

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Introduction

The purpose of this chapter is to review the methods that were used in the production of this study. It offers an overview of the research approach and the design of the study, justifying the approach and design appropriate for the study. A description of the sampling procedures, as well as the subjects used in the study, is given. The chapter also discusses the instruments that were used to collect data, explaining why they were seen as appropriate and issues that arose from their use. Procedures for data analysis are also discussed. To establish whether there was anything that made it easier or difficult for the researcher to carry out the study, issues of access and process, detailing the experiences of the researcher throughout the data collection and analysis, are also examined.

Research approach

This study employed the use of a qualitative approach, the reason lying in its nature of assumptions, which are appropriate for my study. The qualitative approach contributes to my study because it emphasizes human experiences (McMillian and Schumacher, 2001), and makes logical sense when conducting a tracer survey of a group of students who graduated from the BEd (primary) programme seven years ago. The study seeks to assess the diverse situations in which graduates found themselves with and without a degree, and the qualitative approach is concerned with what happens in such a particular setting at a particular time. The knowledge and data produced is based on the respondents' personal subjective and unique experiences, and these require careful probing. The qualitative research design holds that the researcher has to play an instrumental role in data collection and analysis, since social realities are best understood through closed verbal description of individual cases (Gall et al., 1996). In this way the qualitative method was very helpful since it assisted in my choice of instruments for data collection, including the unit of analysis. This method was used in the study to give results that are truly purposeful.

In support of Gall et al.'s (1996) claims, Ary et al. (1996:445) maintain that, "qualitative researchers seek to understand human and social behavior from the insider's perspective, as lived by participants in a particular social setting and do not buy the idea of generalisation because it is misguided." For qualitative researchers, inquiry should be value bound. Thus the inquirer has choices of the problems to be investigated, the approach of investigation, methods of the investigation, and interpretation of the investigation (Goodwin and Goodwin, 1996). For qualitative studies it is difficult to develop a meaningful understanding of human experiences without taking into account the roles of the researcher's and the subjects' values and beliefs (Ary et al., 1990).

Ary et al. (1990) further note that human inquiry calls for ongoing meaningful interaction between the researcher and the subjects. This allows for the researcher, through tactful manipulation, to probe (Bell, 1993; Gall, Borg & Gall, 1996), and to make follow-ups to answers given by the respondents. Respondents also got a chance to elaborate on answers, thereby arming the researcher with all the information she needed about the study. This approach, as a result, allowed for the interaction between the researcher and the graduates in a natural manner. Furthermore, the approach helped me to expose the graduates' perspectives on their career choices, their preferences and what informed and influenced them.

Research design

To explore the relationship between the degree and the labour market, a research design was used that incorporated extensive literature review, documentary analysis and tracer study. The design of the study was divided into two phases, the literature review and procedures for collecting data and analysing it.

Extensive literature review

This study reviewed extensive literature relating to the general theories of university degrees and the labour market, in order to come up with propositions for testing. The purpose of the literature review in the context of this study was largely to clarify recent trends on higher education and the labour market. The nature of the relationship between higher education and the labour market could only be understood well within the comprehension of a broader context. As a result, this

extensive literature review helped to refine the conceptual framework and provided secondary data related to my study. It also focused on theoretical studies about university degrees and the labour market and contextual studies analyzing the relationship in specific contexts. This was very useful, as it not only offered valuable information on debates by different authors, but to a larger extent also offered useful insights into the understanding of the problem and the different perspectives on the data. The process of reviewing this literature included searching for information in published journals, through various databases at the University of the Witwatersrand and University of South Africa (UNISA), as well as journals and books written in relation to the topic.

Documentary analysis

A wide range of documents were collected and analyzed from the Ministry of Education, government departments and the University of Botswana, as other potential data collection instruments. The most outstanding of these were policy documents, commission reports, national development plans and University of Botswana handbooks and calendars. The reports and documents depict the initial state of affairs in the educational circles and the current critical areas of what is happening in the education system, while the policy documents outline the government's position on education policy in terms of efforts and priorities (Letsholo et al., 2001). The documents were analysed with the purpose of providing information on:

- a) Policy relating to education in general and university education in particular
- b) Relevant university programmes and curriculum
- c) National development plans
- d) Commission reports
- f) Ministerial and departmental reports

Policy documents, commissioned reports and national development plans gave insightful information about teacher education policy, its principles and circumstances that led to the recommendations for the policy, as well as government projected plans on how to develop education. University documents provided information on university programmes, the courses, and expectations with the programmes, selection procedures for particular courses and the nature of the curriculum for the courses.

Johnson (1984:23) quoted in Bell (1993) asserts that “documentary analysis of educational files and records can prove to be an extremely valuable source of information”. In support of this assertion, Bell (1993) maintains that documentary analysis is at times used to add value to data collected through other data collection modes. This approach of using more than one means of data collection instruments is better known as ‘triangulation’, described in the Open University (OU) course as:

Cross checking the existence of certain phenomena and the veracity of individual accounts by gathering a number of sources and subsequently comparing and contrasting one account with another in order to produce as full and balanced a study as possible. (OUP course E811 Study Guide, 1988:54)

In addition to allowing for the crosschecking of data from one source against data from another source, the combination of instruments allowed for a consideration of different views of reality and helped validate the study.

