

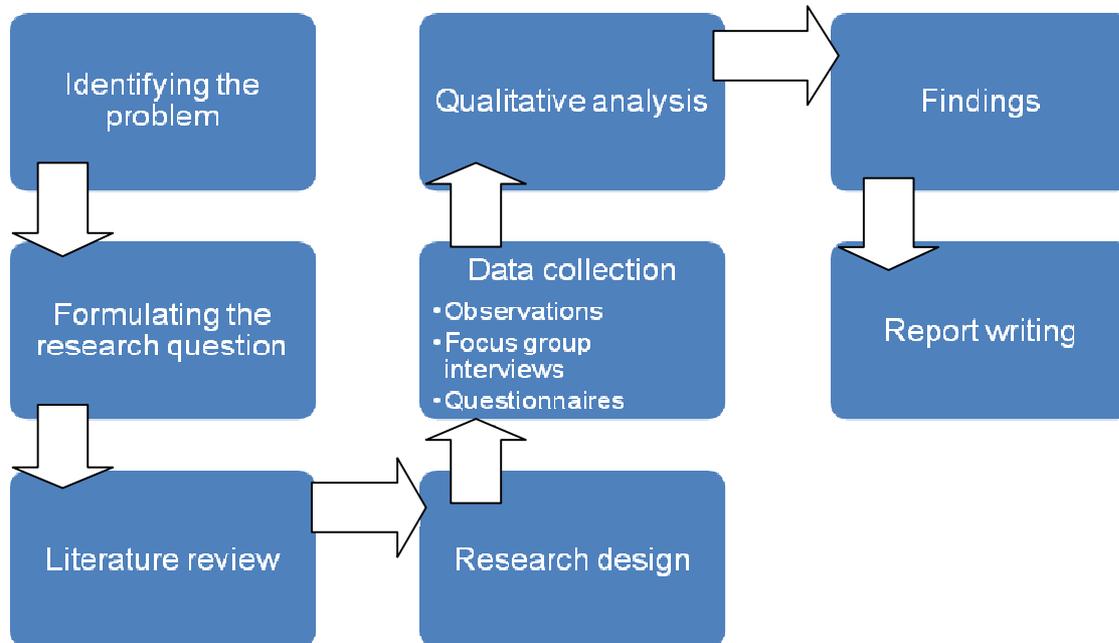
## **Chapter 3 Research design and methodology**

### **3.1 Introduction**

The purpose of this study was to identify and describe the occurrence, type, frequency and causes of misunderstanding in an instructional setting. This chapter provides an explanation of the research philosophy as well as the epistemological and paradigmatic perspectives informing the study. The theoretical framework underpinning the study is described and the methods selected and the instruments designed for data collection are then explained. The data analysis process is described and the strategies for enhancing trustworthiness provided. Lastly, the role of the researcher and ethical considerations are described.

The research design and methodology chosen both focused on finding accountable answers to the research questions. The research design is the planning of the research and indicates the type of study undertaken, while the research methods indicate the steps taken, instruments used and techniques implemented to complete the research process (Mouton 2001). This study used a strong qualitative approach, although elements of quantitative research were included. Qualitative research centres on determining "how people do things and what meaning they give to their lives" (Merriam 2002:19). Since this study aims to describe a social phenomenon, namely misunderstanding, as clearly as possible, a qualitative study is most suitable and deemed appropriate for this study. The nature of the inquiry was social-constructivist since knowledge was gained through observation and interpretation in a social setting. The study was placed within the interpretivist paradigm and confined within a case study, the case being student teachers as second language speakers of English with the resultant misunderstandings as the unit of analysis. The qualitative approach focused on data generated mainly from video recordings, a rating of oral proficiency and focus group interviews. A short questionnaire, which produced quantitative data, was also used. Figure 3.1 provides a visual representation of the research process.

**Figure 3.1: Presentation of the research process**



### 3.2 Paradigmatic and epistemological premises

Research usually comprises the search for knowledge and gaining of new insights into some unknown area. Qualitative researchers often begin their inquiry within a paradigm, in other words, with certain assumptions or with a particular world view (Creswell 2007). A paradigm includes the researcher's "epistemological, ontological and methodological premises that guide the researcher's actions" (Denzin & Lincoln 2000:33). Although there are a number of perspectives from which one can research and interpret social reality, these perspectives should be clearly defined in terms of ontology and epistemology. Creswell (2003) holds that ontology refers to the most fundamental categories of being and the relations among them. It comprises the theory and nature of existence, of what there is, why, and how. It concerns the very nature and essence of the particular field of research. Epistemology, or the researcher's theoretical perspective, is concerned with knowledge, how it can be acquired and communicated to others, how one distinguishes between what is legitimate knowledge as opposed to opinion or belief, and will direct the way in which the researcher acquires new knowledge (Ely & Rashkin 2005; Scott & Usher 1999; Cohen &

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Manion 1994). I approached this study with a post-modernist view which places a high premium on human perception and experience (Spies 2006). Therefore, in this study an interpretivist paradigm, which concerns meaning and seeks to determine society's definitions and understandings of situations (Henning, Van Rensburg & Smit 2004), was followed. An interpretive approach, which allows the researcher to describe and explore, assisted me in the process where I was "the primary instrument for both collecting and analysing the data" (Terre Blanche & Durrheim 2002:126) and resulted in a richly descriptive and holistic account of the phenomenon under scrutiny (Merriam 1988), namely misunderstandings. Methodologically, this study follows the idiographic approach as opposed to the nomothetic approach since an idiographic approach scrutinizes a single case and its relationship with a larger context (Babbie & Mouton 2006). As such, this study will identify and describe the occurrence, type, frequency and causes of misunderstandings occurring in an L2 instructional context.

The anti-positivist paradigm of a qualitative approach, which emphasises the uniqueness and culture-bound nature of data (Cohen, Manion & Morrison 2001), is particularly suited to the nature of this study, as it underlines the important role of the researcher's subjective involvement. A qualitative approach will, furthermore, allow for rich description of the misunderstandings encountered. A qualitative design is also flexible to changes "where and when necessary" (Babbie & Mouton 2001:278). My focus is on understanding and describing this social phenomenon and not on generalizing the findings. I concur with Babbie and Mouton (2001:274) who state that

... researchers within the qualitative paradigm understand that the aim of their study is to provide an understanding of the meaning which one or two people attribute to a certain event and not to generalize.

In summary, in this study I was influenced by an interpretivist paradigm and followed a social constructivist philosophy to conduct a qualitative study. The interpretivist paradigm is shown in table 3.1.

**Table 3.1: The epistemological, ontological and methodological premises**

Paradigm	Ontology	Epistemology	Data collection
<p><b>Anti-positivist/ Interpretivist:</b></p> <ul style="list-style-type: none"> <li>• Determining meaning and understanding</li> <li>• Gaining a unique perspective of the knowledge</li> </ul>	<p><b>Social-constructivist:</b></p> <ul style="list-style-type: none"> <li>• Reality can be understood and interpreted, but not controlled</li> <li>• Participants' internal and subjective experiences are important</li> </ul>	<p><b>Constructivist:</b></p> <ul style="list-style-type: none"> <li>• Knowledge is gained through observation and interpretation</li> <li>• The researcher is empathetic and subjectively involved</li> </ul>	<p><b>Qualitative:</b></p> <ul style="list-style-type: none"> <li>• Non-participant observation and interviewing</li> </ul>

(Adapted from Maree & Van der Westhuizen 2007)

### 3.3 Research design

Qualitative research is broadly defined as any kind of research that produces findings not arrived at by means of statistical quantification and can be multi-method in focus, involving an interpretive, naturalistic approach to the subject matter (Creswell 2003; Denzin & Lincoln 1998). Traditionally, qualitative research focuses on discovery, exploration and theory or hypothesis generation. As an outflow of cultural anthropology, it depends on watching people in their own environment (Denzin & Lincoln 1998). Terre Blanche and Durrheim (2002) concur and state that qualitative research presupposes an in-depth investigation of a particular phenomenon. This means that qualitative researchers study phenomena in their natural setting, where participants behave in their typical manner. The intimate relationship between the researcher and what is studied, rather than the measurement of quantity, amount or frequency of relationships between variables is stressed (Denzin & Lincoln 2001). The qualitative researcher looks at knowledge from a subjective point of view (Onwuegbyzie & Collins 2006).

