

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

The purpose of this chapter is to describe in detail the plan used in addressing the research problem in this study. The research problem put succinctly is “*How does the Faculty of Education at the University of Pretoria implement the RPL Programme in relation to the international, national and institutional requirements for quality assurance*”? This problem emanated from three major concerns:

1. Are the elements (characteristics) of a credible RPL system (Heyns 2004: 186 & Osman 2004a:1) already researched in South Africa applied when designing the RPL programme?
2. Does the Faculty of Education at the University of Pretoria assess RPL candidates/learners properly into formal learning programmes in higher education? International and national literature abound with information on good practice guidelines in the assessment, evaluation, and accreditation of prior learning, as reflected in the literature review of this study in Chapter 3.
3. Are the clients (customers), both internally and externally (to some extent) satisfied with the RPL system that is in place at this institution?

In this chapter, I provide a critical discussion of the research philosophy, design, and methodology for the study. The philosophical underpinning of this study is advanced firstly in order to clarify the researcher’s epistemological viewpoint and ontological stance. The research design gives a detailed description of the approaches used in this research and their appropriateness in terms of the nature, specific research problems and the overall aim of this study. Furthermore, it emphasises the complementarity of qualitative and quantitative research approaches in addressing the main and specific research questions (McMillan 2000:272).

The research methodology is presented in this study in relation to site selection, sampling and selection of participants; data collection strategies; instruments and techniques; data analysis; then a presentation of the trustworthiness features; the researcher's role in the programme evaluated; and management plan (time lines).

4.2 PHILOSOPHICAL FOUNDATIONS OF THE STUDY

The research philosophy of this study draws from *naturalistic and logical positivist paradigms*. A paradigm represents worldviews or belief systems that guide researchers (Tashakkori & Teddlie 1998:3). In relation to qualitative approaches, the main features of this viewpoint are a consideration of multiple meanings, of individual experiences, meanings socially and historically constructed and the implications those constructions have for their behaviours and for those with whom they interact (Creswell 2003:18; Patton 2002:96). For quantitative methods, the main features are that, there are general principles or laws that govern the social world, which are used to predict human behaviour (Ary, Jacobs & Razavieh 2002). With this assumption, the research findings can be generalised to a larger population.

Since this study aimed to gain a deeper understanding of the quality and quality assurance mechanisms in the provisioning of RPL, the *interpretivist paradigm* of research is found to be most appropriate. This paradigm postulates that individuals interacting with their social world construct reality. The interpretative framework therefore sees human activity and institutions as 'social construction', created by people, rather than the product of external forces, which mould individuals, and institutions in ways that can be predictable (Vulliamy, Lewin & Stephens 1990:9). There are two essential constructs of interest in this study, namely 'quality' and 'quality assurance'. There was also no intent to manipulate variables by the researcher in relation to the envisaged results to address research question 3 mainly (Merriam 1998:9). The dominant feature of the interpretative research paradigm is that it foregrounds meanings that people assign to their experiences. However, what is central to this approach is that it does not attempt to represent the original 'voice' of those researched or their intentionality, instead it accepts that the researcher will construct his/her meanings from the research that has been undertaken, that the

research will be mediated through the investigator's own viewpoints (Merriam 1998:6).

4.3 RESEARCH DESIGN FOR THE STUDY

Merriam (1998:6) defines a research design as an architectural blueprint, a plan for assembling, organising and integrating information (data), which results into specific research findings. This research design should be seen as the action plan for getting from the starting point to the endpoint whereby the starting point is an initial set of questions and the endpoint is a set of conclusions drawn from the study about the questions being investigated. There are a number of intermediate steps such as data collection, analysis, and reporting. The logical sequence of the research design should assist the researcher to ensure that the evidence gathered addresses the research questions in the study (Yin 1989:27).

The debate over the merits of qualitative research as compared with quantitative has been going on over the years. "Some scientists see the qualitative approach as less rigorous and thus less acceptable as a way of doing research" (Ary *et al* 2002:23). According to Merriam (1998:6), the selection of a particular design is determined largely by how the problem is shaped, by the questions it raises and by the outcomes desired. As Walker (1985:16) in Ary, Jacobs and Razavieh (2002:23) says, "certain questions cannot be answered by quantitative methods, while others cannot be answered by qualitative ones". Some writers no longer view the quantitative-qualitative distinction as useful. There has been a trend over the years towards rapprochement, which manifests itself in research where the same study uses both approaches (*ibid*).

In this study, both qualitative and quantitative approaches (mixed methods) to research contributed to answering the research questions, and enabled the use of triangulation in relation to data collection and provide the opportunity for presenting a greater diversity of divergent views from all the participants (Tashakkori & Teddlie 1998:6). In the section below is a discussion of the different approaches used in this study.

4.3.1 Qualitative approaches in the study

The data were gathered directly from individuals in their natural environment (setting), in a non-manipulative and non-controlling situation. Qualitative inquiry shows concern for context, it assumes that human behaviour is context-bound, that human experience takes its meaning from, and therefore is inseparable from, social, historical, political, and cultural influences. There were no predetermined constraints on the findings (Patton 2002:40), except for loosely constructed set of propositions and assumptions. I collected detailed information using a variety of data collection strategies that respected the humanity of participants, and this was done over a sustained period of time at the site of investigation (Berg 2001:10; Creswell 2003:179-183). These strategies are interviews (formal and informal; face-to-face and telephonic); observations (participant and non-participant); survey questionnaires and interviews; document analysis; observational checklists; literature review; case studies, and reflective notes. In sections 4.7.1.1; 4.7.1.2; and 4.7.1.4 below is a detailed description of each of these strategies.

In line with Lincoln and Guba's (1985:210) advice to researchers, the approach to implementing the conceptualized framework was not fixed and rigid. I allowed for flexibility during the unfolding of the research process, reflected by slight changes and modifications in the final product. I was mindful of the fact that implementation of RPL is a process and careful attention was given to process and situation dynamics. A lot of reflection took place in between the different phases of the research process, and I had to constantly interpret the situation on the ground accurately, to continue getting the data that addresses the research problem in the study, i.e. quality assurance practice in RPL provisioning (Marshall & Rossman 1999:2-3).

