ACTION RESEARCH:
Some Practical Ideas For Educational Practice

Save the Children

Action Research

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Preface

This book is a collection of conference and workshop papers on action research and reflective practice that were held over a period of seven years, stretching from 2006 to 2012. These conferences and workshops were part of Save the Children Norway's Quality Education Project (QEP) that it was promoting in Ethiopia, Zambia, Mozambique and Zimbabwe. The major objective of this project was to promote reflective practice, with special reference to didactical (classroom) as well as educational administrative practice.

The participants who were trained in action research and reflective practice, were drawn from practicing primary school teachers in Bikita District of Masvingo Province, a sample of school heads, Education Officers (School Inspectors), the District Education Officer for Bikita District, the Provincial Education Director, Masvingo Provincial Education Officers (Inspectors), and initially nine lecturers (three from each of the three Masvingo Teachers' Colleges) and later forty-five lecturers (fifteen from each of the three colleges – Morgenster, Bondolfi and Masvingo Teachers' Colleges).

The Quality Education Project involved both in-service and pre-service practitioners. The action research training was aimed at fostering teaching that would make the teacher or education administrator interrogate and reflect on his/her own practice, focusing on processes, with a view to improve, develop and advance results of learning and practice. A needs assessment study had been carried out in Rushinga and Bikita Education Districts of Zimbabwe between 2003 and 2004 by Save the Children Norway. In this Needs Assessment Study, the major finding was that, the focus of teaching was very traditional, mainly tending to be behavioral, while ignoring processes. Practitioners were mainly interested in behavioral outcomes and rarely did they reflect on their own practice, their beliefs and experiences, and how these impacted on the learning outcomes of the pupils. Learners were not participants in their learning – they were just "passengers", and therefore passive recipients of the so-called knowledge being conveyed to them by their teachers.

It was in response to the above finding that Save the Children Norway conceived the Quality Education Project, which ushered in Action Research and Reflective Practice training in Masvingo Province in partnership with the University of Zimbabwe. The training itself focused on practical activities by participants, which included, planning lessons, executing them (lessons), and reflecting on the processes and results. Brainstorming sessions were conducted by participants, and action research projects were carried out by them, resulting in research write-ups by the participants themselves. The chapters in this book constitute both theoretical and practical reflections and experiences gained by the contributors in the action research project in Zimbabwe, Ethiopia, Zambia and Mozambique.

Prof Bornface C Chisaka

CHAPTER 1

The concern with quality education

Moses T Mukabeta

Introduction

When many nations met at the World Conference on Education for All (WCEFA) in Dakar, Senegal in 2000, there was a clarion call for quality education. Thus in 2000, in the review of the objectives set at Jomtien, Thailand in 1990, there was dissatisfaction with the fact that the objectives set a decade earlier in 1990 were far from being fulfilled. The focus of the Jomtien declaration was on increasing access to basic education. However, by 2000, a snapshot of the statistics and indicators showed that about 130 million children were still out of school, adult literacy rates were not improving in significant ways, Early Childhood Development had not been made mandatory in many countries outside Europe and North America, female participation in education was still at low levels in spite of important advances made, especially in the developing countries.

In addition to that, the repetition and drop-out rates were alarming in many places. In short, education systems did not deliver what they were supposed to. Many nations had failed what they had promised at Jomtien; to give Universal Primary Education to all children by end of the 1990s decade. The Dakar Framework of Action (2000) communiqué carried two concerns; on one hand, increasing access to Education for All by 2015 and on the other hand, providing quality education wherever the opportunities for accessing education were achieved. This concern arose from a wide range of systematic studies that were being carried out in various parts of the world on the quality of education being provided. These studies indicated that education systems did not deliver what they were supposed to, that is to give access to quality education to all children enrolled in schools (Nagel, 2008). I shall turn to some of these studies after exploring the concept of quality education and some of the perspectives in understanding the concept as well as the linkages with everyday practices as regards opportunities to learn.

Towards a definition of quality education

There is no generally agreed definition of educational quality among educationists and practioners. As a start, I shall examine what UNESCO and UNICEF have proffered as they pursue their mandates. UNICEF (June 2000 Working Paper: page 4) defines quality education to consist of:

(a) Learners who are healthy, well-nourished and ready to participate and learn, and supported in learning by their families and communities;
(b) Environments that are healthy, safe, protective and gender-sensitive, and provide adequate resources and facilities;
(c) Content that is reflected in relevant curricula and materials for the acquisition of basic skills, especially in the areas of literacy, numeracy and skills for life, and knowledge in such areas as gender, health, nutrition, HIV/AIDS prevention and peace;
(d) Processes through which trained teachers use child-centred teaching approaches in well-managed classrooms and schools and skilful assessment to facilitate learning and reduce disparities; and
(e) Outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society.

In the Working Paper UNICEF stress that the definition proffered allows for an understanding of education as a complex system embedded in a political, cultural and economic context. These contexts differ from one country to another. The five components of quality education are interdependent and neglect of any one of the components will

affect the outcome. There is a sense in which this definition gives us what might be called a 'systems perspective' of quality education. But what does this conception of quality mean in practice? Given these five components where does one begin? Or, does it matter where you begin? Is any of the parts more important than the others? The definition proffered by UNICEF gives us a good overview and beginning but raises some questions that show how complex exploring 'quality education' is and how an elusive concept it can be, especially when it comes to actual practice.

If we turn to UNESCO, we find a framework for understanding education quality (EFA Global Monitoring Report 2004 entitled 'The Quality Imperative'). The framework has a focus on **enabling inputs** (**learner characteristics, teaching and learning**), **outcomes** and **context**. On *learner characteristics*, it is vital to realise that learners do not come to the classroom on an equal footing. There are socio-economic backgrounds, gender, disability, access to early childhood development opportunities, emergency situations such as conflicts and disasters that do not level the ground for all learners. Education policies ought to recognise these differences in seeking to improve the quality. *Inputs* refer to material resources (textbooks, other learning materials, classrooms, libraries, school facilities) and human resources (education system and school managers, inspectors and most important of all, the teachers). The indicators used widely to measure these inputs are pupil/teacher ratios, levels of teacher salaries, public current expenditure per pupil and what proportion of GDP is spent on education. The dimension of *teaching and learning* involves what happens in the classroom. UNESCO recognises that pedagogical processes lie at the centre of learning. Indicators such as time spent learning, use of interactive teaching and learning methods and how progress is assessed and measured become fundamental. The issues of community involvement and school leadership have an impact on teaching and learning. As regards *context*, education reflects the society's values, beliefs and attitudes. In this regard, national policies, goals and aspirations compete to find their way into the curriculum and teachers have a big influence on the quality of the education availed. Finally, the dimension of *outcomes* as expressed in terms of the level of learner achievement as well as the broader social and economic gains for the nation in terms of the benefits realised on numeracy, literacy and life skills acquisition of the school outputs.

Both definitions provide hints on some of the very critical factors on quality teaching and learning, the teacher and the pedagogical processes. The Dakar World Conference on Education for All identified the imperative for quality education in light of studies which seemed to point to the need to understand more what happens in the 'black box', the processes that take place in the teaching and learning situations in the classrooms. It is in this regard that in a review of the UNICEF and UNESCO definitions of quality education, Nagel (2008) argues that the quality issue was 'entangled' in multi-faceted descriptions and perhaps missed focus on the central role of the Teachers to achieve quality education, what they do in the classrooms, as having a big bearing on quality learning opportunities.

What is education and what is educational quality?

In exploring the current concern with quality education, Nagel (2008) says it is useful to ask the questions: what is education and what does it attempt to do to people? The essence of education is acquisition of new knowledge, skills and attitudes. But what characterizes learning activities for the activities to render quality to education? In formal education, learning traditionally takes place in the classroom. And yet education can take place anywhere. In informal education it is mostly the parents, grandparents, the peers and the people in the surrounding environment with knowledge and skills who act as mentors in the learning process. When you focus on that learning, Nagel (1992; 2008) says it is in the *meeting* between the learner and the teacher/mentor over a meaningful activity and content matter where quality is created, maintained and sustained. Such “meetings” must have certain characteristics in order for there to be quality. Nagel (1992) suggests that the meeting must have the quality of engaging the participants, the teachers/tutors and children/students so that they become interested and absorbed. It is at this point Nagel say the 'meeting' must be “vibrating with energy”.

The annual EFA Monitoring Report (2005) notes that little is known about the learning process. There has not been a lot of educational classroom research that has been reported, especially in developing countries. In view of this Nagel (2008) underscores that if we want to be serious about the quality of education and instigate change in children's learning and consequently in school outcomes, we need to understand much better what is going on, in and around the learning process. This is a necessary prerequisite for change not only in teaching behaviour, but also in cultural traditional attitudes that are harmful to children and their physical, social and psychological development. These analyses help us appreciate that quality education is more than a system running smoothly. The essence of education is learning, and communication is the medium. At this point, we shall explore other attempts at defining education.

Quality education – perspectives from C E Beeby (1966) and R S Peters (1967)
Both Mbozi (2008) and Nagel (2008) draw from Beeby, who in his 1966 book called *'Quality of education in developing countries'* suggests that education has to undergo different historical stages in order to reach to 'fruition', or quality. He was for a time Assistant Director-General of UNESCO, in charge of education with 20 years experience from educational administration in New Zealand with responsibility also for the Pacific islands, whose social and economic situation resembled much that of developing countries. Beeby emphasizes the role and quality of the teachers in education. He says that education cannot become better than the teachers in it. Accordingly, the quality of education is heavily dependent upon the teachers as these are the ones carrying out the most important work in education. It is in the classroom that the quality of education is established. In this respect, quality education is compromised by the employment of untrained and under-qualified teachers which has been a common phenomenon throughout the developing world prompted by the rapid expansion of public education to meet Education for All targets.

In Peters' (1967) definition of education, quality is embedded in the educational process itself. He developed four criteria by which 'education' might be defined. His first criterion for education is that something valuable is passed on during the process. His second criterion involves the development of knowledge and understanding which improves the interpretation of reality, that is, some cognitive change must take place in the pupil. Thirdly, 'education' must rule out procedures of coercion and rest on a voluntary basis. Lastly, the participant must be aware of what is going on. This point helps to show the difference between education and indoctrination. The criteria by Peters for what counts as education unravel some elements that lead to the need to explore more on the processes in the teaching and learning. To Peters, it is clear some practices are unacceptable such as indoctrination. Thus, in classrooms that have chorus chanting and passive memorizing, children's understanding is not promoted. But, why does this happen, even in classrooms of trained teachers?

Levels of achievement as an indicator of quality
I have pointed out that the Jomtien, World Conference on Education for all in 1990 had a big focus on increasing access and that the Dakar World Conference on Education for All in 2000 looked at both access and quality education. It had now dawned on many nations that children who are in school were not achieving as much as they are expected to. Data regarding learning outcomes for children from a wide range of studies was beginning to be published for the first time in Dakar. The findings were a shock to many and the results were generally very similar for the countries. The reports suggested that few grade 6 children can read and write adequately when they leave primary school implying that learning levels are appalling. In the same year, 2000, the Programme for International Student Assessment (PISA), sent some shock waves in some of the First and Second World countries. The problem of low learning outcome is an issue in both developed and developing countries, although it is more pronounced in developing countries.

The first international data pertaining to developing countries were the SACMEQ I (Southern African Consortium for the Monitoring of Educational Quality) studies monitored by UNESCO's Institute for Educational Planning, IIEP. More SACMEQ studies have since been conducted and published prompting policy reviews. Some results were published in the UNESCO EFA Monitoring Report, 2005 and subsequent EFA reports. In broad terms, the SACMEQ findings (low reading levels; majority of children operating at lower levels than their grades), among other factors, underscore concern about learning achievement levels. Since the Dakar World Conference on Education for All (2000) the concern with quality education has increasingly pre-occupied the education agenda. Hence, the six EFA objectives included a specific goal in the EFA Framework for Action. Goal 6 reads: *'Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills'*.

Findings from the SACMEQ II studies showed that about 50 % of pupils can barely read at a minimum level, which is a level close to functional illiteracy (identifying 7 out of 46 words from the syllabus). At an average, only 18% percent of the 6 graders have acquired desirable readings skills. SACMEQ II studies show that in some countries, like Zambia, have less than 5% of grade 6 children who are able to read at an adequate level, Malawi, only 1%. There are also problems with reading skills in many countries; low percentages of children seem to be found to be illiterates. They cannot read and understand what they are reading.

Other findings of low performance for some Latin-American countries were also published in the EFA 2005 monitoring report on quality, *"The Quality Imperative"*. It is not far fetched to suggest that when all else is considered from the research findings, children are not learning much. It is here where Nagel (2008) sounds a warning that the

children who don't learn even to read and write while at school will join the future ranks of youth and eventually grown-up illiterates, with all that which this entails and the repercussions on individuals' personal life, work, health and a country's economy by and large.

The place of Teacher Education and Continuous Professional Development in addressing the Concern with Quality Education

The concern with the quality of education has been shown in the sections of the chapter above. It is my view that Teacher Education and Continuous Professional Development (CPD) ought to be the focus to strive for quality education, of course paying attention to other elements. This view raises some fundamental questions. Where should teacher students learn their profession? Professional development is critical for any profession. Would people who claim that professional training is unimportant prefer to be operated by poorly trained or untrained surgeons? Or fly with unlicenced pilots? Teacher education in many cases replicates the standard procedures of authoritarian, repetitive modes of teaching and learning, where children become passive participants. It needs to be revamped. While it is important for a teacher to have a decent salary which you can survive on, it is important to have creativity and reflection skills. Above all, it is in the meeting between the learner and the teacher over a meaningful activity and content matter that quality is created. Learning must be acquired, or rather meaningfully constructed by the participants in education. For this to happen, the teacher's own understanding of how children develop and learn is critical in quality education. This requires professional knowledge and training of the teacher that is continuous. Children who learn are children who ask and question, even if this is contrary to traditional cultural beliefs about well-behaved children.

Quality education therefore rules out rote learning, memorization and learning without understanding; these are not characteristics of quality education. Interaction in the classroom between the teacher and pupils and between pupils themselves must strive to base itself on mutual respect and common interest in meaningful knowledge production and acquisition. These characteristics of education are major challenges to education, not only in developing countries, but everywhere in teaching and learning contexts. Teacher education and CPD ought to build on analytical work into classrooms to understand what is going on and why and how consequent change of traditional attitudes to education and to children must be promoted. The main point is that teachers are at the front line when quality improvement is concerned. But, how can they continuously learn? In this regard, involving them in action research is one way of addressing the quality problem. For teachers to question their routines, you need to develop reflection. For reflective teachers to be trained, you need also reflective teacher educators. The rapid expansion of the education system may lead to shortened teacher education programmes and churning out of half-baked teachers. It becomes imperative to promote reflective teachers who are reflective about their own teaching styles and methods, their communication with students, their own values and attitudes. This is why “reflection”, “reflective teaching” and “reflective practices” have become a new and useful paradigm for education. The concept of reflective teaching is encouraging you the teacher to be reflective about what you are doing, constantly asking yourself: do children learn, and are they learning that which I try to teach them? If not, why?

Reflective teachers are also in line with Peters' third criterion for good education, that, 'education' must rule out procedures of coercion and rest on a voluntary basis. This criterion opens up for procedures of communication between the learner and the teacher directed at mutual understanding and respect. Nagel (1992) in a study in Zimbabwe found that curricula and formal requirements were up-dated and fine. Classroom practice however, was quite another issue. It was still mostly traditional, repetitious and extremely teacher-centered. The one-way communication in teaching she observed in more than 200 classrooms and 9 teacher training colleges was generally performed at very low cognitive levels, mostly recall and reference to memory. Johannessen (2000) evaluating the Save the Children Norway Basic Education programme in a number of countries established similar concerns. Good classrooms, availability of textbooks and training workshops for teachers on child-centred methodologies did not necessarily result in higher learning achievements. So, what was missing?

Conclusion

As educators, we need to address the quality of education from an educational point of view, not from an administrative or systems approach. We have to ask ourselves what education is all about and what are the hallmarks of good education where children thrive and learn. Education is about human growth and knowledge construction processes. Reflective teachers are important to achieve quality education. For teachers to perform well, they have to be treated well in terms of conditions of service and remuneration. But they also have to be developed through teacher education to learn to take the responsibility for the learning (as well as the failure) of their students, instead of resorting to old-fashioned repetitious teaching methods, a phenomenon found in some classrooms. But in order to

break such habits, initial teacher education and CPD should strive to develop in teachers reflective teaching skills, given the trust that they can change on their own. Action Research offers a possible means to change their practices. The point I am labouring to make is that Action research and promoting reflective practice are possible ways to bring about long needed change in education systems in search of quality education.

Subsequent chapters in this book present the view that teachers should identify the problems in their classrooms by themselves and not be told by others 'what is wrong with them'. The most commonly used approach to improve quality in education, 'delivering training identified as gaps by outsiders', no matter how well meant, is prone to develop resistance by the target group (Nagel, 1992; 2008). This approach is probably the reason why so much short time trainings seem to be wasted and ineffective, since participants have not acknowledged the need for such training (Burns, 2007). Action research helps the teacher identify by themselves what changes they need to do in their teaching. Read on to find out on approaches that demonstrate some lasting changes in classroom interaction and teaching behaviour.

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CHAPTER 2

The Qualitative Research Paradigm

Bornface Chenjerai Chisaka

Introduction

The education phenomenon alongside other social phenomena is being rocked by rapid and unpredictable changes due to the influences of globalization. The education practitioners are, therefore, required to continuously improve on their practices by engaging themselves in social research since their work is primarily social. Social research would enable them to gain understanding and insight in the quality of their clientele's life worlds and subsequently endeavor to improve on provision of services. As social researchers, the education practitioners mainly employ the qualitative paradigm in their studies and education practice.