In this study, the environment or setting was the formal instructional context of a classroom. My proposition was that misunderstandings might be caused by student teachers' inadequate oral proficiency, inadequate speech act realizations and inadequate

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communicative competence. I assumed that because the student teachers in this study were second language (L2) speakers of English, teaching learners who were second language speakers of English, using English as the LoLT, there would inevitably be misunderstandings. Communicative competence involves the manipulation of form, function and context of a language (cf. section 2.3), implying that speaker intent (the function of the utterance) and hearer interpretation need to correlate for misunderstandings to be avoided. To describe the misunderstandings fully, a qualitative design was deemed appropriate. My thinking was clarified after Creswell (personal communication May 2008) suggested I apply a qualitative study as quantitative data, usually from a questionnaire, could often be elicited in focus group interviews. I agreed and continued with a mainly qualitative approach, although I decided to include a small-scale questionnaire for the purpose of corroboration.

I placed the study within a case study design which typically focuses on one case (or a limited number of cases) while employing several data-gathering strategies (Yin 2009). A case study approach – as a type of ethnography – was used to view misunderstandings in the classroom. The case study design enabled a description of the misunderstandings occurring in the classroom and whether they were caused by the language used by student teachers.

A case study is an in-depth analysis of one or more events, social groups, communities or other "bounded systems" in their natural contexts (McMillan 2008:288). Creswell (2005) states that case study researchers are more interested in describing the activities of a group (the case) instead of identifying shared patterns of behaviour exhibited by the group, as would ethnographers. The purpose in case studies is, therefore, not to understand a broad social issue, but merely to describe the particular case being studied. Merriam (1998) claims that a case study is particularistic, descriptive and heuristic. It is particularistic in the sense that it focuses on a specific issue while illuminating a general problem. It is also descriptive in that it reveals the complexity of an event. It is heuristic since it explains, provides reasons for or provides the background of a particular situation (Kaburise 2005). Using case study as design will allow gaining an in-depth understanding,

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not of the life of the individual, but of the phenomenon under scrutiny (Creswell 2007), namely misunderstandings. It, therefore, provides the opportunity to gain understanding of the complexity of misunderstandings in an instructional setting. As such, the type of case study used is observational (McMillan 2008:289) where non-participant observation was the primary method of gathering data to study a particular entity or some aspect of the entity.

A case study has several hallmarks (Cohen, Manion & Morrison 2000) of which the following are most important and applied in this study:

- rich and vivid description of events
- chronological narrative of events
- blending of description and analysis of events

Given the nature of case studies the researcher can never be neutral or a passive instrument in the discovery of the issue being studied. Certain meanings are attached to things and certain forms of language are used to describe these things because of who we are. I believe that it is difficult for a researcher to observe reality without becoming deeply and subjectively involved in the research. I, therefore, agree with the notion that there is no objective truth (Leedy & Ormrod 2010; Nieuwenhuis 2007; Creswell 2005; Cohen & Manion 2001). Reality cannot be determined objectively, but rather is socially constructed and should always be interpreted in its specific context (Nieuwenhuis 2007). This view seems to be constructivist in approach and holds that "there is no such thing as knowledge separate from the knower, but only knowledge we construct ourselves as we learn" (Gottlieb 2000b:1). We all bring different assumptions to the same situation and interpret reality differently (Goldenberg & Goldenberg 2008). Our culture, background and personal experiences determine our view of the world and reality. When trying to make sense of what we observe, we rely heavily on what we already know and believe (Denscombe 2007). We cannot see things "as they really are", we can only describe things as we see them, and how we see them will be based on our background (Denscombe 2007:68). In this regard I was influenced by a social-constructivist perspective in investigating the

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particular phenomenon, namely misunderstanding, since the meaning created in this context is socially constructed.

I recognised that my beliefs and assumptions could invariably influence my understanding and interpretation of what I found at the research sites. To compensate for this, I reflected on the process and data gathered. This introspection helped me to make sense of initial concerns and perceived dead ends in the data collection. I was thus able to steer the progress of the research and refine the strategies for data collection. This process and development were recorded in a reflective journal. The purpose of the reflective journal was to keep me consciously aware of the possible influences that all subjective impressions may have on the research. My concerns about the research and its direction were carefully documented in the journal. As I am not personally inclined to use journals as such, this process was a difficult and unfamiliar one in the beginning. In time it became an extremely useful tool which enabled a greater understanding of the research process. My personal experience and perceptions inform my interpretation of what I observe and as such is subjective and forms an integral part of the research process. My personal impressions, thoughts, hunches and opinions were written in the reflective journal while events and discussions that occurred during the study were also noted in the form of what Mayan (2001:104) refers to as "notes on notes". This ensured a conscious effort on my part to counter subjective assumptions and prejudices. Since I am a strong supporter of mother-tongue instruction, I am inevitably biased. I know that mother-tongue instruction is not a reality in South African schools (see chapter 1), therefore, I anticipated both student teachers and learners to produce many linguistic errors. I assumed that misunderstandings might be caused by these errors. I minimised this bias by employing strategies to ensure credibility, such as member checking and triangulation, as well as by trying to stay objective and describing only what I observed at the sites. Mayan (2001) suggests that impressions and observations be noted as soon as possible and that discussions on such observations be avoided until they have been written down. These suggestions were followed and no editing of my thinking was done.

### **3.4 Theoretical framework**

Theoretically, I framed the study in the socio-cultural approach of Vygotsky (1978), specifically the Zone of Proximal Development and Speech Act Theory (SAT) (Austin 1962; Searle 1969) (cf. section 2.4), a discourse evaluation method within the cross-cultural domain. Vygotsky's (1987:86) ZPD presupposes an interaction "between a more competent and a less competent person on task, such that the less competent person becomes independently proficient at what was initially a jointly-accomplished task". Learning thus emerges as the result of interaction, but interaction within the ZPD (Nassaji & Swain 2000:35). This idea, which is known as scaffolding, refers to a "situation where a knowledgeable participant can create supportive conditions in which the novice can participate, and extend his or her current skills and knowledge to higher levels of competence" (Chaiklin 2003:2; Donato 1994:40). Thus, the teacher assists the learner in achieving a level of performance within the ZPD which the learner would be incapable of whilst acting independently and will subsequently be able to achieve alone (Harland 2003; Scott 1998). Applied to language learning, the concept of the ZPD brings together all of the relevant pieces of the language learning situation including "the teacher, the learner, their social and cultural history, their goals and motives, as well as the resources available to them, including those that are dialogically constructed together" (Aljaafreh & Lantolf 1994:468; Dunn & Lantolf 1998:425). In short, from this perspective, learning principally takes place within the learner's ZPD (Nassaji & Swain 2000). Vygotsky's (1978) ZPD thus acted as one circle of theory that intersects with theories of communication so that the lens of the study was the point where they overlap in terms of misunderstanding.

