An exploration of the factors enabling educators to respond effective	ly to
the work environment:	

Case studies of three participants within the context of a professional development programme for Southern African environmental educators

Half-Thesis

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by

Alistair K Chadwick

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Supervisor: Dr Robin Mackie

ABSTRACT

An exploration of the factors enabling educators to respond effectively to the work environment:

Case studies of three participants within the context of a professional development programme for Southern African environmental educators

This research project investigates the influence of, and interplay between, contextual and biographical factors on an educator's ability to respond to the work context. In particular, this study explores what factors a small number of educators believe were important, before, during and after their participation on one or other specific professional development programme in enabling them to develop (design and/or adapt) and implement a course curriculum in their work environments. Within the context of this research, the professional development programmes of interest are designed with/for environmental educators from the Southern African region.

Although past educational research has often focused on the importance that programme participants give to the interactions between themselves and tutors, the materials used, the assignments tackled, etc. this research project did not set out to draw the research subjects' attention to programme-related factors. Rather, it was designed to broaden the focus to include factors before and after a programme as well.

Within this enquiry, three research subjects were engaged in numerous, open-ended conversations throughout the course of the year during which the study unfolded. The above participants were also involved in semi-structured interviews where, again, relatively open-ended questions were asked. A small number of documents, such as the materials of the above professional development programmes, were also analysed.

This research has provided a number of insights into the wide range of factors that might enable educators to respond effectively to their work environments. Specifically, it has indicated the importance of four broad families of factors perceived by the subjects of this research to have enabled them to develop and implement a meaningful course curriculum. The personal variables are highlighted in particular. Importantly, this study raises questions and challenges both for those involved in similar research as well as for those involved in the design and implementation of professional development programmes, particularly for educators.

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GLOSSARY

EE Environmental Education

GF Gold Fields (Mining Company)

NGO Non-governmental Organisation

RU Rhodes University

SADC Southern African Development Community

SADC-REEP SADC Regional Environmental Education Programme

WESSA Wildlife and Environment Society of South Africa

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CHAPTER ONE

THE RESEARCH CONTEXT

1.0 Introduction

This research project focuses on a small number of educators who have shown a high level of competence in the work place. In particular, this research focuses on three environmental education (EE) practitioners who have participated on either one of two professional development programmes¹ and who, on returning to their work environments, have exhibited an ability to respond effectively to the work context. Specifically, this study attempts to elucidate the biographical and contextual factors that may be of particular importance in an educator's ability to respond to the work context, in general, and to develop and implement a meaningful course curriculum² in particular.

¹ These programmes originate from a 'family' of Gold Fields/Rhodes University participatory courses for EE practitioners, first implemented in 1992 and today managed in partnership with the SADC Regional Environmental Education Programme (SADC-REEP).

² A 'meaningful course curriculum' is one which, at the very least, considers both the structural and sociocultural contexts (Cornbleth, 1990) of the participants.

This study is a result of my professional interest and involvement in the design and implementation of professional development programmes³ for environmental education (EE) practitioners. In this regard, I am constantly reflecting on how best to support educators, both in responding to their work contexts and in their professional development, during and after participation on educational programmes. I am particularly concerned with the type of support that one needs to provide educators/programme participants once they have returned to their places of work and have begun developing, with a view to implementing, a course curriculum.

1.1 The research problem

Recently there has been something of an explosion in the number of full-time/distance/part-distance EE courses and educational programmes being offered in the SADC region. It is generally assumed that these programmes, many of which include take-home assignment tasks, will better enable participants to use their developing, and newly acquired, skills, knowledge and competences in the work place and, in the case of the programmes on which the research subjects participated, to develop and implement meaningful course curricula. This, however, is often only the case with a small number of programme participants (Russo and O'Donoghue, pers. com, 2002), begging the question: What are the possible factors that allow some educators to respond with competence to the work context, developing and implementing meaningful course curricula?

1.1.1 Origins of the research

This research involves case studies of three people, all of whom have participated on one or other professional development programme⁴ designed for EE practitioners. A brief background to these

³ The term "professional development programme" is used when referring to these programmes in order to distinguish them from the "course curricula" that participants on these programmes have developed and implemented themselves.

⁴ Participation on one or the other RU/SADC-REEP professional development programme determined whether educators were included within the study of not. Their participation on the programme meant that there was some history of involvement with the SADC-REEP and that I, as a member of staff of the SADC-REEP, was able to draw on this relationship in order to enjoy regular interactions with them throughout the course of the study.

programmes will be provided in chapter three (3.4). (As will be noted throughout this thesis, students on these programmes are referred to as 'participants' to reflect their participatory nature.) As such, I undertook to involve the above three educators in a study of their perceptions regarding those factors, before, during, and after their participation on these particular professional development programmes, that enabled them to respond to their work contexts. In particular, I wished to explore those factors/variables that have enabled these educators to develop and implement meaningful course curricula. Importantly, however, I did not set out to narrow the research subjects' focus down to the programme-related factors perceived to be of importance, but rather chose to expand their fields of vision to include the factors before and after a programme as well.

As such, the interpersonal exchanges and the extended social pressures which shape the living/working/learning situation are crucial areas of interest. If one accepts that people are learning throughout their lives then this research may be seen to have as one of its central concerns the analysis of the relationships that occur between individuals, within a variety of learning situations (the work environment, the home environment, etc.), and their socio-political contexts.

1.2 Research purposes

This research project attempts to identify and explore the factors that the above research subjects believe have enabled them to complete the development of a course curriculum and implement it effectively. Linked to this, the study aims to uncover what is required before, during, and after, a professional development / educational programme to support a participant in effectively responding to the work context. In other words, this research project focuses its attention on participants that have managed to successfully apply course design and implementation competencies in the work place. It seeks to elucidate what factors and, hence, support processes may be necessary to ensure or encourage the application of competence. As such, it is hoped that

one of the outcomes of this study will be to provide programme developers/implementers with a clear idea of some of the factors that ought always to be borne in mind when designing and implementing a professional development programme such that:

- it enables a participant to respond effectively to the work context that they return to, and
- it enables a programme tutor to provide participants with meaningful support before, during and after a programme

The findings of this study may be particularly useful to adult educators from a broad range of disciplines because the subjects of this research are past participants in educational programmes that have been informed by educational theories and perspectives which are influential in contemporary international, regional and local educational developments.

1.2.1 Research spin-offs

Within the field of education, the evaluation of one or other educational programmes is a regular undertaking. Much of this research, particularly that focussing on programmes for EE practitioners (Janse van Rensburg and Le Roux, 1998; Lotz, 1999; Molose, 2000), has given attention to the importance of the various programme-related factors in supporting adult learning and/or the achievement of intended outcomes and the professional development of participants. Such research has often given attention to the interactions between learners (participants) and educators (tutors), the materials used, and the assignments tackled, etc. It is my hope that this research, in contrast to the above, might provide some insight into the factors, not specifically related to an educational programme, that enable educators to adapt to the distinctive circumstances of a course developer and implementer in specific work contexts. As one who is involved as a tutor, in the implementation of educational programmes, it is my firm belief that a theoretical understanding of course design and implementation is only one of a number of factors enabling educators to plan, develop and implement meaningful course curricula.

From the outset of this study, impetus has been provided by the belief that this research might enable better support for educators, especially those who have participated on professional development programmes, through contributing to an informed understanding of the range of important factors that impact upon such educators in responding to the work context in general, and in developing and implementing⁵ meaningful course curricula in particular. Importantly, the research narrative is also written to account for the research process, in the hope that the insights emerging here might provide some guidance for similar research in the future.

1.3 An overview of the research process

The reader should be guided by the following points when reading this paper. It reflects an enquiry process in which I strove to develop an understanding of the ambiguities and uncertainties that were encountered during regular work-related interactions with environmental education practitioners, including the research subjects. This search for an understanding, to which a theoretical explanation might be applied, was not primarily a process of seeking knowledge through literature reviews.

Rather, books and journal articles were read as a result of dialogue with professional acquaintances.

As such, I have attempted to reflect a truthful representation of this process within the text.

In pursuing the course of this enquiry I have experienced the ongoing clarification of my epistemological position, and have gradually clarified the methodological framework underpinning the enquiry process. As a novice researcher, I made a conscious effort to reflect on the research process throughout the course of the enquiry, making changes wherever and whenever they seemed appropriate. I have attempted to reflect these changes in thinking and research orientation in the developing enquiry, and thus emphasise the research process throughout this paper, giving particular attention to the lessons learnt during the process.

⁵ In the context of this research, "implementing" a course curriculum indicates that an educator is responsible for the mediation of learning (i.e. tutoring), and perhaps for some of the course administration and logistics, etc.

1.3.1 Revising the goals for the investigation

The initial title of this research project indicated a wish to explore 'the successful transfer of learning'. This title indicates two key assumptions that I held at the outset of the project and that were to be overturned during the enquiry process. The first of these assumptions was that it is possible for a person to simply transfer, and hence use, the knowledge (and skills) acquired during an educational programme to the work context. This assumption, however, has been deeply questioned by a number of educators (Taylor, pers. com, 2002).

My second assumption to undergo a critical reorientation is also evident in the initial narrow focus on the particular educational programmes mentioned above. I believed that the professional development programmes, and associated programme-related factors, would be key variables in enabling the research subjects to develop and implement course curricula. However, as I discussed my thoughts with colleagues and waded through the literature I was encouraged to question this assumption, particularly with regard to the vastly differing abilities that educators exhibit in responding to their work contexts after participating on the educational programmes under focus. After an initial research scoping exercise, which included an interview with a past programme participant, it became clear that there are a wide variety of factors that play an important role in enabling a participant to develop and implement a meaningful course curriculum, after a programme, once back in his/her work context. These factors evidently go well beyond those of the programme itself, the content, materials, interactions and the assignment tasks (including work/home-based assignments) and are, therefore, the central concern in this study.

If the process by which I came to the research focus, purposes, methodology and associated approach to data collection, is viewed as a journey then it must be realised that the destination has changed during the travelling. This has been partly due to the "discovery" of potential weaknesses within aspects of the research strategy and to the subsequent revision of the strategy to ensure

greater reliability and validity of the findings. I accept, however, that in investigating social phenomena in general, one simultaneously also changes the nature of the phenomena, so that the research process 'becomes a creative activity as much a form of objective enquiry' (Terre Blanche and Durheim, 1999:26). As such, I believe it is important to clearly articulate the potential weaknesses and tensions inherent in the research strategy adopted here.

1.4 Tensions and potential weaknesses in the research strategy

By asking questions about the perceived success of a past programme participant in the development and implementation of a meaningful course curriculum and of the factors which enabled his/her success, I have intervened simply by bringing attention to them as social facts worthy of study. And by collecting research material from the subjects of this research, I am intervening further as they are certain to begin to engage increasingly with my approach/view, even as I collect data from them. This tension is one that I bore constantly in mind during the research process.

Linked to the above, when questioning the research subjects, who have managed to successfully respond to their work situations, an important issue and concern has been to ensure that such participants do not base their replies on what they believe I want to hear. A related tension that has been evident throughout the course of this research project is that between my need as researcher and programme insider (programme tutor), for honest and critical comments regarding the general helpfulness and competence of programme co-ordinators/tutors and the participant's realisation that such comments may be hurtful to the programme staff.

As in all similar research, the way in which the research subjects interpret and/or choose to narrate their own experiences - in this case, of course curriculum development and implementation - is influenced by their personal biography, their beliefs and their expectations.

Of course my interpretations of the research subjects' experiences is, in a similar fashion, influenced by my personal biography, beliefs and expectations. How I have interpreted or understood the working and living contexts of each of the research subjects, what information in the end I have assigned precedence to, and the conclusions I have drawn are all constitutive of my own social experience, 'privileged' liberal education, and family's moral and political values.

A further tension involves the possibility that a participant does not mention a crucial factor because they are not aware of it themselves. This suggests the importance of sharing a participant's frame of reference, indicating that a deep understanding of a person's interpretations of the world has to come from the inside (Cohen, Manion & Morrison, 2000). One important and obvious weakness inherent in the above research strategy is that the procedures and methods leave the researcher a great deal of room for interpretation, selection and distortion.

Within a case study approach, insurance against distortion of evidence lies not in research technique but in research ethic (Millar, 1983). In this regard, I believe that accountability is the key term. As such, I have provided the research subjects with opportunities to contest the record of the interviews in which I have engaged them.

1.4.1 Research validity

As previously mentioned, I have used a case study approach in this research and, being aware that this is a highly subjective form of enquiry I attempt to clearly expose and problematise my perspective in the following chapters as part of the presentation of the three studies undertaken. In other words, I will address the critique of subjectivity by presenting findings, procedures, basic data, and its own frame of reference for public scrutiny. This research has brought to light a range of insights and perceptions held by a small number of people; the raw data of this research. In interpreting this data I have drawn a number of potential conclusions. However, I am aware that

there are plausible alternative explanations and validity threats to these conclusions. To deal with this, I have endeavoured to give as full an account as possible of the position, expectations and impact of myself (the researcher) and the ways in which the immediate research situation has been shaped by its wider context.

In this regard, I believe that it is important for me to clarify some of the beliefs and assumptions that I hold and that have undoubtedly had an important impact on the research focus, the methodology and the interpretation of the data collected. In particular, an important concern is that of my educational background; that of a South African, educated under the Christian National Education system, within a society whose worldview has been predominantly positivist. How will this background, and all of the associated values as well as ontological, epistomolgical, and other, assumptions that accompany it, and of which I am barely conscious and/or am struggling to free myself from, impact upon the research that I have involved black Southern Africans in?

It must be borne in mind throughout this paper that my beliefs and assumptions have been inevitably built into the research design and have thus shaped the results obtained. The results are certainly not objective but may be reliable and valid in that similar research performed by different people with the same perspective or 'structure of assumptions' would produce the same results. In other words, the revelations brought to light by this research are, as Ingleby (1976, in Morphet, 1983:95) puts it, "as much products of the mentality which is brought to bear on the evidence as of the evidence itself".

I strongly agree with Lincoln and Guba (1985), who state that it is through interpretation, appreciation and evaluation, based on one's own values, that data is rendered meaningful. This stance may raise questions of reliability and validity, and will be discussed later on when attention is given to some of the lessons learnt during the collection and interpretation of data.

1.5 The structure of this study

Within chapter two, I focus on the research process. This chapter serves to clarify my understanding of an interpretivist enquiry, with a particular focus on the use of case studies, based upon the experience I garnered during the research process, and on my reading on research methodology. I discuss the data collection techniques used in this research, and explain my understanding of these particular techniques and how I used them. In general, I attempt to share my experiences and the lessons learnt during this process.

In chapter three, I provide an overview of some of the factors that past research has indicated as being important in the ability of programme participants to respond to the work context. Links are then drawn to key developments and contemporary ideas in professional development and adult learning, with reference to the commonalties with features of the professional development programmes upon which the research subjects have participated. A brief background to these particular professional development programmes is also provided, aimed at explaining the programme orientation.

Chapter four focuses on three case studies and the findings thereof and forms the bulk of this thesis. The results are discussed within a number of broad focus areas, each including a 'family' of related factors, raised in this chapter. For the findings relating to each focus area I provide some discussion, with due attention given to the role of the above professional development programmes. This structure was designed in order not to lose the research focus while at the same time not decontextualizing it either.

