# CHAPTER 4 METHODOLOGY

SMK in recent research is conceptualised as an entity of complex linkages of content, substantive and syntactic structures, and beliefs about the subject discipline. Within the field of TESOL, SMK is relatively unexplored, especially from the viewpoint of the teachers who are ultimately responsible for the learning of students. In order to understand what SMK is to teachers and how teachers use it in carrying out their teaching duties, it is necessary to gain an insight into teachers reasoning, beliefs and intentions (Freeman, 1996). Such a view underpins the study reported in this thesis. Thus, the method of investigation selected for the study was qualitative, particularly, interpretive, as it was felt that such an approach would allow for greater opportunity to understand the phenomenon and all its complexities.

This chapter now outlines the methodology in detail. First, it provides an outline of the theoretical underpinnings of the study. This is followed by a discussion on the central research question and the guiding questions. Next, the study population and the sampling procedures are explained. After that, the methods of data collection and data analysis are outlined. The trustworthiness of the findings is considered next. Finally, issues of ethics associated with the study are addressed.

# **Theoretical Underpinnings**

This study was conceptualised within the interpretive paradigm. As in the case of all definitions encountered in this thesis, 'interpretivism' does not enjoy an undisputed meaning. Erickson (1986, p.119) prefers to use it as an umbrella term for "the whole family of approaches to participant observational research". One reason for this is that he wishes to avoid labelling such research as 'qualitative' as he claims that quantification of sorts can be used in research of this nature. Denzin and Lincoln (1998) subsume

interpretivism under qualitative research. Bilton *et.al.* (1981) use the term 'anti-positivist' in one part of their book and interpretive in other parts, thus suggesting that the terms are interchangeable. On the other hand, Connole, Smith and Wiseman (1995) maintain that there is a difference between interpretivism and qualitative research, although qualitative methods are central to interpretive research. Further, Schwandt (1998; 2000) makes a distinction between 'interpretivism' and 'constructivism', claiming that they differ in their epistemological assumptions and claims of a methodology. Most scholars, however, have avoided making such fine distinction and have used the terms anti-positivism, interpretivism, qualitative inquiry, and naturalistic inquiry to mean almost the same thing.

Under the umbrella of interpretivism is a number of paradigms, approaches to data, and methods of data analysis (Punch, 1998) which have been derived from the German intellectual tradition that emerged in the second half of the 19<sup>th</sup> century, and share the same anti-positivist orientation to research. On this, it is noteworthy that scholars such as Dilthey, Simnel, and Weber maintained that the human sciences (geisteswissenschaft) were fundamentally different from the natural sciences (naturwissenschaft) and, as such, could not be studied in the same manner (Erickson, 1986). At the time, the doctrine of positivism was used widely in the study of social phenomena. Proponents of positivism hold the view that human beings behave in the same manner as matter in that they react to external stimuli mechanically and that their behaviour can be explained in terms of their reaction. Furthermore, positivists hold that what is regarded as truths are 'facts', that is, knowledge verifiable by empirical evidence. Thus, only directly observable and measurable behaviours are considered as worthwhile of study. Unobservable phenomena such as meanings and intentions are not important (Haralambos, 1985).

Interpretivists, on the other hand, reject the assumptions made by positivists regarding the nature of human beings and the ways of knowing about social phenomena. The interpretivists' model of human beings carries with it the notion of choice, free will and individualism. Human beings are seen as active agents capable of monitoring their own behaviour and they are able to use their speech to make comment on their performance and

plan ahead. Further, human beings are purposive, active and involved with life experiences (Cohen and Manion, 1985).

Interpretivists contend that human beings are not like matter. Human beings have consciousness which enables them to think and feel, and give them a sense of awareness (Haralambos, 1985). They do not react mechanically to an external stimulus. Human beings function by making sense of all behavioural and physical objects in their environment (Erickson, 1986) that are perceived through their five senses (Haralambos, 1985). They interpret or make sense of a stimulus before deciding on an appropriate action. In short, human beings do not merely behave, but act. An action is considered to be more than a behaviour as it is a physical act with meaning. A behaviour is only the physical act (Erickson, 1986).

Once human beings have interpreted a particular stimulus they assume that their interpretation is real and that the qualities they have given to different entities are the actual qualities of those objects (Erickson, 1986). Responses to various stimuli will then be based on the attributes given to them. In this respect, human beings define both the stimuli and their response to them. They impose meaning on the natural and social world by the way they organise and categorise their sensory experiences, and their actions are simultaneously defined and confined by these meanings. In order to function, human beings have to construct and live in a world of meaning (Haralambos, 1985, p. 544).

Meanings for the interpretivists are not static. They are constantly being created, changed, modified and developed through interaction. New meanings are negotiated in interactions between actors. According to Mead, one of the proponents of symbolic interactionism, this is done through taking the role of the other person (1934). By imaginatively putting oneself in the position of the other interactant, one is able to interpret the actions of that person. Then, based on one's reading or interpretation of the other person's action, one reacts accordingly. Interactions are a continuous process of interpretations. Human beings are seen to be actively constructing their own world (Haralambos, 1985).

