

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Introduction

When conducting research, there are many possible ways of gathering information from participants. In this chapter, the research methodology for the collecting and organising of appropriate research data for this study will be discussed and analysed. Birley and Moreland (1998) describe data collecting as the part of a project where many researchers feel that the “real” research occurs. Van Manen’s 1990 study (cited in Angellil-Carter 1995, p. 33) defines the term, “methodology”, as referring to the “philosophical framework, the fundamental assumptions and characteristics of a human science perspective.” Guba and Lincoln (1989:183) regard methodology as

... the overall strategy for resolving the complete set of choices or options available to the inquirer. Far from being merely a matter of making selections among methods, methodology involves the researcher utterly - from unconscious worldview to enactment of that worldview *via* the inquiry process.

In order to elicit the attitudes of students and staff towards academic development classes at TUT, different methods were used: in-depth, semi-structured, face-to-face interviews and focus group interviews. The advantages and disadvantages of each method will be dealt with, briefly.

#### 3.2 Qualitative, semi-structured, in-depth, face-to-face interviews

There are different types of interviews - namely, semi-structured, structured and unstructured interviews. Flick (1998:76) feels that the interest in face-to-face, semi-structured interviews is linked to the expectation that the interviewed participant’s view points are more to be expressed than they would be in a non face-to-face questionnaire. McMillan and Schumacher (1993:426) claim that qualitative research

involves interviews that have open-ended questions to obtain data from participant meanings - how individuals perceive their world and how they explain or make sense of the important events in their lives. In this research, the interview is considered to be a research data technique carried out with the definite purpose of gathering data by means of the spoken word through the use of a planned series of questions. The choice of qualitative research for this research is the result of a reflection on the nature of the problem - the students' and staff's attitudes towards academic development classes. Face-to-face interview methods were, therefore, preferred to quantitative methods as they give intricate details of the qualitative phenomena. In this research, semi-structured interviews were seen as the richer and most useful option to collect data.

In this research qualitative interviews - as described by Mouton - were used which “emphasize the relativism of culture, the active participation of the interviewer, and the importance of giving the interviewee voice” (2000:196). Furthermore, the interview questions were semi-structured. All the lecturers and Academic Development Practitioners were asked the same questions which were tape-recorded for later analysis. This was done in order to provide valid and reliable data. Macmillan and Schumacher (1993:14) maintain that qualitative research, commonly, presents facts in narrative form. Bless and Higson-Smith (2000:104-109) cite the following as the advantages of qualitative interviews:

- Qualitative interviews actively involve the respondents in the research process – thereby, empowering the respondents.
- They allow free interaction between the interviewer and the interviewee.
- They allow opportunities for clarification so that relevant data is captured.
- They maximise description and discovery.
- They offer researchers access to people's ideas, thoughts and memories in their own words, rather than in the words of the researcher.

### **3.3 Focus group interviews**

Schurink and Schurink define focus groups as a “purposive discussion of a topic or related topics taking place between nine to twelve people with similar background and common interests” (1998:2). It is also a method that encompasses verbal and non-verbal means of communication and the interplay of perceptions and opinions of the participants. According to Schurink and Schurink (1998:2), it further enables the researcher to develop new concepts and theories. Greeff in De Vos (2002:309) accepts that focus groups are critical for obtaining insights into the perceptions and attitudes of people in an atmosphere of dynamic group interaction.

#### ***3.3.1 Characteristics of focus group interviews***

According to Schurink and Schurink (1998:2-5), the following are the main characteristics of the focus group interview:

- It should consist of a small group of individuals that is homogenous and, relatively, unfamiliar with each other to ensure maximum validity of the findings.
- It should be conducted in series in order to control observation effects so as to generate reliable data about the respondents’ perceptions about the phenomenon on discussion.
- It should produce qualitative data, which is focused on a particular issue.

Wilkinson’s 2000 study (cited in Hinds, 2000) asserts that focus groups can be used to gain information relating to how people think and to explain perceptions of an event, idea or experience. The method was chosen to elicit the attitudes and perceptions of students and staff in the Faculty of Engineering at TUT. Like any other method, focus group interviews have strengths and weaknesses.