Definition of key terms

Research is a studious inquiry that involves the generation and analysis of data necessary to solve a problem (Mafora & Lebeloane, 2011). Social research is research about people- their beliefs, behavior, interactions, institutions and so forth (Neuman, 1997). Qualitative research is a multi-perspective approach to social interaction aimed at describing, interpreting or reconstructing this interaction in terms of the meanings that the research participants attach to it (Schulze 2002). The other label that is used for qualitative research is 'fieldwork' research which indicates that it is carried out in the habitat of the participant. Qualitative research can also be referred to as 'naturalistic' research since it minimizes the presuppositions with which the researcher approaches the phenomenon being studied (Schulze, 2002; Mouton, 2001). Therefore qualitative research deals with data that are primarily verbal. It concentrates on qualities of human behavior (Mavundutse, 2010; De Vos, Strydom, Fouche & Delport, 2003).

The theoretical framework of qualitative research

The qualitative research paradigm is embedded mainly in three theoretical frameworks that are namely: phenomenology, hermeneutics and ethnography. Phenomenology requires the researcher to describe vividly or thickly the lived experiences of the participants by using their own words. The researcher is interested in the emic (insider's viewpoints) perspectives of the situation (Chisaka, 2006; Hoberg, 2001). According to Higgs and Smith (2002), hermeneutics is the science of understanding, the art of interpretation and a science of communication. The researcher is expected to systematically analyze and interpret data and to communicate the findings comprehensibly. On ethnography, Hoberg (2002), defines it as the study of a group's (class') culture. The aim of ethnography is to capture, interpret and explain specific aspects of life of a particular group (Neuman, 1997).

Characteristics of qualitative research

Qualitative research has the natural setting as the direct source of data. It is concerned with life as it is lived, things as they happen, and situations as they are constructed in the day-to-day, moment-to-moment course of events. Researchers seek an understanding of the lived experiences in real situations. Researchers go to the particular setting under study because they are concerned with context. Context is the focus on reality considering the physical, intellectual and emotional environment. The environment in which something happens in any research is very important. An action can best be understood where it occurs (Hoberg, 2001). Qualitative research has the researcher as the key instrument. Data in qualitative research are generated by the researcher. The quality of data that are generated depends on what the researcher sees and hears and on his/her interpretations (Nagel, 2010; Hoberg, 2001).

Qualitative research is descriptive. The data that are generated are always in the form of words. The data could be in pictures but some words need to be used to describe the pictures (Bogdan & Biklen, 1999). Qualitative researchers are concerned with the process rather than simply with outcomes, or products. They are interested in how understandings are formed, how meanings are negotiated and how roles are developed. They, for example, want to understand how teachers become effective teachers. In qualitative research, data are analyzed inductively. Abstractions are built as particulars that have been gathered and grouped together. Concepts, insights and understandings are developed from patterns in data. Theory is developed from bottom-up not from top-down. This is referred to as grounded theory (Chisaka, 2009; Bogdan & Biklen, 1992).

In qualitative research, studies are designed and redesigned. All data generation methods are characterized by flexibility. Researchers may modify concepts as the generation and analysis of data proceeds (Shumba, 2009; Burgess, 1998). In qualitative research, data generation and data analysis occur simultaneously. The responses given in an interview can be analyzed and interpreted during the course of the interview. Thus categories and concepts are developed when data are being generated (Hoberg, 2001; Burgess, 1988).

The qualitative researcher considers settings and people holistically. All the features of experiences are attended to. Holism implies context (Sherman & Webb 1990). Thus all the aspects that constitute a context are considered. Qualitative research methods are humanistic. The human aspect is maintained by presenting the data in the words of the participant but not numbers and statistical equations (Taylor & Bogdan, 1984). The people involved in the study are referred to as participants or informants. They should never be referred to as subjects. The term 'subjects' could be used to refer to anything. For the qualitative researcher, all perspectives of the participants are valuable. The perspectives of the child, teacher, head of school and parent all contribute to a better understanding of the teaching-learning problem in the classroom being studied. Thus there is triangulation of sources (Hoberg, 2001). Triangulation in this context is the use of more than one source for generating data. The purpose of triangulation is to improve trustworthiness of the data generated.

The qualitative researchers emphasize on trustworthiness in their researches. They are aware that they may have some effects on the participants, thus they try to find a close fit between what participants say and what they actually do. They make some probes whenever they are skeptical of the responses given. Trustworthiness is also enhanced by focusing on operational definitions rather theoretical definitions of the constructs that are included in the study. An operational definition is the process of defining a construct in measurable terms (Schulze, 1999). For example in the study that involves the construct 'effectiveness' of a teaching method, the aspects in the operational definition are; performance of the pupils in an oral or written exercise, retention of the content learnt, time spent for a thorough mastery of content and the interest learners show during the learning exercise. Qualitative research is a craft. The paradigm requires the researcher to practice the data generation methods. The researcher has guidelines to follow but never rules. No researcher can ever become successful in the generation of data without an enormous amount of rigorous practice and continual submission to very tough criticism by other qualitative researchers (Brookfield, 1985).

Data generating methods in qualitative research

There are four main data generation methods in qualitative research. These are; observations, interviews, focus group discussions and document analysis.

Observations

The observation method is comprehensible when one considers Halcom's counsel on observation as cited in Shumba (2006: 3). It goes as follows:

> Then, my children, you must go out into the world. Live among the people of the world as they live. Learn their language. Participate in their rituals and routines. Taste the world. Smell it. Watch and listen. Touch and be touched. Write down what you see and hear, how they think and how you feel. Enter into the world. Observe and wonder. Experience and reflect. To understand the world you must be part of that world while at the same time remaining separate, a part of and apart from. Go then, and return to tell me what you see and hear, what you learn, and what you come to understand.

Halcom's counsel describes the activities that the observer should be engaged in. Observations range across a continuum from mostly observation to mostly participation. The researcher could be a complete observer or an observer-participant or a participant-observer or a complete participant depending on the prominent role that he/ she would be playing. The complete observer has little or no interaction with those being studied. For example the

researcher may observe children in the playground. The observer sits on a vantage point with notebook in hand, jotting down all the activities particular children are involved in. The children being studied are often unaware that they are being observed. The researcher can capture all the activities that the children are involved in by means of a video camera.

When the researcher is an observer-participant, he/she remains primarily an observer but has some interactions with the study participants. For example when a teacher-researcher invites colleagues to observe his/her teaching, these colleagues who sit at the back of the classroom taking notes are the observer-participants. The presence of these colleagues of the researcher influences the behaviors of the teacher-researcher and the pupils being taught to some extent. When the researcher is a participant- observer, he/she interacts intensively with the participants. For example the teacher-researcher when teaching his/her class, is a participant-observer. He/she interacts intensively with the class but at the same time observes the pupils' behaviors.The researcher who is a complete participant is completely involved in the work that he/she is doing. For example the teacher who is researching on on-practice is a complete participant. The position of the researcher on the participant-observation continuum depends on the problem being researched, the context of the study and the theoretical framework of the research. The researcher can change from one stage of the continuum to the other depending on the prevailing context.

Observation notes should be both descriptive and analytic or reflective. The observer should write some thick descriptions of the events that happened. In other words the researcher should give a word-picture of the setting, people, actions and interactions that were observed (Mamvuto, 2011). Thus the researcher should strive for accuracy in recording detail but at the same time avoiding being judgemental. He/she should make sure that the notes he/she makes will enable him/her a year later to visualize the moment, the person, the setting and the day (Hoberg, 2001). For example, after observing a class, one could be tempted to write, "The class was in chaos". This statement does not portray a clear picture of what was happening in the classroom. It is judgmental because it relies on the researcher's conception of "chaos". A more vivid and picturesque description should capture as much detail as possible about the context- (physical environment, activities, interactions among members of the environment) (Mamvuto, 2011). The observer should capture detail about; who was observed, by whom, where, when, doing what. An example of a thick description of an observation made is as follows:

The grade six class had 28 girls and 24 boys. Girls had split into two groups and boys into three groups. In one of the two groups of girls, six girls were sitting on the floor in a circular arrangement. They were playing a game with stones. The other girls stood clapping their hands cheering up the players. The other group of girls was singing a church lyric and three girls were competing in a dance. Six boys were playing with a tennis ball in the south-eastern corner of the classroom. The second group of three boys was playing with their toy cars. The larger group of boys had two boys imitating a fight they had witnessed between their teacher and his wife. The other boys in the group were watching, standing on the bricks demarcating the "learning centre".

The observer should avoid 'vague' adjectives at the description stage such as *many* or *some*. He/she also should avoid words that convey an evaluative impression - that obscure rather than clarify issues. Examples of such words are overwhelming, interesting, good, etc.

Analytic notes are the observer comments. For the analytic notes, the researcher writes down feelings, jots down ideas and impressions, clarifies earlier interpretations, speculates about what is going on, and makes plans for subsequent observations. Analytic notes are a product of the observer's reflections on the observation notes. The analytic notes about the initial observations are very handy in the development of observation checklists.

Interviews

After observations, Halcom as cited in Shumba (2006: 4) then advises,

> "You are ready now to return to the world, this time without the vow of silence. Go forth now and question. Ask and listen. ...If you ask and listen, the world will always be new".

The advice is about generating data from interviews. Interviews are the predominant method of generating data. Researchers interview because they are interested in other people's stories. Stories are important to the researcher since they are a way of knowing. "The root of the word story is the Greek word 'histor' which means one who is wise and learned" (De Vos et al, 2003: 292). The quotation implies that the interviewees are wise with regards to the subject under investigation. The researcher should therefore try to get as much information about the interviewee's stories as possible.

The research interview can be defined as a two-person conversation initiated by the interviewer for the specific purpose of obtaining research-relevant information (Hoberg, 2001). It is the method of generating data through direct verbal interaction between individuals. The types of interviews that can be used are; structured, unstructured and the non-directive interview. The structured interview is the one in which content and procedures are organized prior to the interview. Every necessary detail for example; wording of questions, sequence of questions and timing of the interview are scheduled in advance. In contrast to this is the unstructured interview which has greater flexibility. The research purpose guides the questions asked but the content, sequence and wording of the questions are determined by the situation (Hoberg, 2001). In the non-directive interview there is minimal control of the interview by the interviewer. The interviewee has freedom to express his/her views as fully and as spontaneously as he/she chooses or is able.

Focus group discussions

Focus group discussions can be defined as the group discussions in which six to twelve participants talk about a topic of special relevance to a study under the guidance of the researcher who plays the role of moderator. "Sometimes [focus group discussions] can be an observation group that come together to discuss views and observations" (Matiure, 2011: 4). The discussions that are held by the student teacher-researcher, the mentor, fellow students and other teachers who come to observe the student teacher-researcher teaching are an example of the focus group discussions described above.

The informal group situation and the largely unstructured nature of the questions asked for the focus group discussions encourage the participants to disclose their behavior and attitudes they might not disclose during individual interviews. Participants tend to feel more comfortable and secure in the company of people who share similar opinions and views than in the company of an individual interviewer (Hoberg, 2001). During the focus group discussions, the participant may comment on the responses of other participants, ask other participants some questions or respond to comments by others, including the interviewer (Ferreira & Puth, 1988). The focus group discussions should be small enough for all the participants to have the opportunity to share insights and big enough to provide diversity of perceptions.

Before the discussions, the researcher should attempt to create an atmosphere of trust, friendliness and openness by having a purposeful small talk with the participants. The talk can be about how the discussions would be carried out.

To ensure that the discussion flows, the researcher should encourage all members to speak. The researcher should also ask some follow-up questions or probes. A probe is used to elicit additional information when participants make vague comments or simply say "I agree". In such cases the researcher can ask; "Can you please tell us more", "Could you please share experiences that made you feel that way?" and "I don't quite understand. Can you explain what you mean?"

Document analysis

Document analysis is basically content analysis. Content refers to words, pictures, symbols, ideas, themes or any message that can be communicated. The text is anything written, visual or spoken that serves as a medium for communication. Text includes books, newspapers, official documents, video clips, musical lyrics, photographs and arte facts (Neuman, 1997). The artifacts that are created in a teaching-learning situation that can be used for research purposes are written assignments by the pupils, artwork and musical lyrics. The teacher-generated artifacts are lesson plans and peer review reports (Hendricks, 2006).

When the documents such as the ones mentioned above are studied and analyzed for the purpose of scientific research, the method of document analysis as a data generation method becomes operative (De Vos et al, 2003).Document analysis could both be a primary and a secondary data generation method. It is a primary data generation method when the documents being analyzed were created not as transcripts of other data generation methods. For example the analysis of artifacts created by the pupils is primary document analysis. Document analysis is secondary when documents under study were compiled from other methods directly aimed at generating data about a particular study. For example the analysis of interview transcripts is a secondary document analysis data generation method (the interview is the primary data generation method).

Conclusion

This chapter has tried to give a synopsis of the qualitative research paradigm. Qualitative research is characterized by the interpretive nature of phenomena. All designs under the paradigm are therefore interpretive. The four main methods of data generation entail use of interpretive analysis techniques as well as overall perception of qualitative research.

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CHAPTER 3

Action Research And Educational Practice

Prof. Bornface C Chisaka and Moses T Mukabeta

What is Action Research?

To understand the relationship between action research and classroom practice, it is necessary to examine the meaning of the concept, "action research." Action research is an attempt to address one's own shortcomings through a process of systematic investigations. The systematic investigation represents systematic reflection on one's own actions. It is not a research methodology itself. It is an approach to action that employs research techniques in the process of finding a solution to a problem. Actually Action Research is a research design within the qualitative methodological paradigm of research. The philosophy and principles employed in action research, are phenomenological and *not* positivist. The research thrust is *inductive* and *not deductive*. Hopkins (2002:42) says, "Action research combines a substantive act with a research procedure; it is action disciplined by enquiry, a personal attempt at understanding while engaged in a process of improvement and reform."

Kemmis (1983 in Hopkins, 2002:43) goes on to say, "Put simply action research is the way groups of people can organize the conditions under which they can learn from their own experiences." There are only two traditional research methodologies available to researchers. These are the quantitative and the qualitative methodologies. The reader may ask, if action research is not a methodology, what then is a methodology? The third methodology is what is called, "mixed", which combines quantitative and qualitative methods, and is informed by the pragmatic philosophy. This "methodology" is still being contested in some research circles, since it has no independence of its own. Therefore in this chapter, we operate on the assumption that there are two methodologies, the quantitative and qualitative methodologies, which are familiar to most researchers.

We would like to support Guba and Lincoln's (1984:158) suggestion that a methodology assumes "overall guiding strategies" for research. To us, guiding strategies for research would include the philosophy informing the research endeavor. This means how the researcher reads and interprets the world around him/her. For example, the quantitative methodology is informed by positivist epistemology which views reality as being capable of being verified objectively through numbers and statistics (Nherera, 1999). The qualitative research methodology, on the other hand, is informed by the phenomenological epistemology, which accepts that reality is in essence, subjective, and that therefore human beings are capable of giving meaning to their own experiences instead of outsiders giving meaning to their own existence. The methodology is characterized by "participant observation and in-depth interviews" in the generation of data, and "non-mathematical and statistical procedures" in data analysis (Nherera, 1999: vi). The quantitative research methodology on the other hand, is based on highly formalized data collection and analysis methods, the typical example being "social survey experiments with control groups or structured observation" (Chilisa & Preece, 2005:183). (Note that, in the qualitative research methodology, data are not collected or gathered. Data are generated, because the process involves developing a hypothesis or a theory through the active interaction of the researcher and the participants).

What should be pointed out is that some may not see the difference between methods and methodologies. The methods are "tools and techniques", while the methodology is the overall guiding strategy of research (Guba & Lincoln, 1989:158). In the quantitative methodology, research is carried out through research designs, while in qualitative research, the equivalence of these designs are called "research methods".

Confusion also may arise when there is failure to distinguish between research methods and research data. Data, according to The Concise Oxford Dictionary (1990:294, reprint) are "known facts or things used as a basis for inference or reckoning." With respect to quantitative methods, data are in the form of quantities or numbers. According to Altrichter, Posch and Somekh (1993:27) quantification of data in the quantitative methods may be preferred because "numbers are much easier to handle than words" and it is also easier to generalize findings on a sample to a bigger population.

In the qualitative methods, data are mainly in the form of words. Numbers can be used here, but they do not form the basis of inference or interpretation of findings. Take the doctoral studies of one of the writers where he studied the principles and practice of ability streaming in Harare secondary schools (Chisaka, 2000). In one of the sites of his study, he had the head, the deputy head, four teachers and two classes (each of about 40 learners), giving a total of more than 80 participants. But this number was not for the purpose of analysis and inference to generalize to a bigger population. Since the study was qualitative, the data that were generated were what these participants articulated in words in the in-depth interviews, in focus –group discussions, in informal conversations and the detailed observations recorded by the researcher with regards their interactions and daily practices. Why is this valid or interesting? Yes, because it adds to our pool of knowledge and this is important in qualitative research.

Where is the above discussion taking us to? The debate during the writers' Action Research training of the Masvingo Save the Children Norway-Zimbabwe participants (2005-2009), centered on whether action research could be done through the use of a combination of the quantitative and qualitative research methodologies. Our response to this debate centered on what appears to be the confusion between methods and methodologies, and between the latter and forms of data. In our view, action research is really a method of research that is located squarely within the qualitative paradigm, as we argue in the following paragraphs.