Interpretations are based on what human beings know of the objects and/or people with whom they are interacting. People draw on their stock of knowledge or social recipes to help them interpret the meaning of the actions of others. According to Wallace and Wolf (1986), Alfred Shultz who contributed to the development of phenomenology, maintained that people are able to understand the actions of others because they think of the world as being made up of types of things such as books, cars and so on. These typifications are passed on through social interactions with other people in the group.

Thus, according to Gephart (1999), subjective meaning is at the heart of interpretivism. In order to understand the social reality of human beings, the interpretivist has to grasp the meaning(s) of the action. To be able to find the meaning of the action, he/she has to interpret the action within context. For example, the raising of an arm can mean several things, depending on the context. It can be that the person is hailing a taxi, asking for permission to speak, or voting. The context in which the arm was raised would help the interpreter to assign the correct meaning to the action (Schwandt, 2000).

Understanding or *verstehen* is a precondition to correct interpretation. Schwandt (2000) claims that there are four ways in which *verstehen* has been defined. The first, as defined by Dilthey, a German historian and social philosopher, is empathic identification whereby understanding the meaning of another's actions is through grasping the subjective consciousness or intent of the other person by 'getting into the head' of the other person. The second type of *verstehen* is that propounded by Schultz (1962) who was concerned with intersubjectivity, that is, the way human beings interpret both their own and other people's actions as meaningful in their everyday lives. The third kind of *verstehen* is that of Winch (1958), which claims that understanding the actions of the actors requires an understanding of the system of meanings in which the actions are produced. In other words, the goal of *verstehen* is to grasp the meaning of the "institutional and cultural norms, action-constituting rules and so on" of the actors (Schwandt, 2000, p. 193).

All three types of understanding share certain common traits. First, human actions are assumed to be meaningful. Second, the researchers are true to the study of real life. Third,

they believe that it is possible to study social phenomena which are experienced subjectively in an objective manner. They believe that the interpreter is able to reconstruct the original meaning of the actions. What is required for this to happen is to employ the right method. This may require the interpreter to take part in the life worlds of the others. As the construction of meaning is dependent upon the circumstances or the context, understanding of the true meaning can only be complete when the whole and the parts are interpreted from each other (Connole, Smith and Wiseman, 1995; Schwandt, 2000).

The fourth kind of *verstehen* is that of philosophical hermeneutics, as expounded by Gadamer (1975) and Taylor (1995). They assert that all interpretations are subjective and that they contain the sociohistorical biases and prejudices of the interpreter. Additionally, it is not possible to interpret something objectively as our traditions and prejudgements condition our interpretations and cannot be easily set aside. Thus, understanding requires engaging one's prejudices and biases in the interpretation of stimuli. However, this does not mean that the prejudices remain constant. In encounters with what is being interpreted, the interpreter may alter some of his/her prejudices. Furthermore, understanding is not reproduced by the interpreter, but is being produced in the act of interpretation. Meaning is negotiated and the notion of a correct interpretation is not static. Bernstein (1983) explains that 'correct understanding' changes with our own changing horizons and the different questions we ask. Finally, understanding is 'lived' and "where it is successful, understanding means a growth in inner awareness, which as a new experience enters into the texture of our own mental experience" (Gadamer, 1981, p. 109-110). Hermeneutics aims to clarify the conditions in which understanding takes place.

In summary, interpretivists are concerned with understanding the meanings which people give to objects, social settings, events and the behaviours of others, and how these understandings in turn define the settings. In order to retain the integrity of the phenomena under study, interpretivists approach research differently from positivists. First, they study people in their natural surroundings (Connole, Smith and Wiseman, 1995). Second, they use methods of data collection that allow the meanings behind the actions of the people under study to be revealed. Commonly used methods in interpretivist studies are informant

interviewing, both participant and non-participant observations, and analysis of documents of all kinds (Gephart, 1999). In addition to these, other methods of investigation may be integrated into the study. For example, in the studies on SMK, additional methods of data collection include simulations which requires participants to handle contrived problems or situations designed by the researcher, stimulated recall commentaries where teachers are asked to think aloud, and concept mapping where teachers are asked to present conceptual structures in a visual manner (Calderhead, 1996). In regard to the analysis of data, interpretivists carry out the task in tandem with data collection. The data collected are not in support of a hypothesis. Rather, they are gathered to help develop a theory. Thus, theory is emergent and grounded on the data that is produced in the investigation (Cohen and Manien, 1985).

Finally, interpretivists use different criteria to judge the results of their studies. While positivists adhere to concepts of reliability and validity in their assessment of research findings, interpretivists evaluate in terms of trustworthiness, which includes credibility, transferability, dependability and confirmability. According to Gephart (1999), ultimately, how valid a piece of interpretive research is depends on whether similar findings can be achieved when another researcher enters the same field using the same kinds of strategies as the first researcher.