The nature of tracer studies

Data collection included the use of a tracer survey. A significant element about surveys as, observed by McMillian and Schumacher (2001:34), is their nature of exploring relationships between different factors. This was an open-ended plan that traced the graduates to find out where they were, what they were doing from the time they completed the degree to the time of the survey. A tracer study, according to Bennell and Monyokolo (1992:2); “is the dominant methodology for collecting data in post-school activities and outcomes.”

In this respect the study was limited to the 1997 Bachelor of Education graduates of the University of Botswana. This group attended the BEd programme from 1993 to 1997, when they graduated and were considered because the time elapsed since graduation (seven years) enabled them to furnish the researcher with detailed and rich experiences. Thus, as Bennell and Monyokolo (1982) imply, tracer surveys have the capacity to provide direct feedback about respondents to the study. This tracer study was therefore designed to reflect information about respondents’ experiences before and after completion of the courses, detailing their whereabouts, their careers choices and preferences.

In support of Bennell and Monyokolo's (1992) assertion on tracer surveys, Willingford and Moden (1989) maintain that a unique feature of the tracer survey, compared with other surveys, is its capacity to document the quality of respondents' experiences since graduation. With this kind of study, respondents also had the potential to provide the researcher with an objective and richer perspective, especially concerning their occupational choices and preferences. The general assumption here is that they would have had a chance to gain experience to do a range of things since graduating. As a result, graduates were traced where they were in order to find out what they were doing and tie that to the degree.

Sampling

A sample is regarded as a subset of the population. In survey studies, researchers collect information from a smaller group or subset of the population in a way that the data represents the total population under study (Cohen & Manion, 1994). For the purpose of this study, however, a full sample was carried out in order to get reliable information on the recent trends on graduate career choices and preferences. Data for this study was as a result gathered from 26 graduates of the Bachelor (Primary) of Education programme of the University of Botswana. The graduates were the fourteenth cohort who graduated from the programme since its inception in 1981. (UB Department of Primary Education handbook, 1996/7: 2003/4) The cohort was purposefully selected because of the researcher's familiarity with the group. The researcher underwent training with the respondents, within the same timeframe as the BEd programme. There was therefore a great danger of the researcher being biased, because of her insight about information on the programme as well as her own experiences as a graduate.

The sample comprised 7 males and 19 females. The geographical location of these graduates was such that they were scattered in different parts of the country. Many of the graduates were based in urban areas, some working in the country's main villages while only a few were based in the rural areas. Issues that were considered in selecting the sample of the study were the ability of the researcher to easily obtain the graduates' contact details and identification of their location for purposes of tracing them.

Gaining access

Permission to conduct the study was solicited from the research division in the Ministry of Education by means of letter correspondence. Permission was granted on condition that the findings of the study were used only in Botswana, and for the requirements of the degree of Master of Education at the University of the Witwatersrand. The researcher was asked to hand a copy of the research report on completion of the degree to the Ministry of Education.

Telephone calls were made to individual graduates to ask for permission to interview them. This was made possible by the fact that the researcher attended the programme with the respondents and therefore had some form of relationship with them. This relationship acted as a platform for easy rapport and flexibility during communication, making it easier for both the respondents and the researcher to negotiate appointments and to postpone them when necessary. These telephonic encounters to the respondents clearly outlined the purpose and value of the study. Respondents were assured of privacy, anonymity and confidentiality in reporting the data, so that they could respond to the questions asked in a relaxed frame of mind. The researcher was not worried about elements of trust because of her familiarity with the cohort.

The time frame for data collection, which was intended to begin towards the last week of August 2004, was not as permissive as the researcher anticipated it would be. The Botswana International Trade Fair was held during the last week of August, with most of the graduates on duty there representing their various departments. This made honouring appointments for these people difficult. In addition, that period collided with school holidays so graduates were free to travel anywhere if they had taken leave of absence from duty. Tracing them as a result proved difficult. The researcher would arrive in a particular location for her appointment, only to find that the graduate was elsewhere. The result was that the researcher had to spend extra time waiting for the arrival of the graduate. Those that the researcher could not see at their locations (four of them), had to be interviewed telephonically. The result was that data collection lasted for almost a month, as opposed to the anticipated three weeks. This actually made data collection more expensive than had been anticipated.

The interview

The interview was used as the main instrument for data collection. Since the study was an open ended plan, the researcher went to the field not knowing what to expect. The idea was to go there and find out where the graduates were, what they were doing in order to establish what informed and influenced their career choices and preferences, and to tie that to the degree. As the interview was used as the main data collection instrument, it was made as intensive as possible, so as to solicit as much information as possible from the respondents. Questions for the interview focused on the following issues:

- a) Perceptions of the graduates on the BEd.
- b) Graduates' experiences during training.
- c) Experiences of the graduates after completion of the degree.