4.3.2 Quantitative approaches in the study

I used objective measurement and statistical analysis of numerical data to understand and explain the phenomenon studied, i.e. client satisfaction with the RPL programme. In this part of the study, non-experimental approaches to research were used, in that as a researcher I had no direct influence on what has been selected for the study, either because it had already occurred or because it cannot be changed (McMillan 2000:9).

For example, as the principal evaluator I had no influence on how the Faculty of Education of the University of Pretoria, which is the Faculty under investigation, conceptualised and designed its RPL programme. Utilising this approach enabled the description of the implementation of the RPL programme at this particular Faculty with objectivity, and helped uncover salient relationships between variables.

Objectivism, derived largely from the social science tradition of **empiricism**, requires that evaluation information be ‘scientifically objective’ that is, it uses data collection and analysis techniques that yield results reproducible and verifiable by other reasonable and competent persons using the same techniques (Worthen & Sanders 1987:46). This means that the evaluation procedures are ‘externalised’, existing outside of the evaluator in clearly explicated form that is replicable by others and that will produce similar results from one investigation to the next. A **non-experimental approach** facilitated the simultaneous and effective collection of a wide range of data that describes, compares or correlates relationships in the study (McMillan 2000:9; Gay 1997:10-11).

4.4 RESEARCH METHODOLOGY

A **Case Study** research methodology was used to examine what needs to be done to improve quality provisioning of RPL in the Faculty of Education (University of Pretoria). Yin (2003:22-23) defines case studies as any empirical inquiry that examines a recent or contemporary phenomenon within its real life context using multiple sources of evidence. A case study is appropriate when the phenomenon’s variables cannot be separated from the context in which it operates and it is usually used as a **Research Strategy** in many settings, more especially when the ‘how’ and ‘why’ questions are being posed, as well as when the researcher has no control over the phenomenon being investigated (Merriam 1998:9).

Merriam (1998:26) points out that, case studies, “especially qualitative case studies are prevalent throughout education” and are commonly used for investigating implementation of innovative procedures or programmes, or the implementation of a new and untested policy. In each of these instances, the case “is a bounded system” (*ibid*:27) where the boundaries are able to indicate that data collection will not be

infinite and that the number of people to be interviewed will be finite and that there are certain aspects of the area of research that will not form part of the actual study.

A single-case design was followed, where there will be an investigation into all the facets of RPL provisioning in the Faculty of Education at the University of Pretoria. The unit of analysis refers to “what” the researcher will investigate, that is, the phenomenon of interest (Yin 1994:21). The unit of analysis is one of the key considerations that a researcher has to bear in mind in case study research (Yin 1994:31). The ‘heart’ of this particular study is quality and quality assurance measures in the provisioning of RPL in this Faculty.

Given that RPL is emerging in an institutional context undergoing several changes, the case study permits for “interpretation within context” (Merriam 1998:29), and allows for insight obtained from the study to serve as “recommendations” (ibid:29) which may assist future research in RPL and in adding or extending the knowledge base of RPL in higher education in South Africa. Miles and Huberman (1994:28) define case contexts as the physical location (parties involved; history of contacts) and the relevant aspects of the social system in which the actors appear (Faculty; department and positions held).

Berg (2001:231) distinguishes between types of case studies and case study design types, as applied in this study:

The **instrumental case study** was identified as being most appropriate for this study since it allowed the researcher an opportunity of providing insight into the implementation of the national RPL policy in a higher education institution by making special reference to the quality of RPL provisioning offered to its clientele (Berg 2001:229). The arguments, for and against the ‘phenomenon RPL’, were not of importance in this study. However, to afford the researcher a deeper understanding of the nature of the RPL product designed and the kind of services suitable for render to the end-users of the system, in-depth research on all aspects and activities dealing with its implementation was conducted.

The study also used to address exploratory, explanatory and descriptive research perspectives to afford the researcher an opportunity to make sense of fundamental

aspects related to RPL provisioning at various phases and pertinent aspects of conditions on the ground:

4.4.1 Exploratory research perspectives

With this research perspective, I explored possibilities for the improvement of the provisioning of RPL. I considered the views and opinions of the RPL candidates/learners who were assessed at this particular institution and the experiences of the lecturers that participated in the RPL assessment process. The purpose was to inform the researcher's viewpoint on what needs to be done to strengthen (improve) the quality and quality assurance measures of the RPL system that is in place in the Faculty of Education at the University of Pretoria.

4.4.2 Explanatory research perspectives

In order to be truly explanatory, I analysed various components of the implementation of the national and institutional RPL policies and relationships between them to provide more than a surface understanding. Denzin and Lincoln (2000:388-389) pinpoint the researcher's critical role in a study: continually reassessing and refining issues while conducting fieldwork. I continually made interpretive comments from field notes in my reflective journal framing the key findings in the study, and traced theoretical discussions back to the data, using the pattern-matching technique between what should be and what is actually happening (praxis).

4.4.3 Descriptive research perspectives

By means of these research lenses, I offered a comprehensive and detailed account on how the Faculty of Education of the University of Pretoria manages quality through quality assurance in providing the RPL product and related services in order to interpret the significance of the impact of the phenomenon's variables.

4.5 SITE SELECTION, SAMPLING AND DESCRIPTION OF PARTICIPANTS

I utilised a purposive sampling strategy to identify the institution used in the study. According to Guba and Lincoln (1981:276) “sampling is almost never or representative or random but purposive, intended to exploit competing views and fresh perspectives as fully as possible”. Typical case sampling and snowball or chain sampling were used in this study to identify participants. According to Huysamen (1994:37), the research population includes the total collection of numbers, cases or elements about which the researcher wishes to draw conclusions. Merriam (1998:61) argues that the logic and power of purposive sampling lies in selecting an information-rich case from which one can learn a great deal about issues of central importance to the study. Hence, some prior knowledge of the case is crucial for applying purposive sampling as a strategy to select a case. The three main criteria used in selecting the case were: (a) there must be a process of RPL provisioning going on; (b) willingness of the institution to participate in the study; and (c) ease of access into the institution where there will be minimal financial implications and geographical location of the institution.