## **Central research question**

The central aim of the study reported in this thesis was to develop theory about TESOL teachers' perspectives on SMK for planning and teaching. The central research question was as follows: "What are TESOL teachers' perspectives on SMK for language teaching?" According to Fraenkel and Wallen (1996, p. 467), "the concept of perspectives captures ideas, behaviours and contexts of particular teaching acts. ...(They) are set in the concrete world of actual situation and refer to particular actions." They go on to state that teacher perspectives take into consideration how the situation of the school and the classroom is perceived; how this situation is interpreted according to the teacher's experiences, beliefs,

and assumptions; and how this interpretation is exhibited in behaviours. Thus 'perspectives' are the 'meanings' actors attribute to their experiences, beliefs and assumptions. On this, Blackledge and Hunt (1985) maintain that included in meanings or perspectives are such notions as aims and intentions (so one can ask what a teacher aims to do in a particular lesson). Another property of 'perspectives' is that people can state the 'strategies' they use to achieve their aims. It also includes the idea of significance (so one can ask what the teacher sees as significant in the situation). Finally, the notion of reasons is included (allowing one to ask what reasons the teachers give for the aims, strategies and significance they have with regard to the particular situation).

# The guiding questions

The central research question was pursued through a set of guiding questions. The guiding questions were developed from Blackledge and Hunt's (1985) unraveling of the concept of 'perspectives' which takes in the notion of perspectives consisting of aims, strategies, and significance, and the notion that 'participants' or 'actors' can give reasons with regard to their position on each of these areas.

There were two sets of questions grouped under the following headings: teachers' perspectives on planning and perspectives on teaching. Under each of these headings were questions that focussed on aims and intentions, reasons and significance. The following sets of guiding questions were used to help the researcher in her focus during data collection. It must be mentioned that these were only questions to guide the researcher to ensure that all the major aspects of the study were covered.

- 1 Questions on TESOL teachers' perspectives on planning
- 1.1 What actions do you take when planning a) a course outline, b) a weekly teaching plan, and c) a daily lesson?
- 1.2 What aims lie behind these actions? What are the reasons for these aims?
- 1.3 What strategies do you have to achieve these aims? What are the reasons for these strategies?

- 1.4 What is the significance of these aims and strategies for you? What are the reasons for attributing such significance to your aims and strategies?
- 2 Questions on TESOL teachers' perspectives on teaching
- 2.1 Within the classroom situation, what aims do you have when teaching individual lessons?
- 2.2 What are your strategies for achieving your aims? What are your reasons for having those strategies?
- 2.3 What is the significance of these aims and strategies for you? What are your reasons for attributing such significance to your aims and strategies?

From these, a set of very specific questions was generated as data gathering questions. These questions allowed teachers to move backwards and forwards between the global and the particular. In doing so, the teachers were able to get a clearer picture of their own SMK. As Geertz (1979, p.239) notes, "(by) hopping back and forth between the whole conceived through the parts that actualise it and the parts conceived through the whole which motivates them, we seek to turn them, by a sort of intellectual perpetual motion, into explications of one another".

# **Research Site**

This study was undertaken at the ELICOS program in the Department of Languages and Intercultural Education (DoLIE), Curtin University, Western Australia. ELICOS colleges are operated as businesses. They are expected to be self-funding, and in the case of privately owned ELICOS colleges, are also expected to yield a profit for their owners. This orientation towards profitability brings along with it certain practices. ELICOS colleges have to be sensitive to market needs. In recent years, there has been an increasing demand for short courses. This has resulted in some ELICOS colleges running English language courses that are as short as two weeks, although the majority of the colleges have courses that are between four to five weeks in duration. It has also led to some colleges enrolling students in courses at the beginning of every week and allowing students to leave at any time they wish. Thus, in certain ELICOS colleges, conventional ideas of education and the role of educational institutions have been drastically modified to accommodate market demands. In addition, financial considerations often resulted in classes with mixed levels of English language proficiency and mixed educational backgrounds.

In regard to the employment of teachers, most ELICOS colleges maintain only a small core of 'permanent' teachers. The majority of the teachers in the ELICOS colleges are employed on short-term contracts, or on a casual basis. Their continued employment is dependent upon student numbers. They are usually employed on very short notice. In certain instances, teachers are employed a day before the commencement of class. In situations where colleges have to let go of some of the teaching staff due to shortfalls in student enrollments, it is a common practice to retain teachers who are judged by the students to be 'good' teachers.

The research site where this study was conducted was not very different from the other ELICOS colleges in that it also had five-week modules, but unlike a number of them which had weekly intake and exiting of students, new students were admitted only at the start of each module. The shortest period of time that the students could study was one module. Prior to 2004, the ELICOS program operated four terms of ten weeks duration with each term being divided into two modules of five weeks each. At the start of 2004, the idea of 'terms' was abolished. In its place were nine five-week modules each year. The first module was in the second week of January when most of the university was back at work after the Christmas/New Year shutdown period. There were three breaks between modules in one calendar year, namely in July, in September and in December. Therefore, in most instances, there were no breaks between modules.

In the university department where the ELICOS program was located, the teaching staff was employed under the university Higher Education Contract of Employment (HECE) award. There were tenured staff members and there were those who were employed as sessional staff. Sessional staff were employed only if there were still teaching hours left after all the tenured staff members had had their full quota of work. In addition to the post-

graduate and undergraduate programs, there were three pre-tertiary programs in this particular university department. Tenured staff members could choose to teach in any of the programs as long as they satisfied the teaching requirements for the different programs. At the time of data collection, most of the tenured staff members who had been engaged in pre-tertiary teaching were on the other two pre-tertiary programs. There were only four tenured staff members including the Director of Studies (DoS) in the ELICOS program. Of these, two were part-time. The majority of the teachers on the ELICOS program were sessional staff members. Many of these sessional staff members had been with the ELICOS program for several years and many were working part-time.