Quantitative methodological tools and techniques ("methods" or designs) are "surveys and experiments with control groups and structured observation" as suggested by Chilisa and Preece (2005:185). The main focus in these methods or designs is to "establish causal relationship" (Chilisa & Preece, 2005:183). The question being asked here is, what is causing a particular occurrence? There is always a reference point to past similar occurrences and therefore there is a priori theory or hypothesis, or assumptions. The researcher tries to locate the research problem within existing theory or hypothesis. Past occurrences are the guide to the researcher in this methodology. Data collection is under strict formalization to achieve validity and reliability. Analysis of data is in the form of statistical measurement. According to Chilisa and Preece (2005), Nherera (1999), and Saunders, Lewis and Thornhill (1997), the nature of quantitative data is that they are large-scale, they have to be representative and in fixed patterns. The analysis of data here is premised on historical precedence or past experiences.

When we come to the qualitative methodology and its tools and techniques of collecting data, the form or nature of data, and the analysis of that data, we see a different picture altogether. The qualitative research techniques and tools are naturalistic (Guba and Lincoln, 1989). The purpose of qualitative or naturalistic research is not to test a theory or hypothesis. It is to explore, to generate, or to evolve or develop a theory from the researcher's data. This is the phenomenological epistemology of naturalistic research. The focus of the researcher's problem is why things or phenomena are occurring in the manner they are. The starting point is not a hypothesis or assumption. The focus is on discovering what is behind a particular occurrence within the context of that particular environment. Emphasis here is on specificity and not on generalizability. The phenomenological perspective is that, although there may be some universality, there is always uniqueness to every environment.

With reference to the nature of qualitative data, these are always on a small scale, they would be localized and go much deeper in terms of detail since these would be expressed and articulated in word form. (Chilisa & Preece, 2005). Analysis of qualitative data is in the form of interpretation, in thick and reflective explanations and not statistical measurement. Therefore, if we examine the philosophies informing the quantitative (positivism) and qualitative (phenomenology) research methodologies, we find a big chasm between them. One is saying all reality is objective and measurable quantitatively and anything that cannot submit to this measurement does not exist. The other says all reality is subjective and is influenced by the perceptions of those who experience it. Therefore according to the latter philosophy, reality is always in two forms, that is the form of internal or local perceptions (the emic perspective) and external perceptions (the etic perspective, which represent the meaning the outsider or researcher would attach to local perceptions).

The techniques or methods or designs are different, direct what kind of approach(es) to use in the researches or studies. Actually one of the major distinctions between the two is that, one employs research designs (quantitative

methodology), while the other employs research methods (qualitative methodology). One generates data, and the other collects data. Even analyses of data are not the same. One is strictly formalized, structured and controlled (quantitative) while the other is flexible and naturalistic in the sense that it focuses on specificity of reality and rejects its universalization (qualitative). The nature of data itself clearly separates the two methodologies. The one form is large scale, representative and is characterized by fixed patterns or categories (quantitative). The other is localized, deep in detail but is small-scale in nature and is specific to the environment of the study (qualitative). The analysis of the one (quantitative) is deductive and summative and in the form of measurement, while that of the other (qualitative) is inductive and formative, since it is continuous and on-going, and is prolonged on site and ultimately interpretive.

What is then the Relationship between Action Research and Classroom Practice?

Action research really focuses on the action of the researcher, whose interest would be to address a negative situation with a view to make it positive. In education, this relates to a practitioner who would want to address his/her perceived failures to achieve a goal, which goal would be effective teaching and learning and therefore achievement of a good pass rate among learners. The focus of action research is really the self (if it is a problem of one practitioner) or selves (if it is more than one practitioner). Hopkins (2002:42) says, action research "is action disciplined by enquiry, a *personal attempt* (our emphasis) at understanding while engaged in a process of improvement and reform."

Altrichter, Posch and Somekh (1993), also take the same stance that action research focuses on the practitioner's or practitioners' effort(s) to improve or reform a situation. Stephen Kemmis (1983 in Hopkins, 2002:43) defines action research as "a form of self-reflective enquiry."What all this means is that the research focuses on the researcher, in this case the teacher, who also at the same time becomes the *researched*. Therefore, the researcher/teacher will be researching the "self". Typically the research question would read *either*, "What can I do to change or improve the performance of my learners?" *or* "How can I improve the performance of my learners?" *or* "What is it that I am not doing to make the learning environment conducive for all my learners?"

The purpose in action research is for the researcher/teacher to turn on *own* effort and energies to change a situation. There is no externalization of a problem here. The researcher/teacher turns to self for *research* and *action* at the same time, the *action* being informed by *research*. As Schon cited in Zeichner and Liston (1996:12) would put it, action research could be said to be enquiry and action that assists the teacher/practitioner to "reflect both "in" and "on" action." This would imply that action research is different from ordinary or traditional research. This is a radical approach to both action and research enquiry. Here, one is in practice and at the same time one wants to understand one's own practice and change it for the better. *Action* here represents *practice*, while *reflection* on that action represents *theory*. So action research therefore, is a radical approach to *marry theory* to *practice*. The purpose of action research in the practice of education is to enhance the teaching skills and knowledge of the classroom practitioner. It is to make the practitioner a more dynamic and versatile facilitator of learning through developing his/her systematic reflective skills.

It should also be understood that action research does not start from assumptions or a priori theory. It is empirical and inductive. The researcher/teacher would start with doubts or questions on his/her interaction with the didactical environment. The doubts or questions would be resolved in the process of enquiry and action, that is, during reflection on action and in action. The whole process amounts to reflection for action, where insights gained would be used to improve, reform or correct a negative didactical situation. The methods used in the generation and analysis of data in action research are prolonged observations, formal and informal conversations, focus group discussions, in – depth interviews and document study. These are also the methods of the qualitative research methodology itself, thus locating action research among qualitative research 'designs.'

Action Research Principles and Practices

Extract from a Case Story:
"…As a class teacher, QEP (Quality Education Project) has helped me to seriously reflect on my teaching practices. It has enabled me to identify problem areas in my teaching and correcting deformities in my instruction delivery. I have ceased to transfer all the blame on my pupils, the administration and parents when my pupils fail to perform. But, I have rather (begun) to see myself as part of the problem and readily labour to identify the problem areas,

understand them and seek the solution myself". (Kenias Janyure, Bikita Quality Education Project, QEP reflecting on what he benefited from this project, September 2007).

The above reflections by Janyure capture the focus and essence of action research as a research tool and its principles and practices. The critical issues in action research are that, it is research for action, it is "research that is practical, directed at (researcher's) own concerns" (Bogdan & Biklen, 1992: 223). Janyure talks about reflection on the classroom challenges he faces, which reflection makes him to seek solutions to those challenges. Note that he says that he now has to own the problem of his classroom practices. He takes it upon himself the labour to investigate these problems, focusing on "self" i.e. what he can do to overcome these problems.

He however, seems to treat the source of the problem as being social with himself as being " part of the problem" i.e. this means that, while he considers himself part of the problem, hence the solutions to the problems, he has to involve the significant and relevant other stakeholders in coming up with solutions. These others are the learners, the school administrators and the parents.

Action research can be used to investigate problems in the classroom (didactical problems) that directly impact on teaching methods and techniques of the classroom practitioner (Oliva, 1991). It can also be used to determine teaching techniques which are more effective than others. And yet it can also be used to investigate causes of some challenges which may go beyond the classroom, e.g. the existence of slow learners, or non-performers or delinquent behavior.

Action research is in fact, focused on a "local problem in a local setting …" (Leedy, 1997). What this means is that, action research does not fall within the general framework of positivist thinking, represented within and informing the quantitative research paradigm, which first visits general theories and past experiences, before focusing on the particular. In other words, it is not deductive (starting from the general and moving on to the particular), but it is inductive (starting from the particular and moving to the general). This is why it falls within the framework of the qualitative paradigm of research (informed by the phenomenological philosophy). In that sense, it becomes applied research.
The aim of the action researcher in education is to take "professional responsibility for what goes on" in the classroom (Altrichter, et al, 1993). As a professional educator, your objective should be to achieve what you have set yourself as an ultimate goal-in this case, that learning should take place. And if learning is not taking place you want to determine the source of the deformities from the context of the "self" contributing factors that Kenias Janyure alludes to, and then determine appropriate remedies.

It should be noted that in action research, there is self-ownership of the problem of research-there is no externalization of a problem. One has to take into account not only professional responsibility but personal responsibility of the problem. The purpose of action research in education is to inquire into a perceived didactical problem, to develop an understanding and appreciation of the problem, to evaluate the perceived factors, and to effect change (Bassey, 1999).

In all these processes of action research, critical reflection should be the driving force. The action researcher has to read or give meaning to the emic context, in the process, re-organizing or restructuring the teaching and learning dynamics.

The sources of action research are usually the reflective observations the practitioner makes on the day-to-day events of the teaching and learning environments i.e. the didactical experiences. This is what makes it inductive-you start with the particular, and therefore there is no need for literature review, which seeks to situate the problem within existing general theory around the problem.

Conclusion

What this chapter sought to demonstrate is the nature of action research, particularly with reference to educational practice. The argument is that, action research is a classroom dynamic that marries theory to practice, and that also converts the teacher into a researcher, who systematically reflects on his/her own practice with the sole purpose of improving that practice. The practitioner becomes author of change to his/her practice. The practitioner ceases to rely on conventional theories of behavior and practice, but becomes creator or modifier of theories that guide him/her in own practice. The focus of action research is on changing the practitioner's beliefs, values and practice in the context of his/her own work environment. Change and development are the focus, and not retention of the status quo.

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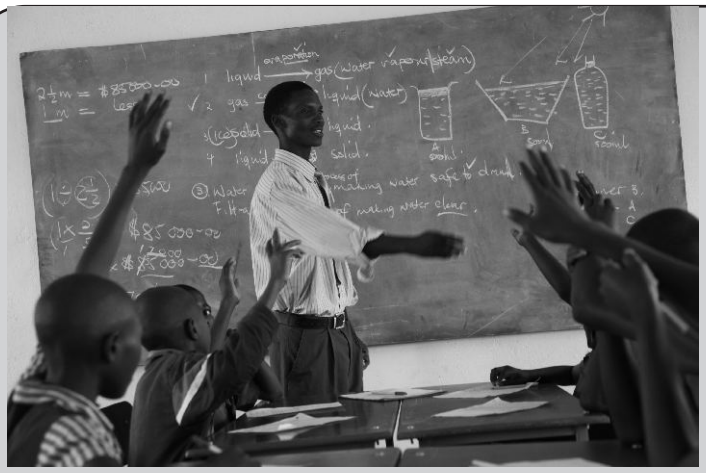


CHAPTER 4

Action Research: A Reflective Practice

Tamuka Shumba and Davison Zireva

Introduction

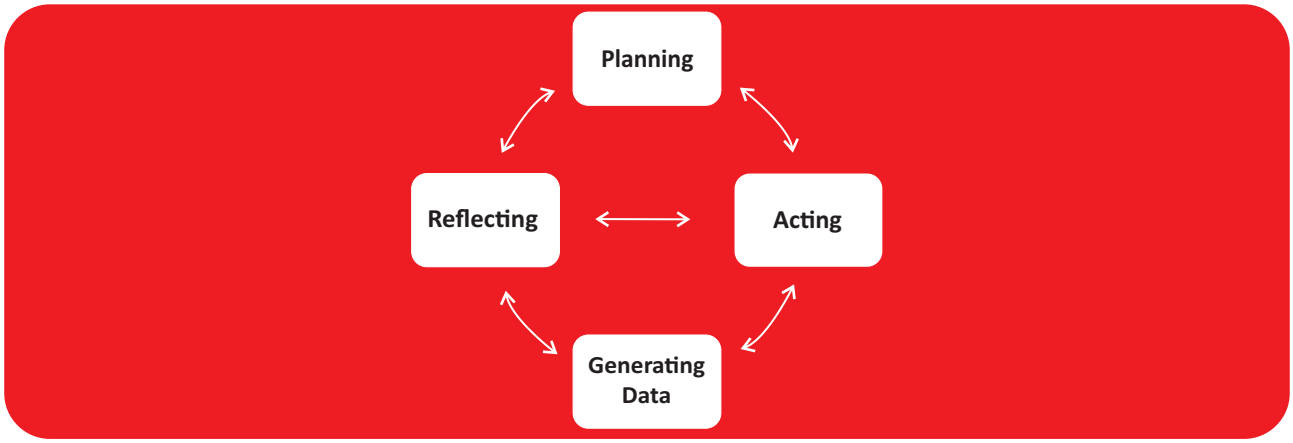
Action research has been part of educational work in the United States for over 50 years. Cohen and Manion (1996 in Hoberg, 2001) consider action research as a small-scale intervention in the function of the real world and a close examination of the effects of the intervention. An intervention is made when there is a problem that has to be alleviated or at best completely solved. Action research thus focuses on solutions to the problems encountered by a practitioner in his /her work. The practitioner identifies a practical problem in his/her working environment and applies different research techniques to try to solve the identified problem. Action research is thus a form of applied research.

Definition of action research

A widely accepted definition of action research is given by Kemmis and Mc Taggart (1988:05), as "Action research is a form of collective self-reflective inquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social or educational practices and the situations in which these practices are carried out." Thus action research bridges the gap between practice and research so that the educator becomes an educator-researcher (Hoberg, 2001). It is therefore perceived to be the most effective form of research for professional development (Hendricks, 2006; De Vos et al, 2003; Hoberg, 2001; Zuber-Skerrit 1992). In action research, the educator-researcher tries to find a solution to his/her problem by means of cycles (never only one) of planning, acting, data generation and reflection.

Action research cycle

We propose to show the action research cycle in the diagram below. While there can be more components of the cycle, there are 4 key ones, namely: planning, acting, generating data and reflecting.



Planning is the most common stage described by theorists. However there is no agreement on the position of this stage. Cohen and Manion (1994) regard it as the first stage. Ebbutt (1983) and Stringer (1996 in Schulze, Kamper,

Mellet & Smit, 2002:58) place planning a little further down the sequence of activities. The disagreement is a trivial issue since cyclical events can be started at any point. Schulze et al. (2002: 58) point out;

> ... Action research is not a neat, orderly activity that allows participants to proceed step by step to the end of the process. People will find themselves working backwards and forwards through routines, repeating processes, revising procedures, rethinking interpretations, leapfrogging steps or stages and sometimes making radical changes in a different direction.

In the planning stage, the researcher should consider the following aspects:

- the people involved and their contributions;
- deciding on the main question and the determination of the severity of the problem;
- deciding on how data are going to be generated;
- deciding on the research procedures such as sampling, crafting of research instruments, administering of the research instruments and acquiring of materials like audio recorders and video recorders; and
- deciding on the means of solving the problem.

In the acting stage, the plans are put into practice. The researcher could be involved in the following activities:

- framing the problem in context. The researcher does not have to begin with a problem. All what he/she needs is a general idea that something might be improved (Schulze et al 2004);
- performing a scholarship review. The researcher should learn from other scholars about, the crafting and administering of instruments and analyzing of the data generated;
- designing intervention programs (lesson plans that are meant to help in the solving of the identified problem); and
- implementing the designed intervention programs.

Data generation is the "research" portion of action research. The appropriate instruments (tools) should be used to generate data that are trustworthy. The following are the different research instruments for the different data generating methods.

Interviews

For the unstructured interviews, the researcher should have an interview guide with a list of the aspects that the interviewees would be interviewed about. For the structured interview, the researcher should have an interview schedule with a list of the questions which the respondents would be asked.

Observations

For the initial observations, the observer should have an observation guide with the list of aspects that the observer would look for about the behaviors of the participants.

For the subsequent observations, the observer should have an observation checklist with a list of behavior traits that should be observed. The observation checklist for qualitative research should be concerned more with how behaviors were performed than the frequency of the behaviors. For the development of checklists, Matiure (2011) proposes that the researcher should:

- identify standards for observable behavior for example participation levels, performance standards; and
- create indicators and should ensure that they describe the observable behaviors for example; raising hands, leading discussions.

Focus group discussions

The first focus group discussion session needs a flexible focus group interview checklist. The first session is some sort of a pilot discussion. The researcher gets some insights on the scope of the questions. The questions may need to be modified in the subsequent sessions depending on the responses given. The subsequent focus group discussion sessions have a bearing on the initial interview checklist but could have some amendments that are in response to the cropping up problems.

The reflecting stage is central to the action research cycle. Though it is placed at a particular stage in the cycle, it is done continuously during and after every stage of the research cycle. Reflecting is when the researcher examines, constructs, evaluates and reconstructs his/her concerns (King & Nel 2002). In other words the researcher analyses and interprets the data generated.

The term reflection is derived from the Latin words “flecto” and “flex” which mean, “bend”. From the context of research work, “bend” means to interpret an experience in order to find meaning. Boud, Keogh and Walker (1996) point out that reflection is the processing of experience – where experience consists of the total response of a person to a situation or event (what one thinks, feels, does and concludes at the time and immediately thereafter). The situation in this context is a teaching-learning one. Reflection is thus an important human activity, in which an individual recaptures his/her experience, thinks about it, mulls it over and evaluates it. Hoberg (2001) postulates that reflection is a mental activity concerned with data analysis and data interpretation. The definition by Hoberg is focused on reflection as a stage of the action research cycle. Nitko (2001) posits that reflection is thinking critically about one's beliefs and actions. Steyn, McDonald, Van der Horst, Louber, Niekerk, Kamper, Schulze and Dreyer (2004) define reflection as a detailed evaluation of an experience that has focus on strengths, weaknesses, opportunities and threats. Some researchers refer to this as the SWOT analysis. The definition operationalizes reflection into activities that constitute it.

