CHAPTER SIX

PHENOMENOLOGICAL INTERPRETATION OF DATA

'The trick is to figure out what the devil they think they are up to'

(Geertz, 1979:228, quoted by Neuman, 1997).

6.1 INTRODUCTION

Interpretative Phenomenological Analysis (IPA) is defined as a psychological qualitative research approach. It has an idiographic focus in the sense that it aims at offering insights into a given phenomenon. This phenomenon is usually a significant personal problem. It could be a major life event, or the development of an important relationship (Smith, 2000).

Schoenbach (2004) states that the meaning of the word *interpretation is* the assignment of significance or coherent meaning. The qualitative interpretation uses visual representations such as maps, photographs, or diagrams showing how the ideas are related. Data is weaved into discussions of significance, in form of words, including quotes or descriptions of particular events. If there is numerical information, it is supplementary to the textual evidence.

In this study data interpretation is done by using diagrams and drawings that best depict the eco-systems of a learner. Data has also been interpreted in the form of words, quotes and descriptions.

In this study SMTs, educators and parents have justified the reasons for the learners' failure towards acceptable academic achievement. Educators and SMTs blatantly said that they were not trained to teach learners with diverse needs. Although the Department of Education offered training, they claimed that it was not enough. The parents justified their learners' none academic performance to poverty and a lack of knowledge for the work being learned at school. All these were identified in the following themes:

- Management of the implementation of White Paper 6 on Inclusive Education challenges;

- Ecological management challenges;

- Systemic management challenges;

- Methodological management challenges;

- Management challenges for curriculum transformation;

- Socio-economic management challenges; and

- Management strategies for learners with physical challenges.

Schoenbach (2004) highlights that a researcher finds a sense of meaning in the data or he/she elicits the underlying coherence. Meaning is developed from the set of meanings and not in a vacuum. In this study, the findings are linked to the social ecological system's model of Bronfenbrenner. This study involves a close examination of the experiences and the meanings made out of the activities of a sample of 10 %, 120 participants (N=120) of the total population of 1200 (N=1200), comprising of 40 educators (N=40), 8 focus groups of Senior Management Teams, each had 5 members (N=40), and 40 parents (N=40) from selected former model 'C' schools, private schools and township schools in the Vaal Triangle. The participants were sampled purposively. All the participants experienced challenges regarding Inclusive Education. Educators are faced with learners who have diverse learning needs but have no skills to teach such learners and they claimed that they were only trained to teach 'normal learners'.

Senior Management Teams of schools experience similar challenges. The majority have no idea of what to do with learners experiencing the any challenges or difficulties. They focus on sending them to special institutions after noticing that they are failing decimally. If they cannot cope within the mainstream curriculum, that is none of the school's worries. Schools fail to develop and implement suitable strategies to help learners who have diverse learning needs. Although White paper 6 on Inclusive Education talks of full resourced schools, in this specific District there are no schools with the resources necessary for Inclusive Education. Parents bring learners to mainstream schools and expect the SMTs and educators to implement Inclusive Education effectively without resources.

Parents who sent their children to mainstream schools with the hope of Inclusive Education, have to face the realities of exclusion. Learners who are unsuccessful in school are considered as possible failures and have to repeat the grade in many cases. The data from the parents gave insights into the life of the learners at home.

As stated previously, in this study the interpretation of data was done through the lenses of Bronfenbrener's environmental structure of the social ecological systems model.

6.2 INTERPRETATION OF THE DATA THROUGH THE LENSES OF BRONFENBRENNER'S ENVIRONMENTAL STRUCTURE OF THE SOCIAL ECOLOGICAL SYSTEMS MODEL

Parents or the guardians of learners were as important to the study as the educators and the Senior Management Teams of the participating schools.

The Ecological theory stipulates that there should be positive relationships in the immediate family. If there is a breakdown, the learner will not have the tools to explore other parts of his/her meso-system. This leads to learners looking in inappropriate places for attention. It might show at school as anti-social behaviour, a lack of self-discipline and an inability to provide self-direction (Addison, 1992; Worcel, *et al.*, 2008).

The above theory has dire implications for the practice of teaching. The difficulties that learners face simply mean that the school must have eco-systemic management strategies to intervene in a very special way. The school must provide support for stable, long-term relationships between learners, mentors and educators (Henderson, 1995; Packard, 2003). Indeed schools and educators should work together to support these primary relationships and should create an environment to welcome and nurture families.

The interaction between factors in a learner's maturing biology, his/her immediate family, the community environment and social landscapes, help his/her development. Changes or conflicts in any one layer will affect the other layers too (Bronfenbrenner, 1979; Worcel, *et al.*, 2008). For example: A learner with parents who are

unemployed may lack basic needs and this may affect the academic performance of the learner.