## **Selection of Participants**

Participants for the study were selected on the basis of their ability to meet three basic criteria. These were:

- They had to be in possession of at least one of the three levels of TESOL qualification acceptable to NEAS, namely, certificate in TESOL, diploma in TESOL, or a master's in TESOL;
- They had to have at least three years of TESOL experience in a language school setting;
- They had to be currently employed in the ELICOS program.

The first criterion was attended to as it enabled the researcher to find out the perspectives of the range of TESOL teachers working in the ELICOS industry. The second and third criteria were included as an attempt to find participants who had as great a shared TESOL background as possible. These criteria were also important in that experienced TESOL teachers were the people who could provide the most insights into SMK.

The original plan was to use theoretical sampling (Strauss and Corbin, 1998; Minichiello *et al.*, 1990) for the study. Theoretical sampling is a method of data collection where decisions on sample types (people, places and events) are made on the basis of concepts that emerge from on-going analysis of the data gathered. The aim of such sampling is to

maximize opportunities for discovering variations among concepts and to densify categories. According to Strauss and Corbin (1998), theoretical sampling cannot be planned before the study commences and specific sampling decisions need to be made in the course of the study.

Nevertheless, before the start of the study, the researcher had to make certain initial decisions regarding sampling on the basis of her understanding of the phenomenon to be studied. This study planned to commence with an initial nine participants to provide the first body of data. For every level of TESOL qualification (certificate, diploma and master's), three participants were to be selected for intense study. The decision to have these numbers was based on two considerations. The first related to the number of participants required for meaningful comparisons to be made, and the second consideration related to what was possible for a single researcher to accomplish within the time allowed. It was felt to be possible to make key comparisons by studying three participants intensely for each of the level of TESOL qualifications. More data from other participants would then be obtained if required until theoretical saturation was reached. Theoretical saturation refers to the point at which a category has become fully developed in that no new or relevant data can be collected to add to the category (Strauss and Corbin, 1998, p.212).

Although the intention was to study the perspectives of ELICOS teachers with different levels of TESOL qualifications, some modifications had to be made to accommodate the actual situation where the majority of ELICOS teachers have only a certificate in TESOL. The number of ELICOS teachers with TESOL diplomas who were available to take part in the study was much smaller than expected. Those that fitted the category were either on extended maternity leave or were doing their masters. Therefore, they could not strictly be considered as TESOL diploma holders. In addition, the number of teachers who had completed their masters' degree in TESOL was also very small.

A decision had to be made on whether to extend the research site to include all other types of language programs such as TESOL in high schools and the Adult Migrant English Program, to cast the net further afield to include ELICOS colleges, or to be more flexible with the qualifications' requirements of participants. The first two alternatives were discarded on different grounds. In regards to extending the study to include other language programs, it was felt that the organisation, philosophy, goals and focus of these programs were too different from that of ELICOS colleges and the inclusion of these teachers from these other language programs would necessitate a reorientation of focus of many parts of the study. The second alternative was rejected on the grounds that it was impractical in terms of money and time.

This left the third alternative, which was to study the ELICOS teachers as one group regardless of qualifications. According to Strauss and Corbin (1998), such sampling on the basis of convenience, where the researcher studies whoever volunteers to participate does not compromise the quality of the data. Comparisons can still be made on the basis of concepts. The only difference is that the researcher "must accept the data that he or she gets rather than being able to make choices of to whom or where to go next" (Strauss and Corbin, 1998, p.208).

In total, nine ELICOS teachers agreed to participate in the study. However, two of the teachers found the commitment too much and so they decided to stop halfway through the study. Seven other teachers committed themselves to the full cycle of data collection, which was five weeks. At the end of the first round of data collection, two did not continue. One dropped out because she found it too time-consuming, while the other could not continue because she went on maternity leave. Of the participants who completed a full cycle of data gathering, three had a certificate in TESOL, two a post-graduate diploma and two had a master's degree. Their years of teaching experience in an ELICOS college ranged from five to over fifteen years. They were between the ages of 28 and 52. In addition, all were females. All were native speakers of English.

## **Data Collection**

## The proposed research plan

In the original plan, the period of data collection was to be over three ELICOS term cycles throughout the academic year. Each cycle was to last between six to twelve weeks. It included the week before term commencement and the week after the close of term. These two weeks were included because they were crucial in relation to finding out about teachers' perspectives on the overall planning of the course.