Chapter five is the final chapter, and is again divided into discussions on the different focus areas, presenting ideas that could serve to guide future research in this field. Some important ideas are

also presented for programme developers to bear in mind when conceptualising and implementing programmes for educators.

As a novice researcher and designer of educational programmes for adult professionals, I invite you to discover how in an interpretivist setting and through relatively unstructured conversations and open-ended interviews with a small number of research subjects, I have come to better understand the importance of providing broad-ranging support throughout the learning process. As will become clear, such support, required during and after participation on an educational programme, ought to focus on a range of factors, many of which are often believed to be outside of the responsibility of programme developers and implementers.

CHAPTER TWO

RESEARCH ENQUIRY

2.0 Introduction

In this chapter I provide an explanation with regard to why the particular research process was followed and data collection techniques used. I explain the process of enquiry upon which I embarked during the course of this research project, and describe the case study approach taken. I describe the ideological assumptions upon which this approach is based, present my understanding of this approach, and point out some of the advantages and disadvantages of such an approach. I also give attention to the subjects of this research and to the research methods and techniques relevant to the case study approach adopted, around which we interacted. In so doing, I further attempt to expose some of the tensions inherent within the approach implemented.

It is in this chapter that I describe the conceptual underpinnings of this study. As such, I explain the theoretical perspective or framework within which I have undertaken this research project. In so doing, I review both the strengths and weaknesses of this perspective. As will be evident, the use of a theoretical framework that is consciously and unconsciously adopted as a guide during the

research process has an important impact on all stages of research, from initial design and the formulation of the research question to the presentation of the findings.

The research topic that I have chosen to focus upon in this study would, I believe, have best been tackled through conducting the enquiry in the various living environments of the research subjects. These would include the work and home environments and, possibly, others as well. Such a study would be termed a naturalistic enquiry, seeking "to study reality naturally, as a whole, in all its complexity, in its own particular context..., without trying to simplify and reduce it...." (Bhola, 1990:155). Naturalistic enquiries set out to develop an understanding of the meaning that people make of their activities. The fact that these understandings and meanings are studied within their contexts has precluded me from basing this study on such a method of enquiry. And so I have had to resort to what may be viewed as second best; an interpretivist enquiry.

My own perspective or framework is thus taken from the theoretical assumptions of interpretivism and the epistomology of constructivism. As such, I use this chapter to clarify some of the assumptions and beliefs that I hold regarding the nature of reality and of knowledge that have had an important impact on the research methodology adopted.

2.0.1 The interdisciplinary nature of this research project

People, and the environments in which they live and interact, are complex and interdependent. I would argue that it is because of this complexity and interlinking that we need knowledge from various disciplines to understand them. In this regard, I believe that the ultimate research approach with regard to this study would involve one that is inter-disciplinary in nature. I, however, have academic experience only in the field of adult education. Some background knowledge from the disciplines of (educational) psychology, sociology and anthropology, to name but a few, would have been very useful. However, each perspective would, no doubt, have required a different

formulation of the research problem, resulting in a different framing of the research question and a different research approach.

This research focuses upon educational programmes that are based upon a number of beliefs and assumptions, relating to the processes of adult teaching and learning. As such, I draw on the findings of research conducted in the international arena within the above fields. In particular, I focus on that which relates to self-efficacy (Bandura, 1977, 1986, 1991), contextual learning and transformative learning (Mezirow, 1991).

As outlined above, this research project is predominantly influenced by contemporary thinking within the field of adult education. It does, however, also draw on current theories within closely related fields, such as that of human resource development. This has led, now and then, to ideologically-based tensions about the most appropriate research focus, questions, approach and/or process to undertake.

2.1 Research questions

By doing this study I hoped to gain a better understanding of the factors that enable some educators to respond effectively to their work contexts, particularly after having completed a professional development programme. At the start of this research project, I entertained the belief that different aspects of a person's professional and personal life act as enabling factors in their work as a course developer and implementer. I did not know, however, which aspects or factors would be important or crucial to this. Key questions that arose at the outset of this study and which have remained of central concern include:

• What factors do past programme participants feel are important in enabling them to respond effectively to their work contexts?

- How might a tutor support a programme participant before and during an educational programme to ensure the development and implementation of a meaningful course curriculum?
- How might a tutor support a programme participant in responding to the work context and in learning and further professional development, once back in his/her place of work?
- What role might fellow programme participants, colleagues, supervisors and professional acquaintances play in such a learning process?
- What role might a participant's personal characteristics play in his/her ability to develop and implement a course curriculum?

Answers are provided to all of these questions but, owing to the nature of this research, provide a clear indication only of the need for further research.

In my work as a course designer and implementer (tutor), I have observed that there are many aspects of an educational programme that will act as important factors in a participant's ability to respond to the work context. It has become clear, however, that there are other factors, not directly related to the programme, which may also play crucial roles.

2.2 The research context

As briefly explained, one of the reasons for the research focus outlined above is because this study links directly with the work in which I am presently engaged. This work is conducted within the Southern African Development Community Regional Environmental Education Programme (SADC-REEP), managed from the Regional EE Centre in Howick (KwaZulu-Natal).

In general, the EE practitioners with whom I interact, as a programme designer and/or tutor, hail from different countries within the Southern African Development Community (SADC). These programme participants are employed in a wide range of broadly educational positions within a

variety of settings, including local communities (as extension officers), and regional (and sometimes national) governmental and non-governmental environmental organisations. Within these positions, most are required to develop educational and awareness-raising programmes for the general public and/or specific sectors of their societies, for example the formal education sector.

Most of the above EE practitioners have completed their initial schooling, while many are looking towards obtaining further qualifications at institutions of higher education at some point in the future. As such, the programmes that I am involved in the development and tutoring of, and upon which the subjects of this research have participated, are often appropriate for, and are attended by, EE practitioners who have degrees or diplomas, e.g. teachers, teacher-trainers, etc. In general, though, the above programmes are designed and structured in such a way so as to improve the work practice of adults with almost any level of education.

2.3 The research process

The research process in which I have engaged, unfolded over a period of approximately 10 months. In this section, I attempt to reflect this process as essentially open-ended and non-linear. As a reflexive researcher, I found that my final destination was constantly changing and never clearly defined. Initially, I believed that this research project might usefully inform the work of programme designers and implementers such as myself, through contributing to an informed understanding of some of the different factors or aspects of a programme that enable a participant to develop and implement course curricula. I soon realised that although the educational programme was important, the personal characteristics and the life situation of the participant, including their life experiences prior to, during and after the programme was perhaps even more so.

Questions emerged during and after meetings with colleagues and resulted in my attempt to clarify, rethink and re-negotiate the purpose(s) of this research. These questions included the following:

- What role did the professional development programme play?
- What role did other external factors play, eg. the attitudes of work colleagues and supervisors?
- What role did internal factors play, eg. a participant's self-belief, feelings of self worth, etc?

In my mind, therefore, participation on an educational programme simply became one of a number of broad external factors as did, for example, interactions at the work place. Internal factors, including a participant's commitment, self-efficacy, feelings of self-worth and his/her self-esteem are another broad category of factors which, therefore, go well beyond those of the programme itself; the content, materials, interactions and the assignment.

Through interacting with colleagues and participants, reading the literature, writing, and reflecting, and reading some more, etc. I gradually came to understand the design and purpose of this project differently from that at the outset of the process. In this regard, Bogdan and Biklen (1986) have insisted that when one conducts a naturalistic enquiry, the design (i.e. research focus, data collection techniques, etc.) is emergent rather than predetermined. Similarly, much of my research design emerged during the course of the study. My research focus was refined over time while the study was in progress and, in fact, the research strategy became clear, only after I had begun the journey and had started to analyse the conversations and interview transcripts.

2.3.1 Scoping the research

One of the first steps taken on this journey, involved a lengthy semi-structured interview with a past programme participant who had developed and implemented a meaningful course curriculum for EE practitioners in his home country. (The interview schedule is included within Appendix A) One of the purposes of this interview was to elucidate the scope of this research; the range of topics that I would need to give attention to and the approach that I would need to take. It was during this interview and afterwards, during the transcription of the tape, that I quickly came to realise that the

professional development programme, in which a participant had participated - the main focus of the research at this stage— was only one of many factors perceived as important in enabling a participant to respond effectively to their work contexts and to develop and implement a course curriculum.

The above realisation, that a programme and its associated materials, processes, assignments, etc. might not be a central factor, encouraged me to rethink my research strategy. This refocusing was further encouraged by my own experience as a programme tutor which pointed to the fact that participants who have completed the design of a course curriculum often seem unable to implement it. These initial reflections together with my attempt at self-reflexivity resulted in the modification of my research focus and approach quite dramatically. Importantly, I developed a comprehensive list of relatively open-ended questions (Appendix D) to be asked of the research subjects during the regular interactions envisaged over the course of the study. Of similar importance, I designed a semi-structured interview schedule which was very broad-ranging and open-ended (Appendix E).

2.3.2 Literature use during the research process

As indicated above, the research process has been one of progressive focussing, a very gradual clarification of my research destination. Literature has been used throughout the process, both guiding the research process (the exploration of topics or themes) and being guided by themes that have emerged during the research process, from discussions with colleagues and from the data itself. And, as everyone who reads books will know, certain readings are meaningful because of the point in time at which they have been read.

2.4 The research text

With regard to a clarification of the research context, one important aspect involves my textual practice; how and why I have constructed a certain representation of experience in the way that I

have. This section, therefore, attempts to clarify how I have taken explicit account of my textual practice.

As a novice researcher, situated outside of an academic institution, I have struggled to recognise some of the constraints that researchers from such institutions have recorded. The constraints that I have experienced during the writing up of this project include a recognition that my textual work is a 'symbolic representation' (Lotz-Sisitka, 2001) of my experiences during the project and of the research subjects' experiences that I have constructed. Linked to this constraint, is the difficulty that I found in writing this text to rigorously and authentically represent the experiences of all research participants, including myself.

I have attempted throughout the process of writing this text to clarify the epistemological position of the textwork, ensuring that it is congruent with the conceptual underpinnings of this research; of how I view knowledge and/or the process by which we come to know. In this regard, I view knowledge and text as socially constructed. In the case of the textwork, this is evident in my interactions with interviewees, the interpretation of their responses, the recording of these interpretations and the reading of such by yourself.

2.4.1 Reading within the text

A related tension that I have experienced is that of articulating the possibilities for reading within my text, of identifying the different layers of writing and of drawing out insights and unspoken conclusions from within these layers. This relates to the partial nature of research textwork, where the reader has an opportunity to make meaning and to fill in the gaps. It also relates, I believe, to the view of language as a 'strategic limitation of possible meanings' (Lather 1991:xix).

In this regard, the use of certain words and phrases indicate one's epistemological and other beliefs. This is also true of the words that one does not use. My use of the word 'tutor' rather than 'facilitator' may clarify this point, albeit at a relatively basic level. Not using the term "facilitator" is an indication of my epistemological beliefs. As an alternative, I have used the term "tutor" throughout the text. The reason for this is that I view the phrase facilitation of learning as privileging the facilitator with the 'expert' knowledge (and perhaps the moral authority) of how best to help others help themselves in the learning situation. The term "tutor" therefore encompasses the belief that he/she is someone whose main task is to try and interact with participants in such a way that the conditions (intellectual, emotional, physical, etc.) are created during an educational programme, and afterwards, that will support a participant in meaningful learning.

The tensions inherent in the use of language within one's textwork also become apparent at another level, this relating to the assertion that the academic task is, as Popkewitz (1991:233) states to talk and write in ways that are 'deemed accessible' to teachers and other educators. I believe that the language that many of us use in conversations on learning and teaching needs to be challenged. I too believe that the language used here needs to challenge the 'commonsense systems of relevance and logic' (Popkewtiz, 1991:234) because, in part, meaningful learning springs from discontinuity. Following Keeves (1988:50), I am concerned with enriching the thinking and discourse of educators.

2.5 Differing views of reality

Relating the use of language to one's view of reality, Charon (2001:52) states that "language is a symbolic system... used to describe to others and to ourselves what we observe, think, and imagine." In other words, we each use language to define the view that we each have of reality.

If one accepts that there are two broad stances taken when discussing social reality, then philosophically these can be distinguished as structural functionalism (Turner, 1982) and interpretive theory (Berger and Luckmann, 1966). It may be put fairly simplistically that the emphasis in the former, structural functionalism, is on the concept structure, whereas in the latter, the emphasis is on the subject. As indicated above, I have worked around an interpretivist framework, within which I have adopted symbolic interactionism (Charon, 2001) as my approach to explaining the social interactions that are discernable in the narratives provided (and the language used therein) by the research subjects.

2.5.1 Symbolic interactionism

Symbolic interactionism holds that in order to adequately analyse human behaviour and social reality, the focus should be on interaction, in this case between educators in/and the working/living environment. An underlying assumption is that people do not interact passively, nor do they respond mechanically to stimuli. We are responsible in the sense that we design our actions in an interactional situation with others; we perceive objects, such as people, actions, situations, etc, and interpret them. In our actions we 'indicate' ourselves to others, while at the same time interpreting these. All of this happens in specific situations which are constitutive for perceptions and interpretations.

In the process of interaction, not only are realities created, but also a consciousness of identity and meaning. If one analyses any form of interaction micro-sociologically, then the first phase involves a variety of gestures. These are more or less instinctual, as are responses to them, and can evolve in 'symbolic interaction' where language plays a significant role (Mead, 1934, in Cohen, Manion and Morrison, 2000).

2.5.2 Adopting a practice approach in the analysis of social processes

In investigating and analysing the micro- and macro-social processes in operation within the work contexts of each of the research subjects, I have adopted a practice approach. In attempting to connect the analysis of the micro-social aspects of practice to the macro-social aspects I use two concepts developed by Lave (1986); arenas of activity and settings for action. Arenas of activity persist over time, exist prior to individuals and to a large extent are out of their control. A setting is the way in which an arena is experienced by an individual (i.e. a process that occurs as the individual establishes a relation with a given arena). In the context of this study, the arenas of primary concern include the work places of the three research subjects, while the setting is the way in which these educators experience and interact with the workplace. In this regard, I agree with Lave (1993) who believes that it is the relations among people, activity, and situation that is the object of theoretical interest. In this paper I attempt to give attention to each of these dimensions.

2.5.3 A community of practice

The concept of a community of practice is an important analytical tool in a practice approach, in this case in the analysis of the social aspects of the practice of the three educators upon whom this study is focused. Work groups and families are both examples of communities of practice and, as such, multiple memberships are important and require negotiation by the individual (Eckert and McConnell-Ginet, 1992). In the context of this study, the relations within and between overlapping communities of practice and between communities of practice and institutions are of interest.

Learning is seen as a process of changing participation in a community of practice (Lave, 1993).

2.6 Constructivism

The second intellectual tradition that forms my own theoretical framework is the epistomology of constructivism, concerned with explaining the nature of knowledge. The interest is not in uncovering the facts of the world, assumed to exist independently of human experience, but to

explain how knowledge is created. The assumption is that reality has a multitude of representations produced in 'diverse symbol systems' (Henning, 1998). Constructions of reality are seen to be manipulated and changed in ways that suit the immediate needs of the situation and the intentional acts of members (Schwandt, 1994).