To define human existence and to understand the human mind in all its complexity is a struggle of philosophers because every person reacts to surrounding differently. Cases of poverty may cause some to drop out of school and others will make it the very essence why they should be in school (Paquette and Ryan, 2001; Wilkowski & Robinson, *2010;* Schwartz, *et al.*, 2010).

Learners develop relationships in school. The process of building relationships is critical to their positive development. The fact that learners spend a lot of time at school increases the importance of the relationships fostered there. For some of the learners, this could be the first time that they develop a relationship with an adult or with another learner outside their families. These connections help a learner to develop cognitively and emotionally. Bronfenbrenner (1979) highlights the importance of these bi-directional interactions with caring adults in the learners' life.

6.2.1 Mutual interaction

The adult in the life of a learner must have an on-going long-term relationship with the learner. These adults are very important in the development of the learner and such relationships should last a lifetime (Paquettes & Ryan, 2001: 3; Wilkowski, *et al.*, 2010; Schwartz, *et al.*, 2010).

In the case of parents being deceased, if there is no one to take over the responsibility, then child-headed families are created with its challenges that tremendously affect schools. Learners suffering from rejections in their family, cry out for help through bad behaviour at school. The interviews done during this research with the parents revealed that some learners are not wanted by their own parents. Attention seeking in the classroom irritates educators who have to deal with a full classroom of often more than 70 learners in some cases. However, it is important for the educator to motivate the learner and to believe that the learner has potential.

Togetherness between the educators and parents will help to develop learners in a very special way. These relationships must be steady and on-going interactions with

the purpose of nurturing the learner holistically (Paquettes & Ryan, 2001; Wilkowski *et al.*, 2010; Schwartz, *et al.*, 2010).

6.2.2 Parent and school discussions

The discussions between parents and the school about the learner should not be a one-off kind of talk. It should be done as often as possible, not just when there is a problem but also when the learner has done something positive. In this way they can show appreciation for the work that was well done.

The relationships between the learner and the adults in his or her life require a public attitude of support and affirmation of the importance of these relationships. Public policies must allow for time and must provide resources for these relationships to be nurtured and a culture-wide value must be placed on the people doing this work. This includes the work of parents and educators and the efforts of extended families, friends, co-workers and neighbours. It makes a learner feel very good about himself/herself if positive reinforcement is coming from an adult other than parents or educators. If another person observing from the distance gives applause, it makes a huge difference in the life of a learner (Paquettes & Ryan, 2001; Wilkowski *et al.*, 2010; Schwartz, *et al.*, 2010). In Africa, our way of life is communal. In a normal African society, a learner belongs to the community and every person has the responsibility to see to it that the learner is brought up, following the norms of the society.

6.2.3 Modern society

In our modern society, there is a lot of instability in the lives of learners. Life is unpredictable (Addison, 1992; Edwards, 2002; Allan & Crow, 2001). There was more stability when mothers stayed at home to raise their learners. Currently, in many families, both parents are working. Therefore, interaction with the important adults is not constant. This destructive force might spill over into the school setting.

Bronfenbrenner (1979) speaks of the nested environments that can be seen as the physical structure related to various stages of development. When the infant is in the sensor motor stage, in Piagetian terms, its whole world is the micro-system and the immediate part of the meso-system. The pre-operational stage includes more of the

meso-system as language develops. School and community become a more direct influence as the learner enters the concrete operational stage. In the formal operational stage higher cognitive abilities reach out further into the eco-system and even the macro-system (Addison, 1992; Edwards, 2000; Allan & Crow, 2001).

The multiple intelligence theory of Gardner provides us with a model that explains that different people handle knowledge and information in different ways. In the bio-ecological systems of Bronfenbrenner, we can view these multiple intelligence as cognitive sub-systems, the atoms that make up the molecule of the mind. If each type of intelligence creates its own interpretation of the events that cause the stimuli we receive, then the aggregate understanding is influenced by the filtering effect of this intelligence (*cf.* 2.6.8).

Figure 6.1 presentation and illustration of Bronfenbrenner's eco-systems theory (according to the researcher's interpretation of eco-systems).

Figure 6.1: Bronfenbrenner's (1979) eco-systems theory (according to the researcher's interpretation of ecosystems).

ILLUSTRATION 1

In order to study the above tree the surrounding environment must be considered. According to the researcher, whatever happens to the surrounding environment will affect the tree. Should there be a fire through the forest, the tree will be affected. The river passing through the forest may provide the water and minerals for the trees but

at the same time the river may cause pollution to the trees due to the chemicals dumped in the river from near and far from factories.