The plan was to follow the same group of teachers teaching on different courses for all three term cycles. As teaching on different courses would necessitate the teachers planning and teaching different content, this would provide the researcher with the opportunity to explore teachers' perspectives over a wider range of SMK. It was possible to study teachers planning and teaching different courses because the nature of ELICOS was such that teachers seldom had the opportunity to teach the same course twice in a row

Data were to be collected from three sources – documents, in-depth interviews and observations. These sources, which are commonly used in interpretive studies, are a means of getting close both physically and psychologically to the participants (Merriam, 1988). The decision to use documents was based on the fact that documents are usually produced for reasons other than those for research. They are readily available, and unlike interviews or observations, they are generally non-reactive and unobtrusive (Merriam, 1988). As for interviews, it was felt that they would be the best way of getting data on something that was not easily observable (Minichello *et. al.*, 1991). Such an approach is particularly good for gaining an understanding of feelings, thoughts, intentions and past experiences of participants (Patton, 1990). Finally, observations were to be used because they are believed to be effective for collecting data in studies where the phenomenon is little known, where the perceptions between insiders and outsiders differed and where the phenomenon was hidden from public view (Jorgensen, 1989). In the case of the present study, it was felt that this would permit the researcher to obtain a first hand account of the phenomenon.

The proposed use of multiple data sources in this study was also based on the following considerations. First, it was to ensure that the information obtained would be trustworthy. The use of three different data sources was to allow triangulation of findings to take place. This, in turn, was to ensure that the findings were credible and dependable, as one source could give confirmation to the evidence presented by another source. Alternatively, if conflicting evidence was found by the different methods, then further investigation could be pursued until some form of resolution could take place. Second, the use of more than one method was seen as necessary in that it could give the researcher greater access to more comprehensive meanings held by the participants. Each method of data collection has its strengths and weaknesses, and the weakness of one may be the strength of another. By employing a number of data collection methods, a better understanding of the phenomenon could be achieved.

## The original data-gathering plan

# *Documents*

Data were to be gathered from two types of documents – those that were directly related to work, and journals kept by the participants. The work related documents that were to be examined included course outlines, teaching materials, corrections of students' work, and students' assessment tasks. These documents were felt to be an important source of information as they were seen to be the outward manifestations of the participants' thinking. These documents were non-reactive and they were the product of the participants' work. In this respect, they were not influenced by the researcher's presence. In addition, participants were to keep a journal. Journal keeping, following Nunan (1992), involved participants recording in writing their thoughts and reflections regarding their work. The entries were regarded as a form of self-disclosure that help make explicit beliefs and assumptions the participants hold. As journal entries were in the participants' own words, they were particularly useful in capturing the participants' perspectives. This type of document is reactive as it is written at the request of the researcher for the purpose of the study. This was taken into account when the journals were analysed.

## <u>Interviews</u>

In-depth interviews, as described in Minichiello *et al.* (1990), were to form the main source of data gathering. All the interviews were to be taped and transcribed so that the words of the participants could be faithfully recorded. All the participants were to be interviewed at least once a week for the duration of the data gathering cycle which was one ELICOS term. The researcher was to meet with the participants either at the beginning of the week or the end of the week to discuss the aims, strategies and significance of the work they have planned for the coming week, and also to discuss their reflections about the teaching the week before.

In addition, there were to be interviews after observation sessions of the participants teaching in the classroom. These interviews would focus on the reasons and significance behind the actions of the participants while teaching. These interviews were to be held either immediately after the observations, or as close as possible after the observation. This was to ensure that the actions were still fresh in the minds of the participants, thus ensuring that their recall was more accurate.

An initial *aide memoire* was to be developed to help keep the interviews focussed. An *aide memoire* is an interview guide which is made up of a list of issues, topics, problems or ideas which the researcher wishes to cover in the interview with the participants. It is not a standardised instrument and is revised as and when required (Minichiello et al., 1990). The questions in the *aide memoire* for the study were to be organised using Blackledge and Hunt's conceptualization of perspective as discussed already. All interview transcripts were to be given to the participants to be checked and verified. The participants were to be given the freedom to elaborate, refine, modify or alter their transcript until they were satisfied that the views presented in the transcripts were an accurate reflection of their perspectives.

### **Observations**

This study was also to make use of observations of the participants in action in the classroom. Observations are important as they facilitate a form of data that can be used to

verify and corroborate the information gained through interviews, which rely on the subjective reporting of the participants. This allows the researcher the opportunity to check if there is a mismatch between what the participants say they do and what they actually do. Another importance of observations is that they give the researcher an opportunity to elicit explanations for actions noted while participants are conducting their teaching.

The observations of the participants in action were to be videotaped wherever permission was given for it. If videotaping was not possible, the researcher planned to take notes and use a tape-recorder to aid the note-taking. In note-taking, every attempt was to be made to describe as closely as possible what was being said and the actions that took place in the classroom.

The plan was to have four hour-long classroom observations for each participant per ELICOS term where possible. The observations were to be for the first day of term, the first lesson at a beginning of a week, a lesson at the end of a week, and the last lesson before the end-of-term assessments. However, owing to the fact that many ELICOS Directors of Studies usually viewed such observations as intrusions and disruption to class routine, the aim was to have at least one observation at one of the key times nominated by the researcher.

#### The actual data collection process

There were three rounds of data collection in total. Each round of collection was for one five-week module. The first round was carried out between June and July of 2002, in the second module of Term 2. Seven teachers participated. The teachers were told that they would be interviewed and observed, and that they would also be required to keep a journal. However, most found that they had too much to do in their daily work to have time to keep a journal. Consequently, it was agreed that the journal was optional. The teachers were also uncomfortable with being videoed, feeling that it was intrusive. Consequently, it was agreed that only notes would be taken in the observations. However, because of illness on the part of some of the participants and the tight schedule with which the lessons were conducted, observations did not eventuate in the first round of data collection.