Information rich and illuminative participants selected in this study were in a position to offer useful manifestations of the phenomenon of interest. The rationale for sampling was aimed at insight about the phenomenon as well as being able to get empirical data to be used for generalisations from a sample to a population. The intent was to conduct interviews that aim to capture direct quotations about people’s institutional and personal perspectives and experiences with the phenomenon and do observations that yield detailed and thick descriptions and for document review, only those that would add depth to these experiences were carefully selected (Patton 2002:40).

A self-selecting sample was used for the administration of the student questionnaire, since these were the participants who had experience with the RPL assessment processes in the Faculty of Education of the University of Pretoria. In line with the overall aim of the study, suitable participants for this research included registered students (undergraduate and postgraduate) in the Faculty of Education of the

University of Pretoria; RPL candidates/learners; lecturers who participate in the RPL assessment process; the non-academic staff and senior managers in the Faculty, such as the dean, various heads of departments and directors of academic centres. Purposeful selection and voluntary participation in the research process were the main criteria used for selecting these participants.

4.6 DATA COLLECTION STRATEGIES

The fieldwork took place in two phases:

Phase 1 involved the compilation of the **institutional profile**, advocated for by Flint and associates (1999:9). Institutional profiles give a picture of the nature of the institution under investigation. I hold on very strongly to the opinion that quality is made at the top. The leaders of an institution have a much greater impact on outcomes from a process, and thus the success of a particular activity, than the efforts of willing workers trying hard to do their best. The categories used for presenting information gathered were the historical background of the institution; demographics; approach to quality and quality assurance; changes/restructurings; and unique aspects of the institution related to RPL and quality assurance initiatives. In order to collect data for the above, the process involved an analysis of institutional documents, artefacts, and a visit to the institution's website.

In **Phase 2**, a variety of qualitative data collection strategies were employed to answer the **THREE** questions of research, such as document and text analysis; interactive fieldwork; notes from the reflective journal; interviews (formal and informal)/one-on-one or telephonic; and observations (participant and non-participant). The interviews used provided enabled the researcher to have a full understanding of participant's impressions and experiences, and to learn more about their answers to questions. The relevance of analysing documentation was in terms of providing a picture of how the RPL programme works without interrupting the programme or the client's routine in the programme. Observations afforded an opportunity of gathering accurate information about how a programme actually operates, particularly about processes.

To collect quantitative data, the sampling technique for administration of the student survey, lecturer survey, and observational checklists can be described as **self-selecting** as participants are all those who participated in the RPL process, i.e. RPL candidates and Faculty assessors. However, the emphasis was on **voluntary participation**. Mertens and McLaughlin (2004:146) argue that research conducted with volunteer participants generally tends to yield an accurate and realistic picture of the phenomenon studied. In most instances, such participants have hands on experience (practical) with the phenomenon studied and hence carry a wealth of valuable information, which they are willing to share ‘without reservations’. They usually speak from an informed position and as a result, their voice in the entire research process needed interrogation. An in-depth analysis and comparison of individual RPL cases will be developed and compared with other (McNamara 2007). These cases are particularly useful in depicting a holistic portrayal of a client’s experiences and results regarding a programme to evaluate the effectiveness of programme processes.

The following table provides an overview of the methods used in this study, i.e. the overall purpose, advantages, and challenges of each:

Table 4.1: *An overview of the methods for data collection used in the study*

Method	Overall purpose	Advantages	Challenges
Interviews	- when researcher wants to fully understand someone’s impressions or experiences, or learn more about their answers to questions	- to get a full range of information - develops relations with client - allows flexibility with clients	- can take much time - can be hard to analyse and compare - can be costly - interviewer can bias client’s responses
Document analysis/review	- when researcher wants an impression of how a programme operates without interrupting the programme	- can get comprehensive and historical information - doesn’t interrupt programme or client’s routine - information already exists - few biases about information	- often takes much time - information may be incomplete - need to be quite clear about you are looking for - not a flexible means of getting data; data restricted to what already exists

Observation	- to get accurate information about how a programme actually operates, particularly processes	- view operation of a programme as they are actually occurring - can adapt to events as they occur	- can be difficult to interpret seen behaviour - can be complex to categorise behaviours - can influence behaviours of participants - can be expensive
Survey questionnaires, interviews and checklists	- when researcher needs to quickly and/or easily get lots of information from people in a non-threatening manner	- can complete anonymously - inexpensive to administer - easy to compare and analyse - administer to many people - can get lots of data - many sample questionnaire already exist	- might not get careful feedback - wording can bias client's responses - are impersonal - in surveys may need sampling expert - doesn't get full story
Case studies	- to fully understand or depict client's experiences in a programme, and conduct comprehensive examination through cross comparison of cases	- fully depicts client's experiences in programme input, process, and results - powerful means to portray programme to outsiders	- usually quite time consuming to collect, organise and describe - represents depth of information rather than the breadth

Source: http://www.managementhelp.org/evaluatn/fnl_eval.htm#anchor1585345
 retrieved on 15 February 2007

In the following section is a summary of data collection strategies in tabular form.

