I make a mistake.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 I want the teacher to explain my oral mistakes not just to provide me with the correct answer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 I don't like my oral mistakes be corrected in the classroom.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 I want the teacher to help me correct my mistakes myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 When my oral mistakes are corrected, I don't want any explanation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional Comments:

Appendix C

Notes on the accompanying CD

Contents:

1. Four folders and two database files.
2. The folder “Interviews Extracts” contains the interview sound files hyper-linked to the texts in the body of the thesis.
3. The folder “Lessons Extracts” contains the sound files of the lessons extracts hyper-linked to the texts in the body of the thesis.
4. The folder “Question 3” contains the sound files hyper-linked to the texts in the “Interviews.mdb” file.
5. The database file “Lessons.mdb” shows how the DHL analysis technique was used in analyzing the classroom observation data.
6. The database file “Interviews.mdb” illustrates the use of the DHL technique in analyzing the research interview data.
7. The folder “Word Documents” contains three word documents: ‘Front pages’, ‘Table of contents’ and ‘Final thesis’.

To view the final thesis on the computer screen, do the following:

1. Insert the CD in the CD drive.
2. Go to either ‘My Computer’ or ‘Explorer’ to make sure that the contents mentioned above are on the CD.
3. If they are, open Microsoft Word 2000 or later and open folder ‘Word Documents’ and then ‘Final thesis’ on the CD.
4. To listen to the extracts from the interviews or the lessons used in the body text of the thesis, put the cursor anywhere in the hyper-linked text and press the Enter Key. **To stop the sound file at any time, press the ESC Key.**

To view the database and examine the new procedure used in transcribing and analyzing the interviews, do the following:

1. Make sure that you have Microsoft Access 2003 or later installed on the computer.
2. Go to either ‘My Computer’ or ‘Explorer’ and look for the file ‘**Interviews.mdb**’. Double click the file’s icon. You will get a message telling you that the file is read only. Click OK.
3. On the screen you should have two panes. On the left, you have ‘Tables’, ‘Queries’, ‘Forms’, ‘Reports’, etc.. Make sure that ‘**Forms**’ is clicked.
4. Then from the right-hand pane, double-click **Question 3**.

5. The database form for Question 3 should open on the screen. Read the notes on Figure 3:5 page 83 in the thesis to know how to navigate through the form and what each part does.

To view the database and examine the new procedure used in transcribing and analyzing the classroom data, do the following:

1. Make sure that you have Microsoft Access 2003 or later installed on the computer.
2. Go to either 'My Computer' or 'Explorer' and look for the file '**Lessons.mdb**'. Double-click the file's icon. You will get a message telling you that the file is read only. Click OK.
3. On the screen you should have two panes. On the left, you have 'Tables', 'Queries', 'Forms', 'Reports', etc.. Make sure that '**Forms**' is clicked.
4. Then from the right-hand pane, choose **Lessons Sample Form**
5. The database form for **Lessons Sample Form** should open on the screen. Read the notes on Figure 3:4 page 76 of the thesis to know how to navigate through the form and what each part does.

Note:

1. **When the cursor is on the hyper-linked text and the sound file is running, scrolling the text using the mouse wheel can stop the sound file. To scroll the text while listening to the hyper-linked file, use the screen vertical scroll bars**

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