In linguistics one may choose from a number of approaches to describe or analyse discourse and these descriptions can be undertaken in various paradigms, such as interactional, ethnographic or pragmatic (Kaburise 2005). Any approach requires a particular lens through which the researcher views the research design and research methodology. A variety of analytical approaches can be used to analyse utterances that may or may not lead to misunderstanding (Thomas 1983; 1995; Gumphez 1984; Hymes 1979). Sociolinguists, for example, usually use conversational analysis or discourse

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analysis within an ethnographic paradigm mainly to show how linguistic forms of language functions might change according to gender and age, or the roles of speaker and hearer (Kaburise 2005). The focus generally is on turn taking and repair structures. Another popular approach is to use critical discourse analysis to describe power relations or instances of inequity. Psycholinguists will determine the sequence of acquisition of communicative competence by using a grammatical analysis of the surface and deep structure of discourse (Kaburise 2005).

None of the aforementioned approaches seemed to suit the purpose of this study. Since the focus was not intended to be solely on words or sentence structures (structural form) but mainly on function (speaker intent) and context, I decided on applying the principles of Speech Act Theory, particularly those relating to the illocutionary force of an utterance, as an analytical tool to determine whether communication has failed between student teacher and learner. Hymes (1972a) suggests three components as units of analysis for speech acts, namely event (language), situation (context), and act (meaning). In other words, communicative competence is based on the premise that communication takes place when a person uses a certain type of language, in specific contexts, to achieve a specific meaning. When applying Speech Act Theory, the researcher has to determine whether the hearer interprets the speaker's meaning or intention correctly. I argue that when the force of an utterance (intention) is misinterpreted, misunderstanding may occur, which makes Speech Act Theory particularly relevant.

A naturalistic pragmatic approach such as a speech act approach focuses on the relationship between the linguistic form, the communicative functions which these forms are capable of serving and the contexts or settings in which these linguistic forms can have those functions (Kaburise 2005; Thomas 1995; Fillmore 1981). Analysis of the structural form (syntactical analysis) of an utterance alone will merely determine the interlocutor's mental competence (Chomsky 1965). An analysis which examines the function and context of an utterance will provide a more comprehensive idea of the interlocutor's competence. SAT departs from the premise that interlocutors must create meaning during linguistic interaction and when this meaning is not created, reasons have to be found (Kaburise

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2005). It is the insistence that language is a functional tool for social use that motivates investigation when an utterance does not create meaning, or causes misunderstanding.

Relatively few studies on any aspects of pragmatic processing in L2 (Kasper & Rose 1999) appear to have been done and my reading of the literature produced few studies on oral speech act failure in an instructional setting. In this study, therefore, I used the principles of SAT as an utterance analysis tool to establish the connection between oral proficiency, realisation patterns and misunderstanding in a specific context, namely the instructional setting. I used the communicative competence or source of linguistic knowledge provided by the student teacher's use of English, while teaching, and focused on how the student teachers used speech acts in their instruction. The assumption here was that misunderstanding might be caused by inadequate realization of speech acts and inadequate communicative competence which in turn might influence the understanding of the learner. Communicative competence centres on the premise that communication takes place when a person uses a specific type of language, in specific contexts, in order to achieve specific meaning. In SAT, a speech act is considered unachieved if there is a discrepancy between the speaker's intent and the hearer's interpretation. In this case, when the student teacher's intent is misunderstood, learning could be hampered. The conventional methods used in SAT measure **written** responses. Since I was interested in **oral** responses only, I applied the principles of SAT but did not make use of conventional SAT methods such as discourse completion tests. As stated previously, using SAT as a framework means one has to establish whether speaker intent or meaning in use has been correctly interpreted by the hearer. This forms a big part of what this study has aimed to do, except that the focus has been on utterances provided by ESL speakers which contain idiosyncratic expressions.

I further applied a combination of the frameworks of Dascal's (1999) four factors of misunderstandings as the standard case and Hinnenkamp's (1999) seven types of misunderstandings as classifications of misunderstandings (cf. section 2.5). In the data analysis I took into account Hinnenkamp's (1999:8) claim that in each of the seven classifications only two factors are relevant, namely what he calls the "event" and the

"core" of the misunderstanding. I used the abovementioned frameworks onto which to map the identified misunderstandings.

### 3.5 Methodology

One of the underlying philosophical beliefs that direct qualitative research is the anti-positivist belief which underscores the important role of the subjective involvement of the researcher. Through this particular role the researcher gains a unique perspective of the knowledge as one view of reality (Cohen et al 2001). The qualitative research of this study was based on *in situ* video recordings and semi-structured focus group interviews. As my proposition was that misunderstandings might be caused by inadequate oral proficiency, speech act realization and communicative competence, the oral proficiency of student teachers and their use of speech acts were scrutinized. I used an internationally accepted set of band descriptors for assessing English oral proficiency, namely the International English Language Testing Score (IELTS) (cf. section 3.5.4.2) to measure my rating of the student teachers' oral proficiency during instruction. Regarding the quantitative aspect, a questionnaire was used to determine the type and frequency of utterances which may or may not have led to misunderstanding. I used a checklist as an informal data collection instrument to help me focus my observations of the recorded lessons. This allowed for a detailed evaluation of the errors made by the student teacher, as well as the resultant misunderstandings which occurred during student teacher-learner interaction.

To summarise, this study identified and described the nature, occurrence and frequency of misunderstandings that occurred in the instructional context of student teachers who were second language speakers of English, using English as LoLT. Therefore, I observed instructional communication in an authentic setting (the classroom) and identified the misunderstandings that occurred.

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#### 3.5.1 Selection and profile of participants

Currently, at the University of Pretoria, one of the prerequisites for the BEd degree<sup>7</sup> is an internship period in the 4<sup>th</sup> year of study of more or less six months, divided into two phases – one (April to June) before the winter holidays and one (August to October) after the holidays. During this time student teachers are placed at schools according to their specialisation. The student teachers are mentored by teachers at the school as well as lecturers from the university for the duration of the internship. It was during these two internship periods of three months each that the study was undertaken (2009 – 2011).

During the first phase of the internship, student teachers are placed at schools of their choice in Pretoria, as university lecturers need to offer guidance and do on-site observations at the schools. A list of the student teacher placements in Pretoria schools was used to identify those students who had indicated that they would be teaching English as a subject or teaching subjects through the medium of English. The sample chosen for this study is, therefore, a purposive sample (Creswell 2005), as it was taken from the list provided by the Teaching Practice office. The strategy used was homogenous (Creswell 2005), since I selected only those student teachers who matched the selection criteria. The three selection criteria were the following:

- 1) being a non-native speaker (L2 speaker) of English
- 2) teaching English as a subject or teaching through the medium of English
- 3) myself not being their mentor lecturer

After having applied the first selection criterion, I compiled a list of 34 possible participants. After having applied the second selection criterion, 27 possible participants remained. Selection criterion 3 further reduced the number to 19. Since the study was done with student teachers placed only in schools in Pretoria, where I am based, the sample was also one of convenience (Creswell 2005).

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<sup>7</sup> Four year undergraduate degree in Education, allowing for specialization in early childhood, primary school or secondary school teaching

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In the pilot as well as the subsequent two collection periods, the selection of participants for the sample was not influenced by race, age or gender. The main selection criterion was that the participants should all be non-native speakers of English. In 2009, the 4<sup>th</sup> year student teachers identified from the list who met the requirements (19) were approached to participate in the research study. During a first meeting with these student teachers, the nature and purpose of the research were discussed and those student teachers who indicated their willingness to participate were provided with letters of information about the proposed research and letters of informed consent were handed out to be signed. Due to changes in the time table and for personal reasons, four student teachers withdrew from the study. The 15 remaining student teachers taught Mathematics, Economics, Life Orientation, History, Technical Drawing and English First Additional Language<sup>8</sup>.