The second and third rounds of data collection took place in the first and second modules of Term 4, which was from October to December. The gap in time allowed the researcher to carry out a much more detailed analysis of the first set of data and this analysis informed data collection for the second and third rounds. In these two rounds of data collection, two of the original participants dropped out. One had found the process too onerous while the other went on maternity leave. Another teacher agreed to take part and all six participants provided valuable data for the two rounds of data collection. Once again, the participants were asked if they could do three things, namely, meet with the researcher to talk about their plan for the coming lessons and reflect on what they had already done, keep a journal and also be observed once in class. Once again, journal keeping was seen to be too time consuming. Only one participant kept a journal but it contained little reflections. It became more of a record of the work done in class. In that respect, it was not very different from the records, which the teachers kept in the class rolls. However, the teachers met with the researcher at least once a week and they were also available for elaboration or clarification of points raised in the interview at other times. This was largely because the researcher was a staff member and was at the research site most days of the week. The participants also arranged for a day when the researcher could observe their class. Thus each participant was observed in her classroom surrounding at least once in each module.

In addition to recounting what they did each week and what they planned to do the following week, the teachers also gave the researcher copies of materials which they gave the students. These were usually given to the researcher each week. Usually, the teachers gave them after they had completed the lessons. Thus, only materials that were actually used in class were given to the researcher.

# **Analysis of Data**

The analysis of data was carried out using the grounded theory method as explained by Strauss and Corbin (1998). This was an intricate process whereby raw data were reduced into concepts that were then grouped into categories. In grounded theory analysis in its

purest form, the data are coded and analysed using three coding methods, namely, open coding, axial coding and selective coding. In this case, it was deemed appropriate to use open coding and axial coding only, with the latter leading to the development of propositions.

# **Open coding**

Open coding represents the first level of coding when raw data are sorted and placed into conceptual categories. This is achieved by breaking down the raw data (which may be an observation, a sentence, or a paragraph) into discrete ideas or events and labelling them. Then these concepts are grouped together into categories and each category is given a name. The aim is to analyse the data with a view to theory building.

In this study, open coding commenced with the transcription of the first interview and it continued throughout the entire period of data collection. The interviews were coded on a line-by-line basis. On occasions, coding was carried out on a word-by-word basis. Initially, the words were cut up and pasted into cards and attempts were made to look for a more abstract category in that manner. However, the researcher found this method of handling data to be unsatisfactory as categories were fluid and could change as more understanding and more data were obtained. Additionally, the data made better sense when they were within the context in which they occurred. In other words, identifying them, labeling them and then taking them out of their original environment was not an efficient way of managing the data. Instead, the researcher highlighted the categories using highlighting pens of various colours and then labeling each of these at the side of the page. She then used multicoloured stickers on which she wrote the category of each and stuck these to the side of the page. For easy location of the categories, the categories were arranged in an alphabetical order on the page, and the different coloured stickers represented different broader categories. For example, yellow stickers represented theories of language teaching, blue represented the teaching environment and green represented subject matter knowledge.

# Figure 1

# Example of open coding

Theresa: Interview 0.1

Well, the $2^{nd}$ bit has changed – it's different in that I lost some of	ELICOS
my original students. I've got brand new students coming in.	environment
	New class population
How many?	
110w muny:	ELICOS
	environment
Er 4 or 5 new coming in and then about 6 or so leave. So,	New class population
virtually half the class is brand new and half the class isn't. And,	Pedagogical concerns
y'know I'd said that this week we're much into the adjustment	Class dynamics
stage – getting to know them and I ah really want to know the	Pitching lessons
level of the students and try to pitch it correctly and make them feel	Class dynamics
that they're bonded to the rest of the class and er. I. this group –	bonding
they seem to be going quite well ahm	bonding
So what did you do I mean on the first day?	
so what all you do, I mean on the first day:	
	Method of bonding
1 first of all got the previous students to introduce themselves	Using old students as
and share I said to them just take care of these new students,	resource people
you know show them where the facilities are and where	
everything's done. With all the new students I've written their	Bonding: Learning
names on the board so that you can see and hear and try to	names
remember their names and then get all the previous students to	
reiterate their names	
How do you do it? to reiterate their names? Did you give a	
specific activity or	
No. Livet had a like each time and the barrow of the	
No. I just had a like each time cos what's happen was that er	ELICOS
on Monday we had 2 or 3 new students and then again on	environment

Wednesday there was another group come in. so each time I've got	New class population
half the class to share that themselves. So they just introduce	Pedagogical concerns
themselves and just make the students feel comfortable and I ab	Creating a conducive
allowed and just make the statents feet connortable and fait	environment: make
y'know, constantly using the new students' names to remind the	students comfortable.
rest of the class and previous students and you can even do lots of	Bonding
group work together so that they've intimate time together and	
seems a bit more relaxing and laughing and you know, small group	Bonding
situation – so that the new students can feel part of the class.	Bonding

In regard to observations, the coding was also carried out on the margin of the notes. An example of this can be seen in figure 2.