Global warming will definitely have a serious impact on the tree in the forest. It might slow the growing process in progress and the tree might simply die or might grow in an unhealthy way. What can anybody do to protect a tree from global warming? The trees normally grow naturally in their natural environment but something like global warming become unbearable to all trees in the forest although some of them may develop resistance and be able to survive despite all the challenges, very much, like learners who can perform despite challenging circumstances in their lives.

Indeed, our economy has shifted from an industrial model to a technological model, yet the patterns of the workplace have continued to rely on factory work ethics. The expectation of industry is that parents work according to a schedule that revolves around the factory whistle, even those who work in high-tech offices are equally expected to work according to a similar schedule. Our work ethics demand more face time and not less. When women entered the work force, they were also subjected to the same demands. Since the workplace supplies us with money that enables us to live well, family life has taken a back seat to the needs of the work place (Addison, 1992; Edwards, 2002; Allan & Crow, 2001).

6.2.4 Community involvement in school

Our community plays a major part in developing the learner; it is part of the meso-system. The community is there to provide for adult relationships meant for positive development. The bio-ecological systems theory holds that these bi-directional relationships provide the foundation for a learner's cognitive and emotional growth. In the community systems are found that will help the learner's development, for example, schools, hospitals, community welfare centres and rehabilitation centres. The exo-system structures such as the community provide the values, material resources and context within which these relationships operate.

A breakdown at the meso-system level simply means that the Bronfenbrenner's exo-system must be in place to provide primary relationships.

Communities are there to provide parents with access to people and structures with concerns similar to theirs and who can function as resources and emotional support. In the community the following structures are found:

- Child Care;

- Parent Employment;

- Child Social Welfare;

- Rehabilitation; and

- Partnerships between community agencies, business and industries that provide resources for families.

If a school is situated in an area that has no resources and nothing to provide in the form of work for the families in the community, it affects the school negatively. It will be considered as a poor community and the poverty within the community will impact negatively on the school. For example, learners will have no libraries to go to for research projects and no nearby Child Social Welfare to go to when they need social services. If parents have to leave their children in search of jobs, it will affect the school. Many of the older learners drop-out of school so that they can help out with taking care of young siblings while the mothers have gone to work. If there are Child Care Services rendered, this challenge will be eliminated.

Research by Lewis (1999, Mahoney, *et al.*, 2008; Lerner, 2004) provide a list of five basic needs for positive development in learners:

- A personal relationship with a caring adult;

- A safe place to live;

- A healthy start towards their future;

- A marketable skill to use after, graduation from high school; and

- An opportunity to contribute to their community.

(Lewis, 1999; Mahoney, *et al.*, 2008; Lerner, 2004).

A learner in a school with the above five basic needs for positive development is likely to perform better in school than one who lacks the basic resources. For example, a learner who is being taught a marketable skill to use after graduation from high school is motivated to go to school than one without it. A school that is producing productive citizens of the community is well respected and supported than one which is perceived has a waste of time and this community is likely to have fewer dropouts. The learners will be encouraged to go to school by adults of the community or the personal relationships they have with adults.

6.2.5 Societal impact on the school

The society functions just like all the other structures of the exo-system. The society of the learners is responsible for providing resources that enable structures of the learners' meso-system to contribute to the learner's positive development. The society provides values, legislation and financial resources. Society creates the context in which families function (Lewis, 1999; Mahoney, et al., 2008; Lerner, 2004).

Bronfenbrenner (1979) has an interesting way of explaining the break downs at the societal level that attribute to problems within meso-systematic relationships. He explains that technology has changed society and while we are taking great pains to safeguard the physical environment from the damage done by technology, no resources are available to provide similar safeguards to the damage done to our societal environment. Bronfenbrenner (1979) has another concern with the 'deficit' model used to determine the level of support granted by public entitlement programs to struggling families.

Parents must declare themselves deficient in some way in order to qualify for help in solving problems that might be caused by our cultural value of independence. If one is a big failure he/she will have a bigger amount of support. We expect families to hold their hands up from deep inside a black hole of helplessness and say, please help. What does this model do to these parents psychologically? Yet, we expect them to have the psychological strength to climb up the thin rope that is thrown down to them (Paquette & Ryan, 2001).

It is of great importance to support the organizations which help parents in their learners' development. We should also foster societal attitudes that will benefit

learners at all levels: parents, educators, extended families, mentors, work supervisors, legislators and the school (Henderson, 1995; Pillay, Roberts & Rule, 2006; Roberts, 2009).