The same process was repeated in 2010 where a further 28 student teachers, meeting the same requirements as in the pilot study, were approached, following the same procedure as in the pilot study. However, only ten student teachers agreed to participate and signed the consent forms. These student teachers taught the subject English First Additional Language to learners in different grades varying from grade 4 to grade 11.

In 2011 a further 12 student teachers, again meeting the same requirements as before, were asked to participate. Six initially indicated their willingness to participate, however, due to personal reasons, five withdrew. Only one agreed to participate and subsequently signed the consent form. I was not able to identify any reasons for the decrease in number of participants; I had followed the same process with equal enthusiasm but for some reason the students in 2011 declined to be involved. The student teacher for the third data collection period taught the subject English First Additional Language to grade 11 learners. The purpose of this third round of data collection was to ensure data sufficiency. In total 26 student teachers, ranging between 21 and 23 years of age, participated in the study. Table 3.2 provides a summary of the participants selected in each data collection period.

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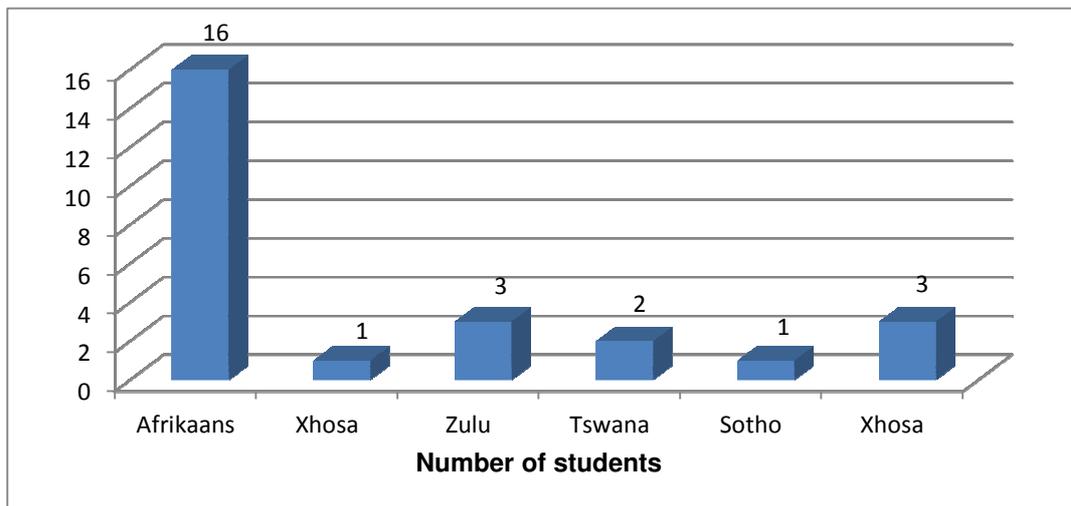
<sup>8</sup> In South Africa, in the National Curriculum Statement, this is the label used for second language

**Table 3.2: Participants in each data collection period**

Period	Number approached	Number agreed	Gender	
			Male	Female
2009	19	15	7	8
2010	28	10	1	9
2011	12	1	1	
<b>Total</b>	<b>53</b>	<b>26</b>	<b>9</b>	<b>17</b>

In figure 3.2 below, an indication of the participants' home language is provided.

**Figure 3.2: Number of participants for each home language**



The learners in the student teachers' classes were not participants, although their verbal and non-verbal reactions (gestures, facial expressions) to the student teacher were considered during the analysis of the data. Learners were not required to complete questionnaires or participate in focus group interviews. They all did, however, complete forms of assent and their parents completed forms of consent for the video recordings, as described in the section on ethical issues in this chapter.

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3.5.2 Research sites

The research sites for this study were the schools where the selected student teachers were placed for internship. The placement of student teachers is usually determined by the student teachers' fields of specialization, their preference in terms of location and the schools' willingness to accept these students for placement. As student teachers are placed at schools by the institutional Teaching Practice office, selection criteria for the research sites, e.g. type of school (such as co-ed, single sex; well-resourced or under-resourced) were not applicable as I did not have the option of selecting specific schools. During the pilot study, the student teachers involved in the study were placed at three English medium schools – one primary school and two secondary schools, and three Afrikaans medium primary schools, where the subject English is taught as a second language. During the remainder of the study, student teachers were placed at seven Afrikaans medium schools – three secondary schools and four primary schools, and three English medium schools – all primary schools, where English, the learners' second language, is used as LoLT. All these schools are considered large schools, i.e. ranging from 800 to 1 300 learners. Table 3.3 indicates the distribution of the sample and the sites.

**Table 3.3: Distribution of participants and sites in the sample**

Number of student teachers	Subject taught	Grade taught <sup>9</sup>	School's language policy
4	Mathematics	1 x gr 7, 1 x 8, 2 x gr 10	English medium
1	Economics	1 x gr 8	English medium
1	Life Orientation	1 x gr 8	English medium
1	History	1 x gr 9	English medium
1	Technical Drawing	1 x gr 12	English medium
18	English First Additional Language	2 x gr 4, 6 x gr 5, 2 x gr 7, 2 x gr 10, 3 x gr 11	Afrikaans medium
		3 x gr 6	1 Afrikaans medium 2 English medium

<sup>9</sup> In South Africa, grades 1–7 are taught in primary schools and grades 8–12 in secondary schools

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### 3.5.3 Data collection process

My choices regarding the methods of data collection were informed by Bogdan and Biklen's (1982) nine process-based criteria for the simultaneous collection and analysis of data. Among others, Bogdan and Biklen (1982), supported by Merriam (1988), suggest the following five criteria, which I applied in this study:

- 1) limiting the investigation (collecting more data on a specific topic than inappropriate data on too wide a field)
- 2) taking note of all observations and hunches, not necessarily part of the planned investigation
- 3) making notes of the learning process
- 4) scrutinizing the literature while collecting data
- 5) trying to recognize correlations and similarities

Data were collected in various phases using various strategies and continued until saturation was reached (cf. section 3.1.5). The first phase was a pilot study used to determine whether the proposed direction of the research was viable, to familiarise myself with the technological aspects of video recording, to identify any unsuitable items in the questionnaire, and to practise interview techniques. During the pilot study I realised that recording lessons was not an easy process and the technical quality of the recordings was poor. It was not easy to decide where to place the camera and who or what to record so as to capture everything that was deemed important. In an attempt to follow the movements of the student teacher and each learner as they spoke, I held the camera in my hand and zoomed in on the subject being recorded. This proved to be problematic since, as a result of the movement, the recording was out of focus. I also tended to train the camera on the learners more than was necessary, instead of on the student teacher. Eventually it became clear that in order to capture as much as possible of the student teacher and the reactions of the learners it was best to place the camera in the front of the class, at an angle towards the student teacher. In my follow-up attempts I used a tripod, focused on the student teacher and, only when necessary, I panned to the learners who responded to the student teacher's questions. This provided greatly improved results. I also had to take certain field

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issues and outside influences such as noise, interruptions and back lighting into account. In some instances there was little I could do to change the physical layout of the classroom, such as where windows ran along both sides of a class and the light inside was too bright. To compensate for this I ensured meticulous descriptions in my field notes which helped with recall during data analysis.

By the second half of the pilot study, most of the changes and technical improvements had been made and I was confident that more detailed and better quality data would be gathered and collected. Once the pilot study had been completed, the main study was carried out at other schools in Pretoria, following the same procedure as in the pilot study.

#### 3.5.4 Instrumentation

Four main instruments were used to collect data, namely observations (recorded lessons) together with the International English Language Testing Score (IELTS), focus group interviews and a questionnaire.