Graduates were traced to their places of work by the researcher using her own transport, this proving to be the most convenient mode of traveling. Graduates were interviewed at their homes and in cases where it was not possible the researcher's car was used. The relationship that existed between the researcher and the respondents had both positive and negative effects on the study. It influenced the study positively because it allowed for flexibility as the respondents felt free to express their views without being intimidated by the researcher. Hence it provided a wealth of information that proved to be helpful for the study. As a result the researcher was able to probe deeply into responses given by the graduates, without fear in ways that may have otherwise not been possible had she not known them. In other instances, however, this flexibility was problematic. In one instance, the interview was actually conducted at night. In another instance, the researcher had to wait for at least four hours to interview a graduate who was teaching in the distance education project and who arrived very late, causing the interview to start at around six o'clock in the evening.

The relationship that exists between the researcher and the respondents also affected the study negatively. In some instances, the interview process was delayed by unnecessary incidents, for example, one graduate made an appointment to be interviewed at his school during the school holidays, as the head-teacher he was on

duty. On arrival at his school I found the gates locked and when I telephoned to inquire about his whereabouts I discovered that he had gone to the district office in another village to submit a report and wanted me to drive there to interview him, whereupon the interview took place in the car. In another instance, one of the graduates asked that we go shopping first as she had just arrived after a week at the Trade Fair and wanted to buy food first for her children and probably also to catch up on our lives. We then had to rest and eat before we could begin, with the result that the interview took place after almost six hours.

The interview process proved to be quite an experience however, signified by the level of emotions displayed by the graduates. Some graduates were so confident about the way their careers had turned out that they displayed a sense of achievement and a look of “I really made it pal”. With the others, the bitterness with which they responded during the interview process showed how much of a disappointment they felt their lives had turned out to be. Disappointment was however directed at the system and not at the researcher. This last group actually wished that I would publish the findings of the study so that the relevant people could get to know their real feelings about their situation. Notes were taken throughout the interviewing processes so that they could later be compared to what was tape recorded, and also to guard against possible omissions of parts of the interview process.

Tape recording

An audiotape recorder was used to capture the responses of the graduates during the interviewing process, due to the fact that the researcher was using an unstructured approach. The respondents’ permission to audiotape was solicited first for ethical reasons. The tape recorder has been recommended by Bell (1993) as a useful tool of ensuring that the researcher can go over the interview process, even well after the interview has been completed. Normally this is done so that the researcher gets the liberty to use any quotations she or he may wish to, as well as avoid problems of misquoting respondents. Bell (1993) goes on to assert that audio-taping is useful if the researcher intends to use content analysis, as it enables the replaying of the tape as many times as needed so as to identify, then categorise the data into possible themes. This was convenient for this study since the researcher’s intention was to use thematic content analysis.

A ninety-minute cassette was used for each graduate at first. This is because it was initially anticipated that each interview would probably last between one and two hours. At first, the interview sessions lasted for longer than an hour, but as the researcher became increasingly conversant with the questioning process, this time was reduced to between forty-five minutes and one hour, depending mostly on the eagerness of the graduates to share their experiences. As a result, as the interview progressed, two interviews could be captured on a cassette.

Data analysis

Bogdan and Biklen (1992) view data analysis as a process of arranging or organising information gathered so as to increase the researcher's understanding and enable a presentation of what has been uncovered to the readers. Analysis of data was done after it had been collected. Since the sample for the study was large and the interview themselves lengthy, a transcriber was hired to retrieve data from the cassettes. This transcribed data was later compared with the researcher's own personal notes taken through the interview process to scan for possible omissions or additions. The data was analysed using qualitative measures, employing thematic content analysis. Patterns were assessed to identify common attributes, which by and large helped in making meaning out of the data. Through this process, I was able to categorise data into themes, looking particularly at the commonality and differences emerging from the responses. These patterns provided tendencies, situational experiences, as well as shared experiences. For example, responses emerging from questions as to what graduates wanted with their degrees ranged from better paying or decent jobs to chances for career development - here termed "Career expectations and preferences of the graduates". Reference was from time to time made to the literature review, while the theoretical framework related to the relationship between the degree and the labour market, in order to generate additional perspectives on the data. To make a better case, the researcher also used her familiarity with policy documents to gain information to support some of the views made in the analysis.

Limitations of the study

The fact that the researcher was part of the group being traced provided room for biasness. This is because the researcher's interest, as well as her own experiences as a graduate may have affected the interview process. These experiences may have

clouded her ability to pursue certain points or contributed to her strong analysis of certain points at the expense of fairness. This may actually have affected the findings of the study. As Selltiz et al (1962: 583) in Bell (1993: 95) pointed out, “there is always a danger of bias creeping into interviews, largely because interviewers are human beings and not machines, and their manners may have an effect on the respondents.”

This cohort was traced only once during this survey, and so the findings may not depict a true picture of what is happening to graduates after completion of the degree. It may have been profitable and also possible to depict a better picture if the same cohort was traced once before the survey, and at another point after it. Furthermore, it would have been interesting to have captured a true picture of what happens to graduates on completion of their degrees, using other cohorts from the same programme and maybe others in-service programmes.

The time factor, of one-month duration to conduct the study was, in my view, not enough to have covered the experiences of graduates, as only one meeting per graduate was convened.