6.2.6 Cultural impact on the school

Traditional African cultures are rooted in *ubuntu*. The researcher understands the concept of *ubuntu* as an act of sympathy, caring, giving, helping, patience, kindness, respect for others and the environment. Learners are affected by their culture through the communication of beliefs and customs. The culture we belong to dictates our beliefs concerning religion, school and family and community life. Generations pass on cultural values via these structures and the developing learners in return will receive these. In a traditional African society the belief is rooted and practiced that giving a learner to members of the family to raise him or her is acceptable. It is not considered as passing on responsibility. It is considered as a great honour that somebody has found me worthy enough to merit such responsibility; the people in the community practicing *ubuntu* will feel very proud of it. Therefore, we find ourselves with learners in the classroom who only see their parents once in a year because parents have left the learners with their grandparents, aunties and uncles. Sometimes neighbours must check on the learners because the parents are working far away from home. This act, in many traditional African communities is not considered as irresponsibility, it is acceptable.

Mentoring a learner is also seen as a community responsibility. Every member of the community close to the learner sees to it that the learner develops skills and that the learner becomes a productive community member. Cultural beliefs have real power in affecting all Bronfenbrenner's systems (Seifert, 1999; Walker, 2001; Griswold, 2004; Stark, 2007).

6.2.7 Global impact on the school

There is no way that the impact of global events on individual can be ignored. The satellites link every corner of the planet. The global news is constant in the lives of the learners of today. The global influences on our learners are not just limited to ecological and health issues but economic forces are much more reactive to international events than they were in the past. Re-development and downsizing of

jobs have an effect on families as it causes economic stress (Paquettes & Ryan, 2001).

Educating a learner requires the co-operation and involvement from educators, parents, families and the community. The community should provide role models that are needed to ensure learners' success in academic work, as well as in life. Research by Lewis (1999; Lerner, 2004; Mahoney, *et al.,* *2008*) has shown that young people have basic needs including:

- a personal one-on-one relationship with a caring adult;

- a safe place to learn and grow;

- a healthy start and a healthy future;

- a marketable skill to use after graduation; and

- a chance to give back to peers and the community

(Lewis, 1999; Lerner, 2004; Mahoney, *et al.,* 2008).

Communities can have a definite impact on learners in a number of positive ways and community leaders continue to look for ways to impact on schools and to improve learners' achievements. It is in the community where there is 'the doctor', 'the pilot' or 'the engineer' that learners want to be in future.

Adults other than a learner's parents are taking on significant learner rearing roles (Edwards & Young, 1992; Allan & Crow, 2001; Edwards, 2002). In most cultures rearing a child has always been the community's responsibility *(cf.* 6.2.6). Therefore, success for the learners means success for the community. A community will always look at a learner and would like to be able to say: '…we are doing something right because we have produced a doctor, an educator, and so on'. Vice versa, should there be a hardcore criminal from a particular community the parents will not be the only ones implicated, the community as a whole will be. Ultimately, it will cost taxpayers' money to keep that learner who has become a criminal in prison.

Schools need community members to be involved practically in the school. Community members can be involved as community tutors, mentors, health care

providers and career counsellors. Schools need caring adults who can help (Edwards & Young 1992; Edwards, 2002; Allan & Crow, 2001). Responsible adults can get involved as mentors. A mentor is an adult who assumes '....a parental role as an advisor and role model for young people to whom they are unrelated' (Hamilton & Hamilton, 1992; Jucovy & Garringer, 2008; Herrera, *et al., 2008*). Mentorship programmes provide a chance for an adult to give back to the community. It also increases a sense of self worth (Hamilton & Hamilton, 1992; Jucovy & Garringer, 2008, Herrera, *et al, 2008*). However, an effective mentor should be committed, accepting, supportive and a positive role model (Rowley, 1999; Silverman, 2008).

Volunteering adults can sacrifice their time and resources in many different ways such as:

- one-on-one tutoring;

- grading papers;

- career counseling;

- coaching;

- library assistance; and

- fundraising (Niemiec, Sikorski & Walberg, 1999; Zaff, *et al.,* 2003; Metz & Youniss, 2003).

Research has proved that community involvement contributes tremendously to the academic achievement of learners. There are many alliances that can be formed between schools and communities:

- School safety might involve the local police that must respond to criminal activities in the school.

- After school programs like study skills.

- Physical improvements: Clean and paint the school, build and extend classrooms, cut trees causing damage, have nursing sisters coming to schools to offer specialized services in health (Lewis, 1999; Devitt, 2004).

It is very difficult even to imagine the community getting involved in a school in the above way but according to (Niemiec, Sikorski & Walberg, 1999; Munt, 2002), all that it requires is careful planning. Each community could develop a plan according to their individual needs and priorities. According to (Mcphee, 1995; Munt, 2002) community involvement is just a matter of having staff members in the school who are willing to develop plans and to ask for assistance from community members. When educators are not sure of how to proceed with asking for opinions and assistance from the community, Mcphee (1995; Munt, 2002) recommends that a community forum of discussion can provide a "diversity of opinions and ideas". Out of this forum, unlimited ways can be found in which communities can assist schools; the result will be a brighter future for the South African youth.