##### 3.5.4.1 *Observations*

Non-participant observations were conducted to gather data on the occurrence, type, frequency and causes of misunderstandings in an instructional setting. Generally, observations as an instrument to gather data are useful as they provide the researcher with authentic live data from natural situations (Cohen et al 2000). One lesson of 45 minutes (average time allocated for lesson periods at all the schools in the study), presented by each of the 26 participants, was observed and video recorded at the research sites. The purpose of the observations was to gain open-ended, first-hand information (Creswell 2005) on the communication that took place during the lesson. The aim was to identify any misunderstandings which occurred between the student teachers and the learners. I acted as non-participant observer, or "complete observer" (McMillan 2008:278), observing everything that took place in the 45 minute period. For the recording of lessons a lesson period on the school time table was booked with each student teacher and all efforts were

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made to ensure that the student teachers, as well as the learners, were comfortable with the video recording.

Although I was not a participant in the lessons, I acknowledge that I was fairly intrusive (cf. section 3.8). I video recorded the lessons and simultaneously kept descriptive notes (of the actual lesson) on the self-designed observation protocol (cf. addendum B). These notes were expanded into field notes directly after each lesson and included my personal thoughts, hunches and insights. An observation checklist (cf. addendum C) was used during the lesson to help identify the errors made and later during multiple video analyses of lessons.

*3.5.4.2 International English Language Testing Score (IELTS)*

To be able to determine whether student teachers' communication can be considered effective (successful) or not, and as a result, whether their oral proficiency is considered good or not, I made use of an internationally accepted set of band descriptors for assessing English oral proficiency, namely the International English Language Testing Score (IELTS). IELTS is a joint venture which has been developed to measure the English language proficiency of international students entering British and Australian academic institutions at both undergraduate and post-graduate level (Elder 1993). This tool is used to gauge the student's level of proficiency in English for academic purposes. In an IELTS speaking test, where oral proficiency is evaluated, the examiner and candidate work face-to-face. Kaye (2009) explains that during the test the examiner will start by asking questions related to everyday, familiar topics such as work, study, food, holidays and friends. The examiner then gives the candidate a topic on a card, such as describing a memorable day or a significant person. The candidate needs to speak about the topic for about two minutes, followed by a discussion. The candidate is now expected to evaluate or justify opinions, or to make predictions. During this process the examiner listens to the candidate and evaluates the level of proficiency by comparing the candidate's performance to the band descriptions of the IELTS test. The IELTS band descriptors for speaking cover

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aspects such as fluency and coherence, lexical resource, grammatical range and accuracy and pronunciation (Kaye 2009)<sup>10</sup>.

The band descriptors in the IELTS provide categories for describing proficiency on a level of 1 to 9, 1 being the lowest and 9 the highest level (cf. addendum D) (Kaye 2009). Table 3.4 shows the IELTS score band ratings.

**Table 3.4: International English Language Testing Score (IELTS) band rating**

Band	Descriptor
0	Not attempted
1	Non-user
2	Intermittent user
3	Extremely limited user
4	Limited user
5	Modest user
6	Competent user
7	Good user
8	Very good user
9	Expert user

The English ability and performance level of the candidate is evaluated against the score range indicated above. The 1 band IELTS score represents a beginner in the language and the 9 band IELTS score represents an expert. When a candidate's ability is marked as 1, it means that the English ability of that candidate is extremely low or extremely poor. If it is marked as 9, the candidate's English ability and understanding is considered excellent, s/he has full operational command of English, has complete understanding of syntax and grammar, is fluent and possesses a rich vocabulary. A band score of 6 seems to be an average IELTS score and indicates that the candidate is a competent user of English. S/he

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<sup>10</sup> Although I did not undergo official training in administering an IELTS test, I studied the process and application carefully and felt satisfied that I would be able to use the rubric to rate the participants' oral proficiency

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may be inaccurate at times in understanding and use, but in familiar conditions may understand the complex use of the language well.

Elder (1993:75) claims that the findings of the British-Australian IELTS study are encouraging in that they "demonstrate a fairly strong link between first year university students' IELTS profiles on entry and their subsequent academic success". It seems as if many universities consider the average IELTS score (band 6) the minimum level one must possess to perform well in academics (Kaye 2009; Elder 1993). An average IELTS score of 6 implies that one would probably not encounter much difficulty in one's studies or at work. Where I refer to oral proficiency in this study, my assessment was based on this internationally validated instrument.

*3.5.4.3 Focus group interviews*

A focus group interview entails collecting data from a group of people (Creswell 2005) who interact with each other on a topic or question provided by the researcher (Cohen et al 2000). The interaction could lead to a richer understanding of the phenomenon under scrutiny (McMillan 2008) as the participants' insights and opinions about the topic are offered. As researcher, I tried to establish rapport with the participants, making them feel comfortable and again explaining the purpose of the study and their involvement. I further consciously tried to improve my questioning techniques during the interviews so that meaningful data could be obtained. Merriam (1988:78) aptly states that "the key to getting good data from interviews is to ask good questions". I prepared a leading question, with a few prompt questions and formulated them in such a way as to elicit participants' perceptions and beliefs of the phenomenon under scrutiny.

After all the lessons had been recorded a date was scheduled with student teachers to meet at each of the schools for the semi-structured focus group interviews to be conducted. These interviews were grouped according to the student teachers' placements. Where the group of student teachers at a particular school was large enough (at least five) I formed a focus group. Where one student teacher was placed at a school, I grouped that

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participant with other student teachers from schools in the vicinity. Thus in 2009, four focus groups were formed, in 2010 two and in 2011 one. A venue that the participants felt most comfortable with was arranged for these interviews. In each case the focus group interviews were conducted at the schools in a private room, usually the school's boardroom.

Student teachers were asked to give a short oral reflection on the lesson they presented in order to discuss their interpretation of the misunderstandings. This served as introduction to the interview and allowed student teachers to gather their thoughts. The leading question, namely, "Do you find that learners sometimes misunderstand you/How often do misunderstandings occur in a typical lesson? If so, how would you deal with such misunderstandings?" was then asked.

Open-ended prompt questions were then asked to guide the interview in order to explain or support the information gleaned from the observations (Creswell 2005). The student teachers' awareness of the occurrence of and reasons for misunderstandings was also gauged. Their opinions about the reasons for misunderstandings and their experiences in their teaching contexts were discussed. During the focus group interviews the answers to the questions were recorded on the interview protocol (cf. addendum E), but all interviews were recorded on audio tape and later transcribed by me. The seven interviews each lasted for an hour. The data gathered from these focus group interviews were usable and sufficient and served as triangulation with the other data sets, the observations, IELTS evaluations and questionnaire.

#### *3.5.4.4 Questionnaire*

Questionnaires are widely used in educational research and offer data on participants' views, perceptions, beliefs and attitudes (McMillan 2008; Cohen et al 2000). However, I was fully aware of the fact that there is often a low response rate when using questionnaires, and that questionnaires are often completed hurriedly, or that questions are misunderstood or misinterpreted (Cohen et al 2001). The questionnaire (cf. addendum F)

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provided information on the types of errors which might cause misunderstanding and the frequency with which these errors occurred. The questionnaire was sent out to four student teachers during April 2009 as a trial run in order to refine its use in the study. These student teachers were part of the initial selection but chose not to participate in the study. They were, however, willing to complete the questionnaire. I used their responses to refine the questionnaire and then asked the 26 student teachers who participated in the study to complete the questionnaire. During each data collection period the questionnaires were distributed after the lesson observations had been completed in order to prevent the student teachers from being influenced by the information generated by the questions. In total, 25 questionnaires were returned and used for data collection purposes.

This concludes the section on data collection strategies and the instruments employed. The data collection strategies are summarized in table 3.5 and presented in the order in which the data collection took place.

