

UNIVERSITY OF KWAZULU-NATAL

FACULTY OF EDUCATION

**EDUCATORS' UNDERSTANDINGS OF THE EFFECTS OF
HUNGER AND MALNUTRITION ON LEARNERS'
PERFORMANCE**

BY

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Declaration

I, Rhonasia Nelisiwe Ngcobo, hereby declare that the work on “Educators’ understandings of the effects of hunger and malnutrition on learners’ performance” is my own original work – both in conception and execution. It has not been submitted for any degree or examination in any university. All the sources used or quoted have been adequately indicated and acknowledged by means of a complete reference.



R.N. Ngcobo

03.04.2013

Date

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Abstract

This study aims to explore educators' understandings of the effects of hunger and malnutrition on learners' academic performance. The study reveals that there are various social conditions that contribute to poor learner performance at school such as poor family background, absenteeism due to hunger, diseases, pedagogic relationship and high levels of unemployment. It came to light from the study that, in spite of the attempts by the Department of Basic Education to eradicate hunger by, for example, providing child support grants and the Nutrition Programme, there are other challenges that hinder learners' progress. The study reveals that the majority of children are orphans and come from impoverished backgrounds. They come to school hungry without breakfast and without lunch-boxes. They do not have the educational materials that are needed by the educators. The study reveals that vulnerable learners, coming from impoverished backgrounds are victims of the situations as they face many problems that hinder their well-being, both at home and at school. The study also reveals that, if a child lives in poverty, that child might perform poorly at school.

Dedication

This research project is dedicated to my late parents, my mother Mrs. Tsheliwe Xulu, who passed away on 11 November 1989 and to my father Mr. Johannes Xulu, who passed away on 15 June 2005. I also dedicate this research project to my late brother Mr. S'phamandla Ephraim. Biyela. My memories of you will never fade. I would also like to dedicate this research project to my sisters Lungi, Futhi, Ngiphile and Winie and to my brothers Bonginkosi and Sazi. In addition, this research project is dedicated to my husband Mr. Thandanani Cecil Ngcobo. I dedicate this research project to my daughter, Mbalenhle Dumisile for her unconditional love and support. Finally, I dedicate this research project to my sisters-in-law Mrs. Phumelele Nonjabulo Xulu and Mrs. Dumisile Ntombikhona Xulu as well as all the Makhathinis for their direct and indirect contribution to this study.

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ACRONYMS

- DoBE..... Department of Basic Education
- OVC..... Orphans and Vulnerable Children.
- LOLife Orientation.
- RDPReconstruction and Development Plan
- SMTSchool Management Team.
- SGB..... School Governing Body
- HIV..... Human Immune-deficiency Virus.
- AIDS..... Acquired Immune-Deficiency Syndrome

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CHAPTER ONE

ORIENTATION

1.1 Introduction

The 1990s within the South African politics marked the beginnings of the end of legislated discriminatory treatment of citizens which was premised on racial differences. Since 1948, racial identity largely determined where people lived, which jobs they occupied, and for the purposes of this study, the quality of life individuals had. The political negotiations that started in 1992, one year after Nelson Mandela's release from the 27 years of political imprisonment, began the journey that paved the way for the creation of a new Constitution. The new Constitution contains the Bill of Rights citizens have as individuals, groups or organizations. Nederlanden(2006), for example, asserts that a constitution contains the highest laws of a country. These laws are higher than the president, the courts and the government itself. These are the laws that describe how people of any country should treat one another, and what their rights and responsibilities are within the parameters of the Constitution (Nederlanden, 2006).

The Constitution declares, among other things, that all people are equal. This is regardless of age, race, gender, physical state and social class. It calls for all citizens to respect the Bill of Rights which contains, among other things, the right to life and the right to quality education. It is in this context that the state has the obligation to ensure that all children enjoy the right to life and quality education. It is in this context, furthermore, that the Department of Basic Education implemented the Nutrition Programme in primary schools (Education Law and Policy, 1999). Given the fact that under the new Constitution all South Africans have the right to basic education, including adult basic education and further education, the state has an obligation to progressively make education available and accessible. Under the South African Schools Act of 1996, for example, education is compulsory for all South African children from the age of 7 (Grade 1) to the age of 15 (Grade 9) (Education Law and Policy, 1999). Given the high levels of poverty in South Africa, the state had to, as a matter of principle, provide food for vulnerable children.