The African village illustrated below (Figure 6.2) illustrates the environment of the learners in the community where they are nurtured with the belief that every learner in the community can grow-up to be productive despite all the challenges they might be facing. In African communities learners are mentored to become whatever they are capable of becoming. A learner who likes hunting should become a hunter. The learner who likes the river and fishing should become a fisherman. The one who likes growing food should become a farmer. The artistic learners should produce crafts and earn their livelihood through the production of crafts. There is no learner considered to be useless unless they are seriously mentally handicapped.

Figure 6.2 depicts activities in a typical African village. The learner will develop because of understanding the life of the people in the village and not just that of his/her family. The learners are not just mentored by the family members but by every member of the community. Educating a learner in an African community is the duty of every member of the community.

The fire in the Figure 6.2 symbolizes life. If there is fire, food can be cooked and shared with the members of the family and other members of the community.
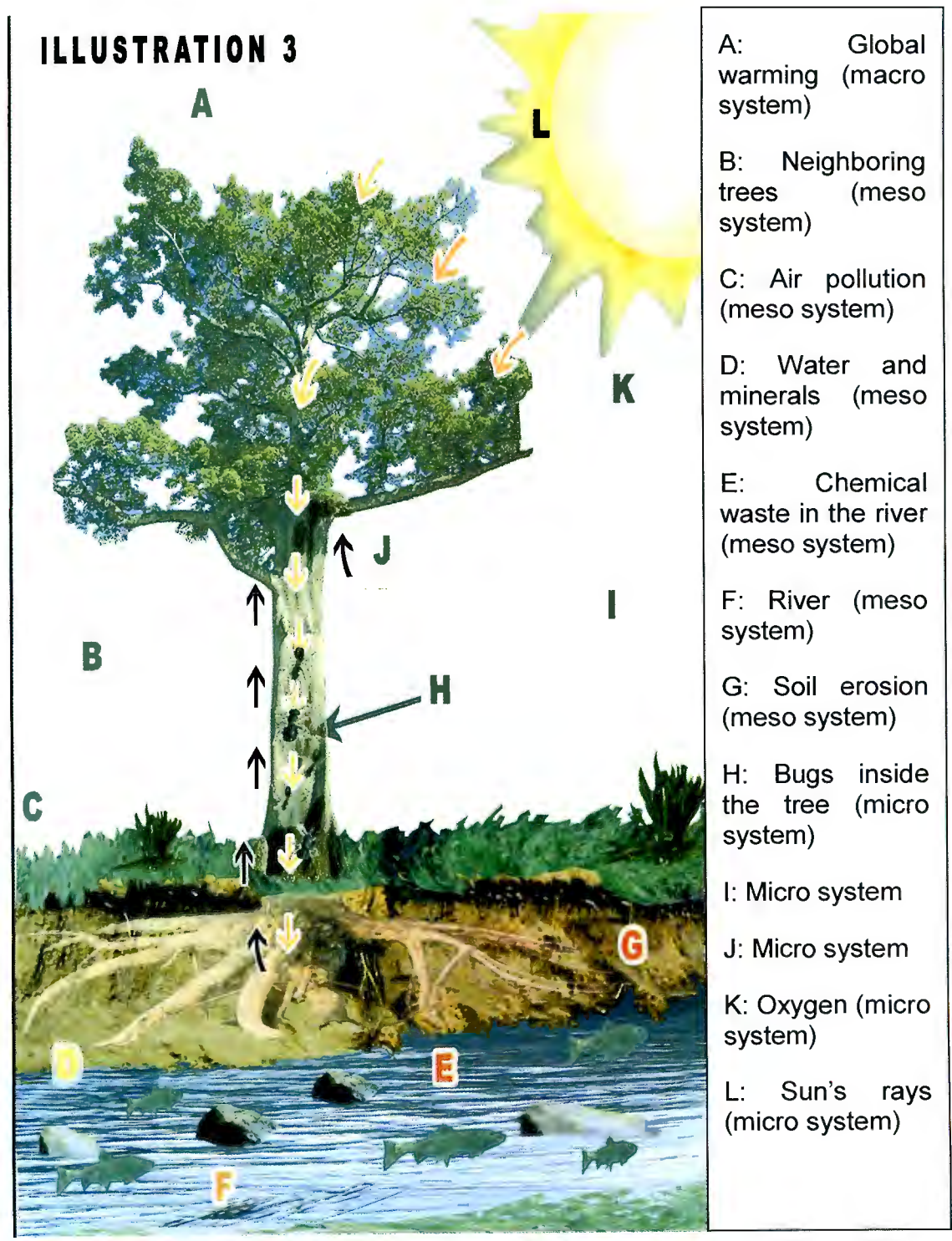
Sharing of knowledge and beliefs is not just done by the family but the whole community contributes to the growth and the raring of the learner in the community.