**Table 3.5: Data collection strategies**

Technique/instrument	Action	Agent	Purpose	Contribution to answering research questions
Observation plus checklist	<ul style="list-style-type: none"> <li>Lessons presented by student teachers and learner reactions were observed</li> </ul>	Researcher	<ul style="list-style-type: none"> <li>To determine whether student teachers make errors</li> <li>To identify and describe misunderstandings</li> <li>To help compile the questionnaire</li> </ul>	<ul style="list-style-type: none"> <li>How misunderstandings occur</li> <li>What the causes of misunderstandings are</li> </ul>
Video recordings	<ul style="list-style-type: none"> <li>Speech act realization patterns of student teachers' lessons were recorded</li> </ul>	Researcher	<ul style="list-style-type: none"> <li>To record verbal and physical interactions in the classroom</li> <li>To generate small sections of data for the database to be analyzed</li> <li>To help identify relevant questions for focus group interviews</li> </ul>	<ul style="list-style-type: none"> <li>How misunderstandings occur</li> <li>What the causes of misunderstandings are</li> </ul>
IELTS evaluator for oral proficiency	<ul style="list-style-type: none"> <li>Student teachers' oral proficiency was evaluated</li> </ul>	Researcher	<ul style="list-style-type: none"> <li>To determine the level of oral proficiency of each participant</li> </ul>	<ul style="list-style-type: none"> <li>Level of oral proficiency required for effective communication</li> </ul>
Focus group interviews	<ul style="list-style-type: none"> <li>Student teachers' opinions and perceptions of misunderstandings were gauged</li> </ul>	Participants and researcher	<ul style="list-style-type: none"> <li>To gather direct information on the perceptions of participants</li> <li>To determine agreement as to the misunderstandings and errors reported</li> </ul>	<ul style="list-style-type: none"> <li>How participants deal with misunderstandings</li> <li>How meaning or understanding is negotiated</li> </ul>
Questionnaire	<ul style="list-style-type: none"> <li>Student teachers complete</li> </ul>	Participants	<ul style="list-style-type: none"> <li>To form an idea of the kinds of errors made and their frequency and whether this corroborated the earlier findings</li> </ul>	<ul style="list-style-type: none"> <li>Awareness of misunderstandings</li> <li>Evidence of misunderstandings</li> <li>How misunderstandings are addressed</li> </ul>

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### 3.5.5 Data analysis procedure

Data analysis is the organisation, interpretation and explanation of data and, in qualitative analysis, these actions may already start during the data collection process (Creswell 2003). McMillan and Schumacher (2001:461) state that there is no "wrong" or "right" way of analysing data, that it is "an eclectic activity" and can be analysed in more than one way. The process of analysis is not always logical or sequential in a predetermined fashion, since the researcher has to be in touch with intuitive feelings (Merriam 1988). Data analysis in qualitative studies involves a complex and time-consuming process, reducing large amounts of data to a few themes (Creswell 2005). A great deal of insight is needed, since the researcher has to interpret the data and make inferences. Since making sense of the data is a highly personal and individual procedure, there are no prescribed rules to follow. As pointed out by Berg (2004), it proved to be a satisfying and enriching process, developing my own understanding of and insight into the research problem. Twelve practical tactics to direct this process, as described by Miles and Huberman (1984:215), were deemed useful in this study and guided the analysis procedure:

- 1) counting (note those appearing more than others)
- 2) noting patterns and themes (scan data to build categories)
- 3) indentifying new concepts or conclusions (often, counteractive findings lead to challenging results)
- 4) clustering (group together those that belong together)
- 5) making comparisons (conceptualize at a higher level)
- 6) splitting categories (often, it makes sense to split one category/theme into two)
- 7) including (smaller elements should be grouped with larger categories)
- 8) factoring (unequal or dissimilar facts may have something in common)
- 9) noting relationships ( consider how concepts relate to each other)
- 10) finding prevailing themes (find reasons why concepts belong together)
- 11) constructing a logical sequence (integrate categories and themes into a logical whole)
- 12) creating unity (find explanations for research questions)

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I approached the data in a reflective manner, using the above-mentioned tactics as guide in the process of the analysis. In tandem with the tactics mentioned above, I also followed an approach outlined by Creswell and others where broad categories are identified and narrowed down to specific focus areas or themes (Creswell 2005; Leedy & Ormrod 2010; Bogdan & Biklen 1982). Some of the data collected lent themselves to statistical analysis and are represented in graphs and tables. The remainder of the data analysed are presented in narrative style in order to offer a holistic interpretation thereof.

The first step in the analysis of qualitative data is to organize the data by transferring spoken and written words to typed files (Creswell 2005). Field notes need to be organized, transcribed, coded, summarized and interpreted (McMillan 2008). I organized the data by type; all interviews together, all observations together and all questionnaires together. I also made duplicate copies of all the forms of data and did the analysis of the data by hand. In case studies, there are four additional types of data analysis, namely categorical aggregation (coding), direct interpretation (using an example to illustrate meaning), drawing patterns (determining the correspondence between categories and codes) and naturalistic generalizations (suggestions of applicability to other situations) (McMillan 2008). I followed the aforementioned guidelines and applied the four types of analysis to the collected data. After several combings where the data were scrutinized repeatedly, I started coding sections that seemed to belong together and then interpreted the coding in order to determine categories. I then searched for patterns and themes.

#### *3.5.5.1 Observations*

Once the video recordings of the observations had been completed, the digital information was saved onto DVDs. These DVDs, containing the recorded lessons, were repeatedly scrutinised inductively and interpretively, after which each lesson was summarised on a template (cf. section 4.3.1). I used Speech Act Theory (SAT) as a framework for communicative competence and as such examined the language, context and function of utterances. I analysed the utterances produced by the student teachers in terms of the three parts of a speech act, namely locutionary (hereafter referred to as **LA**), illocutionary

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(hereafter referred to as **ILA**) and perlocutionary acts (hereafter referred to as **PLA**). On this level, I looked for grammatically correct or well-formed (hereafter referred to as **WF**) and ungrammatical or ill-formed (hereafter referred to as **IF**) words and sentences. Following the principles of SAT, the purpose of the analysis was to establish a match between speaker intent and hearer interpretation. This was done in order to examine the misunderstandings that occurred. As such, I tried to establish a match between speaker intent and hearer interpretation as effective communication is said to have taken place when there is a match between intent and interpretation.

Competence implies mastery of all the communication components, namely grammar, discourse, socio-linguistic aspects and psycholinguistic components such as knowledge and skills (Kaburise 2005). In other words, competence includes both mastery of the structural constituents of language and the ability to create meaning within the appropriate social-cultural context (Thomas 1995). All these aspects were carefully considered during the analysis of the data. Groups of interchanges (between student teacher and learner) where speech acts or ill-formed utterances were observed were analysed using SAT to determine emerging codes of errors in terms of locutionary and illocutionary force (cf. section 4.3.3). These codes were then scrutinised to determine whether misunderstandings had occurred and the incidents of misunderstandings were extracted. From these data I analyzed what preceded and what followed the misunderstanding, and analyzed these in terms of types of speech acts, types of errors and evidence of effective instructional communication. The misunderstandings were further analysed to determine the kind of misunderstanding and the reason for the misunderstanding, i.e. whether it was the result of cross-cultural transfer problems, language related problems, lack of sufficient vocabulary, etc. (cf. section 4.3.3 and table 4.6). Verbal and non-verbal data from the student teachers, as well as the learners in the class, were used to inform the incidents of misunderstandings.