Table 4.2: A summary of data collection strategies

Research Questions	Data collection strategies	Data source
1. What is the quality in the inputs used to design the RPL system (product; services; and materials)?	• Interviews (individual)	<u>People</u>
	• Document/text review	
	• Document/text analysis	⇒ The Dean: Faculty of Education
	• Interactive field notes	⇒ The HOD: Curriculum Studies
	• Reflective journal notes	⇒ The HOD: Education Management, Law and Policy Studies
	• Observational checklist	⇒ The Director: Centre for Evaluation and Assessment
		⇒ The Director: Joint Centre

- for Science, Mathematics and Technology Education
- ⇒ The Director: QA Unit
- ⇒ Registered students (postgraduate and undergraduate)
- ⇒ Non-academic staff
- ⇒ Lecturers in all the departments of the Faculty

Documentation

- ⇒ Institutional RPL policy
- ⇒ Faculty specific RPL policy
- ⇒ Admissions policy
- ⇒ Mission and vision statement of the institution
- ⇒ Strategic plan of the institution
- ⇒ Institutional documents on QA or any other communiqué
- ⇒ The National RPL policy
- ⇒ Criteria and guidelines for implementing RPL.
- ⇒ Criteria and guidelines on QMS

2. How does the Faculty of Education of the University of Pretoria assess RPL candidates for their prior learning? What is the quality of the RPL assessment process?
- Observations (participant and non-participant)
 - Document/text review
 - Document/text analysis
 - Observational checklist
 - Interactive field notes
 - Reflective journal notes

People

- ⇒ RPL candidate(s)
- ⇒ RPL assessor(s)
- ⇒ RPL advisor(s)
- ⇒ RPL evidence facilitator(s)
- ⇒ RPL administrator(s)

Documentation

- ⇒ RPL learner's records
 - ⇒ Letters and email correspondence between RPL candidates and staff involved in the RPL assessment process (artefacts)
 - ⇒ The institution's RPL Assessment Policy
 - ⇒ Criteria and Guidelines for Registration of Assessors
 - ⇒ Standards developed/adapted by the institution for the assessment of prior learning
-

⇒ Procedures and processes for prior learning

Structure

⇒ The 'RPL Unit'

People

- ⇒ RPL learners
- ⇒ Lecturers who participated in the RPL assessment process
- ⇒ Progress of RPL learners (profile of one candidate)

Documentation

- ⇒ Sample of portfolios submitted
- ⇒ Motivations by HODs for particular RPL candidates
- ⇒ External examiner's report
- ⇒ Faculty Board recommendations
- ⇒ Senate's decision on RPL recommendations
- ⇒ External auditors report on the RPL practice (institution wide)
- ⇒ Internal evaluations on the RPL practice (Faculty level)
- ⇒ Artefacts

3. What is the quality of the output (outcomes) of the RPL system? Is there client satisfaction with the RPL system?
- Questionnaires
 - Interviews
 - Observational checklist
 - Interactive field notes
 - Reflective journal notes

4.6.1 Instruments and techniques for data collection

The instruments for data collection were developed in a deeply intense process. I was guided by my supervisor in the development of the questions in the instruments used. I started off with a set of basic questions, which were checked by my supervisor and other masters and doctoral students I regard as ‘critical friends’, and revised according to suggestions and comments provided. The refinement of the instruments assisted in focusing the questions more directly to my three research questions, thereby ensuring that the data collected would be relevant only to the three research questions. Instruments were piloted before the actual study and the responses and comments used to refine the instruments further.

4.6.1.1 Interviews

An interview is regarded as the explicit intentions and actions of the researcher, or interviewer, which converts ‘a conversation’ between two or more people into a ‘study’ of phenomena (Powney & Watts 1987:6). It is a useful way of getting large amounts of data quickly, where immediate follow-ups and clarification are possible. In the same way, limitations and weaknesses of this strategy need to be highlighted. According to Marshall and Rossman (1999:109-110), a lot depends on the cooperation of the interviewees. They might be unwilling or uncomfortable in sharing what the interviewer hopes to get, more especially when the interviewer lacks proper skills in relation to listening, questioning, posing probing questions and handling people.

For the purpose of this study, the interview schedule was most appropriate to elicit the necessary information from respondents, to enable the researcher to answer the first research question adequately. This question deals with quality in the inputs used to design the RPL programme. According to the ISO 9001 model of a process-based quality management system, the quality of inputs determines the quality of the output of the designed system (Fox 1993:263-265), and consequently the level of satisfaction with the system itself. I engaged in purposeful dialogue with those involved in the conceptualisation and design of the RPL programme to determine if there was

compliance with national specifications in terms of materials, actions, methods, people, and operations used.

The national requirements/specifications for implementing RPL from the policy document entitled “Criteria and Guidelines for RPL implementation” released in 2004 consulted formed part of the developed quality indicators in this area. The research conducted by Heyns (2003:186) identified elements (characteristics) of a credible RPL system. Osman (2004) presented the institutional variables required for implementing RPL. Using established RPL practices from countries such as the USA, UK, Canada, Australia, and The Netherlands offered valuable lessons to improve the Faculty’s current RPL practice (Lamdin 1992; Wong 1999; Simosko & Associates 1988; Simosko & Cook 1996). A table that indicates quality indicators in the inputs used for designing the RPL system, used as standards for basing judgement on quality in this area of evaluation, is included in Chapter 3, section 3.2.1.

A semi-structured interview schedule²³ for determining quality in the inputs used to design the RPL programme, was administered on the Dean: Faculty of Education; Head of Department: Curriculum Studies; Head of Department: Education Management, Law and Policy Studies; Director: Centre for Evaluation and Assessment (CEA); and Director: Joint Centre for Science, Mathematics and Technology Education (JCSMTE).

There was also a need to interview people on the ground to find out if they know about the RPL product and services offered in the Faculty of Education of the University of Pretoria. A semi-structured interview schedule²⁴ was designed for these respondents and open-ended and a few closed questions ranging from what RPL is to issues related to specific aspects of the RPL process were posed. The assumption when these questions were structured was that, the institution must have communicated this information to its population by way of information sessions, workshops or publicity materials. Everyone within the Faculty of Education of the

²³ See Annexure A for the Interview Schedule on the quality of inputs used to design the RPL system

²⁴ See Annexure B for the Interview Schedule on RPL knowledge and awareness of its activities

University of Pretoria was a potential participant, and the main criterion was willingness to participate in interviews. This process involved registered students in the Faculty of Education (undergraduates and postgraduates); lecturers in all the departments of the School of Educational Studies for Postgraduate Programmes in the Faculty; and its non-academic staff. It was important to determine whether there is articulation between the institution's intent to provide RPL and what the university's population know about the RPL system that is in place. In most instances, institutional policy documents and intents may be available and clearly articulated by administrators of the institution, but the extent to which students and staff are aware of activities related to RPL may be another issue.