# Figure 2

# Classroom observation: 29/10/2002

Rosa

9.00 a.m.	Pedagogical concerns:
R entered class with me. Only two students (girls) were present.	Role of teacher as
Quick introduction of me to the girls. Counted the number of	facilitator of learning:
chairs and desks. Got six more chairs from another classroom.	adequate furniture
More students turned un	
here students turned up.	
Dermite a maximum for Decision According (4 <sup>th</sup> Maximum for a sector	Importance given to
R wrote a reminder for Reading Assessment (4 November, next	assessment tasks
Monday) on the board.	
When all the students turned up, I was formally introduced. R	
asked me to say a few words about what I was doing in class.	
9.10 a.m.	
Lesson began. R passed a piece of paper round the class.	
Students had to write down their topic for presentation. Paper to	
be collected at Coffee Break	
Directed students' attention to Reading Assessment on Manday	Importance of
Directed students attention to Reading Assessment on Wonday.	assessment tasks
Assured them that they d be given plenty of time to do it.	Pedagogical concerns:
Reminded them that the real test would be the following week.	Maintaining a conducive
Said she would remind them about Assessment on Friday.	affective environment
	Taaahing/loorning
Introduced the day's activities in the form of a 'menu'.	process: Cohesive and
1. Compare/contrast Essay before coffee break.	coherent lessons
2. Finish reading exercise on implied main idea after the	
break.	

# **Axial coding**

Categories derived from open coding are first order concepts (Punch, 1997). The second order concepts which are more abstract than the first are determined through a process called axial coding. In axial coding, the open categories are examined, and relationships between the categories are found. Propositions are then developed. At this stage, the open categories are put together again but in a way that is different from the raw data. The open categories are examined for logical links and are grouped into broader, more abstract categories. Some of the ways in which these categories may be linked include searching for cause and effect relationships, comparisons and contrasts, parts of a process and other logical links. The categories may also be linked in that they may be representations of the same thing from different viewpoints.

The purpose of axial coding is to get a more precise and complete explanation of a phenomenon through reassembling data that were fractured during open coding (Strauss and Corbin, 1998). Procedurally, this involves several basic tasks such as laying out the properties of a category and its dimensions, identifying the conditions, actions/interactions, and consequences associated with the phenomenon, relating the categories with their sub-categories, and looking for clues on how the major categories might be related to each other (Strauss, 1987).

For this study, axial coding was carried out with the researcher moving between inductive and deductive analysis as a means to constructing a core category. Hypothesis were made about the relationships between each category and its subcategories. They were then tested by re-examining data previously gathered or by analyzing new data about the phenomena represented by the categories and subcategories. Figure 3 is an example of axial coding carried out in this study.

# Figure 3

# Axial coding theoretical memo

Conducive learning environment

Phenomenon: Creating a conducive learning environment

# **Dimensions of conducive learning environment:**

Physical: furniture arrangement, furniture, room size, seating between sexes.

Affective: reduction of fear, face-saving.

Social: bonding class.

Causal condition: A desire/need to achieve maximum learning in the short time available.

**Context:** Possibilities and limitations of teaching in an ELICOS program in a tertiary setting.

University setting – physical space not negotiable, no specially designated classrooms for ELICOS teaching.

ELICOS Program – self-funding, short and frequent intakes of students, student satisfaction.

Teachers' own professional standards

# Strategies:

Physical – action where possible; if not possible, do other things – appease students by acceding to their requests.

Affective – create safe learning environment through confidence boosting strategies; face-saving strategies.

Social - strategies to bond class.

# **Consequences:**

A happy class. Lesson outcomes achieved.

## **Development of propositions**

After axial coding, analytic induction was used to formulate propositions. In analytic induction, the phenomenon to be explained (the explanandum) and explanatory factors (the explanans) are progressively redefined in order that a perfect relationship between the two is maintained. The initial explanandum is reworked as new cases are examined and cannot be explained within the existing hypothesis. When this occurs, the reworking of the explanandum or the explanandum so that the problematical cases fall in with the explanans or are not included in the scope of inquiry. On the other hand, it may mean reworking the explanans to reflect the new evidence (Katz, 2001).

An example of how a proposition was refined to take in new evidence is demonstrated below.

#### Proposition 2 a

Such a role requires ELICOS teachers to use their knowledge of language teaching, comprising their knowledge of the language (SMK) and knowledge of language learning, to develop teaching strategies to fit the teaching situation that must take into consideration the following constraints:

- Limited time available to teach the subject matter;
- Learner variables;
- Co-teachers and parallel teachers' professional views.

This knowledge is derived from their own experience as language students, as language teachers in general, and language teachers of particular units, and their own formal training in TESOL.

#### Proposition 2 b

Such a role requires ELICOS teachers to use their knowledge of language teaching, informed mainly by their understanding of what constitutes the SMK of the English language (SMK) and their understanding of how the subject matter is best learnt, to develop teaching strategies that accommodate the constraints posed by the way the ELICOS program at DoLIE is organised, managed and operated. These strategies are used in their teaching and planning.