As part of my theoretical framework, the variant of constructivism that I have adopted assumes that the production of meaning is a social effort and that meaning is produced by everyday, ongoing actions of a community of practice. This meaning is sustained by the intersection of at least two events:

- the production in discourse of a locally appropriate form of the system of meanings at hand, and
- the existence in social relations of a network of actors who, through their day-to-day interactions, give importance to the meaning in question.

As such, throughout this study, my concern has been with:

- the meanings of 'events' for the research subject in their situation,
- the social pressures and wider social functions that provide the context for such personal meanings, and
- an intelligent grasp of engagements in specific contexts rather than with the generation of findings or rules that can be widely generalised,

I concur with Bhola (1990:155), who states that "reality is not out there for everyone to see and record". Rather, reality is a social construction based on one's own special interpretation and the meanings that one makes about the world. Popkewitz (1984) pointed out that these 'constructs' happen as a result of interactions and negotiations in social situations where expectations and appropriate behaviours are reciprocally defined. Bhola (1990) goes further by pointing out that the 'constructs' are based on social interactions that produce shared commonalties, but also reveal

unique individual realities. In this regard, it is accepted that the each of the research subjects' understandings and meaning-making processes, i.e. their constructed worlds, are contextual and were therefore researched as such.

Linked to the above, the findings arising out of this research are not for generalisation purposes because of each individual's unique context, but are seen as contributing to the sharing of transferable 'insights' to other contexts. As such, my vested interest in this research is not in the success or failure of a certain theory but simply in understanding what has taken place. Such an approach to research is congruent with the concept of grounded theory.

2.7 Grounded theory

In researching and writing this thesis I found that I enjoyed tracing themes, applying theoretical frameworks and relating a critical story about the factors that respondents perceived to be important in their development and implementation of a course curriculum. As alluded to, my data analysis and thesis development draws on/is consistent with the principles of grounded theory (Glaser and Strauss, 1967). The thesis that I have developed maintains that an educator who has participated on a professional development programme is impacted upon by numerous important factors, beyond those that are related directly to the programme, strongly influencing her/his development and implementation of a course curriculum.

2.8 A case study approach to the research

"A case study is eclectic, using a variety of research styles and methods, it is ... specific, it is process rather than product oriented, and it is rich in description, interpretation, explanation and narrative, working more for understanding...".

McKernan (1991:76-77)

Just as it is important to understand the methodological framework within which one is working, it is equally important to use data collection techniques that are appropriate to one's research paradigm. In this case it would not have made any sense to embark on an interpretive enquiry, but use data collection techniques which mask the individual voices and their understandings. As such, I describe the case study approach that I have used in this research and indicate what makes this relevant to interpretive enquiries such as this.

This research project adopts a case study⁶ orientation due to the fact that I focused my research on a small number of individuals participating on specific educational programmes designed and implemented for/with EE practitioners from within the Southern African region. As outlined in the previous chapter, I engaged the programme participants, including both students and tutors, in various qualitative research techniques, methods and processes.

Feuerstein (1986:48) described a case study as a "detailed description, and analysis of a single event, situation, person, group, institution or programme within its own context". She also stated that a case study can provide a deep look at something. I chose to use the case study approach because I felt it would give me the opportunity to access the "meanings constructed by individuals and the complexities of educational situations" (Janse van Rensburg, 1995:30). The meaning that the participants were making and their understandings regarding the role of the professional development programme and of other factors perceived to be of importance, represented for me the complex educational situation referred to by Janse van Rensburg (1995).

According to Millar (1983), an important methodological principle to follow when engaging in a case study is that of 'wholism'. This is a principle of procedure that serves as both a guideline and

⁶ Although I talk here of the use of a case study approach it may be more accurate to refer to this research exercise as a 'case investigation'. This would indicate that it should be viewed as an introductory phase of a possible longer-term project, and is less rigorous and less extensive than a case study. I believe, however, that the principles underlying a case study approach are just as relevant here as they are in a more extensive project.

standard, requiring that the 'hidden curricula' are exposed, including those that are likely to be invisible just because they are so pervasive and contextual. This principle was one which I attempted to bear in mind throughout the research process.

As McKernan (1991) explained, case studies work more for understanding than for measurement or prediction. My fundamental rationale for the use of a case study approach is for everything to be exposed to scrutiny. And as should be apparent, the purpose of this research and the use of case studies was not to evaluate the professional development programmes, but to assist in providing a clearer picture of what was going on before, during and after such programmes. In providing this picture, the desire is not to produce generalised results, but to give insights that may be useful in other settings and times. I hope that through analysis of the data, developers of programmes of a similar nature, might be able to better understand some of the processes and actions that take place before, during and after such programmes.

In concluding my brief analysis of the case study approach undertaken during this research, I would agree with McKernan (1991) who explains that one of the disadvantages of doing a case study is that the results are suspended until the research process is concluded. This is so because it is only now, at the completion of the study, that I am able to share my findings with the broader community of programme developers, implementers and co-ordinators.

2.9 Selecting subjects for the case studies

In selecting research subjects for the three case studies, I followed what Le Compte and Preissle (1993) have termed criterion-based selection or, as has been termed elsewhere, purposeful sampling. I devised a list of attributes (Appendix B) that I was looking for in potential participants and, working with colleagues, enlisted educators who had developed and implemented meaningful course curricula. In my selection process, I wanted to include participants from a variety of

institutions. These include one governmental institution and two non-governmental organisations (NGOs); one local and one international (with a local office). I wanted to have research subjects that hailed from different countries but that were easily accessible. I also wanted to include the participant from the interview-based pilot study (scoping exercise) I had completed earlier on in the year.

As I was interested in the factors that impact on the ability of educators to develop and implement *meaningful* course curricula, I chose participants who had undertaken an evaluation of the course that they had developed and implemented and had received responses that strongly suggested this was the case. I also wanted participants who had different academic backgrounds in the field of education. As a result, I enlisted two research subjects with no formal background in education and, as a contrast, one participant with formal education in the field (of education). The participants include three men, all hailing from different countries within the SADC region and all with a good grasp of English.

To some extent, I saw the research participants as collaborators in this study, because while answering my interview questions, they would gain an opportunity to reflect on their experiences and thus an opportunity for reflection on their own development. Furthermore, as a tutor and/or resource person on recent versions of the professional development programmes discussed here, I see myself as an 'inside' participant researcher.

As the study progressed, I learned of the importance of individuals who had been involved in the RU/SADC-REEP programmes as both coordinators and tutors who had a direct impact both on the research subjects' development and implementation of course curricula and upon their learning, and thus interactions with them became another component of this study.

2.10 Data-gathering methods

As explained, I have taken a case study approach to this research, focusing on those factors which have enabled past programme participants to develop and implement meaningful course curricula. This has involved a small range of approaches and techniques to collect and analyse the data. In this regard, I have attempted to ensure that these approaches and techniques constitute an integrated strategy by following Maxwell's (1997) advice for a researcher to focus on:

- one's relationship with the people one studies,
- the site selection and sampling techniques,
- the data collection methods, and
- the data analysis techniques used.

In gathering the data for the above interpretive case studies, I chose to focus most of my time and effort upon the data collection technique of interviewing. This is in keeping with the interpretivist paradigm, described elsewhere in this chapter. This technique is primarily used to enable the development of an in-depth understanding of a phenomenon (Cantrell, 1993), in this case the perceptions that past programme participants have of the factors that have enabled them to respond to the work context and, in this case, develop and implement a course curriculum. Apart from the use of both informal conversations and semi-structured interviews, I also examined course evaluation reports (document analysis). I also made regular 'field' notes as an active means of reflexively examining my relationship to, and understanding of, the interactions that I engaged the research participants in.

2.10.1 Informal conversations and semi-structured interviews

The data was collected, primarily by engaging in relatively unstructured, and informal, conversations and semi-structured interviews with three past programme participants. The conversations were conducted on an ongoing basis throughout the course of this study. The

interviews, on the other hand, were once off events, conducted after many conversations had already taken place. The interviews required the audiotaping of one individual at a time, while the unstructured conversations involved the writing of brief notes, usually during the actual interactions. An important reason for choosing to use the above conversations and interviews with past programme participants was because I wanted to gather descriptive data in the subjects' own words. This approach was incredibly useful as it enabled me to gain insight into what factors participants believed to be of importance in their development and implementation of a course curriculum.

The informal conversations in which I involved the research subjects would be classified as belonging to those interviews known as "unstructured" (Euvrard, 1999). In such 'interviews', the research purpose is used to govern the 'focus'. In this case, broad areas of focus, together with a range of open-ended questions (Appendix D), were prepared in advance rather than specific questions. This allowed me, as the interviewer, to be completely responsive to the context of the conversation held with the interviewees. By following the above process, I was provided with the immediate opportunity to follow up on interesting responses, as was largely the case during the semi-structured interviews. On a number of occasions I was able to respond quickly to comments. If I had designed more structured interviews (or questionnaires) I would have undoubtedly missed a number of opportunities to respond to issues raised.

With regard to the semi-structured interviews, there seem to be any number of definitions as to what one is, many of which refer specifically to the *focus* provided by the interviewer. (The interview schedule is presented in Appendix E.) In this research, however, each research subject was provided with a broad topic – those factors that they felt were important in enabling them to develop and implement a course curriculum - rather than a series of closed-ended questions designed to focus their attention down to specific 'content specified by research objectives'

(Euvrard, 1999:1). The semi-structured interview was therefore designed to encourage reflection on each respondent's own practice and on the socio-cultural context within which their practice is embedded. The purpose of the interview was, in particular, to enable reflection upon the private world within each of the respondents, the world of their 'constructed consciousness' (Reinharz, 1982: 166), to enable an interrogation of what motivates both their practices and the attitudes which drive them.

Prior to each interview, the purpose for doing the research was explained, while ethical concerns such as anonymity and willingness to participate were also discussed. Permission to use the tape-recorder was obtained from the participants and I also explained the ethics around its use to them.

The tape recorder seemed to have worked as well as was intended, bearing in mind that it can make one feel self-conscious, as I know from personal experience. I attempted to take notes during the interviews and, because the interviewees were encouraged to talk freely about the period of time prior to, and during, the development and implementation of their course curriculum, it appeared not to hamper the flow of the conversation during the interview. I believe it is important that during long conversations between the researchers and the respondents that the researcher should strive to be nonjudgmental, thus encouraging unanticipated questions and the construction of many meaningful answers.

As I had interacted with the interviewees on numerous occasions during my normal work responsibilities, the atmosphere was mostly relaxed during the semi-structured interviews and we were able to relate on a personal level. However, I often found it difficult to elucidate what their thoughts, feelings and value systems included. As a result of this, I felt a need to interact further with the participants in order to gain deeper insights into their thinking which they may not have

communicated during interviews. As such, I involved the research subjects in further informal conversations after the semi-structured interviews had been conducted.

Unfortunately the dynamic quality, that is characteristics of conversations, is lost when they are recorded and transcribed. This is just one of a number of personal influences that researchers bring to interviews. Personal bias is another shortcoming of interpretivist data collection techniques, something that I was vigilant of from the beginning of this research. As such, I continually refined my research focus and interview process so that it reflected an open-ended hypothesis in order to accommodate the unexpected and unanticipated.

Informal and unstructured conversations were also undertaken with two programme co-ordinators, involved in programme development and co-ordination, for the same purposes as described for participants. All conversations were conducted a number of months after the completion of the programmes.

2.11 The analysis and interpretation of the data

I saw all of the above as rich sources of data, enabling me to build some understanding of the perceptions that the participants had of the factors that had been of importance in enabling them to respond to the work context and to develop and implement meaningful course curricula. As individual perceptions or views were what I wished to clarify, there was no reason to attempt to verify the data gathered.

Once the data had been gathered through the use of the techniques above, it was then analysed, interpreted and summarised. In this regard, I believe that there are numerous questions that a researcher should attempt to bear firmly in mind in the analysis and interpretation of research data.

The questions that have provided me with guidance throughout this process include three that Foucault (1972:3-4) has indicated as important:

- What links can be made between disparate events?
- How can a causal succession be established between them?
- What continuity or overall significance do they possess?

Findings arising from the use of each of the different techniques, and as interpreted from the data gathered through the process outlined above are reported on in Chapter four, comprising the body of this paper. In the next chapter, I discuss the theory that exists, and that I am developing, about an educator's professional development and his/her professional competence (the ability to respond to the work context), particularly within the field of course curriculum development and implementation.

CHAPTER THREE

DEVELOPING PROFESSIONAL COMPETENCY AS AN EDUCATOR

"... for individuals to function proficiently ... positive self-efficacy is fundamental..."

Gecas and Burke (1995:43)

3.0 Introduction

This component of the research paper gives attention to theory regarding the development of professional competency in general and as an educator in particular. I use this chapter to share what I believe are the more important findings that have emanated from recent research undertaken in the fields of professional development, adult learning and teaching, and adult education, etc. Further sources for this theory that I have drawn upon include:

- my own experience,
- the results of a pilot study (preliminary research), and
- thought experiments (as expressed by Maxwell, 1997).

This research project is based upon the assumption that to be competent in one's profession, in this case as an educator of adults, and to have the ability to develop and implement meaningful course curricula in particular, one has to be able to respond to the work context and the challenges therein.

In order to explore this assumption, and in an attempt to obtain some guidance with regard to the formulation of a research approach or design, I undertook the following:

- An in-depth review of the relevant literature
- A critical documentation of my experiences as a programme tutor and resource person
- A number of focusing discussions with professional colleagues and acquaintances

All of the above point to the need for the existence, to a greater or lesser extent, of a number of factors beyond a thorough knowledge of contemporary theories of adult learning and teaching. These factors are necessary in the external living and working environments, and the internal/personal make-up of course designers/implementers. They suggest that an educator needs to learn and to develop various competencies, i.e. knowledge, skills and attitudes, with regard to one's work context, the associated obstacles and their solutions, and how to interact meaningfully with colleagues and supervisors. From the point of view of this research project, this has required that I give attention to the broad field of 'adult learning', including informal and/or unstructured learning.

In addition, the need that a course developer/implementer has for support from various quarters, in implicit and/or explicit forms, has required that I give attention to the role of the community of practice as well as that of the home environment. This requires some exploration of a person's psychology (the internal environment), of the various external environments, and of the intersection of the two. This is also the case when attempting to understand what motivates and/or drives an educator to succeed in the development and implementation of a course curriculum.