In order to determine if there is a relationship between what the Quality Assurance (QA) Unit of the University of Pretoria promotes and application of quality and quality assurance principles at service delivery level, an interview²⁵ was conducted with the Director of the Quality Assurance Unit.

The interviews were audio taped, through the knowledge and permission of the interviewees. Interviewing participants in this study enabled me to get a full range and depth of the information needed. A pleasant relationship was established with all the participants and there was a lot of flexibility in handling the interview situation as each contributor turned out to be unique in relation to the experience on RPL related matters they brought along. All the participants were given an opportunity to express their views and opinions on RPL freely without being coerced into a particular viewpoint, although they were given specific directives in terms of what to provide information on (Mertens & McLaughlin 2004:169).

²⁵ See Annexure C for the Interview Schedule for the link between the QA Unit and units of operation at the micro level (service delivery)

Table 4.3: *A summary of the respondents interviewed*

Interviews	Respondents	Numbers
1. The design of the RPL system	The Dean: Faculty of Education	2
	The HOD: Curriculum Studies	1
	The HOD: Education Management, Law and Policy Studies	1
	The Director: Centre for Evaluation and Assessment (CEA)	1
	The Director: Joint Centre for Science, Mathematics and Technology Education	2
2. Knowledge and awareness of RPL activities	Registered students	
	Undergraduates	3
	Postgraduates	4
	Non-academic staff	4
3. The link between the QA Unit and application of quality assurance measures at service delivery level	Lecturers	6
	The Director: Quality Assurance	2
Total:		26

This total number includes pilot interviews. All the interviews were conducted during the same period, i.e. between April and June 2006. I then transcribed all these interviews and submitted the transcripts to my subjects for verification and/or amendments. None of the participants had any major concerns regarding the contents of the transcripts, they actually added to the data by providing additional information or clarifying what they meant. The interview process ended with a huge volume of data from all these various data sources.

4.6.1.2 Observations

An observation tool was designed to assist in gathering data in relation to the second research question. With this instrument, the intention was to determine the manner in the Faculty conducts RPL assessments, i.e. whether the entire process conforms to national and international principles, standards, and procedures. In the USA, who is

the pioneers of RPL provisioning, there are principles, ten standards, and a well-developed process of assessing and accrediting prior learning (Nyatanga *et al* 1998:38). Other countries have adapted these standards to suite their particular contexts, including South Africa, and particularly the University of Pretoria.

The observation (participant and non-participant)²⁶ on RPL assessments involved six stages of the assessment process. According to the University of Pretoria's RPL policy, the institution makes use of the learner-centred assessment model used in the United Kingdom (Simosko & Cook 1996:21-27). The stages in the assessment process were the pre-entry (applications and administration); candidate profiling; gathering, generating and compiling evidence; assessment; accreditation; and the post-assessment guidance.

A good practice checklist²⁷ with two subheadings, namely, Macro (Administrative) Quality and Micro (Academic) Quality was used (Nyatanga *et al* 1998:41), to collect data that would enable one to determine quality in the RPL assessment process. I completed this observational checklist in an unobtrusive manner, at various stages of the data collection process.

As a 'partly internal evaluator', the observation period included informal interviews of various participants, such as the administrative personnel, RPL assessors and members of the RPL committee, to verify certain aspects of the RPL assessment procedure and process in the Faculty, against what should be. There was a lot of cooperation from Faculty academics because of the trust established over time.

4.6.1.3 Survey questionnaires and interviews

I administered survey questionnaires²⁸ to the students who have gone through the RPL assessment process in the Faculty of Education at the University of Pretoria, to determine if they were satisfied with the entire process and procedures.

²⁶ See Annexure D for the observation tool (participant and non-participant)

²⁷ See Annexure E for the checklist on macro and micro quality

²⁸ See Annexure F for the student survey questionnaire

Administration of this survey was by e-mail, which had the advantage of prompt responses, lower item non-responses, and more complete answers to open-ended questions (Ary *et al.* 2002:385; Babbie 1995:256-257; Babbie & Mouton 2001:262-264).

The third research question focuses on the quality of the output of the RPL system and the intent with the questionnaire was to determine if there is client satisfaction in a number of areas, such as the availability of the RPL product, services and materials; the RPL product is delivered at a time and place convenient to the clients; the system contributes to the development of RPL candidates; the system is reliable and that it performs as expected by the state, the institution and the clients. In this case, the major clients were the RPL candidates/learners and lecturers who participated in the RPL process. This question explores, from the customer's perspective, what aspects of the RPL system provides satisfaction and what needs to be refined and improved. Another element inherent in this question is whether the designed RPL system meets the requirements of the state. The administration of questionnaires was followed by interviews²⁹ to get lecturers to comment on how they experienced the assessment process, and their opinions on what needs to be done to bring about improvement to the current practice.

There are certain issues of interest from the quantitative data that were explored to find out how they do contribute to improving provisioning of RPL. Issues and themes were identified by analysing the open-ended responses, until data saturation was observed, at which point analysis of the open-ended responses was terminated. Lincoln and Guba (1985:350) define data saturation as "continuing data collection produces tiny increments of new information in comparison to the effort expended to get them". The main issue of focus is whether the RPL system meets customer requirements.

²⁹ See G for the lecturer interview schedule

4.6.1.3.1 Format of the questionnaire and questionnaire items

The number of items in the student questionnaire was kept to a minimum (20 items) so as not to frustrate the respondents with a lengthy questionnaire. For the closed-ended questions, a 5-point Likert scale (Likert 1932 in Ary *et al* 2002:224) used ranged from Strongly Disagree to Strongly Agree, which was easy to score on Ms-Excell. Open questions were kept to a minimum (two) and RPL candidates were asked to give concise answers (in point form) to these two open responses. Since all the other relevant information (personal particulars) on these candidates is available at the various departments, I left out the section on biographical data. In using the data from archival records, I will mask the identities of the actual participants, by using pseudo-names.