Moon (1999) as cited in Chisaka (2006) assert, “Reflection is a mental process with purpose and/or outcome that is applied to relatively complicated or unstructured ideas for which there is not an obvious solution”. Some academics use some metaphorical language like “to ruminate” to describe what reflection entails. In ChiShona the words “kuzeya” and “kugaya” are synonyms of the term reflection. The reflection process has basically three components. These are returning to experience, attending to feelings and re-evaluating experiences. Returning to experience is the recollection of the salient events. The initial experience is replayed in the mind or recounted to others. The replaying of the experience in the mind's eye enables the emergence of details which were ignored at the time of the experience or only noted in passing. One can even commit the descriptions of events to paper. The description makes one realize what his/her feelings were and the responses which prompted him/her to act in the way he/she did (Boud et al 1996). For example, after a Math lesson, a student teacher thinks about writing an evaluation. The student teacher replays his/her experience when; planning for the lesson, introducing the lesson, organizing media and learning activities and concluding the lesson. Replaying the experiences enables an evaluation of the lesson that focuses on SWOT analysis.

Attending to feelings has two aspects that are utilizing positive feelings and removing obstructing feelings. Positive feelings can be enhanced through attending to situations in which one was successful or in which one felt good about the experience. According to Boud et al (1996:36), “Removing obstructing feelings is a necessary precursor to a rational consideration of events”. Negative feelings about something, would cause some stress and impact negatively on one's rationality. Obstructing feelings can be removed by laughing through an embarrassing incident. Some researchers can discharge them through writing.

Re-evaluating experience is a process with four stages which are; association, integration, validation and appropriation. Association is relating of new data to that which is already known. New data can challenge the researcher both intellectually and affectively. Reflections at this stage can lead one to the discovery that his/her attitudes are no longer consistent with new ideas and feelings and that earlier knowledge needs modifying to accommodate new ideas (Boud et al 1996). Integration is selecting relationships among data. There are two aspects of integration. Firstly, it is the seeking of the nature of relationships that have been identified through association. The second aspect is drawing conclusions and arriving at insights into the material, which one is processing.

Validation is to determine the authenticity of ideas and feelings, which would have emerged. One of the techniques which aid validation is mental rehearsal. One can rehearse how ideas can be put into practice. This can be done through simulations. Appropriation is making knowledge one's own. New information which has been integrated needs to be appropriated in a very personal way if it is to be one's own.

Reflection is not an end in itself but a means to an end – the end being refined action. Refined action may include, according to Boud et al (1996:37):

- a new way of doing something;
- the clarification of an issue;
- The development of a skill; and
- The resolution of a problem.

Refined action is actually an outcome of reflective practice.

Reflective practice

One of the chief exponents of reflective practice is Schon. According to Schon (1983) as cited in Zeichner and Liston (1996), reflection is considered in two time frames, which are reflection-in-action and reflection-on-action. "In the teaching-learning situation, reflection-on-action occurs before a lesson when we plan for and think about our lesson and after instruction when we consider what occurred" (Schon 1983 in Zeichner & Liston, 1996:14). Reflection before action implies that some mental rehearsals of the lesson based on technical rationality occur. The educator would have assumptions that what would have transpired in a situation prior to the current situation would likely happen in the current situation. Reflection after instruction enables the educator to learn something from his/her experiences.

Reflection-in-action occurs during the course of instruction. When the practitioner encounters a problematic situation during teaching, he/she tries to correct the situation on the spot. The practitioner thus attempts to frame the problem and to solve it there and then.

In addition to Schon's time frames of reflection is reflection-for-action. "Reflection-for-action [is] thinking about thoughts and actions to plan for the future" (Shumba, 2006). Reflection-for-action is thus closely linked to action research since it is done for the express purpose of research.

Reflective practitioners

The reflective practitioners have the appropriate orientation for the creation of knowledge-in action. They are already in the 'laboratory' of creating knowledge that is the classroom. Reflective practice thus signifies that the generation of knowledge is not the exclusive property of universities and research and development centers. Teachers in their classrooms can also create knowledge. The practitioner who engages in reflective practice exhibits particular attributes in his/her professional practice. According to Zeichner and Liston (1996:6) a reflective practitioner:

- examines, frames and attempts to solve the dilemmas of classroom practice;
- is aware of and questions the assumptions and values he/she brings to teaching;
- is attentive to the institutional and cultural contexts in which he/she teaches;
- takes part in curriculum development and is involved in school change efforts; and
- takes responsibility for his/her own professional development.

When one indulges in reflection and action to improve on his/her own practice, he/she is doing action research. Action research thus requires a dialogical relationship between reflection and action. "Action without reflection is one sided. Without reflection, we do not learn from our experiences. .... Reflection without action does not produce change" (Hughes, Ndonko, Quedurago, Ngum & Popp, 2004 in Shumba, 2006: 3). One of the important terms that are intertwined with reflection is interpretation. The reflective practitioner should be able to interpret his/her experiences.

Interpretation

The term interpretation is derived from the Latin word, 'interpres' which means 'explain'. In the context of research work, it means explaining the meaning of research data. Neuman (1997:335) posits, "The word interpretation means the assignment of coherent meaning." Neuman goes on to say that the researcher interprets data by giving them meaning and making them understandable.

> Interpretation involves the synthesis of one's data into larger coherent wholes" (Mouton, 2001: 109). Synthesis is the process of building up separate elements, especially ideas into a connected whole (Schulze, 1999). The whole is better understood when one is aware of how the constitutive parts interact and influence each other. Thus interpretation of data is done after an analysis of the data (Neuman, 1997:335).

Neuman (1997) posits that the meaning the researcher gives begins with the point of view of the people being studied. The researcher thus interprets data by finding out how people being studied see the world, how they define the situation, or what it means to them. This stage of interpretation is referred to as the emic interpretation (Hoberg, 2002; Chisaka, 2009). The researcher should thus consider the principles of phenomenology. The emic

interpretations are the first–order interpretations and their aim is to learn the meaning of social behavior of the people being studied as interpreted by the people themselves. The researcher ascertains the personal reasons and motives for the actions performed.

The researcher's discovery and reconstruction of first-order interpretation is the beginning of the second-order interpretation. The researcher elicits any underlying coherence or sense of meaning in the data. The researcher thus gives his/her own meaning of the data. This interpretation is known as the etic interpretation (Hoberg, 2002; Chisaka, 2009).

Summary of points

Our summary is that, the sum total of action research can be captured as follows:

- That it stems from practical questions that arise while engaged in practice;
- That it is undertaken by a practitioner in a specific education setting;
- It assumes that the natural surrounding in which the problem occurs is the best place to study the problem;
- That its driving goal is the solving of immediate problems;
- That it requires local evidence to support claims;
- That it employs numerous and appropriate qualitative methods to solve the problem at hand;
- It makes no distinction between the practice being researched and the process of researching it;
- It involves reflection by the action researcher as well as the group of colleagues, thus action research is both an individual undertaking and a partnership; and
- Its sample is unrepresentative but typical.

(Tomlinson, 1995 in Hoberg, 2002).

Conclusion

This chapter has attempted to locate action research in the qualitative paradigm. An attempt was made to define the research approach with emphasis on its cyclic nature. While there are four main dimensions to the cycle, there is constant reflection at every stage. In action research, we talk of generating data. As one engages in self reflection and implementation of intervention strategies data are constantly generated. In the chapter we also attempted to give contextual definition of critical terms associated with action research. These are reflection, reflective practice, reflective practitioners and interpretation. Proper conceptualization of the terms is critical to understanding the research paradigm.

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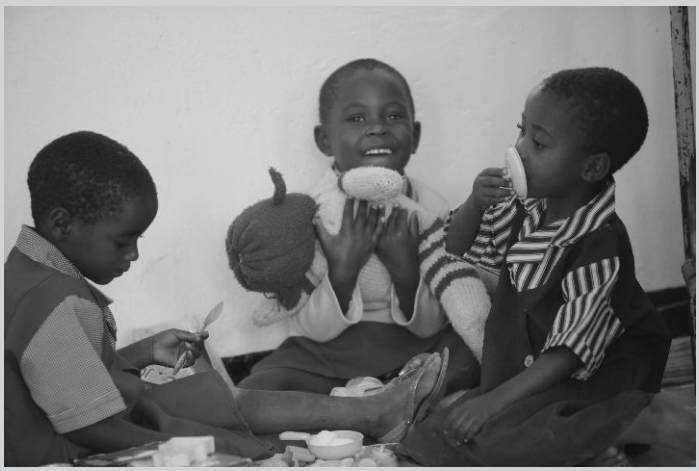

CHAPTER 5

Knowledge Construction Through Action Research

Dr. Attwell Mamvuto

Introduction

Knowledge is a social construct that is generally taken for granted and yet when one seriously considers its meaning, one finds the term difficult to conceptualize. Similar philosophical concepts such as color, fire, shadow and laughter require an inquiry mind that can only put forward epistemological views that initiate further deconstruction than providing definitive standpoints. This chapter examines the notion of knowledge in the context of action research. Firstly it attempts to broadly conceptualize the construct and then tries to locate it within the qualitative paradigmatic methodology of action research. The aim is to see how action research as a methodological approach can be a source of both conveyed and tacit forms of knowledge for teacher researchers.

What is knowledge?

Before we delve into discussing the idea of creating or constructing knowledge through action research, it is important to examine the meaning of the concept, *knowledge*. This, in itself is a problematic concept. Universities call themselves, *knowledge communities*, and by so saying, they imply that they are reference centres for what they call scientific or genuine knowledge.

Theory of knowledge has been a fertile primary field of philosophical investigation by epistemologists such as Descartes and Locke, Hume and Kant. The notion of knowledge is also articulated in Plato's dialogues and doctrines such as the *Theaetetus* where it is defined as *perception or sensation* that is acquired through sensory means. Knowledge is also defined as *true belief* accompanied by a rational account. However the widely accepted definition, which is still subject to debate is justified true belief. It is believed that we can only have knowledge of what is true. Therefore, we cannot derive knowledge from what is not knowledge, truth or reality.

Knowledge is basically a reference to a perception of relationships or connections of happenings. John Dewey makes a distinction between knowledge as *content* and knowledge as *reference* to the future. He says, knowledge as content is "what has happened, what is taken as finished and hence settled and sure" (Dewey 1966: 341). He further says that the reference of knowledge is in the future or in a proposition or a hypothesis. Dewey (1966:342) further argues that, "knowledge furnishes the means of understanding or giving meaning to what is still going on and what is to be done." What this means is that past experiences (perceptions acquired as a result of past experience) are used to judge or to try to develop an understanding or give meaning to new experiences that may occur under similar conditions.

According to Elliot (1991: 141-2) knowledge is constituted by "structures or systems of thinking about ourselves and the world, which are encapsulated within our culture." Elliot (1991:142) further argues that, "knowledge is not information but structures to sustain creative thought and provide frameworks for judgment." In other words, knowledge is embodied in theories, concepts, principles and or hypotheses (propositions). It is in the form of theories and principles that knowledge becomes a source of reference to practice or to practical daily activities. In terms of educational practice, knowledge refers to theories, hypotheses and principles of teaching and learning, how learners learn, and learning aptitudes at different mental ages among other attributes.

Is knowledge absolute or relative?
It has been considered that knowledge is perception of relationships of experiences. These perceptions are constituted as theories, hypotheses or principles that are used to provide the basis for judgment of an event or a process. These perceptions are also influenced by one's cultural experiences. If knowledge is a perception of relationships of experiences, past and present, on going, and has a cultural bearing, it can therefore not be absolute. It is relative. As Dewey cited in Curtis and Boultwood (1977: 471) puts it,

> All knowledge is personal and is made by each individual for himself for the purpose of adapting himself to new situations, and therefore, the meaning of a concept depends on its relationship to the individual; even scientific laws are but generalizations which may be modified again and again - they remain true only as long as they summarize truly the current state of human knowledge.

Knowledge is relative to the social context in which it is conceptualized or constructed.

According to Plato, the rationalist theory of knowledge can only be of what is external and unchanging, of Ideal Forms, Ideas or Universals. These are teleological forms from which the material world is derived. Plato contrasts knowledge and belief. Belief is of objects that make up the temporary or transitory world and can therefore not make one access true knowledge of the intangible world from which the material world is a derivative. The world is a poor imitation made of corruptible material. However, modern views focus on *knowing how* and *knowing that* forms of knowledge.

On the other hand the constructivist view of knowledge is based on the belief that through action research teachers become more skilled, more dynamic and more vital as they generate new knowledge. Teachers develop new insights of phenomena. Development of new insights and knowledge requires relating newly discovered knowledge to previous understandings (King & Rosenshine, 1993). Constructivists describe learning in terms of building connections between prior knowledge and new ideas and claim that effective teaching helps students construct an organised set of concepts that relate old and new ideas (Markle et al, 1990).

There can never be an exhaustive list of proposed forms of knowledge. The following is just a point of departure for would be teacher researchers. According to Roberts cited in Thistlewood (1989) says there is propositional knowledge or *knowing that* kind of knowledge. There is also *knowing how* kind of knowledge, for example, how to paint, how to do macramé knotting. It is *practical knowledge* achieved through indwelling. Both forms are an outcome of learning. The learning processes in both cases take different forms as their bases are essentially different. There is also professional knowledge, propositional knowledge, practical knowledge, tacit knowledge and explicit knowledge, which are codified. These can be summarised to two forms: *genuine knowledge* (knowledge that one individually possesses) and *pretentious knowledge* (no one can claim ownership of it).

Conveyed or codified knowledge, a form of pretentious knowledge (Roland 1988; Hirst in Mukorera, 1999; Pashapa, 2000) is objective knowledge. It is propositional or procedural knowledge. It exists as a body of explicitly formulated ideas about the world. It is acquired and assimilated and exists independent of the knower.

Personal knowledge on the other hand is created and self fashioned by the knower. It involves the knower knowing what he knows. It is tacitly generated through integrative processes.

How is knowledge constructed in Action Research?
Knowledge, which is systematized perception of connectedness of experiences, is created from sense experience and observation (Higgs, 1995). This is what Bertrand Russell in Higgs (1998) calls, knowledge by acquaintance. Knowledge as systematized perceptions is also created through secondary sources, that is, accounts of things or states of affairs that one receives from other sources. This is what Russell in Higgs (1998) calls knowledge by description. General research and action research in particular, creates empirical knowledge that informs decision-making (Chilisa & Preece, 2005).

Action research has been defined as, "the study of a social situation with a view to improving the quality of action within it." In education, action research "lies in the will to improve the quality of teaching and learning as well as the conditions under which teachers and students work in schools"(Altrichter, Posch & Somekh, 1993:4). We have earlier on alluded to the notion that knowledge is a proposition or hypothesis, that is, a generalized explanation of a given situation. It refers to a formed perception, which is used to judge an on-going process or to judge its outcome. In traditional beliefs, theories are generated in universities and other centres of higher learning, and schools only

exist for the practical application of the theories. There is a clear separation of theory and practice in this traditional belief. However, in action research, and the phenomenological philosophy that informs it, the teacher can create or construct own knowledge or theory through reflecting in and on his/her own action, and this is what Schon in Zeichner and Liston (1996) calls knowledge-in-action.

In action research, the teacher is confronted with a situation where he or she has a problem at hand to probe and to solve. The process of probing in itself, is a process of creating knowledge because through probing, one is creating tools for the creation of knowledge; and through solutions that emerge, one would have created new perceptions that constitute new knowledge, new theories, hypothesis or propositions.

When discussing reflective teaching, Zeichner and Liston (1996) make a distinction on what they term technically focused and reflective focused teaching. The technically focused teaching is one where the practitioner hardly questions the goals and values that guide his or her work, the teaching context or never examines his or her assumptions but considers everything as given. Judgment of the performance of learners is based on conventional wisdom, that is, the knowledge or theory codified from the experiences of others. Hence the judgment and decisions to be made are based on external knowledge, that is, secondary knowledge. On the other hand, reflective focused teaching is whereby the practitioner questions the conventional wisdom on a particular situation questions his or her own beliefs and orientations and probes the problematic situation. The judgment and decisions to be made would be based on data emerging from the practitioner's probing or investigation. The perceptions, which will form the basis of judgment and decisions, become what Schon (1983) calls knowledge-in-action. This is now wisdom derived from one's own experience, but which may be compared and contrasted with conventional wisdom. The practitioner's perceptions constitute primary knowledge, theory or hypotheses.

Action research created knowledge is derived from first hand experience. It is knowledge created through empirical research. Literature review is not involved in its creation, although at the level of reflection on the experiences, reference can be made to existing (secondary) knowledge/ theory on the situation at hand. In other words, knowledge creation in action research is inductively handled rather than deductively handled. The aim in action research is to create own hypotheses and not to use others' hypotheses in the creation of knowledge. In other words, in technically focused teaching or practice, the aim is not to create knowledge, but to use knowledge that has already been created by others to understand and to solve a current situation. The practitioner is just a consumer and user of knowledge here. Whereas in the case of reflective focused practice through action research the aim is three fold, that is, to probe/ investigate, to create a new hypothesis or knowledge, and to use the new hypothesis to solve one's problem.

Action research is not based on generalizations – it is based on the particular, the unique. The philosophy is that, each situation is basically unique to it and has context based on unique characteristics. Action research is basically about creation of new knowledge. It is not about applying existing theory or wisdom but is about creating new knowledge to solve an existing problem.