3.1 Factors in the development of professional competency

As a course developer and implementer, one of my primary concerns relates to how one might enable an educator, who has participated on a programme, to continue developing professional

competence once he/she has completed one or other professional development programme. As indicated above, there are a wide range of factors/variables that will have an impact on a person's ability to respond effectively in the work place, in this case to develop and implement a course curriculum. And, although this research project is based on the belief that learning can rarely be said to transfer from a teaching/learning context to the work context, the factors that past research has brought to light as important for the 'transfer of learning' have served as the starting point for the research process undertaken. As such, the factors that a variety of researchers have perceived to be of importance gave some pointers with regard to 'structuring' the interviews and conversations conducted with the research subjects. Factors identified by Holton, Bates, Noe, and Ruona (2000) as the most important influences on the 'transfer of learning' included the following:

- organisational climate
- job utility
- rewards

In research conducted by Moore (1999), focusing on experiential or work-based learning, factors influencing the transfer of learning were thought to include the learning process and, in particular, organisational elements, especially:

- the knowledge environment of the workplace
- how the knowledge is used
- the micropolitics of knowledge, and
- the historical characteristics of the workplace

In this research, Moore (1999) further indicates that work-based learning does not always occur merely because a programme participant is in the workplace, but that what really matters is the participant's participation in work-place activities.

Organisational elements are given similar emphasis in the research conducted by Butterfield, Gold, and Willis (1998). Kontoghiorghes (1998) also refers to aspects of the organisational climate as being among the most important factors in facilitating the transfer of learning. In this case, the organisational elements given particular attention include:

- supervisory support
- encouragement for application of new skills and knowledge
- measurement of trainee knowledge immediately before and immediately after training, and
- intrinsic rewards

In research describing the 'factors that influence the transfer of learning', Taylor (1997) identifies the following as barriers:

- lack of on-the-job reinforcement in applying learning to the job
- interference by the immediate environment
- lack of active support by the organisational climate
- poor timing of training
- unfocused learning objectives
- establishment of rewards
- programme participants' perceptions
- programme design and content
- changes required to apply learning, and
- organisational context

As is evident from the above, the 'transfer of learning' or, as re-viewed in this study, the development of professional competence (and/or the ability to respond to the workplace) is thought to be dependent to a large extent on the 'organisational climate' and on learning that occurs within the workplace as a result of both formal and informal learning opportunities. These factors, together

with the wide range brought to light through personal experience and during conversations and interviews with colleagues and research subjects, have been distilled into a number of broad families of factors. These include:

- Support from within the workplace
- Support from outside of the workplace
- Prior experience (including formalised professional development)
- Personal characteristics

These four families of factors are of crucial importance, I believe, in enabling educators to respond to the work context with competence, to develop and implement course curricula, and to enjoy professional growth and development during the process.

3.2 Adult learning⁷

As indicated above, professional competence as an educator may be seen to be dependent upon a wide range of factors, many of which require that an adult engages in learning within and outside of the workplace. In this regard, adults learn throughout life, acquiring new understandings, skills and attitudes, and developing professional competence in general, as a result of formal, structured programmes of teaching and learning. The majority of studies of adult learning, have been located and carried out in these formal settings or within the confines of the laboratory (Henning, 1998).

This project, however, signifies a break from the general trend outlined above and focuses, in part, on the learning that results from the daily interactions that play out between the research subjects

⁷ In the context of this study, the term 'adult learning' signifies professional development, i.e. the development of professional competence (the ability to respond to the work context).

and their colleagues and supervisors in the context of an environmental and/or education-focused work environment.

3.2.1 Unstructured and/or lifelong learning

Within the theoretical perspective of symbolic interactionism, society is viewed as a complex social system in a state of continuous change, where change is the norm rather that the exception, and where every interaction involving adults is a process of learning and teaching. Human beings are therefore not only born into a changing culture, but they are a part of the process of change. Their adaptation to this ever-changing society is a learning process (Jarvis, 1996), one that takes place naturally in an unstructured way over the course of a person's life, i.e. as a lifelong process of learning.

During traumatic experiences and processes of change, whether individual, institutional or social, etc, the questioning process is evoked. This, Jarvis (1996) states is because the accepted internalised body of knowledge is not able to cope with the situation. It is this disjucture that underlies the need to learn, continuing throughout most of a person's lifespan and, it is hoped, during structured and/or more formalised professional development programmes.

3.2.2 Transformational / transformative learning

Situations such as those described above, in which an individual's biography and their current experience are not in harmony, reactivate the questioning process, causing the individual to recommence their quest for meaning and understanding. Such discontinuity in assumptions, perspectives or beliefs, etc. in the context of the work environment will often lead to meaningful or transformational learning (Mezirow, 1991), i.e. the development of professional competence.

Transformational learning is a theory of how adults learn, focusing on the cognitive processes of learning. It is about how we, as adults, become aware of our assumptions, beliefs, values and the

perspectives that we have of life and of work, and of our roles therein, and how, subsequently, we change them/learn new perspectives.

According to Mezirow (1991), transformational learning is often set in motion by a disorienting dilemma, a crisis, or a discontinuity, which cannot be solved by using old problem-solving strategies. In essence it involves three phases:

- 1. Critical reflection (self-examination) on one's perspectives leading to the creation of new meaning and a new perspective.
- 2. Discourse to validate the critically reflective insight, i.e. dialogue to test the truth/authenticity of the new perspective / new understanding.
- 3. Individual action and change.

As might be expected, and as indicated above, transformational learning occurs during one's daily interactions with others in diverse contexts. Such learning also occurs as a result of planned programmes of teaching and learning, resulting in the professional development of programme participants

3.3 Professional development programmes

Professional learning/development is about transformation and change - of perspectives, personal goals, aspirations and understandings - leading to an application of the new understandings and new knowledge (Taylor, pers com. 2002) building competence and feeding into a continuous improvement of practice. It occurs as a result of both informal, unstructured learning and as a result of more formal programmes of learning, in which case it may be described as a life-long process, involving supported training, study or research (Leach, 1996), resulting in the development of skills and understandings that enable a participant to respond better to contextual and complex work-related challenges and issues.

In order to enable meaningful learning/professional development, it is widely acknowledged that there are a number of principles upon which professional development programmes need to be constructed. These most commonly include a focus on ensuring:

- Participation
- Contextuality
- Reflection-in-action

3.3.1 Participation

The principle of participation is based on a combination of critical theory influences and research into the role of language, social interaction and other cultural symbolic systems in the learning process (Lotz, 1999). Participatory orientations to professional development have also been influenced by global trends towards the democratisation of institutional and social life, in general, and by constructivist learning theories. These theories, in particular, argue that learners/programme participants have the ability to organise, construct and structure knowledge in interaction with others and should, therefore, be provided with authentic opportunities for participating in the different programme processes, including the deliberation of the curriculum.

3.3.2 Contextuality

The principle of contextuality relates to the fact that both social issues (including political and economic issues) and ecological issues are complex, particular and diverse, and arise in a range of different contexts (Lotz, 1999). And, as stated by Usher, Bryant and Johnston (1997), adult learning also takes place in a variety of contexts, including all of those (living and working) settings in which we interact with others. One of the implications for professional development programmes is that there is a need to deliberate curricula which respond to particular adult learning situations in different contexts.

3.3.3 Praxis

The principle of praxis refers to the concept of reflection-in-action, and is described by Usher *et al* (1997) as 'informed committed action', stressing the need for professional development programmes to provide opportunities for the development of abilities to critically reflect on one's educational practice. Molose (2001) believes, however, that the ability to integrate theory and practice or, in other words, to reflect critically on one's practice is not a simple matter as educators and/or participants on professional development programmes might have limited percpetions, information-processing skills, understanding and awareness of alternatives.

3.4 Key ideas and principles shaping professional development programmes for EE practitioners ⁸

An in-depth review of the relevant literature indicates that the education of EE practitioners, at least within the context of the two professional development programmes given attention within this research project, includes a relatively coherent, articulated pedagogy. In this regard, the principles that shape these programmes are in agreement with the above mentioned contemporary principles of adult teaching and learning (Robottom, 1987; Lotz, 1998; van Rensburg, 1995). The teaching and learning processes enabled within these two programmes, have, in other words been built upon the above principles. As such, the orientation of these programmes focuses strongly on professional development through participation, critical reflection and the integration of theory and practice (Janse van Rensburg and Le Roux, 1998 and Lotz, 1998).

This section therefore includes a brief description of the orientation of these professional development programmes (in which I am involved as a tutor and/or resource person) developed and

⁸ This section draws superficially on research undertaken by a number of educators involved in the above programmes, including an evaluation of programme aspects that influenced participating teachers to change their world view (Burton, 1997), the evaluation and monitoring of the role of course materials and course mediation (Lotz, 1998), research focusing on the notion of professional development (Heylings, 1999), and the evaluation of the role of course materials within a course adapted for teachers (Molose, 2001).

implemented by Rhodes University (RU) in partnership with the Southern African Development Community Regional Environmental Education Programme⁹ (SADC-REEP).

The above RU/SADC-REEP programmes include a year-long, part-distance course, known as the Rhodes University Certificate / Gold Fields Participatory Course in Environmental Education (leading to the Rhodes University Certificate in EE). It is designed for South African participants and, as indicated above, has been developed and implemented by staff from Rhodes University (RU) and the SADC-REEP. A full-time, two-month version of this programme is also conducted each year, for participants from around the SADC region. Of importance, the word 'participatory' in the name of these programmes, indicates the programmes' orientation towards notions of professional development through participation (Janse van Rensburg *et al*, 1998 and Lotz, 1998)

Both of these programmes have been developed in response to a perceived lack of professional development opportunities for environmental education practitioners from within the Southern African region. The core texts, readings, on-course and workplace-based assignment tasks, and teaching and learning activities are designed to strengthen the capacity of active EE practitioners to improve their professional practice in critical and informed ways and to act as 'multipliers' to support, encourage and inform other educators.

Importantly, the programmes explore a wide variety of ways in which practising EE practitioners can respond to increased environmental pressure in the region, through educational processes, and through developing course curricula and materials for application in a diversity of contexts. The purpose of these programmes is therefore to develop participants as active EE practitioners with a reflective orientation.

³ The SADC-REEP is coordinated by the Wildlife and Environment Society of South Africa (WESSA) through their office at Umgeni Valley Nature Reserve in Howick.

The orientation of these programmes is also apparent in the framework of key ideas within which they have been developed. These key ideas are clearly laid out in the programme file (Rhodes University, 2000) emphasising the importance of:

- History
- Context
- Critical reflection
- The social construction of meaning, and
- The integrated nature of theory and practice

Interestingly, although these programmes are designed and implemented within the above framework of key ideas to enable participants to work towards a better understanding of the beliefs, theories, and socio-economic and other influences which shape, and are shaped by their practice, little attention is given to their specific workplace-related challenges or to the internal/personal factors.

As is evident from the foregoing description, the above professional development programmes have curricula which include various materials and provide numerous opportunities for interaction, including a workplace-based assignment task. Importantly, the curricula have both overt and hidden aspects, all of which may act as important catalysts to a change in practice and, hence, in an improved ability to respond to the work context. And yet few past participants seem to go on to effectively develop and implement course curricula (Russo and O'Donoghue, pers. com, 2002) even though they may complete the programme to the satisfaction of the tutors.

3.5 Contextual teaching and learning and the transfer of knowledge

In this section, the theoretical perspective known as contextual teaching and learning is contrasted with one which implies that the transfer of learning (i.e. the transfer of knowledge) from lecture

theatre to workplace is not only an important goal of adult teaching (and learning) but that it is also relatively commonplace. In this regard, in the early 1990's, research (Bracey, 1992; Johnson, 1995) was being undertaken which indicated the common failure of learning to transfer to new situations. I believe, however, that the assumption that learning can be transferred from one situation to another is problematic and that cognitive operations are affected by culture.

Researchers have in the past assumed that symbolic learning of a more general and abstract nature takes place primarily in formal institutionalised learning settings. This type of learning, associated with the notion of generalised transfer, was viewed as higher order learning, while skill learning and other forms of supposedly context-bound concrete learning were seen as a lower order of learning. The result has been that learning in non-formal settings has not been given a high priority in research. In contrast to this, however, one of the main foci of this study is on the contextual learning of educators that has taken place in the work place before, and during, the design and implemention of a course curriculum.

3.5.1 Contextual teaching and learning

Within the broad field of education, there has been much discussion on using real-world context as a pedagogical tool to enhance learning. In recent years, the call for the inclusion of such applied learning has appeared in educator and teacher education literature, using such names as "situated learning", "situated cognition", and "communities of practice". These terms have been integrated under an umbrella term, "contextual teaching and learning" (Sears and Hersh, 2000). As such, I believe that it is important to give brief attention to the contextual teaching and learning aspect of the RU/SADC-REEP programmes. This component includes the final assignment, a workplace-based task which requires that participants develop a course curriculum or a learning resource material once they have returned to their workplaces¹⁰.

¹⁰ Where a participant has chosen to develop a course curriculum, it is not a requirement of the programme for the participant to implement the curriculum developed.

Even though the RU/SADC-REEP programmes have been built within a framework of contemporary educational theories and beliefs, including the above mentioned opportunity for contextual learning, there often seem to be participants who struggle to develop a meaningful course curriculum. There seem to be many more participants who do not go on to implement their course curriculum. This is perhaps due, in part, to the fact that the above programmes have, to some extent, been conceived of in isolation from social 'structures' and human relations, etc, particularly within the workplace. This relates directly to my assertion that the theory of learning transfer, from the classroom to the workplace in this case, can be discredited.

What might enable past programme participants to put into practice what they have learnt while participating on one or the other professional development programme is not so much the structured teaching and learning processes afforded by the programme, but rather the unstructured, and contextual, learning that takes place in the workplace. I feel that this is evident in the cultural competence of the participants, evidenced in their ability to engage with their colleagues and supervisors in effective, socially acceptable ways. In this regard, contextual learning involves the idea that learning and doing are inseparable and that learning is a process of enculturation (Hendricks, 2001).

3.5.2 Contextual learning

The focus of contextual learning is on problem-solving strategies in authentic activities that can be used to solve problems in everyday situations, a fundamental tenet of which is the notion that students should learn in context. And although this has commonly been linked to the transfer of learning, as indicated by the research of Aredondo, Toporek, Brown, Jones, Locke, Sanchez &

Stadler¹¹, 1996 (in Granello, 2000) and Lave, 1988 (in Hendricks, 2001), amongst others, I believe that it is entirely relevant to this research project.

Recent empirical studies indicate that symbolic learning makes up a significant proportion of learning in everyday situations (Henning, 1998), involving an array of methods constructed from the resources inherent in social relations and discourse in the everyday working worlds. In the cases under investigation, the resources that are used for learning by the research subjects may be relatively varied and complex, lying in the realms of particular forms of discourse, and in the social relations that are built during daily interactions with colleagues and supervisors.

The context for cognition and action and, in particular, the complex interactions and relations among people acting and thinking in particular sites for learning has not commonly been seen by researchers (Lave, 1986). Research has shown, however, that workplace conditions (including the institutional environment and/or organisational climate) can have a strong effect in shaping an educator's practices (Flores, 2001). Thus, in this study an important concern has been the work environment and the impact that this might have upon the ability of an educator to develop and implement a meaningful course curriculum.

3.6 The work environment

I would agree with Catherine Cornbleth (1990) who argues that a (course) curriculum emerges from the dynamic interaction of action, reflection, and setting, not action and reflection alone. The development and implementation of a curriculum can therefore be conceptualised as a contextualised social process, emphasising an educator's biographical, structural, sociocultural and historical contexts. In this regard, Grundy (1987:24) states that:

¹¹ In the study conducted by Aredondo *et al* (1996) the focus was on learning in a decontextualised setting and its impact upon the 'transfer' of such learning to the work situation.