#### Proposition 2 c

Such a role requires ELICOS teachers to develop teaching strategies that accommodate the constraints posed by the way the ELICOS program at DoLIE is organised, managed and operated. These strategies are

guided by teachers' knowledge of language teaching which is informed predominantly by their understanding of what constitutes the SMK of language for ELICOS, and how this SMK is best learnt.

#### Proposition 2 d

Such a role requires ELICOS teachers to adopt a teaching approach that integrates two types of strategies. The first type of strategies are those which teachers develop to accommodate the constraints posed by the way the ELICOS program at DoLIE is organised, managed and operated. The second types of strategies concern teachers' knowledge of language teaching. Teachers' language teaching strategies are informed predominantly by their understanding of what constitutes the SMK of language for ELICOS, and how this SMK is best learnt.

#### Proposition 2 e

Such a role requires ELICOS teachers to develop teaching strategies that accommodate the constraints posed by the way the ELICOS program at DoLIE is organised, managed and operated. The strategies which the ELICOS teachers have developed may be grouped under four headings; namely, strategies to prioritise SMK; strategies to maximise time utilisation in the classroom; strategies to address student variables; strategies of working with co- and parallel teachers.

As will be seen in the following chapters, none of these propositions fitted all the evidence available and new propositions had to be developed.

# **Data Recording and Storage**

Data coding as mentioned above was carried out simultaneously with data gathering. In addition to the meticulous coding, the actual storing of data was important as the data consisted of tapes, and different types of documents. All the interviews were transcribed and stored in three separate computers. One of the computers was at work. In addition, there were two sets of floppy discs. Again, one set of floppy discs was kept in the workplace. Such precaution was taken as a safeguard against computer breakdowns, theft, fire and other misfortunes reported by numerous other postgraduate students. There were also two hard copies. The hard copies were clearly labelled, referenced and filed away together with other documents and notes for each participant. These were kept in individual folders.

# **Criteria for Trustworthiness**

Trustworthiness is that quality of an investigation (and its findings) that make it noteworthy to audiences (Schwandt, 1997). According to Lincoln and Guba (1985), interprevist studies must satisfy the criteria set for trustworthiness. These are credibility, transferability, dependability and confirmability. Credibility concerns the truthfulness of the data collected. To ensure that the data are credible, a number of research strategies may be used. The first is an extended period of data collection. For this study, data were collected over a period of three ELICOS terms for every participant. The second was the use of multiple data gathering methods. This study used three methods of data collection – documents, interviews, and observations. Another way was to involve teachers in critiquing the conceptual relationships and theoretical propositions as they emerged at the time of data analysis. Finally, 'peer debriefing' was carried out regularly throughout the data planning and gathering phases (Lincoln and Guba, 1985).

The second criterion, transferability, refers to the generalisability of the study, whether there is sufficient information about the study to allow the reader to establish the degree of similarity between it and other cases to which the findings might be transferred (Schwandt, 1997). One way of meeting this criterion, according to Lincoln and Guba (1985), was to incorporate working hypotheses with thick descriptions of the context. This would permit the reader to judge whether transferability was possible. In this study, efforts were made to keep detailed notes and analysis of data collected from interviews, observations and documents. Additionally, analyses of emergent theories relating to SMK of teachers were also kept.

The third criterion, dependability, pertains to the rigour associated with the process of inquiry (Schwandt, 1997). Guba and Lincoln (1981) advocated the use of an audit trial as a means of ensuring dependability. An audit trial is a technique whereby the reader is taken through the process of the study, step-by-step, so that he/she can determine whether the process and conclusions of the study are trustworthy. In this study, the reasons and the processes taken in collecting and analysing data have been made explicit. This enables the

reader to understand the path taken by the researcher and to decide if those actions taken were dependable.

The final criterion, confirmability, is in regard to the degree to which the data and interpretations of the study is based firmly on evidence collected rather than the personal construction of the researcher (Lincoln and Guba, 1985). To satisfy this criterion, Lincoln and Guba (1985) specified the use of an audit trial described above. To assist in ensuring confirmability, the researcher kept in mind the following questions while analysing the data: Are the findings grounded in data? Are the data-derived inferences logical? Do the categories have explanatory power and do they fit the data?

# **Ethical Considerations**

At the time when the study proposal was submitted for consideration by The University of Western Australia Research Ethics Committee, the researcher had to complete a detailed form on how the research was to be carried out. Risks to the participants and any other person had to be clearly stated. The research proposal satisfied the stringent requirements set by the university.

In the study, the researcher followed the procedures stated in the ethics form. All participants were given a clear picture of what the study was about and what they were required to do. They were also told that they could withdraw at any time and that a joint decision would be made on what to do with the data collected on withdrawal from the study. Also, confidentiality was ensured through the use of pseudonyms and the identity of the participants was not revealed without their permission.

# Conclusion

This chapter discussed the methodology used in the study on TESOL teachers' perspectives on SMK in planning and teaching. It began with the theoretical underpinnings for interpretivism which was the approach taken. Next, the actual data gathering and analysis processes and strategies were discussed. This was followed by a brief discussion on the methods used to maintain trustworthiness in the study. The chapter ended with steps taken by the researcher in order to meet the ethical standards set by The University of Western Australia.