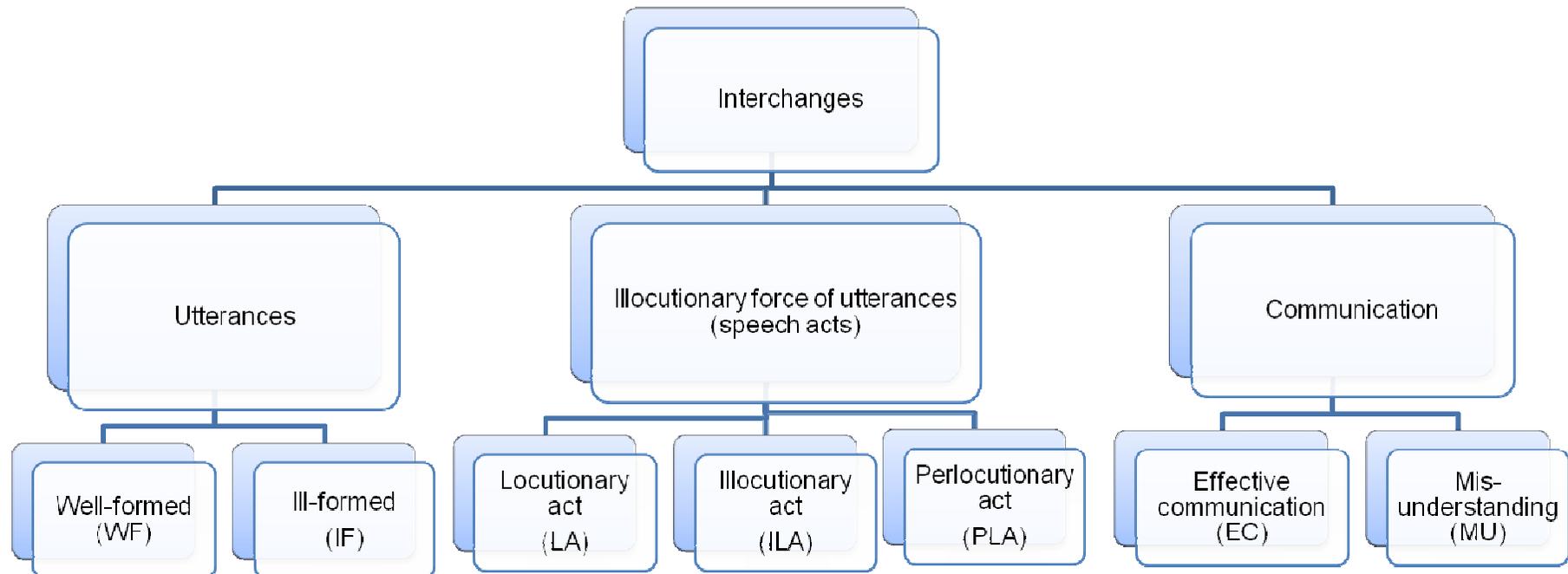
In each case I tried to establish whether the utterances were correctly interpreted by the hearer, in this case the learners, or whether the interpretation led to misunderstandings. Thus, the examination of the utterances provided the speaker's intent (hereafter referred to

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as **SI**), the hearer's interpretation (hereafter referred to as **HI**), an identification of the speech act (**LAs**, **ILAs** or **PLAs**) and whether effective communication (hereafter referred to as **EC**) took place, or whether there was a misunderstanding (hereafter referred to as **MU**). Figure 3.3 on the next page indicates a summary of the codes I identified in the coding process, based on the principles of SAT and reflects the units of analysis of communicative competence, namely language, context and function, as well as the components of speech acts. The main criterion for identifying the utterances for analysis was that they were marked in some aspect, whether phonologically or grammatically, semantically or pragmatically. The challenge was to establish whether these non-ordinary features (idiosyncrasies) had caused misunderstanding, which would imply that speaker intent and hearer interpretation did not match. The misunderstandings that occurred in the lessons were identified and scrutinized in order to code segments. Any overlapping codes and redundancy were identified and the codes collapsed to form categories. The misunderstandings were categorized to determine what the cause and type of the misunderstanding was. I then explained the misunderstanding in terms of Speech Act Theory. The identified misunderstandings were mapped onto the classifications used by Hinnenkamp (1999) and Dascal (1999) (cf. section 2.5) to identify the nature and causes of misunderstandings.

This process assisted in forming descriptions and broad themes in the data. The inductive process allowed for a narrowing of the data into a few themes. A discussion of the key findings from this data set is provided in chapter 4.

Figure 3.3: Codes identified in the coding process based on the principles of SAT



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*3.5.5.2 International English Language Testing Score (IELTS)*

I made use of the International English Language Testing Score (IELTS) (cf. section 4.3.2), an internationally accepted set of band descriptors, for assessing English oral proficiency to assist in measuring the oral proficiency of the student teachers. My assessment against this instrument produced the rating I gave each participant. The rating for each participant was indicated on the template for each lesson summary. I took into account errors in grammar, such as tense and concord, syntax, sentence length, vocabulary, pronunciation and enunciation. A discussion of this rating is provided in chapter 4.

*3.5.5.3 Focus group interviews*

The data gleaned from the focus group interviews were transcribed and carefully analysed by reviewing the transcriptions repeatedly to look for similarities, repetitions and striking segments. This combing of the data assisted me in coding segments of texts. The codes were collapsed and grouped together to determine emerging categories and themes in the discussions. The resultant themes were scrutinized in terms of supporting evidence for the misunderstandings found in the video recordings, which included many verbal interchanges and served to corroborate what was initially found (cf. section 4.3.5).

*3.5.5.4 Questionnaire*

The data produced by the questionnaire were analyzed by carefully summarizing the data provided by the questionnaire and then coded. The segments of texts that could be coded together were grouped together and the themes which emerged were compared with the visual recordings in order to support or refute the results from the observations and focus group interviews. It seemed as though the findings from the observations and the focus group interviews corroborated the findings from the questionnaire, as explained in section 4.3.6.

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The data from the three data sets, namely the observations, the focus group interviews and the questionnaires, as well as the ratings for oral proficiency based on IELTS, were carefully read, divided into segments of information, labelled with codes (about 30) reduced and collapsed to about 16 codes and further collapsed into five categories. The categories were then grouped and reduced to three key themes. These codes, categories and themes are discussed and explained in chapter 4. During the last stages of the analysis I compared the empirical observations with the theoretical concerns in the literature (Berg 2004). This resulted in a proposed amendment to the model of misunderstanding developed by Hinnenkamp (1999).

### **3.6 Role of the researcher**

I was an independent researcher; working in my own time and with my own funds. This role informed many of my actions and the choices I made, including the following:

- I obtained ethical clearance and adhered to the principles of ethical research.
- I arranged access to the research sites through the various gatekeepers.
- I arranged the recording schedule of 26 lessons.
- I consulted with statisticians and distributed questionnaires.
- I organized and conducted the focus group interview discussions.
- I kept informal field notes by writing observations, impressions and hunches in the personal journal.
- I analyzed the video recorded lessons, processed and interpreted the findings and wrote the report.

Apart from the actions mentioned above, I had a particular relationship with the participants. All the student teachers who participated in the study knew me well. I had developed a special fiduciary relationship with most of the student teachers at the faculty over the years and they knew that I could be trusted to be fair and just.

All student teachers' performance is assessed during Teaching Practice and to ensure that their marks were not influenced by this study, I arranged with the Teaching Practice office that other mentor lecturers were assigned for the participant's assessment. I was,

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therefore, in a position to guarantee that the participation of the 26 student teachers in this study would in no way influence their assessment or final marks.

I acknowledge that the possibility existed that my role and experience as lecturer could have influenced the way I looked at the lessons presented by the student teachers. Force of habit could have allowed me to make judgements, not only in terms of misunderstanding and language competence, but also in terms of quality of performance as instructional designer and facilitator of learning. Although I feel the above needs to be mentioned, I do not think that it influenced the outcome of this study.