Figure 6.2: Activities in a typical African village (The researcher's interpretation of ecosystems through a typical African village)

Figure 6.3: The systems that may affect the growth of the learner according to the researcher's own interpretation. The learner is represented in a form of a tree

ILLUSTRATION 3

A: Global warming (macro system)

B: Neighboring trees (meso system)

C: Air pollution (meso system)

D: Water and minerals (meso system)

E: Chemical waste in the river (meso system)

F: River (meso system)

G: Soil erosion (meso system)

H: Bugs inside the tree (micro system)

I: Micro system

J: Micro system

K: Oxygen (micro system)

L: Sun's rays (micro system)

A: Global warming (macro system): The way that global warming affects trees in the forest is the same as the way in which learners are affected by circumstances

far from their environment. The current recession for example, is definitely going to affect the learners in the classroom.

B: Neighbouring trees (meso system): A learner in a neighbourhood which is polluted with crime and gangsters will be affected directly or indirectly, in the same way that a tree that has worms eating it from outside as those worms will spread to the other trees and all trees may be affected.

C: Air pollution (meso system): Polluted air will affect the growth of the trees. In the same way air pollution will affect the growth of learners.

D: Water and minerals (meso system): Water and minerals are necessary for the growth of the trees and the learners. Should it be polluted, it will cause damage within the biological system of the learner.

E: Chemical waste in the river (meso system): Water sustains life for plants, humans and animals. A polluted river will cause damage to the environment in the same way that a community with alcoholism and drug abuse, may affect the learner negatively.

F: River (meso system): A river is not just a source of water in many communities but also a source of livelihood. Communities drink from the river, work in the river (in the form of fishing) to feed and bring an income to their families. If anything goes wrong in the river in the form of pollutants, it will affect the livelihood of the people .In the same way 'rotten' communities will have a negative impact on families and the learners will be affected.

G: Soil erosion (meso system): Soil erosion symbolizes insecurities, instabilities in the lives of learners for example, dysfunctional families where learners watch their parents fight often.

H: Bugs inside the tree (micro system): A tree with problems inside symbolizes a learner with biological and emotional challenges that may affect the development and the academic performance of the learner.

I: Micro system- Systems within the learner and systems closest to the *learner.*

J: Micro system- Sugar and other nutrients are found in the system to help the tree grow, without proper nutrients the tree will die. A healthy growth of the learner depends on the proper nutrition, without it, the learner will be sickly and thus he/she cannot perform well in the classroom.

K: Oxygen (micro system): Theses are found within the tree as well as within the learner. Any imbalances may affect the learner physically or emotionally and these may influence the learner negatively.

L: Sun's rays (micro system): The radiant energy converted to produce food for the trees to feed on. Likewise learners must be fed to be successful in the classroom.

The interpretation was done through the following approaches:

6.3 INDUCTIVE REASONING

Inductive reasoning or induction is a stage in the interpretation of data where the researcher moves from the particular to the general, from a set of specific observations to the discovery of a pattern that represents some degree of order among all the data and/or all the given events (Babbie, 2004). Inductive reasoning uses specific instances or occurrences to draw conclusions about the entire classes of objects or events. It observes a sample and then draws conclusions about the population from which the sample comes (Leedy, 2009). Two premises of inductive reasoning are under review: the case and the characteristics of the case. Premises are statements or assumptions that are self-evident. The conclusion is a provisional generalization. De Vos (2003) gives a typical inductive syllogism as follows:

- The case which is a generalization as: John is a human being

- The second premise gives the characteristics of the case as: John is mortal

- The inductive premise with provisional generalization is that there is a possibility that humans are mortal.

6.4 DEDUCTIVE REASONING

Deductive reasoning moves from the general to the specific (Babbie, 2004). It moves from a pattern that might be logically or theoretically expected to observe if the expected pattern actually occurs. Like induction, deduction is a form of reasoning that includes the case and the generalization of the premise. Deductive conclusions are drawn from the logic, appearing almost self-evident. This process is called a syllogism and the classical form is usually presented as:

- The case is first premise: John is a human being.

- The generalization of the case is the second premise: Humans are mortal.

- The deductive conclusion following this is logical, self-evident, and adding no new knowledge, therefore John is mortal.

If the case is not mentioned, the reasoning in deduction will be incomplete and it will not be possible to draw conclusions but as soon as the case and generalization are mentioned, the conclusion is inevitable. The fact is that it is built in into the premise (Babbie, 2004).