### ***3.3.2 Advantages of focus group interviews***

According to Schurink and Schurink, some of the advantages of focus group interview could be the following:

- It is cost and time effective as respondents and researchers can be in the same place at the same time.
- It allows respondents to interact with the researcher in terms of the information and the subject under investigation.
- It reveals the respondents' worldviews and social processes that we know little about. (1998:2-5)

Focus group interviews could also allow for the clarification of misconceptions - respondents could repeat their answers to questions that may be rephrased if they were not clear. The researcher could process the information and produce a rapport with the group in a short space of time.

### ***3.3.3 Disadvantages of focus group interviews***

According to Schurink and Schurink, the technique of the focus group interview has the following disadvantages:

- The recruitment of the right kind of respondents is difficult and could be met with suspicion, transport problems, etc.
- The respondents' responses could be irrelevant and would, therefore, need redirection.
- There may be a need for greater control in the interview - a difficult role for the mediator.

- Respondents could be reserved on sensitive issues which require a tactical approach by the facilitator (1998:13).

Another problem that may arise in focus group interviews is the possibility that some respondents may tend to monopolise the interview and try to intimidate other respondents.

### **3.4 Sampling**

According to Cresswell (1998:110), sampling is the process of finding people or places to study; to gain access to study; and to establish a rapport so that participants provide relevant data. During the process of sampling, the aim is to get a sample that is as representative as possible of the target population (Mouton, 1996:110).

In qualitative research, participants are carefully selected for inclusion on the basis of the possibility that each participant will expand the variability of the sample (Maykut & Morehouse, 1945:45). Qualitative researchers set out to build a sample that includes a selection of people with different goals in mind. This research involved purposeful sampling which - according to Macmillan and Schumacher (1993:379) - is selecting rich cases for in-depth study.

In qualitative research, the report should also include a description of the people who participate and the settings - in one study. In this research, people were assured of confidentiality and, hence, the use of pseudonyms. Ethical procedures – as set down by Wits - were adhered to. A protocol form was completed and submitted to the Research committee at Wits. Permission was then obtained from the Research office at TUT to conduct interviews among lecturers, Academic Development Practitioners and Students of the Engineering Faculty. Lecturers from the Engineering Faculty were purposefully selected because they are more knowledgeable about academic development as the concept started in that faculty. Also, Academic Development Practitioners were relevant for this research because they handle academic development classes at the institution. The students that were interviewed were ones

who had gone through the Academic Development Programme in their first year of study.

A total of five lecturers from the Engineering Faculty and six Academic Development Practitioners who are involved in that faculty were purposefully selected. The sample consisted of a mixture of genders and they were interviewed individually. Interviews were conducted with four 1<sup>st</sup> year Engineering students and five 2<sup>nd</sup> year students who were randomly selected on the grounds of having attended the Academic Development Programme during their first year. Focus group interviews were also conducted with a different group of students. Five 1<sup>st</sup> year students and four 2<sup>nd</sup> years took part in the focus group interviews. In this research, letters were written to all who participated in the interviews (see Appendix 2). The interviews were conducted after lectures to avoid interfering with the participants' schedules.

### **3.5 Data collection**

In this research, the primary data was collected from interviews - that is, face-to-face interviews and focus group interviews. The interview questions were divided into two categories:

- The first category probed the Engineering lecturers' and Academic Development Practitioners' attitudes to the Academic Development Programme at TUT.
- The second category of questions sought to elicit the 1<sup>st</sup> and 2<sup>nd</sup> year Engineering students' attitudes to the Academic development Programme and to reading and writing classes within the academic Development Programme in the Engineering Faculty.

In collecting data for this research, the researcher followed specific steps. This was done to ensure the success of the face-to-face interviews as well as the focus group interviews as techniques for collecting empirical data - as suggested by Macmillan and Schumacher (1993:383-385).

### **3.5.1 Face-to-face interviews**

#### *3.5.1.1 Interviews with lecturers and Academic Development Practitioners*

A total of five lecturers and six Academic Development Practitioners were interviewed. The following questions were asked:

- In your opinion, what do you think academic development classes are for?
- What do you think are some of the teaching and learning issues that we need to deal with in terms of these classes?
- Do you think that these classes are succeeding in achieving their objectives?
- Have you referred any students for academic development? If yes, why? If no, why not?
- What role - if any - should lecturers play in academic development for their own classes?
- How do you think these classes should be structured - from a curriculum perspective?