### **3.7 Strategies for enhancing trustworthiness**

The focus of the interpretation of any social phenomenon, in this case the qualitative data (from focus group discussions and visual recordings), should be viewed as something that can be used for better understanding the phenomenon under scrutiny which might otherwise have been enigmatic or confusing (Golafshani 2003). However, the qualitative researcher has to accept that reality is changing whether s/he wishes it to or not. From a constructivist paradigm, knowledge is socially constructed and may change depending on the circumstances, leading to multiple perceptions about a single reality (Healy & Perry 2000) and multiple or diverse constructions of reality. Therefore, to acquire credible multiple realities, multiple methods of gathering data are encouraged (Golafshani 2003) – in this case focus group interviews, observations and recordings, as well as questionnaires. In qualitative research there is a very definite need to address issues of credibility, precisely because researchers cannot see things as they really are, but can only describe things as they see them, which is influenced by their background, beliefs and assumptions. To address this issue, researchers should fully describe and document the methods used in the research to generate data in order to ensure consistency (Morgan & Drury 2003).

Apart from taking the abovementioned and the considerations for qualitative research as described in Leedy and Ormrod (2011); Nieuwenhuis (2007); Creswell (2005); Golafshani

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(2003); Ritchie and Lewis (2003) and Merriam (2002) into consideration, I increased the credibility of my research by:

- Member checking

Krefting (1991) suggests member checking as a technique, which actively involves participants in the research process by encouraging their own interpretation of the data. Member checking is a form of triangulation and minimizes researcher bias (Creswell 2003). I offered all the participants an opportunity to view, comment on and verify the accuracy of data transcriptions after each data collection period. Those who did so were all in agreement that my interpretations were accurate.

- Peer review

Peer review entails disseminating the data to impartial colleagues or academics experienced in research methods and the research process, to obtain comments or advice (Krefting 1991). I asked two experienced colleagues, one an expert in research methodology, and the other an expert in Applied Linguistics, to act as critical readers of the study. This was done both during the research process and after the first full draft was completed in order to ensure that our interpretation of the data was aligned. Suggestions and recommendations were considered and those applicable were addressed in the final writing of the thesis.

- Triangulation/Crystallisation

Triangulation is typically a strategy for improving the validity of research by controlling bias. According to Cohen et al (2000:112), "Exclusive reliance on one method of data collection may bias or distort the researcher's view of the particular slice of reality s/he is investigating." Triangulation strengthens a study by combining methods (Patton 2002). It is prudent to mention here that I noted the criticism by post-modern researchers of the term "triangulation" on the grounds that it assumes only three sides of approaching the world and as a result adopted the term "crystallisation" since I agree that there are "far more than three sides from which to approach the world" (Merriam 2002). The thorough literature study, the observations and focus group discussions, as well as the questionnaire, complemented one another and served as crystallisation of the data.

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The analysis in this study involved evaluative judgement on my part and was inevitably subjective. Although I respect my subjectivity, and do not necessarily consider it a negative entity, I endeavoured to minimise it by fully recording everything that I observed by writing detailed reflective notes (Wolcott 1992), and by staying consciously aware of my assumptions and prejudices. This self-conscious and rigorous examination for bias was a continuous process throughout the research. Qualitative research can achieve strong levels of reliability by documenting the sequence of moves in the data production, analysis and interpretation (Morgan & Drury 2003). My study relied on valid, authentic and trustworthy methods of collecting and presenting information and interpretations. Hammersley and Atkinson (1983:191) state that "data in themselves cannot be valid or invalid; what is at issue are the inferences drawn from them". Maxwell (1992:284) concurs: "Validity is not an inherent property of a particular method, but pertains to the data, accounts or conclusions reached by using that method in a particular context for a particular purpose." To strengthen the reliability of the inferences drawn in this study I applied the notion of rigour through the careful formulation of the research questions and the conceptualising of the research, as well as by comprehensively and accurately collecting and presenting the data. I declared my relationship with the participants, I described the participants and the sites fully, I documented detailed field notes from observation and interviews and thoroughly documented the methods for data collection. This thoroughness increased the reliability of the research. A direct, conscious assertion of validity is not possible for a qualitative study, but I am confident that this research comes close to what Wolcott (1992:120) calls "conscientiously thorough".

### **3.8 Ethical considerations**

Ethics deal with beliefs about what is right or wrong, proper or improper, good or bad (McMillan & Schumacher 2001). This study was potentially fraught with ethical issues pertaining to the participants being observed, particularly being video recorded, and may have been potentially unpleasant and intimidating, as participants may have had feelings of being exposed or embarrassed. I minimized the effects of the observations by always

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acting in a sensitive and tactful manner. The ethical requirements for conducting research were implemented throughout the study.

I applied for, and received, ethical clearance through the ethics committee of the Faculty of Education, University of Pretoria in 2008. I then applied for and received permission to conduct the research in Gauteng schools through the Gauteng Department of Education (GDE), also in 2008 (cf. addendum H). In 2011, I was provided with the official ethics clearance certificate to be included in the thesis (cf. addendum G). After discussions with the student teachers and with their consent forms signed, I sent out letters of information and consent forms to the learners in the classes of the student teachers involved in the research, and to the parents of these learners. I communicated the aim, objectives and nature of the study as well as the possible application of the findings to participants prior to commencement of data collection activities. The letters of information, the consent forms for the student teachers and the parents and the assent forms for the learners are included in addenda I, J and K. In all instances, I acknowledged that participation would be voluntary and informed (written) consent from participants was a prerequisite. Assurance was given that no individual's identity would be revealed to anyone other than the researcher. Participants were asked to choose pseudonyms if they wished. I then negotiated access to the sites with the principals of the schools so that all the participants were comfortable with my continued presence (cf. addendum L).

During the course of the research, every effort was made to maintain the fiduciary relationship I had established with the participants. At the onset of the research, during the first meeting with the participants, I explained that I would try not to create feelings of distrust or discomfort. I also explained that participants had the right not to answer questions or participate in research that they felt might hold negative consequences for them. I constantly reminded participants of the confidentiality and anonymity of their contributions. Both the student teachers and the learners were reassured that their participation would not impact on their final assessment or marks.

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The video recordings in the classroom were undertaken in such a manner as to be minimally intrusive and disruptive, e.g. I entered the classrooms before the lessons were due to start and set up the video camera. I remained silent and did not interrupt the lessons. I also offered to record the same groups more than once in order to eliminate the first, awkward recording and to use those recordings where the student teacher and the learners had become used to being observed. None of the participants felt that this was necessary. I explained to all the participants that the findings of the study would be included in a PhD thesis and in the form of articles and conference presentations, which are conventional undertakings in the academic community. I assured them that I would only use the information once their permission had been granted. The participants were given opportunities to view, comment on and verify the accuracy of data transcriptions before the final reporting of the data. Participants, who so wished, would receive a copy of the findings to be included in the thesis. The participants were debriefed after the recordings and analysis in order to ensure agreement and satisfaction with the process. As a token of appreciation, I offered each participant an opportunity to provide advice and share knowledge with them in order to help in their preparation regarding their Teaching Practice obligations. Since I was not their mentor lecturer and was not required to assess their performance, I was able to help them prepare for their assessment by teachers and other lecturers. Each participant also received a small token of appreciation after their participation, as well as a CD copy of their recorded lesson to use when applying for teaching positions.

### **3.9 Conclusion**

In this chapter I provided a description of the research design, methodology and the process followed in the research. The choices I made regarding the research design and methodology were influenced by my interpretivist world view and the particular lens, namely social constructivist, through which I viewed the phenomenon under scrutiny, namely misunderstandings. These choices were best suited to answer the research questions. I also described the data collection strategies, the instrumentation used, indicated the strategies used to analyse the data and mentioned the steps taken to ensure

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research rigour. The next chapter provides a detailed analysis of the data collected and offers the findings, as well as the implications thereof.