The instrument for collection of quantitative data (student questionnaire) is a standard (but adapted) one used in England at institutions offering RPL to elicit constructive feedback from RPL candidates on the assessment process (Nyatanga *et al* 1998:37-38). The construction of the questionnaire involved RPL specialists in that country and by implication it had the following characteristics: (1) it is appropriate for measuring what it is supposed to measure; and (2) questionnaire items are a representative sample of the attitude under investigation, i.e. client satisfaction. A covering letter³⁰ crafted and mailed to all the respondents detailed the purpose of the study, a request for cooperation, and the protection provided to the respondents.

4.6.1.3.2 Pre-testing the student questionnaire and lecturer interview schedule

Without standards for validity, questionnaires can be misused and actually may have deleterious effects on the respondents. **Content validity** is the degree to which the sample of questionnaire items represents the content that the questionnaire intends to measure (Borg & Gall 1979:212). **Construct validity** on the other hand is the extent to which a particular questionnaire can measure a construct it purports to measure, such as client satisfaction. The standardised questionnaire administered to five

³⁰ See Annexure H for a copy of the covering letter for the student survey questionnaire

Masters and PhD students addressed these questions: Do the respondents seem comfortable with the questionnaire and motivated to answer it? Are certain items confusing? Could some items result in hostility or embarrassment on the part of the respondents? How long will it take a respondent to complete the questionnaire? Do all respondents interpret the items in the same way? The purpose of giving the draft questionnaire and interview schedule to my supervisor and critical reader was for them to check whether the instruments will provide the desired data and whether there may be any unforeseen problems overlooked during the process of development, prior to being administered. Based on the comments received, I then made improvements to the original document.

To test for the **validity and reliability of the item scores**, the SPSS programme enabled the calculation of the item analysis and the index of reliability. The calculation of the item analysis generated three statistics, namely, the item discrimination index, the number and/or percentage of respondents marking each choice to each item and the item mean and standard deviation. The item discrimination index shows the extent to which each item discriminates among the respondents in the same way as the total score discriminates. All the items used in the analysis correlate at least .25 with the total score. The output of the SPSS programme is in tabular form, indicating all the necessary information needed for analysis of the results. The other score from the item analysis indicate the extent to which responses spread out among the response categories preferred over items.

Reliability is concerned with the extent to which the measure would yield consistent results each time it is used. To calculate the index of reliability, the best index to use for an attitude scale is **Coefficient Alpha**, which provides a measure of the extent to which all the items are positively inter-correlated and working together to measure one trait or characteristic (Ary *et al* 2002:259). The SPSS programme (Statistical Package for the Social Sciences) is very useful in calculating this value. I highlighted all the items with very low scores, and made possible explanations regarding their usefulness, followed by the necessary amendments.

Reliability interpretation

The values range from 0.00 to 1.00. The higher the value, the more reliable the item score is. Higher reliability indicates that item statements are measuring the same construct (George & Mallery 2001). The table below describes interpretation of reliability scores:

Table 4.4: *Interpretation of reliability scores*

Reliability score	Description
.90 and above	Excellent reliability
.80 - .90	Very good
.70 - .80	Good. There are probably a few questions that could be improved
.60 - .70	It is somewhat low. There are probably some questions that could be improved
.50 - .60	This suggests the need to revise the test, or to supplement it by other measures for grading
.50 or below	Reliability is questionable: probably the instrument needs revision

Table 4.5: *A summary of questionnaire returns (%)*

Survey questionnaires/interviews	RPL learners	Lecturers	Total
Determine client satisfaction and get opinions on the RPL system	13 (92%)	5 (92%)	18

4.6.1.4 Document/text review and analysis

Document analysis is a research method applied to written or visual materials for the purpose of identifying specified characteristics of the material (Ary *et al* 2002:442). In this study, it was used to identify the biases and prejudices towards RPL; the discrepancies between national/international policy documents and institutional ones, and between institutional and Faculty documents on RPL and quality assurance, and to describe the prevailing practice in RPL provisioning. A number of data sources developed and used by the institution during the implementation of RPL were consulted, in the form of documentation, archival records and artefacts:

- a) The Institutional RPL policy, or any document that outlines how the institution intends to assess and accredit prior learning
- b) Faculty specific RPL policy, Faculty of Education
- c) The institutions admissions policy for the years 2005 and 2006
- d) Institutional documents on Quality Assurance (QA)
- e) Documents from the CHE/HEQC or communiqués with information on RPL
- f) Section of the report on the institutional audits conducted by the CHE/HEQC, which highlighted RPL issues
- g) The Institutions mission, vision and strategic plan (current and operational one)
- h) Internal records on RPL statistics/cases
- i) The National RPL policy document from SAQA
- j) Policy document on criteria and guidelines for RPL implementation from SAQA
- k) Policy document on criteria for the registration of assessors from SAQA
- l) Assessment Reports from the RPL committee of the Faculty of Education indicating how the RPL candidates was assessed
- m) Documents forwarded to the Faculty Board and the SENATE of the University of Pretoria on RPL candidates
- n) Portfolios submitted by RPL candidates for assessment
- o) External examiners report of the RPL assessment
- p) Standards, procedures and processes for RPL assessment in other countries (QA measures)

4.7 DATA ANALYSIS

Qualitative data analysis:

I have used the following approach to analyse the data collected in case studies, that is, **Interpretational Analysis**: examining the data for constructs, themes and patterns that can be used to describe and explain the phenomenon studied. Analysis of the data was inductive and on-going (Miles & Huberman 1994:68). The data was analysed by constructing categories and/or themes that cut across the sources. Pre-coded categories derived from the conceptual framework, as well as from codes emerging from ongoing fieldwork were used to analyse the data. The perspectives/views of different participants were compared and contrasted according to the different interests they represent. One of the analytical challenges confronting the study is how best to understand the different views, understanding and interpretations (perceptions) and opinions held by different participants where there are multiple realities. Therefore, the **Discrepancy Analysis** served as a useful tool to interrogate the voices of participants. The discrepancies between what an institution stated and what it actually does is very common and has been the subject of intensive studies of late.