In this study, the Management of the implementation of White Paper 6 on Inclusive Education challenges, ecological management challenges, systemic management challenges, methodological management challenges, management challenges for curriculum transformation, socio-economic management challenges and management strategies for learners with physical challenges were found to be affecting the classroom of teaching and learning and the school at large. Without these challenges learners should perform better.

In the following paragraphs the interpretation and data collection processes of this study are explained.

6.5 INTERPRETATION AND DATA COLLECTION PROCESSES OF THE STUDY

According to Creswell (1998; Gibbs, 2002), the process of qualitative data analysis and interpretation can best be represented in a spiral image, a data analysis spiral. The researcher does not move in a fixed linear approach, but moves in an analytical

circle. One enters with data made up of texts or images and exists with an account or a narrative. The researcher will in between touch on several facets of analysis, circling around and "upwards" towards completion of the process.

The steps are as follows:

- Collection and recording data

- Writing memos and reading

- Describing, classifying and interpretation

- Visualization and representation

6.5.1 Collection of data and the recording of data

De Vos (2003) highlights before the collection of data starts, the researcher should plan for recording data in a systematic manner that is appropriate and that will make analysis easier. It does not matter what qualitative approach is being used but the researcher should practice and develop the organizational habits of:

- labelling audiotapes;

- carrying extra batteries for recording; and

- finding a quiet place for note-taking.

This will help keep the data intact, complete, organized and accessible.

In this study, the data was recorded on cassette. Labelling was done according to the following criteria:

- The type of school

  o Former model 'c' schools:

    ▪ Educators

    ▪ Senior Management team

- Parents

- Private schools (under section 21 non-profitable organization):

  - Educators

  - Senior Management Team

  - Parents

- Catholic Government Aided Private school:

  - Educators

  - Senior Management Team

  - parents

- Township schools:

  - Educators

  - Senior Management Team

  - Parents

The researcher kept all the necessary equipment for the field work in a bag called 'Field research bag'. It contained a cassette recorder, batteries enough to last for the research project, blank tapes, a notebook, pens and pencils. The researcher was ready for fieldwork all the time. Educators and Senior Management Teams of the participating schools have workshops very often, therefore plans for scheduled appointments changed. However, the researcher knew that all that was needed for the data collection is in the bag. It gave me a piece of mind and confidence that if anything had to go wrong during the research it should not be small things that I have control over but rather unforeseen circumstances.

Marshall and Rossman (1995; De Vos, 2003) state that the researcher plans a system for facilitating information retrieval for analysis. Planning in advance for colour, coding notes to keep track of dates, names, titles, attendance at events,

chronologies, descriptions of settings, maps, socio-grams and so forth, is important for putting together patterns , defining categories for data analysis, a plan for further data collection and the writing of the final product of the research.

6.5.1.1 The two-fold approach to the collection of data and recording

The first approach to the collection of data and recording involves data analysis at the site of research during data collection. The second approach involves data done away from the site after data collection. Data can also be analysed between site and after the completion of data collection. In a qualitative study, data collection and analysis are inseparable. The claim is that the human being is an instrument capable of on-going fine-tuning of the process in order to generate the richest data (De Vos, 2003). An example to the above statement in this study is explained below:

Question: *Sir, tell me how you are managing Inclusive Education with the learners of diverse needs in your school.*

In some cases, I had to rephrase the question because they did not understand what Inclusive Education is. I had to give them an explanation of what Inclusive Education is for them to have an idea of the phenomenon. Then they gave very rich data of what they were doing in their school and then talked about the challenges that they are facing in implementing Inclusive Education in an eco-systemic environment. The question had to be refined, rephrased, and explained before some participants could engage in the discussion.

6.5.2 Memo writing and reading

De Vos (2003) states that researchers must read the entire transcript several times, immerse themselves in the details and try to get a sense of the interview as a whole before breaking it into parts. During this process the researcher can list on note cards the data available, perform the minor editing necessary to make field notes retrievable and generally get rid of what seems overwhelming and unmanageable. The writing of the memos is an exploration of data. The memos are short phrases, ideas or key concepts that occur to the reader.

In this study, the researcher transcribed data several times, so that sense could be made out of the data. It was the most interesting part of the process where the researcher had to listen and feel the words and get the undertone of what was being said. Immersing herself in the transcript brought a different dimension to the data; it was through that that the interpretation of the data unfolded. Since most of the participants are not first language English speakers, editing was necessary to make sense of data. As themes unfolded, writing of memos was necessary to conceptualize the themes, categories and sub-categories of data.