Action research is about creating new knowledge, theory, and hypotheses, aimed at solving a social problem. This knowledge is created through systematic classroom research in the case of education. Day to day classroom challenges are problematized, investigated over a period of time, analyzed, interpreted, and the knowledge gained through these processes would be applied to reply to the initial challenges. Once this new knowledge provides a solution to the initial challenges then the practitioner would have created a new hypothesis or even theory, and also if the new perception solves similar challenges on a prolonged period of time, the action research projects would be the embodiment of the new knowledge in a codified form.

Action Research as a Knowledge Base

Action research contributes to *professional knowledge,* which includes the following:

- Pedagogical content knowledge;
- Subject content knowledge;
- Integration of subject content knowledge and pedagogical knowledge (methodology); and
- Knowledge of and insight into learners' ideas about subject matter, for example, pre-concepts.

There is need for a professional knowledge base for teachers to apply in their daily operations (Barnes, 1991). Professional knowledge base also entails:

- Knowledge about learners (theoretical base);

- Knowledge about learning (theoretical knowledge, research based knowledge, wisdom of practice base i.e. tacit);
- Knowledge about effective teaching (research base); and
- Conditional/ contextual knowledge (theoretical, wisdom and practice, philosophical), which is about understanding the operational parameters.

The concept *teacher as researcher* is continuously changing. Teachers engage in systematic inquiry. Action research is systematic, self critical and intentional inquiry by teachers that is made public (Lythe & Cochran-Smith, 1990). Teachers learn deliberately through research, so every lesson should be inquiry for the teacher. Each classroom is a laboratory in which practitioners thus generate knowledge, subject the curriculum content and problems experienced to empirical examination. Through action research teachers solve problems of immediate concern. Action research is therefore a form of operational or applied research.

When is Knowledge Generated during Action Research?

Knowledge is generated at various stages of the study. The following is a summary of stages during which knowledge is generated:

- During data generation;
- During data presentation;
- During data analysis;
- During corroboration of data;
- When drawing up conclusions/ insights;
- When suggesting areas for further investigation; and
- When researchers publicize their findings.

Knowledge Gains through Action Research

There are several gains that can be made through action research. First, there is increase in knowledge of personally experienced educational or curriculum problems. As one experiences problems specific to a context, one is able to reflect on them thereby developing this theoretical and practical understanding. There is also the creation of knowledge to cope with complex educational issues and situations, which vary from context to context. The practitioner becomes aware of effective instructional practice informed by this practice. The researcher develops some commitment to personal teaching methods keeping abreast of new information and trends in whatever field one is engaged in. Teachers become on-going learners and creators of knowledge instead of implementers of codified knowledge. According to Stenhouse (1975) action research involves reflection through construction of personal knowledge. Self-reflection becomes a pre-requisite to professional development (Wallace, 1987). Reflecting-in-action leads to development of personal theories in action (Schon, 1983 in Ashcroft & Griffiths, 1989). Lastly, action research as a research paradigm is aimed at generating new theories and knowledge about one's practice.

Synopsis of Action Research as Defining Knowledge

Rapport in Hopkins (1993:44) says 'action research aims to contribute to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework.' As people solve envisaged problems they make use of various forms of knowledge as well as generate new knowledge. Action research is also conducted by practitioners to help them understand their contexts, practices and in the case of teachers, their students. The result is enhanced understanding of a situation, problem and operational factors. Action research bridges the theory-practice and the knowledge-action gap as researchers put the personally generated theories and the different forms of knowledge into practice. This leads to greater self-knowledge/ personal theories and deeper understanding of one's own practice. Teachers as researchers are empowered to engage in curriculum development where they use the different forms of knowledge to initiate curricula innovation and change. Practitioners intuitively or reflectively compare and contrast the present situation with cases experienced in their past, creating both personal and codified knowledge.

Systematic reflection by practitioners in their practical situations plays a central role in improving professional judgments, decisions and knowledge. Emerging analytic insights and interpretations of a situation are continuously informed and tested through dialogue (inter and intra) again creating new knowledge. Intra-dialogue is self-directed while inter-dialogue capitalize on interactions between and among persons. This is derived from Gardner's (1983) theory of multiple intelligences of the inter- and intra- communication. Action research is therefore an approach to pedagogical analysis and practice.

Knowledge can be acquired through action research. Knowledge acquired through personal means tends to become personal knowledge that is, tacitly assimilated. It becomes a mental apprehension or cognition. As we engage in research we build personal theories and forms of knowledge that we operationalize according to prevailing situations.

Conclusion

In this chapter we looked at the concept of knowledge from philosophical, epistemological and practical perspectives. Historically the concept has intrigued many philosophers, education practitioners and the general populace and still remains a contested notion and terrain. We have also discussed the qualitative paradigmatic perspective as we roped in action research and its pedagogical benefits. It is a source of self-fashioned knowledge. The educational field is a contemporary source of self-generated knowledge that practitioners need to constantly reflect upon. It is important that we document whatever form of knowledge that we generate.

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CHAPTER 6

The 'Self' And Story-Telling In Action Research

Prof. Bornface C Chisaka

Introduction

A story can take two forms. It can be a narrative of one's experiences, which represents what Denzin and Lincoln (2005) call "self-reflexivity". In this case, the narrative would be looking at real life experiences of the narrator. A story can also be a fictional narrative, which seeks to depict a philosophical, ideological or cultural perception of a group of people, which is expressed in riddles or "parables". The Christian Bible is actually full of such stories and as Chilisa and Preece (2005: 51) observe, stories "are central to the lives of African societies", as they have been used to collect, deposit, store and disseminate information. So, even when written in the context of fiction, stories focus on depicting reality in a subtle manner. Chilisa and Preece (2005: 51) go further to define stories as being "a reflection of the values of society", and also as "teaching instruments and a commentary on society, family or social relations".

Stories in Action Research

In action research, stories are used at two levels. First, they can be used as data generation tools, in which case the storyteller would be the researched or action research participant. The researcher would ask the participants to narrate their experiences in the particular area or subject under research, which narration should be captured in as much detail as possible. Critical concerns of the participant in the subject under study can be captured in the story's thick narrative. In place of directing questions to the participant, the researcher would simply ask the former to narrate his/her experiences in the subject. This approach has the advantage of revealing to the researcher, the un-anticipated data, which may even be more important or critical than what the researcher had anticipated. As Denzin and Lincoln (2005: 456) have noted, "case researchers usually enter the scene expecting, even knowing, that certain events, problems, and relationships will be important; yet they discover that some of them…will be of little consequence".

In qualitative case research, two purposes stand out. There is the purpose to convey the storyteller's perception. This represents the *emic* perspective, i.e. the insider's point of view. This is the original or first hand data, which the readers or interested *others* may need to be exposed to, so that they are afforded the opportunity to vicariously interact with the original source. The second purpose is to convey the researcher's perception of the storyteller's narrative. This now represents the perspective, which is the outsider's point of view, regarding the experiences of the insiders.

Secondly, in action research, storytelling is also used as a method of presenting and analyzing qualitative data. As Leininger (1985: 66) puts it, stories "help the researcher identify patterns and specific expressions of values, motives, needs and human responses". The story is being told here by the researcher, who, in his/her narration of his/her research report, is providing an "interpretation of meanings" (Huberman &Miles, 2002). The narrator/storyteller, or researcher, has a story to tell, which ranges from the conception of the problem, through designing research strategies, carrying out the study, the interaction with the participants, to his/her own perceptions of the constituents of the problem. It is necessary and critical to combine the *emic* and *etic* perspectives in a storytelling action research report. It is critical that both the voices of the participants and that of the researcher be heard so that the interested *others* are given the opportunity to evolve their own points of view from these perspectives, and could come up with their own stories to tell from those experiences.

In narratives or action research stories, it is "not only about past actions but how individuals understand those actions, that is, meaning" (Huberman & Miles, 2002: 232). That is why it is important to capture the *emic* perspectives in action research – i.e. what is the meaning given to the experiences of the participants by the participants themselves? Yes, in educational action research, the purpose is for the researcher to transform the "self", but the "self" aims to transform so that his/her interaction with the *significant others* can have a positive effect on those *others*. It is important therefore for the researcher to empathize, and look at the experiences of participants through the latter's own lenses, so that the positive effect could be achieved.

Therefore, in storytelling presentation of an action research report, the researcher does not just narrate events, utterances, behavior of participants, etc, but also adds his/her voice (the self) through critical reflection. In fact, it is advisable that all action research reports take the form of a storytelling report, rather than what Denzin and Lincoln (2005: 457) call "a report that looks like traditional social science, running from statement of the problem to review of literature, data collection, analysis, and conclusions".

Action Research is research on the *Self* or *Selves*. But what is the self/selves in Action Research and what is its role? To tackle this question, we need to look at what action research is and also look at the purpose of action research. Hopefully this will illuminate the issue of the role of the "self/selves" in Action Research. Hopkins (2002: 42) says Action Research is 'action disciplined by enquiry, a *personal* attempt at understanding while engaged in a process of improvement and reform'. Note that the *self* in the above definition is captured in the notion that Action Research is action that pertains to a "personal attempt at understanding". The *understanding* here, is by the *self* - i.e. the researcher is the *self*.

Stephen Kemmis (1983, in Hopkins, 2002: 43), characterizes Action Research as "a form of self-reflective enquiry…" The "self" in this characterization comes out clearly. The researcher here will be reflecting on self – behavior, inquiring about self-performance. Dave Ebbutt (1985, in Hopkins, 2002: 43) defines Action Research in terms of its collaborative context, that is, the selves, when he says, it 'is about the systematic study of attempts to improve educational practice by groups of participants by means of their own practical actions and by means of their own reflection upon the effects of those actions'. Here, the focus of enquiry is on the actions or behaviors of a group who have a common problem, that is, the 'selves'.

Biott in Day, et al (2002) sees Action Research as a systematic enquiry by educational practitioners to create "new ways of seeing and understanding" their practice. Once again, the focus here is on "selves" and not the "others." Altrichter, Posch and Somekh (1993: 6) also take the same position of the above that Action Research is action taken by those concerned with their social situation-and in the case of classroom practitioners, "this means …teachers who take professional responsibility for what goes on there (classroom)." This means that when a teacher is not meeting some of his/her didactical expectations, he/she has to take action to correct the situation or to improve it. The teacher has to take responsibility for the negative situation. He/she has to ask the questions, "What can I do to correct or improve this situation?" The focus is on the "self"-i.e. "what can I …?" If "others" come into this equation, their role is to provide support and not to take responsibility and control over the direction and duration of the project," say Altrichter et al. (1993).

Chilisa and Preece (2005: 194) see Action Research "as a form of inquiry where practitioners (selves) … work together to solve their own, practice-base problems." "It is a process of doing, reflecting on the action, drawing conclusions, re-doing based on these new conclusions, and then reflecting again on the doing." All these processes are pointing at self-doing or selves doing. It is not the others or outsiders doing, but the self or selves doing.

Chisaka (2006) says Action Research is not a methodology of research, but a kind of thinking that emphasizes use of research to address immediate problems. In his address to Action Research's focus on the "self", Chisaka (2006) argues that Action Research is used to examine personal concerns of the classroom practitioner and how these concerns could be transformed into systematic investigations to bring about an improvement in instruction and learning.

In Action Research, the self or selves is (are) the motor force, and reflection by the self or selves is central to the action. It is reflection on self-perceptions and task-practice. One reflects on own task perceptions - reflects on the process of the own tasks - reflects on outcome for change or improvement - hence the concepts of: reflect on action-reflect in action-and reflect for action. You reflect on action when tackling a problem through action research. Then plan for conscious change and reflect while implementing the plan. This is reflecting for action and in action.

Action Research in education is personalized research within a professional context, hence its association with qualitative research; focus is on the human instrument, who is the researcher, that is, the 'I', or the self in research. The uniqueness of action research is that the researcher becomes the researched - he/she is the participant on two ends - i.e. participant as researcher (etic perspective) and participant as researched (emic perspective).

Focus on self, is because it is the self that perceives a problem - it is the self that wants to tackle the problem in order to change the status quo of the Self – i.e. the practice of work as usual. The self wants to interrogate why expectations are not fulfilled; the self wants to find out how he/she can make a difference - change or improvement. It is the **self** who says things are not okay - it is therefore the same who has to answer the question; why things are not okay, and it is the self who has to determine how things that are not okay should be made okay.

In the educational scenario, it is the self who wants to affect quality of teaching in order to affect quality of learning - quality of teaching points at **self**, while quality of learning points at **others**. However, the others only come into the equation with respect to the self. In the same educational scenario, the self wants to affect the quality of leadership in order to affect the quality of follower-ship (i.e. the others) and the others only come into the equation because of the self-leadership model.

What I am saying in this chapter is that, in action research, action is centered on the practitioner researcher - the self as researcher. This is because the problem of research is not conceptualized by the researched, but by the practitioner researcher, that is, the self. The focus should be on how the self or practitioner can change a negative situation and not on how the others can change, or how the self (practitioner) can change his or her perceptions and practice so as to bring about fulfillment of self (practitioner) expectations. The heart of action research is the self (practitioner), because action research, as the name suggests, is about changing a situation through self-action.

What is collaborative Action Research?

The term collaborative stands for working together, co-operative effort or collective effort. In action research focus is on the researcher's own concerns (Bogdan & Biklen, 1992). With respect to education, Olivia (1991), says action research focuses on inquiry of problems that directly impact on the practitioners' classroom methods and techniques. Altrichter, Posch, and Somekh (1993) take the position that the driving force is the practitioners' desire to take professional responsibility for what goes on in the practitioner's line of duties. However, Bassey (1999) argues that the purpose of Action Research in education is to investigate a perceived problem with a view to develop a clearer understanding and appreciation of that problem, and ultimately to find a solution to it and achieve positive change. The focus of action research is on solving a self-perceived problem. The solution is pursued by the same self perceiver. However, it is possible that two or more colleagues may be facing the same problem.

A researcher does not work in a vacuum, especially educational researchers. Their research is concerned with behavioral traits of themselves and others. It is concerned with didactical situations, which situations may have external origins such as family background or previous grade experiences. Therefore it may have micro and macro cultural dimensions. This makes such research ethnographic. The micro dimension may be the local classroom didactical situation, while the macro may be the historical dimension that may be related to preceding grades or family background.

Any researcher, when conferring with other colleagues, may discover that those other colleagues may experience what he or she perceives as his or her problem alone. Under such circumstances, there may be need to work as a team to clearly interrogate the issues at hand and come up with a research strategy - this will involve cooperative effort. The focus becomes a problem common to selves rather than to the individual self. The action research investigation can be done separately, in separate similar contexts, or contexts with similar characteristics or experiences. The findings and results could then be compared and contrasted. Alternatively, the colleagues could arrange to do the investigation at the same site or didactical environment, in this case, working with the same class or group of participants. The collaborators can work as each other's critic in the process of generating and analyzing the data of their study. They become each other's consultant, that way; the effort of two pairs of spectacles may produce more valid and reliable outcomes than one pair of spectacles. This approach improves not only the validity of the results of the investigation, but it also enhances the validity of the hypothesis that will emerge from the local data of the local setting or the similar settings, since there can be limited generalizability of findings.

Yet, on the other hand, collaborative action research could be achieved in a situation where the problem remains that of an individual action researcher, with the collaborator(s) being a person or persons who would be engaged as a consultant in the capacity of a critical observer or evaluator on the process of the researcher's action investigations. In this instance the role of the collaborator will be to provide active critiques of the investigation of the problem, in terms of brainstorming the research plan, the methods, techniques and process of the investigation with the investigator, as a way of providing active feedback and keeping the research more focused.

Collaboration in the two cases, will serve the purpose of triangulating the human instruments of data generation and analysis, which enhances the trustworthiness of methods and results of the investigation and the hypothesis that emerges from it. This becomes research for social action and change because of its co-operative nature.

Conclusion

The self is a critical notion in action research. The concept tells us the important role of the researcher in the totality of the research, that is, the story to be told. Without the self, there is no story to tell. The self has critical significance to the interpretive nature of data that are generated by the research. In story telling the emic and etic perspectives become critical notions on which conclusions and implications are drawn. As researchers we need to understand the role of the self in the narration of the story.

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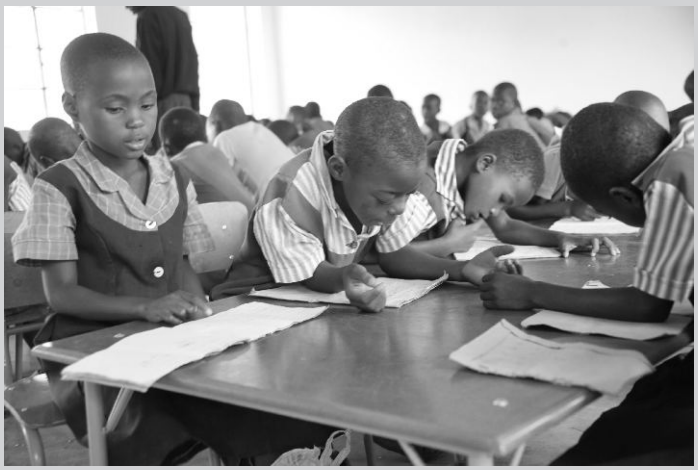

CHAPTER 7

Writing Field Notes

Davison Zireva and Tamuka Shumba

Introduction

This chapter is a synopsis of the process of generating field notes for the purposes of an action research project. It defines the field and field notes, and discusses considerations when making field notes. It also looks at managing field notes which includes generating descriptive data and writing observer commentary. Included are practice examples so that you have a feel of generating field data. You however need to appreciate the subjective nature of the whole process of making field notes.