"...social interaction.... Takes place within a context which impinges upon the situation and often constrains it in unrecognised ways. If a particular set of social interactions is to be improved, then it is often the case that the social and material contexts within which those interactions occur need also to be improved, and it is always the case that these contexts need to be understood."

3.6.1 Organisational factors

Following on from the above, research conducted by Flores (2001) in the formal education (school) sector, with a focus on teachers' professional development and learning, indicates that more importance needs to be given to the structural and organisational factors of the workplace, particularly if a learning culture is to be fostered.

Robottom (1987) believes that an important organisational factor that can result in a gap between the way a past programme participant thinks and his/her practice within the work situation is what might be termed 'institutional pressure'. This, of course, refers to work-related pressures that prevent one from doing what one wants to do, and may take a number of forms. The other important organisational factor that Robottom (1987) believes can result in the gap spoken of above is what might be termed 'false consciousness'. This specifically refers to the gap between what one thinks one is doing and what one is actually doing.

3.6.2 Support from colleagues and professional acquaintances

It is thought that false consciousness and deeply entrenched beliefs can only be overcome through long-term support for past programme participants (Robottom, 1987). And as such, it would appear that competent educators are often those who have assistance and support from colleagues and/or professional acquaintances in their 'battle' against both false consciousness and institutional pressures. As forces against educational improvement seem often to be political in nature, challenging such hegemony seems to require co-operation amongst educators, within the workplace

and, perhaps more importantly, from outside of the workplace. It is also often the case, however, that successful programme participants are those who are willing to engage in the process of finding solutions to contextual problems (Janse van Rensburg, 1998). This willingness to set oneself such a challenge is linked directly to one's self-efficacy¹², and appears to be what makes a difference in the human experience (Bandura, 1986) and in an educator's ability to respond to the workplace.

3.7 Personal characteristics and interpersonal skills

Engaging in the process of finding solutions to contextual problems often appears to be a difficult process, resulting in most past programme participants looking for universal techniques that they can apply to all situations. As stated, however, there are some participants who are able to respond effectively (with competence) to the work context. It would seem that it is a participant's self-concept and self-efficacy that play an important contributory role to the growth of competencies (Bandura, 1977), in this case, an educator's ability to develop and implement a course curriculum.

As Bandura (1986:93) states, "people often do not behave optimally even though they know what to do. Self-referent thought mediates the relationship between knowledge and action." The 'self-referent thought' spoken of here is efficacy, which can be derived both from past accomplishments and/or failures (Bandura, 1986).

What is especially important in the context of this study, is that people with a strong sense of self-efficacy organise their attentions and efforts toward the task and, when challenged by potential barriers, muster even greater effort to overcome the obstacle (Bandura, 1991). Self-efficacy allows people to tackle potentially difficult or threatening tasks (Bandura, 1986) or, in other words, take risks. Thus, in a workplace where support - moral, financial, or technical - might not be

¹² Self-efficacy refers to our beliefs about our ability to execute control over our own level of functioning and the events that affect our lives. In this regard, we depend on our self-efficacy to accomplish tasks.

forthcoming from colleagues and supervisors, self-efficacy may be a crucial factor in the drive to succeed in the development and implementation of a course curriculum.

3.8 Concluding comments

As is evident from the above, the development of professional competence (the ability to respond to the workplace) may be assumed to be dependent to some extent on organisational factors, such as the learning that is enabled as a result of both formal and informal learning opportunities in the workplace. In this regard, professional development programmes for educators, which include workplace-based assignment tasks, such as those with which the research subjects were involved, may also be assumed to play some role in the development of professional competence. Similarly, the informal interactions and ongoing learning that an adult enjoys as a natural aspect of everyday life and living may also be viewed as crucial.

It might therefore be assumed that for a Southern African EE practitioner (within the context of a professional development programme) to develop and implement a meaningful course curriculum, requires that programme designers/tutors give attention not only to all of above external factors but also to the internal factors (such as self-efficacy) of programme participants. The following chapter interrogates these assumptions more thoroughly through the means of three case studies.

CHAPTER FOUR

RESEARCH FINDINGS

4.0 Introduction

This, the penultimate chapter presents the findings of this study. These findings are based to a large extent on the in-depth conversations and other interactions that I enjoyed with the research subjects. These interactions, focusing on the variables which enable educators to respond to their work contexts in general and develop and implement meaningful course curricula, in particular, have pointed to the importance of a number of factors in the external living and working environments, and the internal/personal make-up of course developers/implementers. I have attempted to draw these 'common threads' together and, as such, structure each of the case studies around four broad 'families of factors' below, within which all of the above variables, raised by the research subjects, fall. These four families of factors include:

- Support from within the workplace
- Support from outside of the workplace
- Prior experience and/or professional development (in the relevant field)
- Personal characteristics and interpersonal skills

Firstly, I will present the findings gathered during the many interactions that I have enjoyed with the research subjects, focusing on each case study separately. I will then make some general comments on the perceived role of the RU/SADC-REEP professional development programmes in the research subjects' ability to respond to the work context.

I will conclude this chapter by drawing out points that I believe are common to all of the case studies, with the aim in mind to provide possible focal points for future research in this field.

4.1 The research subjects

Having provided a very brief and superficial description of the 'average' programme participant in chapter two, I use this chapter to provide more detailed descriptions¹³ of the three research subjects with whom I interacted over the period of this study.

As explained in chapter two, lengthy, semi-structured interviews were conducted, generally after working hours, at a number of venues that were quiet and free from interruptions. I also involved the research subjects in innumerable conversations during the course of the study, the foci of which were drawn from a very comprehensive list of topics compiled during the research process. Issues raised during these informal, unstructured 'chats' were noted down and, together with transcriptions of the above serve as the raw material upon which the following findings are based.

¹³ The descriptions do not include any reference to the countries from which the research subjects hail. In a similar vein, specific country names are omitted from all quotes to ensure that there is no negative feedback from the research subjects' colleagues and/or supervisors.

4.2 Case study A: Jeremy

"... when I start doing something, I want to achieve what I want to do... and when I achieve that, I get excited."

4.2.1 Personal details

Jeremy participated on the two-month (full-time) RU/SADC International Certificate in Environmental Education at the end of the year 2000. This programme heralded the beginning of my professional relationship with Jeremy as it was a programme on which I participated, as a 'student' rather than as a tutor.

As Jeremy remarked, the above programme "...acted as a catalyst..." for his development and eventual implementation (just four months later) of a one-month course; the WWF Training of Trainers Course in Environmental Education.

Leading up to the above period of course development, and for the five previous years, Jeremy had been employed by an international environmental organisation, the World Wide Fund for Nature and Natural Resources (WWF), within what was termed the Education Project. During this time, he was formally employed as the Resource Materials Development Officer (RMDO). However, as Jeremy states: "I found myself working as the 'unwritten' Course Coordinator."

At the time of the course development (and implementation), Jeremy could list as one of his successes, a healthy marriage and four healthy children. With regard to his successes in the academic world, he revealed the fact that his tertiary qualifications included "…a two year Certificate in Primary Teaching Methods, and a three year Diploma in Agricultural Education…

(and) a range of certificates for short courses in education, human and social perspectives, training, and media."

An important reason for having asked Jeremy to participate in this research project was because of the glowing reports received from one of the RU/SADC-REEP programme co-ordinators/tutors regarding the month long course that Jeremy had developed and implemented. The course involved a total of 19 participants from a range of backgrounds within the formal education sector. These included people from the Primary Teacher Training Colleges, the national Curriculum Development Center, and Teacher Professional Resource Centres, etc. Interestingly, Jeremy had managed to obtain the services of 25 resource people during the running of his course, three of whom were his WWF colleagues. And, according to Jeremy, the course evaluation did indeed suggest that the course was meaningful. He, quite modestly, explains that "...the course was a success... most people were happy with the way it ran..."

In particular, Jeremy notes that participants "believed that the course, was very helpful in...
broadening their understanding about environmental education, particularly their understanding of
environment, which was more limited to physical and biophysical aspects."

4.2.2 Prior experience and/or professional development

Throughout our conversations and interactions, Jeremy gave the distinct impression that he had confidence in his abilities during the period in which he was developing and implementing the course curriculum under focus. This may have been due, in part, to the fact that he has had quite extensive prior experience in the design of curricula, being involved in "...national curriculum development" and also "in the development of the environmental science syllabus for the primary schools... the development of the curriculum for the basic education in (his country) and... the development of programmes or curricula for workshops." Most of this, however, is for the formal

education sector and, I believe, requires quite different competencies from those necessary for the development of a full-time, month-long course for educators. Jeremy certainly had very little experience in course implementation.

With regard to professional development in course curriculum development and implementation,

Jeremy participated on the RU/SADC-REEP programme as well as "...a three week long

programme... on course designing and delivery... offered by...PELUM... the

Zimbabwean...group." This course was thought to have been "really useful", although in terms of his proficiency in course design, the most important factor was perceived to be... "hands-on experience."

4.2.3 Personal characteristics and interpersonal skills

Jeremy's belief in himself and in his capabilities is clearly illustrated, I believe, in his reference to the fact that he went ahead with the development of the course curriculum even though, initially, this supervisor showed little interest. In fact, Jeremy's work was the target of unfair criticism from the team leader (or supervisor) and colleagues, which he ignored. He refers quite diplomatically to this when he states that "... it took some high level of tolerance... and then eventually everyone was on board."

When questioning Jeremy about his approach to the management of professional challenges and problems, he replied that "... when I am faced with a professional challenge I try to keep to myself and, and think through that... sometimes I ask fellow professionals... but this is something that I don't easily do..." The reasons for this have certainly to do with past "... bad experiences..." but, it seemed clear, were also related to the fact that he feels confident in his capabilities, indicated in his assertion that: "... I can just look at something... and then don't complain about it... give it time and then find solutions..."

High levels of motivation are also evident. Jeremy remarked at one stage that the course development and implementation process became "... so close to my heart that I forgot about other things, for example ...it is normal for me to have a fresh shirt every day... but that time I could forget and get into the old shirt."

A final indication of Jeremy's self-efficacy is illustrated in his assertion that support from within the work place, when eventually forthcoming, seems only to have been in the form of moral support, with little or no technical input and yet he persevered with the project. He explains that "...the national coordinator and technical advisor... never came into the project so much..." The team leader, himself, only became supportive once the project was well under way and he was sure that the development and implementation of the course curriculum was going to be successful. Jeremy explains that "... he (the team leader) was supposed to take the lead, so for me to take the lead was like me taking over ..."

4.2.4 Support from outside of the workplace

If Jeremy's self-efficacy played a crucial role in the development and implementation of a meaningful course curriculum then the technical (and moral) support that he received from outside of his workplace seems to have been of almost equal importance. In questioning Jeremy about the role played by professional acquaintances and by other institutions in his country and elsewhere, he focused on the support provided by the RU/SADC-REEP programme co-ordinators and tutors, explaining that they had provided "...a lot of support". He was particularly keen to point out that "...they were willing to come and help out on the course, in the implementation."

Support from local professional acquaintances and institutions also seemed forthcoming and of importance: "I had a lot of support... from what we call the core group members... professionals in

different disciplines that we thought would work with us... from the biggest agricultural college, university college, from the Curriculum Development Center... another one from teacher education programme and ... one from the Environmental Council..."

In terms of the general living environment, Jeremy remarked that "...the local environment in terms of the political and social, actually supported what we were doing." Added to this is the support that Jeremy received from his family. In this regard, the development of the course curriculum required that he had to often work overtime, while the implementation of the course required that he spend almost this entire period of time away from home. This, Jeremy felt, "... caused a bit of tension..." In this regard, I developed the feeling that Jeremy's family provided more support than he gave them credit for but, whether he would have been as successful in the development and implementation of his course as evidently was the case, without their moral support, is difficult to say.

4.2.5 Support from within the workplace

In direct contrast to the above, support from within Jeremy's workplace seemed to be almost completely lacking. As indicated above, and throughout most of my conversations with Jeremy, it was apparent that initially there seems to have been little support from his colleagues or supervisor for his course development or for his participation on the RU/SADC-REEP programme. There was, in fact, some suspicion regarding the fact that he was developing his course curriculum as his workplace-based assignment for the above programme: "I came to learn that some people were not happy.... that I wanted to use it for my home-based assignment, and they were thinking maybe...I wanted to pass... using project... facilities, and so on."

In terms of financial support for the course development and implementation, "the project itself had an in-built financing system, so the money was there..." Beyond this support, Jeremy obtained

the input of two of his colleagues, all "...education officers running as a... core management team... we worked together." However, Jeremy explains that "....everyone else more like, left me... to think and plan the way of the course... and I was actually... a key role player in ensuring that the course aspects were attended to."

And, as explained above, the team leader gave little or no support or assistance beyond his moral support.

4.2.6 The role of the RU/SADC-REEP professional development programme

It is difficult to rank precisely the above families of factors in terms of their importance in the development and implementation of Jeremy's course curriculum, beyond stating that his self-efficacy, and other personal characteristics, together with the support that he received from outside of the work place were evidently crucial. Similarly, the role played by the RU/SADC-REEP professional development programme is equally difficult to rank. Having said this, however, Jeremy explained that "the two month SADC course actually opened a lot of insight into course development..." In this regard, he felt that other courses provided "...a lot of theories on how to do things, but when I came on the SADC course there were no theories about how to do things but things were being done, and I was a part of the process of things being done.... I saw the process of developing a course... where we as participants contributed in tutoring that course So in other words it was actually not the theory of how to develop a course, but it was the practical of the course being developed, and we were seeing that."

Jeremy further commented that "... I would say that if I didn't have the theories and all that stuff, maybe it could have been a different story but with the hands-on experience then I could tie the different theories to practice."

4.3 Case Study B: Sidney

4.3.1 Personal details

Sidney participated on the year-long, semi-distance (part-time) Rhodes University Certificate / Gold Fields Participatory Course in Environmental Education during 1999. During this programme he acted as both a tutor and a 'student' within the Mpumalanga Province regional tutorial group, driving almost three hours from his home every time there was a tutorial. And, as he states, "...the purpose behind my participation was to adapt and develop this course for the (his country) context." This course became known as the Rhodes University Certificate / (his country)

Participatory Course in Environmental Education. My professional relationship with Sidney only began at the very end of the first year of the implementation of this course, when I provided a small amount of technical support at the tutorials he coordinated within his country.

Leading up to the above period of course development, Sidney had been employed by (his country)

National Trust Commission, a government institution, as an Education Officer, managing an

Environmental Education Centre within a nature reserve. Here he was involved in developing short educational programmes for school children and, occasionally, for school-teachers.

Sidney's employer would not agree to him developing or implementing the course during his office hours and so, as he explains, this all took place "...outside of my formal... work responsibilities.

Fortunately, my work schedule gives me six days off per month, because I often have to work from 8am to 10pm. So it was during my off-days that I developed the course."

As chairperson of a non-governmental organisation, focusing on ensuring environmental justice, especially within marginalised communities, Sidney acted as the course co-ordinator and a tutor during the implementation of the course. At this time, Sidney enjoyed the support of his wife and

three very young children. With regard to his tertiary qualifications at this stage, Sidney had "...only a three year teacher's diploma."