There are three sets of observations to demonstrate discrepancies within organisations: firstly, that the objectives, goals and targets espoused by the policy makers are not always those actually pursued; the second point concerns the differences between what the organisation does, believes it does, is believed by others to do, and is supposed to do, and thirdly, discrepancy between the expected/espoused institutional environment versus the actual situation of the institution. This is in terms of who says what, and who is strategically positioned to ensure that the status quo is maintained, if the institution is opposed to a change of approach.

I therefore utilised the conception of discrepancy analysis to analyse the quality of RPL provisioning by comparing different sources of information with a view to constructing an understanding of reality that reflects its complexity (Potter in Miles & Huberman 1994:606-620). Findings from the research will be presented qualitatively, using texts as well as tables, matrices and diagrams where possible. An attempt made to establish a strong chain of evidence (audit trail) was to increase validity and reliability of the findings. In order to analyse the data from documentation, archival records and artefacts, **Content Analysis** and pattern matching was done (Franzosi in Miles & Huberman 1994:547-554).

Quantitative data analysis:

For the 5-point **Likert Type** scale, the data will be analysed statistically to determine frequencies of responses (Ary, Jacobs & Razavieh 2002:329). The Likert scale is the most appropriate in determining/assessing respondent's attitude (satisfaction) on the RPL programme. Respondents answered a set of statements on the output of the design process, involving the RPL product, related services rendered, paperwork produced and information on RPL. The respondents were to indicate for each item whether they strongly agree, agree, not sure, disagree and strongly disagree. To score the scale, the response categories were weighted. For favourable or positively stated items, the numeric values 5, 4, 3, 2, and 1 respectively were assigned to the response categories beginning at the favourable end (strongly agree). The total score was determined by summing up the numeric responses given to each item by individual respondents. This total score represented the respondent's attitude to the item. There have been some questions whether the undecided option should be included in a

Likert scale. Most experts in the field recommend that the researcher include a neutral or undecided choice because some respondents actually feel that way and do not want to be forced into agreeing and disagreeing (*ibid* 2002:225).

4.8 RESEARCHER'S ROLE IN THE RESEARCH PROCESS

In relation to the qualitative part of this study, I was the 'main instrument' for data collection. Creswell (1994:145) states that data in this type of research is mediated through this human instrument, rather than through inventories, questionnaires, or machines. Although qualitative studies have several advantages, one of the consequences of being the principal instrument of data collection is that the researcher could ring personal biases to the study (Marshall & Rossman 1999; Wolcott 1995). In terms of my research role, I oscillated between being a 'partial internal evaluator' to a 'total external evaluator'. The main challenge I faced was having limited knowledge of the RPL practice, organisational and the political environment prevalent in the Faculty.

Trust amongst staff (participants) was developed over time. This alone facilitated access to the site of investigation and ensured maximum cooperation from participants, and I envisage that the results would provide a fresh look at the RPL practice to those who are involved in the process of assessing prior learning (Shapiro & Blackwell 1987; Patton 1997; Scriven 1997; Weiss 1998; Kushner 2000). One of the disadvantages of using internal evaluators only, is that they tend to be less objective, than external evaluators.

There were various activities and processes related to RPL provisioning I was invited to by Faculty academics, as an external researcher. Involvement in all these activities and processes enabled me to view operations (events and activities) of RPL provisioning as they are actually occurring.

4.9 TRUSTWORTHY FEATURES

The trustworthiness of reported observations and interpretations of interviews would strive for maximum validity through the following mechanisms:

Triangulation: multiple sources of data (people; documents and facilities) and various strategies for data collection increased the likelihood of understanding the phenomenon under study from various points of view. Data triangulation assisted in determining whether the data collected with one procedure or instrument confirmed the data collected using a different procedure or instrument. I wanted to find support for the observations and conclusions in more than one data source. This method was also to assist with the search for convergence of a major theme or pattern in the data from these various sources, which leads to credibility of the findings.

Member checks: the tape-recorded and transcribed data was taken back to the people from whom they were derived to confirm the accuracy of the information. In addition, participants were asked to comment both on the categories developed for the analysis of data, as well as the final narrative. Feedback from the participants gave further insights and drew attention to some other aspects missed. Through member checking I wanted to demonstrate courtesy to the participants by letting them see what has been written about them.

Building an audit trail: I developed a database containing raw data gathered during interviews, observations, administration of the questionnaire, and records of my decisions about whom to interview or what to observe and why, and only this information will be utilised. The results of all the interviews, questionnaire data, including documents availed by the institution, and notes on observation as well as from the reflective journal were kept in a database (electronic and manual). This database was given to my supervisor to examine, prior to the writing up stage, and will be availed to any other third-party auditor to attest to the dependability of procedures and confirmability of the findings.

Repeated observation: Repeated observation of the processes of RPL provisioning and gathering data over a considerable period increased the validity of the findings. Being in

the field over time solidified evidence because I was able to confirm the data over time, and compare interview data with observational data.

Peer/Expert Review: I used multiple sources of evidence, establish a chain of evidence and had key informants review various aspects of the research process. This activity was done during the data collection as well as the writing up stages.

Working with a team: The key peer reviewer(s) who assisted with the review throughout the research process were also requested to comment on the following aspects: content of the study; structure and layout of the research report; presentation of data after analysis and overall quality of the report, i.e. they acted as quality controllers of my research project.

I acquired the services of established and reputable academics from the University of Pretoria to act as my critical readers or experts in the field of research methodologies, the content on RPL, assessment (evaluation), quality and quality assurance, to further test the validity of my findings on ‘the quality of the implementation of the RPL programme in higher education’. In addition, a professional in the field of language editing edited the final narrative. A graphic designer worked on the all the diagrams used, as well as the design and layout of the Thesis.