The field – a complex setting

Jackson (1987: 12) had this to say about fieldwork involving humans:

> Fieldwork requiring people to study other people at first hand... entails much more than merely knowing what to observe and how to record, process and present it. The field worker must explain his or her presence and purpose to others, gain their confidence and cooperation, and develop and maintain mutually acceptable relationships. These requirements create dilemmas, produce confrontations, demand clarifications and compromises, and evoke reflections and introspections, that one can neither fully anticipate nor prepare for in advance. Worthwhile projects may fail. Research strategies frequently must be modified or abandoned as researchers and subjects interact. Unexpected opportunities, fruitful leads, and important insights can blossom as fieldwork develops.

The field is the setting where you are going to conduct your research. The field in the context of a teacher is the classroom where teachers interact with pupils. The classroom as a microcosm is full of data that teachers need to generate about their own operation and improve their effectiveness.

What are field notes?

These are the written records of your perceptions in the field. According to Bogdan and Biklen (1992) the term field notes refers collectively to all the data generated in the course of study that include interview transcripts, official documents, official statistics, pictures, and other materials. Koshy (2005) calls these research diaries. These are recordings of what you see, hear, smell and even taste turned into data. The process of generating field notes however needs to be systematic. There are four basic types of information that researchers collect: observations - participant to non-participant; interviews - close ended to open ended; documents -private to public; audio visual materials e.g. photographs and videotapes (Creswell, 2007). Generating field notes is a reflective process that contributes to the professional development of the researcher. It is important that you create a vivid mental picture of the setting through a detailed and accurate description. Any reader should be able to relive the setting from your description. They should be able to hear and feel what you heard and felt (Mbozi, 2009). Allow the reader to experience the activities observed through your report. However you do not collect detail for the sake of detail. Ensure that the notes that you collect are in line with your research. If your study is on group work and pupil interactions, then there is little need for detailed descriptions of the school grounds or buildings. Instead focus on classroom set-up that facilitates interactions.

Field notes contain two kinds of material:

Descriptive data

- What you observe, the data about the research;
- This is the running record;
- Word-picture of the setting, people, actions, and conversations observed;
- You capture as much detail as possible about the context (physical environment, activities and interactions among members of the environment).

According to Bogdan and Biklen (1992) descriptions encompass the following:

- Portraits of the participants;
- Reconstruction of dialogues;
- Description of the physical setting;
- Accounts of particular events;
- Depiction of activities; and
- The observer's behavior.

Observer comments/ reflective data

- These are your feelings and emotional reactions to events, your reflections;
- They include analytical insights, questions about meaning, and thoughts about modifying your design;
- The subjective journey of the study - speculations, feelings, problems, ideas, impressions and prejudices, likes and dislikes, confession of your mistakes and inadequacies;
- Systematically recording of ideas, strategies, hunches as well as noting emerging patterns and hypotheses;
- These are the data about the process and yourself, with self-reflection.

According to Bogdan and Biklen (1992) field notes contain the following reflections:

- Reflections on analysis;
- Reflections on methods;
- Reflections on ethical dilemmas and conflicts;
- Reflections on the observer's frame of mind; and
- Points of clarification.

Observational field notes are also added to interview transcripts to augment and interpret the exact words of the interviewee. Field notes are usually taken by hand in the setting and take an individual idiosyncratic form. Variations exist in writing materials, the time and place for recording field notes, the symbols developed by observers such as short hand, and how the notes are stored. Individual settings dictate the mechanics and procedures for taking down notes (Patton, 2002). After the process of taking field notes you need to find a way to remove yourself to a quiet place to write notes that you will elaborate on later. Rossman and Rallis (2003) recommend, for example, the bathroom.

Why observe?

There are several reasons why we need to observe. The following are some of the reasons:

- To understand the context;
- To see tacit patterns;
- To see patterns people are unwilling to talk about;
- To improve direct personal experience and knowledge; and
- To move beyond the selective perceptions of both researcher and participants.

Taking field notes

Write descriptively:

- Where you observed;
- Who was there and not there;
- What events/ activities took place;
- When events happened (day, date, time);
- What the physical setting was like; and
- Name(s) of the observer(s).

Use specific and concrete details:

- Use evocative adjectives;
- Use action verbs;
- Avoid evaluative language; and
- Be specific.

Guidelines in taking field notes

Koshy, 2005: 97 provides some guidelines in taking field notes which include:

- A free writing style can be employed when keeping field notes and diaries
- It is important to have a structure in your mind. Within that structure, you need to have the flexibility to make notes about aspects which may not fit into your predetermined structure
- Reflective writing supports professional development. Try to be analytical and reflective in your entries
- Including a section for personal commentary supports analysis and discussion at a later stage

Working with field notes

As soon as you leave the field you need to get to the task of re-writing the raw notes (interviews, observations and focus group discussions. These are called write-ups (Mbozi, 2006). It is tempting to leave this task to a later stage but the best is to write whilst ideas are still fresh in your mind. "The greater the time lapse between the event and recording it, the more difficult it becomes to reconstruct problems and responses accurately and retain conscious awareness of one's original thinking" (Hopkins, 1985: 103). The process involves transcribing handwritten notes into the computer, if you have one, elaborating on some scanty data, and adding commentary. Ideally, this is also preliminary analysis. This is done whilst the researcher is in the field generating data. Thus in qualitative research, analysis and data generation can happen simultaneously. You also clarify vague statements and unfounded assumptions that appear in the data. This is the stage when you write thick descriptions (Geertz, 1973 in Rossman & Rallis, 2003). Thick descriptions present details, emotions, quality of social relations. Thick descriptions are also necessary for in-depth analyses. You may use (with consent of your interviewees) a tape recorder to facilitate the process of recording what you see, hear for it to become data.

Example of over-generalized and detailed notes (Patton, 2002: 304)

- *The next student who came into the room was very poorly dressed*
- *The next student who came into the room wore clothes quite different from the three previous students. The other students had hair carefully combed, clothes clean, pressed, and in good condition with colors coordinated. The new student wore soiled pants with a tear in one knee and a threadbare seat. His flannel shirt was wrinkled with one tail tucked into the pants and the other tail hanging out. His hair was disheveled and his hands looked like he'd been playing in the engine of a car*

Tasks for the Reader:

From the following action research topics by Koshy (2005: 27) create field notes on any aspect of the topic that you have selected from the box below:

- *How can I improve my questioning skills?*
- *Who does most of the talking in my class- the children or me?*
- *How can I improve children's participation in ICT?*
- *Will the introduction of learning diary in mathematics lessons enhance children's conceptual understanding?*
- *How can I introduce class discussions on children's special interests?*

Task on field notes

Read the field notes in the box below and then do the following tasks:

- Pick out and mark instances where what is recorded is what was seen/ heard and justified.
- Which methods do you think were used in generating data recorded in the field notes? Justify.
- Pick out and mark instances where you think the researcher is presenting an analysis of data generated. Give your justification.

The primary research question in my study was Will the use of cooperative group activities increase achievement in my fourth period advanced biology class? Analysis of student work indicated that achievement did not improve during the eight-week intervention. Baseline data recorded one week prior to the implementation of the intervention showed that the average test grade was 82, the average quiz grade was 75, and the average lab grade was 85. Scores steadily rose over the eight-week period, and at the end of the data collection period test averages rose to 88, average quiz grades rose to 95, and average lab grades rose to 91. Interviews conducted with students in the seventh week revealed that most students felt they were learning more and doing better in class because of participation in the cooperative group activities. Eighteen of the 25 students said improvement in the work was a direct result of working in the cooperative groups. Benefits of the intervention went beyond simply completing class activities with peers. Half of the students said they were studying more in order to prepare for their group work, and responses on student surveys corroborated this. On one survey, a student wrote, "I know that when I have a group assignment the next day, I have to prepare before I go. I don't want to look dumb. I study more and my grades are higher." This attitude was fairly typical of the students who said they were preparing more for class. When asked why they were preparing more, most students said it was because they didn't want to look dumb in front of their group. Additionally, about half of the students said during the interviews that they were studying for tests and completing assignments outside of the class with people from their cooperative groups, although only two students said that they had worked with classmates before the cooperative group intervention. In my observations, I note that students in some groups frequently made plans to get together to study for tests. This is a behavior I have witnessed before the intervention

Source: Hendricks, 2006: 146

Conclusion

In this chapter we have defined the field and field notes. We have also discussed the kinds of field notes that one can generate and how to generate them. While field notes making is a personal and individual process, it is important to maintain some degree of objectivity in order to generate data relevant to the area of investigation.

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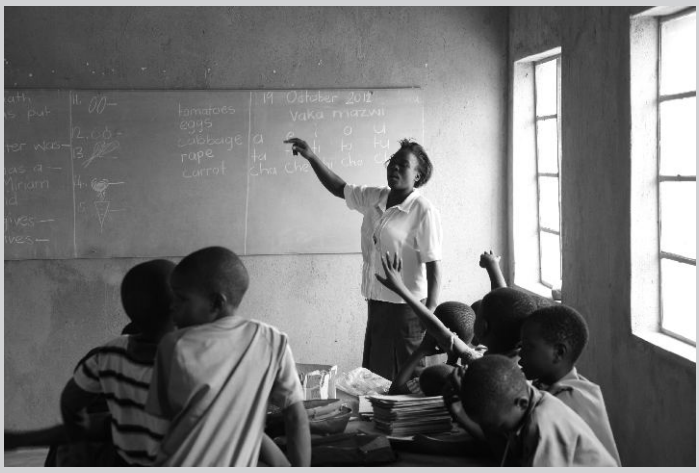

CHAPTER 8

Qualitative Data Analysis

Davison Zireva

Introduction

Qualitative data are evidence and/or facts that are generated to describe the attributes of social phenomenon being studied (De Vos et al., 2003; Neuman, 1997). The data comprise of the respondent's own written or spoken words and observable behavior (Hoberg, 2003). The qualitative researcher presents facts and evidence (data) in a narration. Thus qualitative data are primarily verbal (Schulze, 2002).

Qualitative research data are always in the form of words or pictures. The written word is very important – both in recording of data and the dissemination of findings. Qualitative data include interview transcripts, field notes, photographs, video clips and artefacts.

Action Research and Data analysis

Analysis is a reasoning strategy the objective of which is to split a complex whole into its constitutive parts in order to understand the relationships of the parts (Schulze, 1999). According to Mouton (2001:108), "Analysis involves 'breaking up' the data into manageable themes, patterns, trends and relationships." The aim of analysis is to understand the various constitutive elements of one's data through an inspection of relationships between concepts and to see whether there are any patterns or trends that can be identified or isolated in order to establish themes in the data. In qualitative research, data analysis entails the search for patterns in data that is recurrent behavior (Neuman, 1997). According to Hoberg (2001:65), "... qualitative researchers integrate the operations of organizing, analyzing and interpreting data and call the entire process 'data analysis.'"

Data analysis in qualitative research has a number of characteristics. Firstly data generation and data analysis occur simultaneously. Alongside field notes, the researcher generates analytic memos. These include notes about probing on ambiguous and ambivalent statements and also notes on the pursuit of recurring issues.

Data analysis is primarily an inductive process. This means that "... categories and patterns emerge from data rather than being imposed on the data prior to data generation" (Hoberg 2001:165). In other words, data generation is a posterior. Although a number of qualitative researchers and qualitative research theorists have explained that themes 'emerge' from data, Shanks (2003, in Hendricks, 2006:134) explains that;

> ... Themes do not really emerge from data. What emerges, after much hard work and creative thought, is awareness in the mind of the researcher that there are patterns of order that seem to cut across various aspects of data. When these patterns become organisationed [sic] and when they characterise different segments of data, then we call them themes.

Qualitative analysis entails constant comparison. The analytic technique employed is about constant comparison. Themes and categories are compared and contrasted to determine the distinctive characteristics of each (Hoberg, 2001). Qualitative data analysis is a rigorous process. It involves a systematic process of selecting, categorizing, comparing, synthesizing and reflecting on the data to gain understanding of the phenomenon being studied (Hoberg, 2001). It is an integrated process. The qualitative researcher integrates the operations of organizing, analyzing and interpreting data and calls the entire process 'data analysis' (Mouton, 2001).

Analyzing data transcripts

There are a number of activities that should be followed when analyzing data transcripts. The method that is commonly used is the Johnson Christeson one cited in Steyn et al (2004). The method has the activities; segmenting, coding, compiling a master list, and checking for intra-coder and inter-coder consistency.

Segmenting involves dividing data into meaningful analytical units. The researcher does this by reading the transcribed data line by line and asking him/herself the following questions;

- Do I see a segment of the text that is important for the research?
- Does it differ from the text coming before or after it?
- Where does the segment begin and end?

A segment could be a word, phrase, sentence or several sentences that are independent and of relevance to the research question. The segments could be demarcated by means of brackets, set braces or any means of highlighting text.

Coding

According to Miles and Huberman (1994) in Neumam (1997: 422), "codes are tags or labels for assigning units of meaning to descriptive data. Codes are attached to 'chunks' [segments] of varying sizes; words, phrases, sentences or a whole paragraph ..."

The identified segments of data are coded by means of category names and symbols. The researcher should give abstract names to categories instead of the exact concrete names that the participants used. The abstract names are more encompassing in nature. "... The categories are given a name that captures the essence of a concept they contain" (Schulze, Kamper, Mellet & Smith, 2002:164).

Data from an interview transcript

All the data got from interviews should be transcribed. This is the first step for the analysis. For example a researcher wanted to solicit reasons for pupils' poor performance in written work and she asked the question;
"Why is it that you did well in your group but badly as an individual?"

The response was;
In my group the {*three of us do not understand most of the things*.}^{LU} It's {*only Chipo who understands and writes answers for us}*^{LAP} {When we ask him to help us on how to get the answers, he says that at break we must give him some food.}^{CH} If we don't the next day {*he writes answers quietly*.}^{LAP} {I am nervous to ask you a question in the hearing of the whole class.}^{PA} One day {the class laughed at me when I asked}^{CI}
The segments are demarcated by set braces { } and are highlighted differently with respect to the subthemes (categories) they point to. The researcher should go on to analyse other transcripts about the same question in the same manner. The table below shows the sub-themes, codes and highlights.

Sub-themes (categories)	Code	Highlighting
Lack of understanding	LU	**Bold**
Lack of active participation	LAP	*Italics*
Conditional help	CH	Underline
Presence of anxiety	PA	Blackadder
Class discipline	CI	Swic721

Compiling a master list
All the subthemes that are noted are put on a master list with their symbolic codes. The codes on the master list are then considered for categorization of new segments of text. Thus the master list is expanded as need arises.

Checking for inter-coder and intra-coder consistency
Inter-coder consistency can be checked by means of another coder who verifies the appropriateness of the codes allocated to segments. The researcher can check for intra-coder consistency by reflecting on the transcripts several times after a period of time say after a day.

Presentation of data from interview transcripts
Data from interviews are analyzed and presented by means of 'words' (Hoberg, 2001). The researcher should present his/her findings in a systematic way. For example, one of the ways of presenting interview data of the transcript above is as follows:

Theme	Sub-theme	Excerpts
Ineffective grouping	Lack of active participation Conditional help	-Only Chipo understands and writes answers for us -He writes answers for us -When we ask him to help us ... he says at break we must give him some food
Ineffective learning facilitation	Lack of understanding Class indiscipline	-Three of us do not understand most of the things -The class laughed at me when I asked
Presence of anxiety		I am nervous to ask you a question in the hearing of the whole class

Data from observations

Like data from the interviews, the data from observations should be transcribed as the first step of analysis. An example of the observation made by the researcher is given below.

> *Observation notes of the Grade Six class at 0830*
> *The grade six class had 28 girls and 24 boys. Girls had split into two groups and boys into three groups. In one of the two groups of girls, six girls were sitting on the floor in a circular arrangement. They were playing a game with stones. The other girls stood {**clapping their hands cheering up the players**}. The second group of girls was {**singing a church lyric and three girls were competing in a dance**}. Six boys were playing with a tennis ball in the south-eastern corner of the classroom {kicking it against the wall}. The second group of three boys were playing with their toy cars **{imitating the sounds of engines}**. The larger group of boys had two boys imitating a fight they had witnessed between their teacher and his wife. The other boys in the group were watching {standing on the bricks demarcating the "learning centre"}**{whistling and clapping hands}**.*

All the segments that are in bold confirm that there was a noise in the classroom and the underlined segments confirm that there was disorderliness in the classroom. The table below shows the theme, the sub-theme and the excerpts.

Theme	*Sub-theme*	*Excerpt*
Chaotic situation	*Disorderliness* *Noise*	*-each of the five groups doing its own activities* *-boys standing on the bricks demarcating the 'learning centre'* *-kicking the tennis ball against the wall* *-clapping hands, cheering up players* *-singing a church lyric two girls competing a dance* *-imitating the sounds of engines* *-whistling and clapping hands*

The other observations made for the same class should be analyzed in the same manner.

Data from focus group discussions

Data from focus group discussions also need some transcripts. For example an action researcher, involved some colleagues in focused discussions about the lesson he had conducted. The transcribed focus group discussions are given below.

In: What can you say about how I introduced the lesson?
R1: I liked the introduction.
In: What did you like about it?
R1: The pupils were actively involved
R2: Almost everyone was actively involved.
R4: Very simulating- the pupils were all in smiles.
R3: But the singing of the rhyme had no relevance to the content that was taught to the pupils.
R5: Ya-a, you are right, the teacher should have infused simple subtraction problems in the rhyme to make it relevant.
R6: I agree with Miss – (R5).
In: How would you evaluate how I delivered the lesson?
R3: The pupils were divided into too large groups. Six pupils per group are too many.
In: How many pupils do you recommend per group?
R3: That depends with the activity. As for the subtraction activity, - each one for him or herself and the teacher for everyone.
R2: Are you saying that group work is not necessary?
R6: We should not be ritualistic to involve pupils in group work that is not necessary.
R5: Only one child in group two did the working quietly – others were onlookers. I wonder if the others learnt anything.
R1: A child from group four excused himself to go to the toilet but was not in a hurry. He was walking lackadaisically.