In Sidney's case, he explains that the course evaluations undertaken by his course participants indicated that the course "was definitely a success." This was firmly supported by myself and other staff members of the SADC-REEP who had supported him during the development and year-long implementation of his part-time course, which involved a total of 12 participants from a very wide range of backgrounds within the formal, informal and non-formal education sectors. These included people from schools, Teacher Training Colleges, the Curriculum Development Centre, non-governmental organisations, etc. The total number of resource people supporting the course was three, including himself and usually two staff from the SADC Regional EE Centre in South Africa.

4.3.2 Prior experience and/or professional development

Sidney's prior involvement in the development and implementation of course curricula was limited almost entirely to short programmes for school groups. He explained that he "had been regularly developing and implementing short educational courses and programmes mainly for school children..." He "also developed and implemented short programmes for teachers..." Apart from these brief courses, however, Sidney had had little or no prior experience in the development or implementation of courses of more than a few days duration.

Sidney also had had almost no professional development in this field, and explained his competence by saying that things were learned about course development and implementation mostly "by default than by deliberate learning. It was a case of "... hands-on learning..."

4.3.3 Personal characteristics and interpersonal skills

The development and implementation of Sindey's course curriculum seems to have been almost entirely dependent on his personal interest, commitment and motivation because, as he states: "From the first day of the course (the RU/SADC-REEP programme) I had it in mind to adapt and develop the course for (my country). My participation was outside of my work. I had to use my own time to participate."

In terms of catalysts for Sidney's development of the course curriculum, he explains this by saying "I was professionally bored.... I realised that the workshops I ran were not achieving what I hoped they would. .. I was totally not happy... I also needed to find new avenues to exhaust my EE energies. I can't just sit around..."

In my mind, the fact that Sidney had very little prior experience in course development and yet persevered with the development of his course clearly indicates high levels of self-efficacy. This belief is substantiated by his statement that "colleagues thought I was following impossible ideas... people thought it was impossible without funding promised." In fact, neither his work colleagues nor his acquaintances seemed to show much interest. His self-belief, in the face of such disinterest and low levels of support, appears to be substantial.

4.3.4 Support from outside of the workplace

Interactions with professional acquaintances took the form of discussions and/or curriculum deliberations. Sidney elaborates on this by saying that "I had to draw on my professional friends... and bounced ideas off them and got a lot of inspiration from them." In general, however, acquaintances "didn't show much interest..." although, as Sidney states, "in a (his country) context, if people don't say 'no' then they are giving moral support."

Of importance, however, was the fact that Sidney was interacting with the staff of the local university, where he obtained some technical support.

Support from further afield, in this case from outside of his country's borders, seems also to have been crucial, because as Sidney states, "ongoing support from my SADC-REEP professional friends was very, very important." This support took the form of both technical and limited financial support.

In terms of the general environment, it seems to have been relatively 'supportive' in that "lots of government environmental policies, strategies and regulations were being developed, while EE was being seen as an important response supporting these other initiatives."

With regard to receiving support from family and friends, this seems to have been fairly important, because as Sidney explains, during his participation on the RU course, his wife would drive him to tutorials while he would sleep, and she "attended all of the tutorials and national workshops, and so gained an understanding of what I was up to." And during the implementation of Sidney's, course his wife "even assisted with the logistics, picking up people and shopping. Everyone in the family got involved."

During the implementation of the course curriculum, Sidney indicated that it is perhaps also of some importance to note that "one of the things that made this course successful was my private vehicle which enabled me to transport course participants and do shopping, etc."

4.3.5 Support from within the workplace

In general, the support that Sidney received from work colleagues appears to have been of less importance than the support that he obtained from outside of the workplace. Although Sidney

interacted with colleagues, where they acted primarily as sounding boards for his ideas, he received little support from them in the planning or implementation of the course curriculum. This is clearly evident in his statement that "... colleagues didn't want to take on the extra work..." This also seemed to have been the case when the course ideas were introduced to his supervisor "...but little interest was shown..." and so, as Sidney remarks "I had very few interactions with my supervisor."

During the implementation of the course, there also seems to have been almost no technical support or guidance from colleagues, as indicated in Sidney's remark that his "tutors were often grappling with conceptual misunderstanding with key course ideas..."

4.3.6 The role of the RU/SADC-REEP professional development programme

When requesting that Sidney reflect on the role of the above programme, he responded by suggesting quite strongly that this professional development programme was important primarily because of the informal discussions that he had enjoyed within the course of the weekend contact sessions (tutorials and workshops). This perhaps also indicates the depth of his personal interest and motivation.

Beyond the above programme, and as noted above, Sidney participated on no other courses worthy of mention prior to the development of and implementation of his course.

4.4 Case study C: Vincent

4.4.1 Personal details

Vincent participated on the two-month (full-time) Rhodes University / SADC International Certificate in Environmental Education at the end of 1999. During this programme he took on the role of a 'student', while during the 2000 programme he acted as a resource person/tutor for myself and my fellow programme participants, and thus initiated the professional relationship that we now share. It was in the time in between these two programmes that Vincent developed and implemented his own course curriculum; a one-month (full-time) course.

Although not yet twenty, Vincent had initiated a non-governmental organisation in 1991 for the youth of his country, focusing on ecological issues. From this time until the development and implementation of the above course he had taken on the role of president of 'his' organisation. One of his responsibilities was to coordinate the organisation's educational activities, involving the development of short workshops and courses for school teachers and those involved in the environmental field.

As president and coordinator of educational activities within the above non-governmental organisation, Vincent found he "...was in the perfect position to take on the development of this course." At the time, Vincent was single, although engaged to be married, living in the home of his parents. His tertiary qualifications at this point, a Diploma in Electrical Engineering (and the first two years of a degree in Computer Science) reflect a diverse range of interests.

For Vincent, the catalyst for the development of his course curriculum included a number of factors, directly related to his participation on the RU/SADC-REEP programme. This is indicated

in his statement that "...we (the country) needed this kind of course... and the materials were available and they were very useful... and the other reason was that there was money available..."

The course was termed the Environmental Education Participatory Course and drew 30 participants, from 10 of the 18 provinces in his country. The participants were a diverse group, including teachers, NGO representatives, journalists, members of 'his' organisation and others.

According to Vincent, the course evaluation process gave participants regular opportunities to provide comment. In this regard, participants remarked that "it was challenging... It was very participatory... people could always be engaged..." and they were "able to share their experience..." Positive comments were also made regarding the "...richness of the materials available..." and also on the usefulness of "...the consolidating session at the end of the day, putting things together..." All of these comments were firmly substantiated by a member of staff at the SADC-REEP who had provided active support during the first week of the course. And, with regard to support, further assistance was provided during the course by three members from the organisation and from the local university Faculty of Science. In all, a team of five or six members were involved in putting the programme together on a weekly basis.

4.4.2 Prior experience and/or professional development

As is the case with Sidney (Case study B), Vincent's prior experience in the field of course development and implementation was limited to "smaller courses..." In this regard, Vincent had been involved in developing courses since 1995, but had little experience beyond short workshops or five day courses, where an established programme was drawn on time and again.

In reference to Vincent's lack of experience "...in these kinds of courses..." obtaining guidance from the RU/SADC-REEP programme co-ordinators/tutors was mentioned. This, I feel, points to

two important issues; firstly that the RU/SADC programme co-ordinators/tutors played an important role long after the RU/SADC-REEP programme had come to an end and, secondly, that Vincent, who had little experience, was still very willing to take on such a project. This point, I believe, indicates high levels of self-efficacy.

4.4.3 Personal characteristics and interpersonal skills

Vincent indicates quite some considerable motivation and drive, and states that "... I really wanted to see that kind of course being implemented."

When asking Vincent to describe how he resolves problems and challenges in every day work situations, he explained that most of the time he would tend "...to call upon colleagues..." The reason for this is not that he feels incapable of resolving problems on his own but rather that he has felt that he should "... give space for people to encounter the same problem and be able to find a solution together..." He explained this by saying that, as the leader of the organisation he is conscious of the fact that he would not be there forever. In fact, when it comes to solving professional challenges and problems, Vincent felt that he tended to try and solve the problems by himself.

In terms of support, Vincent "...wasn't working alone...". He was in fact able to achieve a wide range of support, from Ministry level down to that of (voluntary) work colleagues. I believe this indicates that Vincent is highly socially competent. This belief certainly seems to have been substantiated when, having asked Vincent to describe his general external situation during this period, he remarked that "....most of the other EE expertise was attending and supporting the course..."

4.4.4 Support from outside of the workplace

When discussing Vincent's work situation before and during the development and implementation of his course, he chose to focus on the support provided by other institutions. This was explained in terms of "...looking at partners, to implement the programme..." because his organisation "...didn't feel that it was appropriate to run the programme alone..." In this regard, he and his colleagues brought on board the government Ministry responsible for environmental affairs, as well as the Ministry of Education and Culture.

To ensure continuity in the programme, Vincent's organisation acquired the "expert support" of the Curriculum Development Centre. They also drew on one or two NGO's, such as Action for World Development and Environment, as well as upon the environmental club of the University Faculty of Science, making use of their experience in terms of conducting scientific research. Vincent referred a number of times to the good relationships built in the previous years with these institutions because, he explained "...due to a lot of bureaucracy in our country, some things wouldn't be able to go smoothly without that kind of support..." in this regard, he felt that it was "... not just the technical support..." that was important, but also the "traditional support" which was very important for the course process.

During the planning of the course curriculum, very important support was provided by one of the co-ordinators/tutors of the RU/SADC-REEP programme, mainly involving debating "...the structure of the course... and trying... to come up with the programme..."

During the implementation of the course, Vincent explains that there was a team, involving a number of the above mentioned institutions, including "...five or six people..." who were responsible for putting the programme together (on a weekly basis). In fact, the programme was

often revised on a daily basis. The above mentioned RU/SADC-REEP programme coordinator/tutor was also there on the course, providing support, for the first week.

Vincent doesn't give much attention to the support provided by his family, although he does agree that they "...were supportive..." This may simply be a case of taking this type of support for granted such that it has become almost invisible.

4.4.5 Support from within the workplace

Vincent's colleagues (all working on a voluntary basis) within his organisation were intimately involved in both the initial planning stages and during the implementation of the course, taking care not only of logistics but also participating in the sessions. Two colleagues in particular were also included in the curriculum deliberations, in order to give them the experience. Once again, however, these colleagues had little experience or 'training' in the field and so were not able to provide much technical support other than acting as sounding boards for Vincent and the rest of the team.

Perhaps the lack of experience exhibited by Vincent's two colleagues was overcome by their interest in playing a part in the course process, and alluded to in Vincent's remark that they were "... really enthusiastic and... keen to learn."

In questioning Vincent about his life situation during this period, he rather focused upon the support that he received from his colleagues, which he felt had been "... very encouraging because people were really keen, even knowing that most of them wouldn't be able to be there physically because there wasn't the space for them..."

4.4.6 The role of the RU/SADC-REEP professional development programme

With regard to the role of the RU/SADC-REEP professional development programme, he explained that "...actually the SADC course was the one that taught me most..." And although he had attended numerous conferences and courses before the RU/SADC-REEP programme, he felt that he hadn't really learnt a lot, particularly "...in terms of curriculum design and programme and course development... so it was pretty much... the SADC course in which we were engaged in the process of developing part of the curriculum..."

4.5 A summary of the findings

Although the focus of this study is on the role that different factors play in supporting three educators from Southern Africa to respond to their work contexts, the findings of the research have shown that it was not always easy for me, as the researcher, to isolate the role that different factors played. In the following discussion, I attempt to separate out the factors from each other. And, although the interpretive research paradigm is not amenable to reliable generalisations, I draw attention to general trends that I believe are evident in the above case studies. This is for no other reason than to guide future research in this exciting field.

4.5.1 Prior experience and/or professional development

In general, the research subjects appeared to have had relatively little experience in developing and implementing a course curriculum on such a scale. Their professional development in this field also seemed to be relatively limited. Overall, the research subjects appeared to value the more informal contexts of professional development / learning. They strongly suggested that they learn by trying out in the workplace strategies which they have devised, often in collaboration with the RU/SADC-REEP co-ordinators/tutors. Therefore, a more practical and context-based approach to professional development seems to prevail. It was often emphasised that they learn by doing, and by making continuing decisions about course development and implementation and other course-related roles according to an idiosyncratic (and isolated) way which is very much influenced by their prior experience within the work-place.

4.5.2 Personal characteristics and interpersonal skills

I believe the personal characteristics of the research subjects were recurrent, although implicit, themes throughout the interviews. And, as I believe has become clear, it is the personal characteristics and interpersonal skills in general, and the self-efficacy in particular, of each of the above research subjects that seems to have played a role of overriding importance in their ability to

develop and implement a meaningful course curriculum. In this regard, none of the participants in this study indicated that they had received the technical assistance or guidance that might reasonably have been expected from their work colleagues. Rather, they seemed to stress the personal way in which they grappled with the obstacles and difficulties they experienced during the process of developing and implementing their particular course curriculum.

Related to the above, it seems that the opportunities for collaboration between the workplace and other institutions was almost entirely dependent upon the motivation of each of the research subjects and, I believe, upon their social competencies. The obvious ability to engage with professional acquaintances and, to some extent, with their colleagues and supervisors in effective, socially acceptable ways, indicates that the research subjects have each developed 'cultural competence' (Wolcott 1991:262).

Also of interest are the findings related to the factors aiding (or hindering) the research subject's professional learning and development. I consider the intrinsic factors to be the most relevant ones. In this regard, motivation, interpreted as self-efficacy, seems to be of crucial importance. I developed a sense that the more external reasons, such as the structural and organisational issues, were not as important.

4.5.3 Support from outside of the workplace

Besides high levels of self-efficacy and the often visible personal commitment to their own professional beliefs, the support that each of the research subjects was able to draw on from outside of the workplace often appears to have been a relatively powerful variable in the process of becoming and being a competent course curriculum developer and implementer. In this regard, the importance of technical support from professional acquaintances outside of the workplace and from the RU/SADC-REEP programme co-ordinators/tutors in particular, was reiterated throughout the

interviews. The research subjects seemed to be clearly indicating the need for collaborative opportunities between their organisations and other institutions.

Although not often mentioned, the support provided by the research subjects' families, spouses in particular, was primarily in the form of emotional support, although on occasions it seemed also to include logistical support as well as physical support. I developed a strong sense that this support was only seen in a positive light and that these feelings and perceptions were embedded within the social habitus of each of the participants so as to be almost invisible to them.

4.5.4 Support from within the workplace

The organisational climate / workplace conditions in general, and the professional support from within the workplace in particular, appear not to have had a major impact upon the ability of the research subjects to develop and implement a meaningful course curriculum.

Generally, perceptions related to workplace leadership were fairly noncommittal. To a larger extent, the research subjects felt that they were neither encouraged nor discouraged to develop and implement course curriculum projects or to develop professionally. As to the working conditions, the research subjects claimed that there was not a supportive atmosphere and that working relationships among staff were not particularly effective.