#### *3.5.1.2 Interviews with Students*

A total of four 1<sup>st</sup> year Engineering students, who are in the Academic Development Programme at TUT on the Soshanguve Campus, were interviewed. The focus was on the Faculty of Engineering because it was the first faculty to introduce a foundation programme. The following questions were put to them:

- Have you ever heard of the term, “academic development”?
- What does it mean to you?
- Have you taken part in the Academic Development Programme?
- If you did, which parts of the programme did you participate in?
- How did you know about these classes?
- Which parts of the programme did you attend? Which ones did you not attend? Why?
- What did you think of the different programmes?

- Where do you think it meets your needs? Where is it not doing this?
- Who do you think the programme is aimed at? Do you see it as aimed at you?
- If you had a child at this institution, would you recommend this programme to him/her?
- What would you list as three things that you have learnt in this programme?

Another set of face-to-face interviews was conducted with 2<sup>nd</sup> year students from the Faculty of Engineering who have been through the Academic Development Programme. These students were asked the same questions as the 1<sup>st</sup> year students. The intention was to be able to compare and contrast the responses of both groups of students.

A central observation - during the interviews - was that some respondents were so enthusiastic about giving information that they offered to repeat the interview if I felt anything was not clear on the tape. At the end of the interview the respondents were given a letter to confirm that they had participated in an interview. This was done to increase their chances of being employed as research assistants in the future.

### ***3.5.2 Focus group interviews***

Two focus group interviews were held with five 1<sup>st</sup> year Engineering students and four 2<sup>nd</sup> years in the same Faculty. The 2<sup>nd</sup> year students were asked the same questions as the 1<sup>st</sup> year students.

- Are there any academic development classes available?
- What kinds of reading and writing activities does the Academic Development Programme offer?
- In what way have these been useful or not useful to you?
- How often did you attend these classes?
- How much time was allocated to reading and writing development in the Academic Development Programme?
- Would you have preferred more or less time for these classes? Why/why not?
- What reading and writing activities did you expect to do?

- Were your expectations of the academic development classes met?

### **3.6 Ethical considerations**

Before interviews could be conducted, there were ethical considerations that needed attention. Application had to be made to the research office of TUT for permission to conduct interviews. The research office provided a letter that had, then, to be submitted to Wits - together with a protocol form (see Appendix 1) that had been completed by the researcher. After obtaining clearance from the Ethics Committee of the University of the Witwatersrand, two focus groups were arranged - one for 1<sup>st</sup> year students and another one for 2<sup>nd</sup> year students. The reason for this was to be able to establish whether the attitudes observed among the 1<sup>st</sup> years would be the same as - or different from - the ones displayed by the 2<sup>nd</sup> years. Each focus group consisted of five participants. Appointments had to be made for late afternoon because students were involved in end-of-year examinations. Students were given an option to suggest a time that best suited the majority of them. Interviewees were selected at random to avoid a bias on the part of the researcher who is also a staff member in the department.

As a starting point, I introduced myself and then handed out the introductory letter which is attached as Appendix 2 and the students signed a letter of consent - a copy of which is also attached. I, then, put the respondents at ease by assuring them of the confidentiality of the information that they would give, and that I would allow them to respond in their mother-tongue - if they needed to do so. This was done to encourage maximum participation and to create a relaxed atmosphere. During the interview, I observed that some students in the group were more eloquent than others. Although they had been encouraged to use their mother-tongue, freely, they still felt obliged to use English. This resulted in some members dominating the group while others tried to formulate answers. Some quieter students asked to be given an opportunity to participate in face-to-face interviews where they felt they would be in a better position to make a contribution. Schurink and Schurink confirm my feeling that the possibility that some respondents may tend to monopolise the interview and try to intimidate other respondents is one of the great disadvantages of a focus group.

### **3.7 Data Analysis**

The analysis of the data was carried out by using thematic content analysis; and by looking for patterns and themes as well as ruptures in the data. The responses of the lecturers and those of the Academic Development Practitioners were analysed first. This was followed by an analysis of the responses from 1<sup>st</sup> and 2<sup>nd</sup> year Engineering Students. The same method of analysis was used to identify common themes and patterns in the focus groups. The responses to the questions give rise to a discussion of key findings. Conclusions are drawn using the key findings that were identified as a basis. The responses of the lecturers and Academic Development Practitioners are compared and contrasted with those of the Students. The responses of the 1<sup>st</sup> year students are compared to those of the 2<sup>nd</sup> years.

The next two chapters, Chapter 4 and Chapter 5, describe and analyse the interview data elicited from the lecturers and Academic Development Practitioners and students during face-to-face and focus group interviews.