R6: Others from that group were looking at us stealthily.
R4: But remember the calibre of our pupils, they are dull and lazy.
R5: Then they should be occupied as individuals.
R6: Though counters were collected as media, no one used them.
R3: It's because the intelligent ones who are 'secretaries' do not need them – so every one does not need them during group work (*with a broad smile on his face*).
R6: That's my point – group work in most cases clouds the truth about individual performance.
R5: Believe me or not group work is an insidious evil in Maths.
R1: The other thing that I noted is that the teacher gave very clear instructions.
R2: I totally agree she communicates vey clearly.

An analysis of the focus group interview session yielded the following themes, subthemes and the supporting excerpts.

Theme	Sub-theme	Excerpts
Positive attributes of introduction	Pupil involvement Pupil stimulation	-pupils were actively involved -almost everyone was involved -pupils were all in smiles
Negative attributes of introduction	Introduction not relevant	-rhyme had no relevance to the content -teacher should have infused simple subtraction problems in the rhyme.
Group work activities not efficacious	Ineffective grouping Passivity in group activities Involvement in off-task activities	-six pupils per group are too many -for subtraction ... each one for him/herself -... should not be ritualistic -only one child did the working quietly -others were onlookers -no one used counters in groups -walking to the toilet lackadaisically. -looking at us stealthily
Conducive personal traits	Effective communication	-gave clear instructions -communicates clearly

Data from document analysis – pupil's written work
The pupil's written work is analyzed for the purpose of identifying some learning difficulties. For example some pupils could show the following computations;

1) $1/2 + 1/3 = 2/5$

2) $1/2 + 1/3 = 3/4$

3) $1/2 + 1/3 = \frac{2+1}{} = 4/6 = 2/3$

4) $½ + 1/3 = \frac{3+2}{} = 5/6 = 2/3$

The analysis of the computations reveal the following information:

-On item 1, the pupil has knowledge of addition. She added numerators on their own and denominators on their own;

-On item 2, the pupil has knowledge of addition. She added numerator and denominator of the first fraction and wrote the answer as the numerator. She also added the numerator and denominator of the second fraction and wrote the sum as the denominator;

-On item 3, the pupil showed lack of knowledge of equivalent fractions as well as addition;

-On item 4, the pupil showed that she could not reduce a fraction to its lowest terms.

The learning difficulties identified can be considered as themes. The themes are:

-lack of knowledge of addition;

-lack of knowledge of common denominator;

-lack of knowledge of equivalent fractions; and

-lack of knowledge of reducing a fraction to the lowest term.

The presentation of the data from document analysis can be done as is done for the data from interview transcripts. The learning difficulties that the pupils exhibit should be taken as the excerpts.

Conclusion
Data analysis and interpretation are important activities in any research work. These activities authenticate the research that was embarked on. Data analysis helps the researcher to identify the problem and hence take appropriate mitigatory measures. Qualitative data analysis is a complex process that starts with sampling of information rich informants. It is characterized by generation of codes, themes, sub themes and categories. Unlike in quantitative data analysis that can be easily subjected to specific tests and measures, massive data qualitative data cannot be easily subjected to such tests. The researcher's role becomes critical in coming up with appropriate context codes and meanings from observations, interviews and analysis of documents in order to come up with valid conclusions and implications.

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CHAPTER 9

Writing An Action Research Report

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Introduction

Action research is "an inquiry which is carried out in order to understand, to evaluate and then to change, in order to improve educational practice" (Bassey, 1998 in Koshy, 2005: 8). It is meant to empower and to give freedom to practitioners. It is professionally emancipative by promoting involvement, engagement and participation, and critical consciousness in exploring strategic and effective actions to improve professional competency and the quality of learning (Shumba, 2006). In this chapter we propose a structural framework that can be adopted when presenting an action research report. This structure is however not definitive. It is subject to modification according to individual needs.

The research problem

Reporting action research can be a challenge. To deal with this challenge, we need to reflect on the cyclic process of Action Research and use the evidence we gather and analyse to tell the story of our experiences. The idea is to report your concern, your investigation into that concern, your action, your evidence, and your interpretation of that evidence. At each stage, you present your reflections on your practice. People should be able to immediately see what you are saying. Your story about the problem encountered should be clear.

A problem or concern comes when it manifests itself in different ways (Zireva, 2009). The practitioner should reflect on the different manifestations (which are indicators that something is wrong) and make sense of the problem. For example, the indicators of the practitioner's ineffective practice could be manifested in lack of involvement by learners in the learning situation, off task behavior or performing badly in a written exercise. The practitioner's problems are revealed by his/her reflections about his/her actions or the effects thereof. The framing of the problem will only be done after reflecting on some data that would have been generated to validate the existence of the problem. The data generated and analyzed for the express purpose of validating and understanding the problem is referred to as baseline data. Understanding of the problem entails *inter alia* establishing the nature of the problem, intensity (severity) of the problem and/or the reasons for the existence of the problem. Problem identification in participatory action research occurs in a particular context the teacher-researcher is working. Each context is unique and presents its own set of problems. Thus technical rationality based on literature study should not be used by the teacher-researcher to come up with a problem.

In a teaching-learning situation a teacher-researcher could focus his/her action research on the following:

- Teaching methods (for example improving field trips to encourage meaningful learning);
- Learning strategies (for example improvement of learning from process portfolios);
- Learning materials (for example improvement of use of text, audio, video and computer based media);
- Attitudes and values (for example improvement of learners' attitudes towards certain courses).

Reporting an action research project

Action research is closely intertwined with concepts such as 'reflective-teaching,' 'self-monitoring teacher' and 'self-reflective enquiry'. These concepts especially 'reflective teaching' could mistakenly be considered as synonymous to action research. It is therefore imperative to diffuse this confusion. "Action research becomes research (as opposed to reflective teaching) only when the researcher's reports are made open to public critique" (Hoberg, 2001:132). Reporting is thus a very important aspect of action research, since research is done in unique set ups.

The structure of an action research report has not been agreed upon by academics. According to De Vos et al. (2003) a participatory action research report normally consists of issues such as; contextual background information, research question/problem, objectives, literature study (infused appropriately where necessary), data generation methods, teacher-researcher's artefacts for improvement of practice (for example, lesson plans), presentation of data and the reflections, conclusions and implications. The action research project can be divided basically into three phases. Phase one focuses on the scope of the problem while phase two focuses on the intervention strategies.

General content of an action research report according to McNiff and Whitehead (2005) includes:
- *Descriptions*: Narratives of what you have done in relation to practice and learning;
- *Explanations*: Why you did it and what you hoped to achieve;
- *Possible significance*: How your research can influence the education of others in your workplace and also at the level of policy; and
- *Implications*: How your research can contribute to new forms of practice and theory.

Phase One
Pre-intervention situation analysis (diagnostic research)

Background to the Research Study/ Introduction
This is the scope of the problem. It is where you are conceptualizing the action research problem. First and foremost the researcher should explain the contextual background to the research. In the contextual background information, the researcher should explain the physical, intellectual and emotional environment surrounding the situation. The questions that can be considered in writing the contextual background to the research are:

- What prompted you to focus on this particular research problem/topic?
- What had you observed and/or experienced that urged you to do this research? (Moyo, 2000).
- In what sense is what you call a problem a problem? The researcher is called upon to problematize the situation that he/she experienced (Shumba, 2011; Hopkins, 2001).
- What can you do about it? (Schulze et al., 2002).

Secondly, the researcher should write the problem question/statement. The researcher should be cautious not to externalize the problem. For example, "How can I help Grade Three pupils at Chivasa Primary School to add proper fractions with different denominators?" is an externalization of the problem. The researcher comes in as a sympathizer and he/she implies that he/she does not contribute to the pupils' learning difficulties. In fact the pupils' learning difficulties are indicators that the teacher is not effective since he/she is failing to adapt him/herself to the intellectual level of the pupils. The framing of the problem question should imply some introspection. Instead the above question can be framed like, "How can I improve my teaching of Grade Three Pupils at Chivasa School to add proper fractions with different denominators?" This question is a granted question that can be split into finer questions that focus on; teaching methods, learning activities and using some media.

The researcher could have either a research question, research statement or compound statement. The following are some suggestions on how to begin a research question; *How can I ...?, What can I do to ...?, How does ...?, What procedures ...?, What happens if ...?* (Kamper & Schulze, 2004). Next the researcher should state the objectives of phase one. Phase one focuses on the generation of baseline data, which is used to authenticate the problematization of a situation. Thus baseline data is about the nature, severity, and/or reasons for the existence of the problem.

The researcher should then go on to explain how he/she is to go about trying to achieve the stated objectives. This stage is about the articulation of the plan of action. The next step is an explanation about the data generation methods, presentation of data and reflections on the data. What reflections led you to plan the particular Action Research Project (ARP)? What were your concerns? What were the desired outcomes? What were the possible reasons for undesirable outcomes? What problem had you identified and why was it important? What were the possible (positive) actions? How did you become involved in the ARP? Why was the ARP important to you in your career?

Clearly articulate the purpose of the study including action research plan. The following questions are just a guide:
- What was the purpose of the ARP? What were the research objectives or research questions? Was the purpose and questions aligned with the reflections? Were the questions aligned with the purpose?

- Did you have any baseline data?
- What positive actions were to be tried? What did you intend to do to investigate the problem? Was the action justified and informed? (examine literature, curriculum guidelines, and experience).

- Describe the educational environment in detail so that it can be understood
- What were the characteristics of the setting for the ARP? (for example, school, district, classroom, class size).
- Who were the participants? (their ages, abilities, behavior, motivation and other attributes). Was there a structure for their participation?
- What role did they play? How did you invite and involve them? Did you use collaborators or critical friends? If so, what was their role?

This involves deciding on what action to take or what conditions to change. You are envisaging plans for action. You are planning how to collect evidence of impact of the action or changes made. You also consider how to check whether what you will tell makes any difference.

Phase Two
Implementation/ Intervention Phase (Action and reflection)
The intervention phase is the phase in which the teacher-researcher attempts to solve the identified problem by means of cycles of planning, acting, generating data and reflecting. Theses stages of the cycles were alluded to in chapter four. The planning stage involves the consideration of the people involved, the activities the people involved are going to do, the material resources needed for example video recorders, the procedures involved and the research instruments used. Acting involves the implementation of the intervention program and crafting of instruments for generation of data to ascertain the impact of the intervention program. Generating data involves the use of instruments that were crafted in the acting stage. Then lastly but not least the teacher-researcher reflects on the findings in order to map the way forward for the next cycle. There is no agreement on the suitable number of cycles to undertake. After a cycle a new problem might emerge leading you to another unanticipated cycle.

When reporting an action research project, the researcher should end by writing the conclusions. The conclusions comprise of the total reflections on the whole project and the implications to the teacher-researcher.
Researchers reflect on some of the following:
- What methods did I use and in what order?
- What were my sources of data?
- What evidence and data did I generate to assess that the intervention or action made a difference?
- Did you use multiple forms of data generation? How did I generate the data as I implemented the innovation (formative research)?
- How did I generate the data at the end of the intervention (summative research)?
- Were there any connections between the data you generated and the research questions?
- What kind of evidence did I produce to show the situation as it unfolded?
- How did I show that any conclusions I reported were reasonably fair and accurate?

Also reflect on action and research implementation process: Did things go according to plan? What changes had to be made, if any, and with what effect on (i) quality of the action or (ii) on quality of the research data or evidence?

Phase Three
Post Intervention situation analysis
Present the results as obtained from your intervention. The following questions can guide you.
- What were the results of the actions?
- What kind of achievements resulted from the actions?
- What is the evidence for the claimed results?
- If necessary, do I provide results based on multiple data sources, for each research question?
- What made the actions to have impact?
- What claims can I make about improvement?
- What evidence and arguments support the claims about improvements?
- What aspects of the actions were important?

Conclusions and Implications of the Study

Reflect on change and transformation which include answering some of the following questions:

- What are the overall conclusions about the effectiveness of the action in the particular context it was implemented?
- How can others use actions similar to mine?
- Is there another future action research arising out of this one?
- What are the practical significance of the ARP?
- What are the new perspectives arising from the ARP?
- What are the changes in my personal beliefs and philosophy that have taken place through this research?
- How do the ARP results influence my practices and quality of education?
- How have you modified your practice in light of your evaluation?

Important notes

It is not the number of cycles or pages that matter but addressing the main issues or aspects of doing action research. These are the pre-intervention stage (situational analysis), the taking of action and research, implementing the action and research and the post intervention stages. There is no section devoted to literature review. Literature is fused in all sections of the report as long as it relates to the focus of the study. In fact an action research report has no literature review chapter like in the traditional one. It should be a synthesis of sources you reviewed and applied in context. The report should be written in the past tense.

The action research report must be able to answer for its readers all or most of the following questions. The questions provide for critical reflection on conclusions about interventions and their impact, and how systematically the intervention was implemented as well as how systematically the evidence of impact was collected. Both the intervention (action) and the research need to be systematically conducted and reported upon. The issues of credibility and validity emerge as follows:

- How systematically was the ARP conducted?
- How credible are the conclusions drawn from the ARP process? How confident am I of the conclusions and about the impact of the actions taken?
- What are the evidences of the trustworthiness of the conclusions?
- To what extent are the conclusions valid?
- What are the practical and substantive significance of the ARP and its outcomes and findings?

Credibility and authenticity in action research is important. Shumba (2006) cites McKay and Marshall's five authenticity criteria, which we would, do well to note and reflect upon. The five criteria are important as the conduct of an ARP must lead to improvement, change and transformation of the educational environment, participants, and you, the researcher: First there is *Fairness*: the extent to which participants' constructions are represented and presented in a balanced way. This is followed by *Ontological authenticity*: the extent to which individual participants grow through the research experience. *Educative authenticity* focuses on the extent to which shared understanding develops through the intervention. *Catalytic authenticity* examines the extent to which action is stimulated and facilitated by the research process. Lastly, is *Tactical authenticity,* which is the extent to which participants are empowered to act throughout the research process.

Validity may also be increased through a number of other techniques. The following are some techniques that you can use. Engage in persistent and prolonged observation and record data and observations accurately. This is prolonged engagement at the site of study. Also discuss your interpretations with participants of the ARP. This is called member checking. Provide thick, detailed descriptions of the setting. Use various means such as audio recording, detailed observations and in-depth interviewing. Consider, reveal, clarify, and reflect on any biases and preconceived ideas and how you dealt with them.

Conclusion

The importance of reporting action research efforts undertaken cannot be under-estimated. A report provides an important means of communicating our experiences and developing understandings. It is therefore good practice to report our practices passionately and with a personal voice to demonstrate our self-reflexivity, reflexivity about participants, and reflexivity about those who receive the report. Issues of trustworthiness and credibility are critical in the whole

process of writing an action research report. In the chapter we have provided you with some guiding questions that will assist you in understanding the different facets of action research report writing. While the three critical stages of the report are a must, variations can be suggested within this overall structure.

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CHAPTER 10

Doing Research With Children

Tamuka Shumba and
Bornface Chenjerai Chisaka

Introduction

Children are important respondents in classroom based action research. They indicate to the practitioner his/her shortcomings or strengths in the teaching-learning situation. The learners who indicate the shortcomings of the teacher are the most valuable respondents in action research since they are rich with information that the practitioner can use to improve on own practice. In other words, they are the "wise" participants whose stories and behaviour have the potential to evoke reflection on self during and after a teaching-learning situation.

Special nature of children in research

Childhood is a mode of human existence (Verster, Theron & Van Zyl, 1996). Thus children deserve a humane treatment in all research involving them. In some scholarship reviews they are implicitly derogatively considered as "things" rather than "beings". They have been seen as objects and/or subjects in research (Greig, Taylor & MacKay, 2007)retrievedfromhttp://books.google.no/books?id=doing+research+with+children&hl=no&sa=X&ei=mPY1UczNKqXj4Qsw-YFY& rediresc=y, 14 September 2011. In research, children should essentially be considered as participants, respondents or informants depending on the roles they would be playing (Schulze, 2000). For the children to effectively play their roles in research, some theories about child development need to be considered. Each one of the five domains of development is indispensable. These are the social, intellectual, emotional, moral and conative domains. One of the overarching theories that needs consideration in researches that involve very young children is that about attachment. The more intimate the researcher is to the child the more information the researcher gets from and about the child (Nash, Stoch & Harper, 1994).

Theoretical framework of doing research with children

Doing research with children is imbedded in philosophical perspectives that are critical theory, phenomenology, hermeneutics and ethnography.

Some ideas from critical theory that contribute when doing research with children are:

- Truth about the world we live in is created and uncreated by all human beings. Thus children should be involved in the creation of truth about themselves.
- Knowledge and how we understand truth, should not be separated from everyday life (Higgs & Smith, 2002). All knowledge generated by the classroom practitioner should involve the daily participants in that setting.
- Transformations in behaviour occur through "praxis" (theory-in-practice) (Higgs & Smith 2002). Theory should be generated from practice and practice should be informed by theory.
- Pedagogy (the theory and practice of teaching) should be devoid of all forms of domination (Horkheimer, 1993). Children should be accorded their rightful status and should not be manipulated.

Phenomenology

Phenomenology has the following contributions to doing research with children.