Linked to the above, and with regard to the informal socialisation of the subjects of this research into the professional field of course curriculum development and implementation, little importance was attributed to, what might be termed, the 'apprenticeship of observation' (Lortie, 1975, in Flores, 2001). This seems to be in contrast to the common perception of educators within the formal education sector (school teachers), where often older and/or more experienced colleagues seem to have a powerful effect on the formation of beliefs and ideas related to education (Flores,

2001). With regard to the socialisation of the research subjects as educators, a common theme throughout the interviews was the general lack of technical support available or forthcoming from work colleagues and supervisors, i.e. the low impact of workplace-based professional learning.

In this regard, the comments focussing on the work place seem to be related to the general lack of supervision and guidance, and to the virtual non-existence of a supportive atmosphere within the workplace. Teamwork was not often mentioned, but a common belief in the need for more effective supervision and a supportive climate was reiterated throughout my interactions with the research subjects.

Both Jeremy and Sidney seemed to adopt a 'strategic compliance' in order to respond to the situational and institutional constraints during the period of course curriculum development and implementation. Although they may not have had much support from their supervisors, they appeared to have maintained cordial relations with them. They seemed to have adopted a 'now I do things my way' attitude in order to respond to the situational and institutional constraints during the period of course development and implementation.

4.5.5 The role of the RU/SADC-REEP professional development programme

I believe that that the conversations and interviews in which I engaged the research subjects indicated that they did not see the RU/SADC-REEP programmes on which they participated as playing the most significant role in their ability to respond to their work situations. Rather, the comments regarding the above professional development programmes as a factor in the development and implementation of a course curriculum seem to be related to the quality of the supervision and guidance provided and, especially, to the existence of a supportive atmosphere after the programme had been completed.

4.6 Concluding comments

As explained throughout this paper, my assertion that it is unlikely for learning to be transferred from one situation to another has had a major impact in shaping this research. It has meant that this study, and the research approach adopted, was designed to encourage the interview respondents to give attention to their general life and work contexts, rather than primarily to the programme upon which they participated. As such, personal characteristics in general, and self-efficacy and finely-honed interpersonal skills, in particular, were recurrent themes throughout the interviews and must, in my opinion, be some of the most important factors in the case studies under focus. Neither prior experience nor professional development in the field seemed as critical in the development and implementation of the course curricula.

Throughout their accounts, the research subjects referred to professional support from outside of the work place. In all three case studies this seems far more crucial than the professional support that they obtained from within the work place. Support from family and friends may often also be an important variable, although its relative importance seems difficult to ascertain with any amount of certainty.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

"People who see themselves as efficacious set themselves challenges that enlist their interest and involvement in activities; they intensify their efforts when their performances fall short of their goals, make causal ascription for failures that support a success orientation, approach potentially threatening tasks non anxiously..."

Bandura (1986:26)

5.0 Introduction

Although much of our learning as adults occurs in non-institutionalised settings in everyday situations, the literature suggests that studies of learning have, to a large extent, been limited to formal, institutionalised settings, such as the RU/SADC-REEP programmes. I believe that one unfortunate consequence of this is that the learning / professional development and/or social interaction that enables professional competence within the workplace is rarely the primary focus of attention.

This research project diverts from the above studies by focusing on the factors that were of importance to three educators in their ability to respond to the work context in general (indicating

professional competence), and to develop and implement a course curriculum in particular. These factors are evident in the external living and working environments, and the internal/personal make-up of the above course developers/implementers. They include, amongst others:

- An ability to interact meaningfully with colleagues and superiors
- An ability to overcome potential and real obstacles specific to one's work context
- Prior experience
- Support from colleagues and supervisors (implicit and/or explicit)
- Professional support from acquaintances
- Moral and/or logistical support from family members
- Professional development in the relevant field
- A belief in one's capabilities (high self-esteem)
- A willingness to take chances (especially if financial support is not assured)

Many of these factors were perceived by the research subjects to have been important in their development and implementation of a meaningful course curriculum. On the other hand, some of these factors were given little, or no, attention but were interpreted by myself, the researcher, as having been crucial to their professional competence. As such, this chapter serves to draw threads together as well as to point out the aspects of this exploratory study that require more in-depth research if useful guidelines are to be developed for those involved in the design of professional development programmes and/or the support of educators within the SADC region.

5.1 Professional competence in the workplace

The findings of this study indicate that although the subjects of this research had the ability to respond to the work context, there was a range of factors acting as potential barriers to the development and implementation of a meaningful course curriculum. The following five factors are common to at least two, if not all, of the research subjects:

- 1. Relatively limited prior experience in the development and implementation of course curricula for adults. (Only Vincent had experience of implementing courses of greater duration than a few days.);
- 2. Relatively limited professional development in the development and implementation of course curricula;
- 3. No formal qualifications in adult education, (although Sidney had a teacher's diploma);
- 4. No technical support from work colleagues and/or a supervisor; and
- 5. Very limited moral support from work colleagues and/or a supervisor.

Working in opposition to the above mentioned factors are four which, I believe, can be assumed to have played some role in enabling the subjects of this research project to respond to their work contexts in general and in developing and implementing meaningful course curricula in particular. These factors include the following:

- 1. High levels of self-efficacy;
- Limited professional development, through participation on one or the other RU/SADC-REEP professional development programme;
- 3. Ongoing technical and moral support from professional acquaintances and critical friends outside of the work situation including, in particular, RU/SADC-REEP programme co-ordinators/tutors; and
- 4. Moral support (and occasionally some logistical support) from family members.

5.1.1 Prior experience and/or professional development

The subjects of this research indicated varying levels of experience in the field of course curriculum development and implementation, with no-one having been involved in developing or implementing anything more substantial than a week-long course prior to the course curricula given

attention to within this study. Similarly, the above research subjects had participated very little in professional development programmes and 'training' courses with a focus on the development and implementation of course curricula. In this regard, apart from the RU/SADC-REEP programmes (which includes the development of course curricula, resource materials, etc. as one theme out of four) the subjects of this research had had relatively few opportunities for 'formalised' professional development.

If a situation such as this is found to be common within the Southern African region, then I believe it might be useful to undertake research in order to elucidate the role that prior experience and/or professional development play in an educator's ability to develop and implement a meaningful course curriculum. It might be the case that often it is the ongoing support that is given, the growing network of professional acquaintances that result from a professional development programme, and the increased levels of self-confidence that are of vital importance.

5.1.2 Personal characteristics and interpersonal skills

As the findings clearly illustrate, the research subjects had relatively limited prior experience, as well as little support from within the work place, in developing and implementing course curricula and yet each of them indicated a lot of confidence in their ability to develop and implement course curricula. In other words, each of these educators showed high levels of self-efficacy.

Participants in this study seemed to attribute a lot of importance to their own motivation and drive and willingness to take risks in their endeavours to develop and implement their particular course curricula. This common attitude, indicating a firm sense of self-belief and self worth, further suggests high levels of self-efficacy. In all cases, the research subjects demonstrated a confident and positive attitude in dealing with their own problems.

Leading on directly from this, I believe that the findings of this study indicate a need for future research to give attention to the following questions:

- Is high self-efficacy a pre-requisite for the development and implementation of course curricula?
- If it is, what role might professional development programmes play in building this, i.e. how might teaching and learning processes build self-efficacy?
- If high self-efficacy is not a pre-requisite, then what factors are necessary?

5.1.3 Support from outside of the workplace

The research subjects also attributed importance to the support obtained through one or the other RU/SADC-REEP programme, namely to the influence of the programme co-ordinators/tutors. This influence seems to be partly as a result of the ongoing technical support provided after the completion of the programme. In this regard, I believe that the findings from this study encourage future research to give attention to the role of professional support from outside of the workplace in determining whether educators are able to respond to their work contexts, in general, and to the need for meaningful course curricula to be developed and implemented in particular.

Research might also usefully be undertaken around the assumption that "beginning" course developers in a supportive and informative professional environment are more likely to seek advice and to overcome their professional doubts and difficulties more effectively. In the light of the findings, however, I believe it might be more important to focus research on those work environment where professional support is not forthcoming. In such cases, how important is moral support and/or logistical support from family and friends in an educator's ability to respond to the varied constraints and requirements of the work context?

5.1.4 Support from within the workplace

Findings from this study suggest that even though the research subject's supervisors and colleagues were not often able to offer technical support for the development and implementation of course curricula, they felt more motivated when their colleagues acknowledged the need for pursuing such projects. Future research might usefully indicate the importance of such moral support and whether it is likely to be important in determining positive or negative perceptions of the workplace.

Generally, the educators involved in this study felt that although leadership and colleagues were often relatively passive during their development and implementation of the course curricula, the silent acknowledgement of the importance of the work being done was sufficient to ensure the continuation of the curriculum processes. In general, however, the research subjects place much more emphasis on the importance of collaboration between themselves and their professional acquaintances outside of the workplace.

In research undertaken by Zeichner and Gore (1990) on teacher socialisation, the nature and the strength of the personal and the contextual variables influencing the process of becoming a teacher is highlighted. In contrast, findings from this study do not support the idea that the workplace plays the key role in shaping educator's understandings, abilities and skills in the development and implementation of course curricula. I believe more in-depth studies are required in order to examine the relative importance of the factors related to workplace conditions in the process of learning and in the development of professional competence.

5.1.5 The role of the RU/SADC-REEP professional development programme

As alluded to above, the research subjects attributed importance to the influence of the programme co-ordinators/tutors on the way in which they went on to develop and implement their own course

curricula. This influence was partly as a result of the approach that the coordinators/tutors adopted during the particular RU/SADC-REEP programme, enabling the research subjects to actively participate in shaping the programme curriculum. The research subjects' image of being a competent educator and of meaningful course curriculum development and implementation seem to be intrinsically related to these experiences, as RU/SADC-REEP programme participants. Future research might usefully focus attention on the importance of similar programme-related experiences in building the confidence and self-efficacy, as opposed to the skills and understandings, of programme participants.

5.2 Recommendations

As should be clearly evident from the foregoing discussion, I believe that this study has bearing on future research. In this regard, I believe that the "standard" approach that I have adopted during the research process, focusing on relatively compartmentalised knowledge with limited regard for how academic disciplines relate to one another or to the surrounding society, can present an impediment to developing a deeper understanding of the phenomena in focus. As such, I believe that one of the fundamental challenges before us is to develop ways and means that might enable researchers to enter into joint ventures that are mutually respectful and recognise the validity of diverse sets of knowledge, as well as the benefits to be gained if they are pooled together in mutually complementary ways.

I also believe that this study has bearing on the work of those involved in the development and implementation of professional development programmes for educators, in general, and for environmental education practitioners in particular. In this regard, the model below (Figure 1) depicts not only the four families of factors discussed above, but also indicates some of the interconnections that exist between them. I believe that it is these links, that exist between each of these families of factors, that are the crucial elements to take cognisance of in the design of

research projects and/or the development and implementation of professional development programmes for educators.

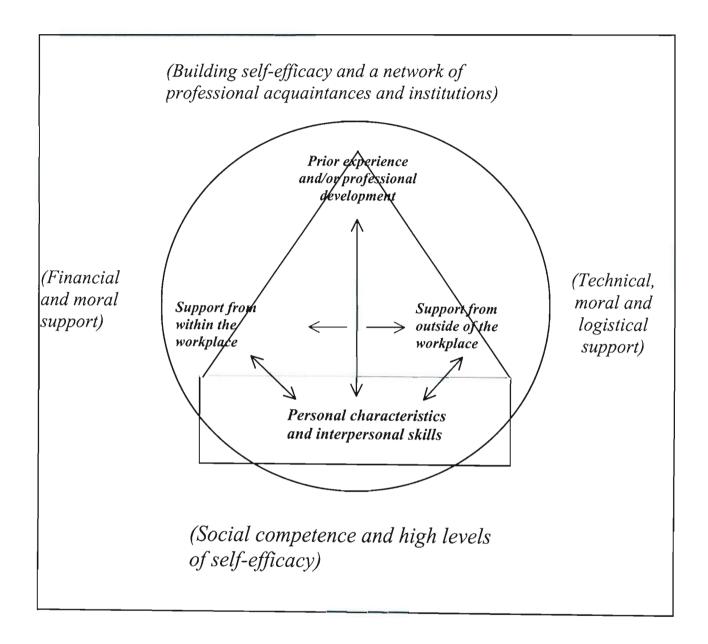


Figure 1. Four broad families of factors and associated interconnections impacting upon an educator's ability to develop and implement course curricula.

5.2.1 Implications for the support of programme participants

This study indicates that the educators who were the subjects of this research, all happened to have high levels of self-efficacy and were, in general, able to respond to the work context with competence, developing and implementing meaningful course curricula. Of course, this does not mean that educators with low self-efficacy cannot be expected to develop (or implement) course curricula. Rather, I hope that professional development programmes, such as the RU/SADC-REEP programmes, will give more attention to ways in which educators might be enabled to extend their circle of professional friends and acquaintances and improve upon and/or develop further their networking skills in order to create opportunities for collaboration with local and/or regional (SADC) institutions.

I believe the findings of this research strongly suggest that support and technical guidance for an educator, after participation on a professional development programme is likely to be important, especially for those educators with lower self-efficacy. In this regard, if it is mainly those educators with high self-efficacy who are developing and implementing course curricula, then there is an urgent need for attention to be given to those educators who may have lower self-efficacy. As such, I believe that there are at least four key questions that a programme developer and implementer should ask. These include the following:

- 1. How might one create opportunities for the development of an educator's networking competencies during his/her participation on a professional development programme?
- 2. How might one enable the further development of an educator's networking competencies after his/her participation on a professional development programme?
- 3. What role might a workplace-based assignment play in encouraging/ensuring that collaborative partnerships (networks) are initiated and strengthened between institutions once a participant has returned to the workplace?

4. What support should one attempt to provide a programme participant with after s/he has returned to the workplace?

Thus, for those involved in the development and implementation of professional development programmes for educators, the findings suggest that programmes include deliberations and discussions with a focus on appropriate educator support processes after the completion of the programme. Such support processes will be contextual in nature, dependent on the socio-political milieu within which the educator and his/her practice is embedded. In this regard, I concur with Soden and Halliday (2000) who argue against the idea of decontextualised vocational preparation and for the idea of learning through practice. I, however, wish to take this line of thought further by suggesting that to contextualise the vocational preparation of educators, for course development in particular, requires that the designers of professional development programmes ensure opportunities for collaboration / interaction not only with colleagues and supervisors but also with the broader community of practice.

5.3 Concluding summary

As alluded to in earlier chapters, this study was initially focused upon the assumed 'transfer of learning' from a professional development programme to the work context. As indicated, however, it was through conversing with the research subjects, reading the available literature, engaging in discussions with colleagues, and also through personal experience that this assumption was wholly revised.

In this regard, I believe that the findings of this study support the belief that a professional development programme for educators will rarely enable participants to simply transfer new understandings and skills to their work situations. A professional development programme may, however, build an educator's competency, i.e. develop their ability to respond to the work context.

In this regard, it is quite evident that a professional development programme - the materials, assignment tasks, and associated processes of teaching and learning - is only one of a number of variables which have enabled the subjects of this research to respond effectively to their work contexts. This paper has brought to attention a number of other factors, not directly related to a programme, that may be of critical importance in the ability of educators to develop and implement a meaningful course curriculum.