6.5.3 Description, classification and interpretation of data

De Vos (2003) states that this is the most difficult, ambiguous, complex, creative and enjoyable phase of the research project. The process of analysing data requires a high level of understanding of the data, a focused attention on the data and openness to the subtle, tacit undercurrents of social life. It requires identification of salient themes, recurring ideas or language and patterns of belief that link people and settings together. The researcher in this process notes regularities in the settings or the environments of people who are chosen to participate in the study. The researcher then looks for the internal convergence and external divergence as categories of meaning emerge. This means that the categories should be internally consistent but different from one another. In this situation, the researcher does not look for the exhaustive and mutually exclusive categories of the statistician, instead, they want to identify the salient, grounded categories of meaning held by the participants in the setting (De Vos, 2003).

De Vos (2003) states that the classification implies taking the text or qualitative information apart and looking for categories, themes or depth of information. Classification is a popular form of analysis and it involves identifying five to six general themes. In this study, the classification of information has been structured into seven different categories namely:

- Management of the implementation of the White Paper 6 on Inclusive Education challenges

- Ecological management challenges

- Systemic management challenges

- Methodological management challenges

- Management challenges for curriculum transformation

- Socio-economic management challenges

- Management strategies for learners with physical challenges

Putting the information into categories made the data manageable. It was also more fun to work with data in categories than it was before the classification. It made words and sentences fall into place and to fit somewhere in the organization of the data. It became easier to see what was relevant and irrelevant.

Interpretation of the data means making sense of the data, making sense of the lessons that are learnt from the information collected. There are several forms of interpretation that exist such as:

- interpretation based on hunches;

- interpretation based on the insights and intuitions;

- interpretation within a social science construct or idea; and

- interpretation based on the combinations of personal views versus a social science construction or idea.

When categories and patterns emerge in the data, the researcher must critically challenge the patterns that seem apparent and other plausible explanations and linkages must be sought. It is normal to find alternative explanations. The researcher must search for identification, description and demonstration of how and why the explanation offered is the most plausible (De Vos, 2003).

6.5.4 Visualization and representation

The researchers' final presentation of data is presented by packaging what was found in the form of tables and figures. In this study the findings have been represented in table form (cf. 5.1.1).

6.6 CONCLUSION

This chapter discussed the phenomenological interpretation of data as well as the meaning of Interpretative Phenomenological Analysis (IPA). Data interpretation is done by using diagrams and drawings that the researcher thinks best depict the eco-systems of the learner. Data is interpreted in the form of words, quotes and descriptions *(cf. 6.1)*.

Interpretation of data through the lenses of Bronfenbrenner's environmental structure of the social ecological systems model was discussed to give a deeper understanding of eco-systemic dimensions operating around the learner *(cf. 6.2)*.

Mutual interaction between the adult in the life of a learner was discussed as an important aspect of a balanced growth of a learner. This is only fruitful if it is done on an on-going long-term basis *(cf. 6.2.1)*.

Parental and schools discussions were discussed as important aspects of the learner's emotional growth. An African communal lifestyle was discussed because it operates eco-systemically as the responsibility of bringing-up a child is shared among all the members of the community *(cf. 6.2.2.2)*.

The influence of modern society was discussed as a contributing factor to the instability in the lives of learners because in most of the families both parents work and their children are left alone at home without supervision of an adult *(cf. 6.2.3)*.

An illustration of Bronfenbrenner's bio-ecological system theory is presented in a form of a tree to represent the learner *(cf. figure 6.2)*.

Community involvement in a school was discussed as a major contributing factor in the development of the learner in the sense of providing adult relationships aimed at the positive development of the learner *(cf. 6.2.4)*.

The impact of the society on the school was discussed because the society is responsible for providing resources that can enable resources for learner's positive development *(cf. 6.2.5)*.

Cultural impact on the school was with a focus on 'ubuntu' *(cf. 6.2.6)*.

The researcher's own interpretation of eco-systems in the form of activities in a typical African village was given in a drawing *(cf. 6.2)*.

The researcher's interpretation on how eco-systems may affect the growth of a learner and ultimately affect performance at school is illustrated in a form of a tree *(cf.* figure 6.3*)*.

Inductive reasoning and deductive reasoning explain the stance of the researcher. In inductive reasoning the researcher moved from the particular to the general *(cf.* 6.3*)* and in the deductive reasoning the researcher moved from the general to the specific *(cf.* 6.4*)*.

The data analysis and interpretation processes were discussed under the following sub-heading, namely:

- Collection and recording data *(cf. 6.5.1)*

- Memo writing and reading *(cf. 6.5.2)*

- Describing, classifying and interpretation of data *(cf. 6.5.3)*

- Visualization and representation *(cf. 6.5.4)*

The above conclusion provided the summary of this chapter. The next chapter will discuss the proposed eco-systemic management strategies for inclusive schools.