4.9.1 Ethical considerations

I used the case study protocol where the institution and participants were assured of confidentiality and anonymity (the identity of the cases were masked), wherever possible. In elaborating on the protocol or ethical issues, I ensured that all the participants were made aware of the purpose (goal) and outcomes (objectives) of the study. The research instruments designed served the purpose of eliciting information the study intends to get. There was an undertaking from the onset not to deceive participants in any way. All the participants interviewed were requested to complete a consent form prior to the interviews. See **Annexure I** for a copy of the consent form signed by all the participants interviewed. The Dean of the Faculty of Education granted permission to conduct fieldwork at the Groenkloof Campus (Faculty of Education) of the University of Pretoria. See **Annexure J** for a copy of the permission

letter from the Faculty of Education of the University of Pretoria. In terms of reciprocity, the research report is going to be part of the university's property, accessed by all members of staff and the student body, as well as being utilised for any other purpose the university might deem fit.

4.10 LIMITATIONS OF THE STUDY

Yin (1989:22) argues that good case studies are very difficult to do, because of the intricacies and the rigour that is involved. The limitations of this study are:

I will be the main instrument for the collection and analysis of data. This creates the possibility of researcher bias being introduced in the research study. In order to minimise the effect of this limitation, I made use of a variety of strategies, in order to establish reliability and validity of the research findings. I also ensured that I adhere to proper ethical standards during the research process and I handled the data collection period and analysis thereof with the needed rigour and scrutiny.

Since case studies in general provide little basis for making scientific generalizations, I have stated that it is not my intention to make broad generalisations, even within the other faculties of the University of Pretoria. I have stated the purpose of the study explicitly, namely, improving quality provisioning of RPL at an institution of higher learning; it will remain the prerogative of the readers if they may find the findings in this study relevant to improve their own RPL practices. According to Yin (1994:10) the study may be “generalisable to theoretical propositions” but not to all higher education institutions and faculties within the University of Pretoria.

Qualitative studies usually result in large amounts of data that needs to be managed and kept safely (having a research database) and careful consideration needs to be taken when analysing qualitative data. The loss or omission of information could result in a lack of continuity or incoherence in the final analysis of the data. I then created a logical case study database for each set of data collected, both manually and electronically and the databases were then stored in various places of safety.

The sample size for administration of the questionnaire was very small. Calculations of the item index and reliability coefficients was done as a standard practice, however, very little could be done to increase either the validity or reliability scores in cases where the researcher was expected to increase the population size. The use of standardised and published instruments is not promoted by many authors, since there could be inherent problems with such instruments impacting negatively on the quality of results obtained. In addition to instrument having 'face validity', it was pre-tested, and checked by specialists in the area of RPL for accuracy and appropriateness of items to measure client satisfaction.

I experienced that it takes great effort and skill to apply mixed model designs appropriately in a case study. The researcher needs to be specific in terms of where the mixing occurs, and be able to justify the use of such approaches at those various points adequately. All the methods for data collection have advantages and disadvantages, however great care was taken in coming up with alternative ways to circumvent the limitations of each instrument used.

4.11 RESEARCH MANAGEMENT PLAN

The plan for conducting the research was drawn in the early stages of the research process and was followed accordingly. However, the process of implementation was not a smooth one since there were many changes made and adjustments to the original schedule. Specifically, this related to the following aspects: changing the research topic; reformulating the main research question; rephrasing the research question(s); revisiting the research design and methodology and making the necessary adaptations, prior to the data collection phase and reviewing the literature on an ongoing basis and making the necessary changes to the content of the Thesis.

The following section presents the research management plan in tabular form

Chapter 4

 Table 4.6: *The research management plan*

ACTIVITY	TIMELINES
<p>A. Research project starts</p> <p>January to September 2005 (9 months)</p> <p>Milestones</p> <p>Development of the research proposal</p> <p><u>Sub-activities</u></p> <ul style="list-style-type: none"> - Research topic: finalisation and acceptance - Ethics statement: acceptance - Research proposal: defence and acceptance 	
<p>B. Data collection: Phase 1</p> <p>September to November 2005 (3 months)</p> <p>Compilation of the Institutional Profile</p> <ul style="list-style-type: none"> - Review relevant institutional documents - Develop a framework for document/text analysis - Keep fieldwork notes - Keep reflective journal notes 	
<p>C. Review of the research process</p> <p>January to March 2006 (3 months)</p> <p><u>Sub-activity</u></p> <ul style="list-style-type: none"> - Analysis of the data collected for the compilation of the institutional profile 	
<p>D. Data collection: Phase 2</p> <p>April to June 2006</p> <p>The other part of the data collection was to address the three research questions.</p> <p><u>Sub-activities</u></p> <ul style="list-style-type: none"> - Develop interview schedules - Start interviews - Keep fieldwork notes - Transcribe interview tapes - Keep reflective journal (notes) 	
<p>E. Capture data and edit data</p>	<p>July 2006 (1 month)</p>
<p>F. Data analysis</p>	<p>August to September 2006 (3 months)</p>

G. Write Thesis	October to December 2006 (3 months)
H. Final editing	January to February 2007 (2 months)
I. Submission of the Thesis for External Examination	April 2007

4.12 SUMMARY

The case study of the evaluation of the RPL programme in the Faculty of Education of the University of Pretoria was designed to provide a detailed and comprehensive picture of the quality assurance measures built into the programme. In the quest for a deeper understanding of a quality RPL system, I utilised various strategies for data collection and approached the ‘case’ from an interpretative perspective. I applied both naturalistic/constructivist and positivist paradigms in the research design. In order to ensure validity and reliability of the research findings, a pilot study was done and the results were used to refine the instruments that were finally used. I identified the limitations of this study and indicated strategies to be employed to overcome the challenges of using mixed methods in case studies.

Individual participants for the study were selected because they were viewed as ‘information rich’ and illuminative cases, in the sense that they offered useful manifestations of the phenomenon of interest. The rationale for sampling was aimed at insight about the phenomenon and not only empirical generalizations from a sample to a population. The intent was to conduct interviews that aim to capture direct quotations about people’s personal perspectives and experiences with the phenomenon and do observations that yield detailed and thick descriptions and for document review, only those that would add depth to these experiences were carefully selected. In the next chapter, I will provide the account of the research findings.