Not surprisingly, support from within the workplace has an effect on the understanding and practice of the above professionals. Of greater importance, however, is the support that the research subjects received from professional acquaintances and institutions from outside of the workplace. Prior experience and professional development in the field of course development also seemed important, although uncertainty exists in my mind with regard to its exact role; that of building skills and understandings and/or of building self-confidence/self-efficacy. What I believe is clear, however, is that high self-efficacy is probably a crucial factor in each of the case studies presented. And, as such, although the RU/SADC-REEP professional development programmes were also important factors, I believe that they are just one of a range of factors that could impact upon a participant's ability to develop and implement a meaningful course curriculum.

The above findings have many implications for future research and for those involved in the design and implementation of professional development programmes, particularly for educators in Southern Africa. As such, the findings will be shared with other course developers, including those who play a role in the development and implementation of the RU/SADC-REEP programmes given attention to in this study. It is through this sharing of results that I think, we, as course developers might help to ensure that the programme designers, participants and professional acquaintances with whom we interact, are provided with meaningful opportunities both for ongoing collaboration

and support,	, perhaps	aiding in	the deve	elopment	of a self-	-efficacious	and ef	fective	commun	ity of
practice.										

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PERSONAL COMMUNICATIONS

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APPENDIX A

INTERVIEW SCHEDULE FOR THE RESEARCH SCOPING EXERCISE

Questions designed to ascertain whether the course curriculum implemented was felt to have been meaningful

- 1. Did you apply to participate on the SA programme of your own accord?
- 2. What were the reasons for your application to participate on the SA programme?
- 3. Who were you working for at this time?
- 4. What did your work involve?
- 5. Briefly describe the course curriculum that you developed for your home-based assignment.
- 6. How long did it take, after completing the RU course, to complete the design of your course?
- 7. How long did it take to implement your course?
- 8. In general, how would you describe a successful course curriculum?
- 9. What were your course objectives?
- 10. To what extent did your course meet its objectives?
- 11. How would you describe your course in terms of being successful/unsuccessful?
- 12. Are you planning to develop your course further and/or implement it again?

Questions focusing on the factors that have been instrumental in the successful completion and implementation of a meaningful course curriculum:

13. Why do you think you were successful in the completion of your assignment / course curriculum?

Personal / Professional factors

14. To what extent had you been involved in developing and implementing courses prior to the programme that you participated on?

Course-related factors/reasons

- 15. How would you describe your learning during the programme?
- 16. Comment on your understanding of educational theory (incl. Constructivism, etc) prior to the programme?
- 17. To what extent were you familiar with the educational terminology used during this component of the programme?
- 18. Comment on your understanding of curriculum design prior to the programme?
- 19. While the focus was on curriculum design, to what extent did the different aspects of the programme core texts, readings, course activities, presentations, etc. reinforce or challenge your beliefs?

Work-based factors

- 20. How often and to what extent did you interact with work colleagues and superiors during the development and implementation of your course?
- 21. How would you describe yourself in the work situation at that time?
- 22. How would you describe your job and your feelings for your job at that time?

General factors

- 23. Why do you think you were successful in the development of a meaningful course curriculum and others not?
- 24. What do you think some of the reasons might be for other's success?
- 25. Could you give a summary list of all the factors that you think enabled your success in the implementation of your course curriculum.

APPENDIX B

CHARACTERISTICS OF AN EFFECTIVE COURSE DEVELOPER AND IMPLEMENTER

An effective course developer

- Familiar with educational theories and perspectives
- Hard working
- Reliable
- Methodical
- Resolute

An effective course implementer

- Enthusiastic
- Helpful
- Able to reveal flawed assumptions
- Financial resources
- Able to clarify boundaries

APPENDIX C

A DESCRIPTION OF THE RU/SADC-REEP EDUCATIONAL PROGRAMMES

The two professional development programmes under focus have been designed for environmental education (EE) practitioners, and were developed in response to a lack of professional development opportunities for environmental education practitioners in South Africa and the SADC region. They include the following:

- Rhodes University/ Gold Fields Participatory Course in Environmental Education, initiated in 1992:
- Rhodes University/ SADC International Certificate in Environmental Education, initiated in the mid-90's:

Each of the above programmes includes presentations and discussion around similar themes, though in varying degrees of detail. These programmes are based on the recognition that both presenters/tutors and participants work in diverse contexts and bring a wealth of experience to the programmes. As such, various opportunities are created for participants to share experiences, etc. To enable maximum participation in the course, and to adhere to a key principle of the course in which all participants (tutors and students) are viewed as *learners and educators*, opportunities are created in the programme for students to share their extensive experience with the rest of the group.

Both of these programmes/courses above have been implemented almost every year since their initiation. The basic course materials consist of a file with four core themes, around which detailed texts have been written, readings and assignments. Rhodes University shares the responsibility of course development, fundraising, financial management, and co-ordination, etc. with WESSA and has, in recent years supported the adaptation and expansion of the course in association with a number of organisations, such as KZN Wildlife. The RU/GF course has, in other words, provided a framework and materials, for a number of professional contexts within South Africa and the SADC region – industry, conservation and school contexts in particular. The RU/SADC Course is one such course. Each of the above courses lead to the Rhodes University Certificate in Environmental Education.

The RU/GF Course

The RU/GF Course is a fairly general year-long, semi-distance course for environmental educators in South Africa. In its 'standard' format it consists of three main national workshops, with smaller localised tutorials (held at the provincial level) in-between. Over the past years, environmental educators (including past course participants) from all provinces in SA have participated in the development of the course's materials and processes. (Possibly the most important policy factor shaping this course and its future development is the need for its accreditation within the National Qualifications Framework¹⁴ (NQF)).

The RU/SADC Course

This course was initiated in the mid-1990's, and has been run almost every year since then. It is a fairly general, two-month-long, residential course for environmental educators from the Southern African (SADC) region. There are a variety of readings that support each of these texts and four assignments. Daily activities consist of guest lectures, presentations led by a core group of tutors, excursions, group discussions and assignments.

¹⁴ Within South Africa the intention is to accredit the RU/GF course within the NQF, as all future adaptations of the programme will have to be developed within the NQF framework. This will influence the design and management of the course/s, as well as decisions regarding who is accepted as a participant.

Programme participants

Participants include environmental educators within the formal, non-formal and informal education sectors; conservation officers, community development workers, extension officers, teachers, curriculum developers, etc. as well as people not yet involved in EE processes. Some are employed in local, regional (and sometimes national) non-governmental environmental organisations, where they may be required to develop educational and awareness-raising projects or programmes for the general public. Most of these EE practitioners have completed their initial schooling, while many are looking towards obtaining further qualifications at institutions of higher education at some point in the future. This course is often attended by EE practitioners who have degrees or diplomas, e.g. teachers. In general, though, the above courses are structured/designed in such a way so as to improve the educational/work practice of adults with almost any level of education.

Most of the course participants are English second language speakers, but many have degrees or diplomas and are, for all intents and purposes, quite fluent in English. Participants have a wide range of experience and qualifications. In this regard, the programme are open-entry and open-exit. Within the RU/GF Course one of the main factors dictating who is, or is not, accepted as a participant is the fact that a maximum of about 60 people can be accommodated at the national workshops. The RU/SADC Course accepts one participant from each of the 14 SADC states, (and has full funding to support this).

Themes and core texts

The two programmes include a focus on the following themes, although the actual content might differ

Environmental Risks and Issues

During this part of the programme, opportunities are created for participants to develop a deeper understanding of environmental issues and risks. Participants work together to develop a more complex understanding of key concepts including; environment, sustainability, development, etc. These concepts enable participants to examine a range of responses from a more informed position.

Environmental Education as an Emerging Response

In this theme the focus is on a wide range of responses to the environmental crisis. This includes a focus on diverse environmental education processes undertaken by EE practitioners around the world in response to local and global environmental risks, problems and issues.

Environmental Education Processes and Changing Theories within Education: Trends and Patterns.

This theme focuses on the assumptions and educational theories that underpin the methods that EE practitioners involve learners in. As such, the relevant texts direct participants' attention to educational and learning theories and the way in which they have informed EE methods and processes. The text and the associated 'tutor-directed presentations' provide an overview of some of the key trends or 'paradigms' in educational thinking. Some of the major characteristics of the various orientations to education, such as vocational/neo-classical, socially critical, etc. are presented. Both the text and the tutor provide summaries of the key features of the orientations/ perspectives on learning, and outline for example how each of these reflect a view of the teacher's role, the learner's role, etc (particularly during educator-learner interactions).

Participants have the opportunity to study and work with a range of environmental education methods in many different contexts. The programme attempts to enable participants to understand the assumptions and theories that underpin particular methods and to review their own practices in the light of these understandings.

Curriculum Development, Programme Development and Materials Development for Environmental Education

In this theme the focus is on policy, curricula, programmes and materials in environmental education. Throughout the course participants are provided with opportunities to find out about how curricula, programmes and resource materials are developed and implemented/used. This theme serves as an introduction to the course / work-based assignment in which participants have to develop a course curriculum, programme and/or resource.

In general, the course curriculum has a critical, open-process orientation, which means that participants are required to engage critically with different dimensions of the above themes.

APPENDIX D

FOCUS QUESTIONS FOR INFORMAL CONVERSATIONS

Ouestions to gain background information

- 1. What were the reasons for your application to participate on the SA programme?
- 2. Who were you working for at this time?
- 3. What did your work involve?
- 4. Briefly describe the course curriculum that you developed for your home-based assignment.
- 5. How long did it take you, after the completion of the RU/SADC-REEP programme, to complete the design of your course?
- 6. How long did it take to implement your course?

Questions to ascertain whether the research subject believes his/her course was meaningful

- 7. In general, how would you describe a meaningful course curriculum?
- 8. What were your course objectives?
- 9. To what extent did your course meet its objectives?
- 10. How would you describe your course in terms of being meaningful?
- 11. Are you planning to develop your course further and/or implement it again?

Questions to elucidate the course development and course implementation process:

- 12. What happened during the course design and development process?
- 13. What happened during the course implementation process?
- 14. What worked during the above process?
- 15. What difficulties did you experience during the above process?

Questions focusing on the factors that the research subjects raise as instrumental in their development and implementation of a meaningful course curriculum:

Questions focusing on General factors

- 16. Why do you think you were successful in the development of a meaningful course curriculum and others not?
- 17. What do you think some of the reasons might be for other programme participant's success?
- 18. Could you list all the factors that you think enabled your success in the implementation of your course curriculum.
- 19. Why do you think you were successful in the completion of your assignment / course curriculum?

Questions focusing on Prior knowledge and experience

- 20. To what extent were you able to draw on prior knowledge and experience in the development and implementation of your course?
- 21. Comment on the role that your prior knowledge and experience played in the development and implementation of your course/.
- 22. To what extent had you been involved in developing and implementing courses prior to the programme that you participated on?

Questions focusing on Work related factors

- 23. How often and to what extent did you interact with work colleagues and superiors during the development and implementation of your course?
- 24. How would you describe yourself in the work situation at that time?
- 25. How would you describe your job and your feelings for your job at that time?

- 26. What aspects of your work situation acted as enabling factors in the development and implementation of your course?
- 27. What aspects of your work situation acted as obstacles in the development and implementation of your course?
- 28. Comment on the extent to which you interact with your superiors and colleagues.
- 29. What do you think your superiors and colleagues felt on hearing of your acceptance onto the course?
- 30. Describe the attitude of your superiors and colleagues with regard to your participation on the course?
- 31. Describe the attitude of your superiors and colleagues with regard to the development and implementation of your course.
- 32. Comment on the 'pressure' that may or may not have been put on you by your superiors to complete the development of your course.

Questions focusing on the home environment

- 33. To what extent was your home environment supportive and/or enabling?
- 34. To what extent would you say that the SA programme enabled you to develop and implement your course?
- 35. What aspects of the SA programme served as enabling factors?
- 36. Comment on the importance of the SA programme with regard to providing skills and understandings useful in the development and implementation of a course.

Questions focusing on RU/SADC-REEP Programme related factors

- 37. How would you describe your learning during the RU/SADC-REEP programme?
- 38. Comment on your understanding of educational theory (e.g. Social constructivism, etc) prior to the programme?

- 39. To what extent were you familiar with the educational terminology used during the educational theory component of the programme?
- 40. Comment on your understanding of curriculum design prior to the programme?
- 41. While the focus was on curriculum design, to what extent did the different aspects of the programme core texts, readings, course activities, presentations, etc. result in your professional development?
- 42. Comment on those aspects of the programme that you believe played a role in enabling you to develop and implement your course.
- 43. Comment on the SA programme with regard to building your confidence and/or feelings of competence.
- 44. While the focus was on educational theory, to what extent did the different aspects of the programme core texts, readings, programme activities, presentations, etc. reinforce or challenge your beliefs.
- 45. If you can remember, how would you describe the discussions around this topic that you and your fellow programme participants engaged in?
- 46. To what extent did the programme encourage, or force, you to reflect critically upon your own practice?
- 47. To what extent did the programme encourage, or force, the other participants to reflect critically upon your own practice?

APPENDIX E

SEMI-STRUCTURED INTERVIEW SCHEDULE

- 1. Referring to the responses received from your colleagues and to your course evaluations, how would you describe your course?
- Describe your work situation before and during the development and implementation of your course curriculum.
 - How did you interact with your colleagues and superiors?
- 3. Describe your life situation during this period.
 - What was happening at home?
 - What was happening in your relationships with family and friends?
- 4. Describe your personal/internal situation, i.e. your general happiness, motivation, etc.
- 5. Describe your general external situation during this period.
 - What interactions did you have with other EE practitioners, professional acquaintances?
 - What was the state of your local environment (social, political, economic, etc.)?
- 6. Describe how you manage and overcome/resolve professional challenges in everyday work situations.
- 7. To what extent had you been involved in the design and implementation of course curricula prior to the Rhodes University course?
- 8. Describe how and when you have learned things about course design and implementation?
- 9. What other courses/programmes had you participated on, prior to the design, of your course, which gave attention to course design and implementation?

APPENDIX F

THE SEMI-STRUCTURED INTERVIEW – DATE AND VENUE

Jeremy

A semi-structured interview was conducted on the 5th August 2002 after hours at Umgeni Valley

Nature Reserve, in a cottage that was quiet and entirely free from interruptions. The interview was

conducted by Alistair Chadwick and lasted for approximately 40 minutes.

Sidney

A semi-structured interview was conducted on the 1st August 2002 at Umgeni Valley Nature

Reserve, in an office that was quiet and entirely free from interruptions. The interview was

conducted during office hours by Alistair Chadwick and lasted for approximately 35 minutes.

Vincent

A semi-structured interview was conducted on the 12th August 2002 after hours at a venue outside

Grahamstown that was quiet and entirely free from interruptions. The interview was conducted by

Alistair Chadwick and lasted approximately 60 minutes.

Note: All transcriptions of the above interviews are available from:

Alistair Chadwick

Training Coordinator

SADC - Regional EE Programme

PO Box 394, Howick, 3290

Phone:

++27 33 330 3931

Fax:

++27 33 330 4576

E-mail:

alistair@futurenet.co.za

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