- It encourages the teacher-researcher to explore, to "look again", to reflect on the now, the immediate which is the "most-real" moment we are currently experiencing (Higgs & Smith, 2002).
- "phenomenology makes a definite distinction between the "illusory education" of social schooling and "real education", the latter it regards as the creation of new and real worlds as a result of authentic dialogue

between teacher and child" (Higgs & Smith, 2002:67). Authentic dialogue occurs when there is no coercion.

- Phenomenology encourages the teacher-researcher to put aside all theories, prejudices, ideologies and labels and look at what is actually happening with and/or to the children, very often teacher-researchers succumb to empirical dogmatism (Higgs & Smith 2002). That is when teacher-researchers are indoctrinated and almost always apply knowledge generated by other researchers in contexts that are different from theirs.

Hermeneutics

- Hermeneutics is described as the science of understanding, the art of interpretation or the science of communication. The researcher develops systematic ways of communicating with children and of interpreting the communication and subsequently practises the ways to come up with authentic information leading to understanding of the child.

In research with children, hermeneutics considers:

- total context. The children should be studied holistically.
- how teacher-researchers influence children and vice-versa. Mutual influencing should be the centre-piece in all interpretations.
- how teacher-researchers can distort communication. Teacher-researchers should guard against biases in communication that make respondents give responses for the sake of pleasing them.
- communicating with as many children as possible to understand what actually transpires. All the information rich respondents should be consulted until a point of saturation is reached in the data generation.

Ethnography

- Ethnography is the study of a group's culture (Hoberg, 2002). For many researchers in Zimbabwe, the ethno-philosophical ideology of "ubuntuism/unhuism" offers a framework for research.
- In research with children, some "ubuntuist/unhuist" ethics like gerontocracy should be considered seriously. The respect for the aged that is emphasised can easily lapse into fear of the aged. The researcher should guard against the creation of a teaching-learning situation in which children are apprehensive.
- Classroom based research is aimed at emancipating the teacher-researcher from European epistemological ethnocentrism. The teacher who is not emancipated considers theories developed in the Western World as the panacea to all classroom problems.

Ethical considerations in carrying out research with children

Every researcher should consider research ethics when generating data (Neuman, 1997; Schulze, 1999; Mouton, 2001; De Vos et al., 2003; Hendricks, 2006; UNISA, 2007). "Ethics is a set of moral principles which is suggested by an individual or group, is subsequently widely accepted and which offers rules and behavioural expectations about conduct towards ... respondents ...." (Schulze, 1999: 5) Educational researchers are bound by ethical guidelines that protect the participants (UNISA, 2007) which help ensure that the participants:

- are protected from harm or deception;
- are informed regarding what participation entails;
- agreed to participate. There should not be coercion or inducement (Schumacher & McMillan, 1993); and
- are assured that confidentiality of their responses and their participation will be maintained (Neuman, 1997).

Involvement of participants under the age of 18 requires their parents or guardians' permission (in writing) (Schumacher & Macmillan, 1993; Neuman, 1997; De Vos et al, 2003; Hendricks, 2006; UNISA, 2007). Consent can be obtained using an informed consent form. The following should be explained on the form:

- the purpose of the study;
- the nature of participation in the study;
- that confidentiality will be maintained;
- that participation is voluntary;
- that there will be no penalty for withdrawing or not participating in the study;
- that the intervention is part of the normal instructional or remedial activities;
- that you are only seeking permission to report data generated on participants (Hendricks, 2006).

Each parent or guardian should sign two copies of the form. One is kept by the participant or parent and the other should be returned to the researcher and filed. Permission to embark on research with children should also be sought from the school administrator.

Generating data with children (some broad recommendations)
The teacher-researcher should enter into a contractual relationship with the respondents during the process of generating data. In this context, a contractual relationship can be defined as a relationship between the teacher-researcher and the respondent which is based on assumed equality (Schulze, 1999). Equality in this context is concerned with human dignity. All human beings deserve a humane conduct.

When carrying out interviews with the pupils, the teacher-researcher should be empathetic. He/she should consider the plight of the pupils in terms of differences in status and language. Interviews should be in the first language of the respondent to facilitate genuine understanding (De Vos, Strydom, Fouche & Delport, 2003). The emic (insider's – pupil's) interpretations that are not restrained by language deficiencies help in providing trustworthy responses (Hoberg, 2001; Chisaka, 2006). Like interviews, focus group discussions should be in the first language of the participants. The flow of discussion should not be stifled by language.

Very often, researchers are victims of dogmatic empiricism. They embark on research with some preconceived ideas about what they should find out. Their ideas are influenced by previous studies carried out by researchers elsewhere. To alleviate the problem, observation checklists should be developed from the thick descriptions of observations made in a particular context. The observation checklist should not result only in frequency tables about certain behaviours but should provide the basis of delving into precedents and manifestations of certain behaviours. The observations should be followed by interviews to elicit the emic rationality of the behaviours shown.

The document analysis checklist should not end in frequency tables but with descriptions of how and explanation of why respondents exhibited certain attributes. Thus document analysis could be complemented by interviews to corroborate the etic interpretations.

Some criteria on trustworthiness of data generated
The trustworthiness of data generated from children should be weighed against four criteria of trustworthiness that are; truth value, applicability, consistency and neutrality. As regards the truth, the truth value is a test of whether the researcher has established confidence in the truth of the findings from the participants (Schulze, 2002). The researcher should see to it that the contexts in which data are generated conduce to the production of truth about the situation. Applicability is the degree to which the findings can be applied to other contexts and settings or used with other groups (in the case of focus group discussions). Thus for example the contexts in which focus group discussions are held should be similar in order to facilitate generalisations in context (De Vos et al., 2003).

Consistency is a test of whether the findings would be consistent if the enquiry were replicated with the same respondents in context. The researcher should ensure that the respondents would give the same responses when asked by different researchers or when asked by the same researcher after some period of time. In quantitative research the criterion of consistency is called reliability (Schulze, 2002). Neutrality is a criterion which probes the degree to which the findings reflect solely the opinions of the informants and conditions of the research and none of the researcher's other biases (Schulze, 2002). This criterion is realised well in research with children since children express their ideas plainly, devoid of metaphorical language which is riddled with connotations.

Conclusion
In this chapter we have discussed the nature and spontaneity of data provided by children. Children are a rich source of authentic data once they have trust in the researcher. However children should not be treated as subjects, but as rich informants that have their rights to participation and concert. Where these cannot be drawn from children, the role of an informed adult becomes important in concerting on behalf of the children. The theoretical frameworks to be followed when doing research with children are a key factor or operational parameter that each researcher should seriously consider. Classroom practitioners should find the information in this chapter useful as they are always dealing with this human field.

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CHAPTER 11

Ethnography: A Hermeneutic Approach To The Arts

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Introduction

In this chapter we present a synopsis of ethnography as a qualitative research methodology that can be used in action research, particularly in the arts as humanistic disciplines in the college and school curricula. Ethnography as an approach premised in qualitative research is defined and contextualized in the arts in addition to its role in defining cultural behaviors and traits. In this chapter we discuss the concepts and methods surrounding ethnography. First, is the concept of the arts as embodiments of cultural traits. This is followed by the concept ethnography, the ethnographic field and generating ethnographic data, sample and sampling procedures, and lastly, analyzing ethnographic data. The issue of validity and reliability in qualitative research is also discussed. We also attempt to make a link between ethnographic methodology and action research, an approach that has been adopted by most teachers' colleges in Zimbabwe. The methodology is perceived as useful in solving pedagogical problems and related classroom issues.

The Qualitative Research Paradigm

Qualitative research is a research paradigm that has its origins in sociology and literary criticism. It aims at giving a holistic description of a social context through the world-view of the participants (the culture bearers). In order to understand the social context, emphasis is placed on providing thick descriptions of the phenomena from both an insider's as well as an outsider's perspective. Qualitative research embraces various methodologies of research that include phenomenology, symbolic interactionism, ethnography, naturalistic inquiry and hermeneutic/ interpretive studies (Bresler & Stake, 1991; Richardson, 1999). The arts entail cultural manifestations such as visual forms, performances and music. These are best investigated through qualitative means such as ethno-methodologies and phenomenological methodologies. Phenomenology is the study of phenomena as opposed to the study of the nature of being, or the study of consciousness and the objects of direct experience. Auto-ethnography as a form of autobiographical narrative is also a qualitative design that explores the writer's experience of life.

The Arts Defined

The arts are imaginative, expressive and creative manifestations that embody the beliefs of a culture. They include a wide range of arts – visual arts, literary arts, performing arts, music, theatre, drama, and film. They express the daily experiences of a people. They are a social construction as they are defined by the people who practice them. In studying the arts, one has to qualitatively experience the phenomena and study them from within. For the purposes of this chapter the arts include the practical subjects offered in Zimbabwean schools and colleges of education (art and design, music, physical education, dance and movement, home economics and expressive arts for Early Childhood Development). Ideally cultural history as a component in a number of syllabi for these subjects is approached using ethnographic methodologies.

Ethnography Defined

Ethnography as a qualitative research methodology has its origins in socio-cultural anthropology and authorities such as Patton (2002) and Denzin and Lincoln (2005) have written extensively about it. It has become a popular research inquiry in fields such as sociology and social sciences. The term has its roots in two Greek terms ethnos (folk/ a people) and grapho (to write). This translates to writing about a people, "…a social scientific description of a people and the cultural basis of their peoplehood" (Vidich & Lyman in Patton, 2002: 81). It entails writing about the culture

or a cultural trait that reflects the knowledge and systems of meanings guiding the life of a group of people. It also entails going into the field (an ethnographic multi-dimensional space) and studying the behaviors and their meanings as understood by the cultural participants. Ethnographic researchers are, therefore, searching for meaning as perceived by the culture bearers. Ethnography describes the nature of those studied. Empirical data on society and culture are collected in order to understand the ethno-group and other social formations, their socio-genesis, composition, settlement, social welfare, characteristics as well as their material and spiritual culture. Societal groups vary from the broader racial groupings (black, Indian, white) to cultural groupings (the Tonga, the Venda) and sub-social groupings (females, males, children, gays, lesbians). These groupings are however socially constructed and are not universally accepted.

Ethnographic Field

Cooley (1997) defines an ethnographic field as a multifaceted cultural space with no delineated parameters except those defined by the ethnographer. The field is where the people are, where the people live, and where the cultural trait under study is located. It is the community of study of which the researcher is normally an outsider (Stone, 2000). The researcher goes into the community of study and through the process of going native, an integrative process, becomes a cultural participant. This enables the ethnographer to get an insider's perspective of the cultural trait under investigation. Ethnography as a methodology premised in anthropology has been traditionally used to study other cultures, '*the other*.' Unfortunately, historically, the term has been used in a derogative sense to mean the study of cultures other than white, that is, African, Aboriginal, Oriental, and Black American. These are viewed as the primitive other. This is why there were so many ethnographic museums in Europe in which cultural artifacts from *the other* were exhibited to epitomise their cultural styles. Techniques such as stylistic and morphological analysis were used to try to understand and classify the various cultures. It has also been used to define sub-cultural groups even within the western society (the so called civilized cultures!) such as women, children and the insane. A post-modern and contemporary view of the other, however, connotes any culture other than the researcher's own.

Generating Ethnographic Data

The nature of an ethnographic field entails that particular procedures should be followed in generating data. An ethnographer normally participates in the cultural setup, observes exhibited behaviors, interviews the participants and analyses cultural artifacts that are embodiments of belief systems, norms and values. For example, songs and performances depict the spiritual dimensions of a people. Visual artifacts embody various phenomena of a culture. As the researcher gets into the field he normally uses ethnographic tools such as audio recorder, video camera, still photo camera, a note pad and pen. A research assistant is sometimes engaged depending on the nature and magnitude of the study.

Critical to ethnography is *participant observation*. The researcher takes part in the cultural performances of the community under study. He/she studies the cultural trait after going native, which is usually achieved through gatekeepers. He can attend performance events, rituals and other social gatherings where participants exhibit behaviors related to their arts or other cultural traits the researcher is interested in (Reed, 2003). It is during these observations that the researcher records the events using the various ethnographic tools. He generates field notes-takes photographs, writes field notes, audio records and takes video footages. The research assistant becomes handy at this stage. There is usually the challenge of when to write the field notes, a problem that the researcher has to grapple with. In a classroom situation, does the teacher teach and write notes at the same time? When does he analyze the documents that might include children's visual productions and performances? Bi-artistic is a term that has been used to describe the learning process by the researcher as he/ she experiences and learns the artistic expressions of the people during this dialogical exchange (Reed, 2003; Stone, 2008). Experiential learning of the other's cultural context is vital in ethnography. There has to be an objective observed account of the day's proceedings regardless of their significance, normally determined at the analysis stage.

Interviews come in various forms and are an integral constituent of ethnography (ethnographic interviews) that is deep in penetration as well as open-ended. They are characterized by probing, member-checking (feed-back interviews) and general flexibility in conduct. They are also characterized by informal impromptu questions (Tuettemann, 1999). They aim to get to the heart of a cultural issue, the meaning and absolute truth as defined by the cultural participants. Interviews are usually conducted with informants who are culturally rich, and these are normally purposively identified. A broad base of interview questions that are not strictly adhered to or systematically followed usually guides ethnographic interviews. The informants' responses determine the next set of questions the researcher asks. There might be a total deviation from the initially designed and envisaged questions. Recording of interviews is best done using tools such as a digital or analogue audio recorder or a video camera. These are reference sources during the transcription stage and reliving of the events and experiences.

Cultural documents in ethnography include a wide range of artifacts such as sculptures, mosaics, textiles, pictures, written documents etc. Documents contain information that informants may not be able to articulate during interviews and which might also be missed out during participant observations. The documents, therefore, become valuable means of authenticating the validity of what informants say. Sculptures and paintings in art, costumes and transcribed songs in music, for example, are good evidence of social phenomena in a given culture. A critical and semiotic analysis for iconological meanings of these artifacts yields rich data. Documents in a practical subject situation include students' productions, and other written documents.

Sample and Sampling Procedures in Ethnography

Ethnographic research entails going into the field and collecting data using the various techniques and tools. This means the ethnographer has to carefully select culture rich informants as the first stage of the sampling procedures. This is followed by the snowballing technique which is basically a referral system aimed at identifying informants who are also rich in a particular trait under investigation (Cohen & Manion, 1985). These culture bearers are the first port of call as they are the custodians of the community's values. They are the 'authorities' responsible for the visual productions, performances etc. Referrals in art and design, for example, might include accessing the various art genres, artists and artifacts. In performances researchers are referred to the cultural performers and music of a community. This form of triangulating methods among other attributes has been a key issue in debates on validity and legitimacy of qualitative researches.

Bosk in Maxwell, 1992: 279) raises a crucial question that can also be asked among all researchers doing action research. "All field work done by a single field-worker invites the question, why should we believe it?" Maxwell (1992) talks of descriptive validity (factual accuracy of the account), interpretive validity (concerned with what objects, events and behaviors mean), theoretical validity (account's validity as a theory of some phenomenon), generalizability (extent to which an account of a situation can be extended to other situations) and evaluative validity (involves the application of an evaluative framework to objects of study). In ethnography there is also the challenge of whether one can get the truth or authenticity through the design. In this regard Nzewi (1997) discusses the concepts of cultural bearer and cultural exponent. When we investigate the arts as specialists, are we culture bearers or cultural exponents? Is the researcher always an outsider to a cultural trait or concept under investigation? What challenges does belonging to either of the two bring?

Analyzing Ethnographic Data

Presentation and analysis of qualitative data is done in three basic stages, namely, transcription, thematic indexing and thick descriptions. Data from interviews are transcribed verbatim from the audio tape recorder or other tools used to generate the data. An ethnographer usually engages an assistant for this process, which is also done immediately after exiting the site of study. The transcribed interviews are then analysed together with other data from document analyses etc, so that the researcher builds interpretive meanings from both an emic and etic perspective. The interviews and thick field notes are further processed through thematic indexing, a process of identifying themes, headings and sub-headings according to the emerging data. Thematic indexing is based on interpretation, thus making ethnography an interpretive design. Thick descriptions are characteristic of qualitative analysis and presentation. These include giving detailed descriptions of events, situations or trait under investigation. There is also detailed description of behaviours as reflected in the video footages and audiotapes. The thematic indexing becomes the bases for further interpretation.

Ethnography and Action Research

There seems to be a strong relationship between ethnography and action research. Whether the teacher/ lecturer is a cultural bearer or a cultural exponent, he/ she is researching on a cultural group (students) who exhibit certain cultural tendencies of the arts. His/ her role becomes critical as he/ she investigates the culture. Interviews, participant observation and document analysis are common characteristics of both action research and ethnography. The lecturer participates in the pre-testing, intervention strategies and the post-test stages of the research cycles. He/ she generates thick data and comes up with interpretive meanings based on both insiders' perspective and his/ her own etic perspective.

Ethnography is a design that can be effectively used in studying the arts. It is one of the qualitative designs that have been extensively used to study cultural traits in music, performances and the visual arts the world over. Practical subjects as embodiments of different facets of cultural practices can best be accessed through qualitative means. Like in other qualitative designs, ethnography has authenticity problems, which the researcher needs to grapple with. Overall, action research in the arts is a form of ethnographic research.

Conclusion

In this chapter we discussed ethnography as a qualitative approach. Ethnography has increasingly gained momentum in the recent past because of its ability for interactive and interpretive methodologies. It has ben used extensively in educational circles including the arts and other cultural studies. The classroom has been viewed as a microcosm in which the cultural participants can be studied using ethnography. Action research has become a dominant design in Zimbabwe teachers' colleges because of its practicalities when it comes to solving of classroom problems. It shares a couple of methodologies and tools with ethnography hence our discussion of the two in this concluding chapter.

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