According to Mayer(2008), the energy that food provides for learners, especially those that are younger and come from poverty stricken communities can be likened with the fuel that makes a vehicle move. If learners are hungry, concentration levels get negatively affected, and this leads to passivity. The consequence is that learners eventually fall asleep while lessons are going on. Klugman (2002) argues that once we have eaten enough food to satisfy our bodies' needs, hunger goes away until our stomachs are empty again. In the learning and teaching context, empty stomachs militate against cognitive development. Overcrowded classrooms, diseases learners and parents alike suffer from as a result of malnutrition, HIV and AIDS related illnesses, and even death, has resulted in many children being orphaned (Curriculum News, 2002). It is such learners that go to school hungry and without lunchboxes. It is for this reason that, in addition to the Nutrition Programme introduced by the Department of Basic Education so that those children who go to school hungry can be fed and be able to learn better, the government further provides child support grants in order to help needy children, especially those abandoned by their fathers and mothers.

All these attempts, however, do not succeed in tackling the challenge. A sizeable portion of the South African population still lives with hunger and face a number of challenges that leave their most basic needs not met. This perpetuates hunger from one generation to the next (May, 2003). The worst scenario is that, even if younger learners in primary school escape hunger during school hours due to the government sponsored feeding program, hunger catches up with them once at home since their parents are unemployed. They arrive at school with practically empty stomachs. This means short attention span, and the reason is mostly that such learners fall asleep during the first period. Some even come to school late because they even do not enjoy waking up in the morning to attend school. Learners who arrive late constantly are not only disrupting lessons, but miss out on important subject matter. This situation affects their performance in class and leads to many questions this study hopes to answer.

1.2 Critical research questions:

The critical research questions for this study are as follows:

- What are educators' understandings of the effects of hunger and malnutrition on learners' performance? and;
- How should educators improve the performance of hungry and malnourished learners in class?

1.3 Aims of the study

The above critical research questions guided the researcher to formulate the aims of the study.

These are:

- To explore educators' understandings of the effects of hunger and malnutrition on learners' performance and;
- To help educators improve the performance of hungry and malnourished learners in class.

1.4 Rationale for the study

Given the fact that teaching today takes place in a world of rapid change and development, educators are expected to meet high standards and raise levels of learners' achievement (Campbell, McNamara & Gilroy, 2004). This becomes a challenge for educators in the context of learners who face hunger on daily basis because they come to school on empty stomachs and with no lunch-boxes. How educators are teaching learners under such circumstances is the question this study explores. The purpose is to suggest strategies that can be implemented to improve the performance of hungry and malnourished learners and to empower educators in order to tackle this challenge. As a member of the school's admissions committee, the researcher observes that many learners that enrol are orphans that come from poor family backgrounds. These children live with their guardians or care-givers. This study thus has an opportunity to benefit the school by providing the School Management Team (SMT) an insight to tackle the challenge.

There are various factors and conditions that contribute to the teaching and learning situation, such as the teaching styles and dynamics, different types of learners and their learning styles, the learner's ability to perform, biological impact on learners, the learning context, as well as the

demographics of learners. As far as the researcher is concerned, the study will also benefit the Department of Basic Education (DoBE) by providing recommendations that will be made from the findings. The recommendations will be made available for academic reference and for future researchers who wish to further their studies. Through this study, the researcher believes that the educators' voices will be heard.

Given the foregoing discussion, the purpose of this study is to empower educators who work in classroom contexts where there are hungry and malnourished learners. The study hopes to suggest teaching and classroom management strategies that can improve learners' acquisition of knowledge, thereby improving their performance levels regardless of their circumstances. According to Atinmo, Mirmiran, Oyewole, Belahsen and Serra-Majem (2009), educators need to be empowered to become actors in human resource development of citizens from preschool years and beyond. Since children's education is a societal issue and need not be the concern for educators alone, Atinmo et al. (2009) suggest that if political leaders and citizens dare to dream, they need to work imaginatively at their dreams and strive to translate these dreams through research and actions to concrete achievements. It is only in this context that the situation is guaranteed to improve.

1.5 Statement of the problem

Due to high levels of poverty in South Africa, a number of learners go to school without breakfast, tired and poorly dressed. Alaimo, Olson and Frongillo's (2001) study reveals that everyday educators witness the consequences of hunger among their learners. The majority even go to bed the night before attending school without food and receive no breakfast before coming to school. The situation is so dire that some of the learners get motivated to go to school, not necessarily because of the desire to learn, but because they know they will be fed. However, because they go to bed without a meal and go to school without breakfast, their attention span gets shorter, and this affects their concentration levels. This is the reason they fall asleep during the first period. Studies (Alaimo, Olson & Frongillo, 2001) conducted in the United States (US) reveal that hungry and malnourished children have lower attendance, shorter attention span, lower performance scores and more health-related problems than their well-nourished counterparts.

1.6 Research design and methodology

This is a case study conducted in one primary school. According to Cohen, Manion & Morrison (2007) a case study is an in-depth investigation of a single individual, group, incident, group or community. The case study methodology was found to be appropriate for this study because it focuses on one school. This study was conducted from a qualitative approach and required the researcher to explore and interview people. This is the reason the case study methodology was found to be appropriate by the researcher. A smaller number of six educators as participants will be interviewed. This smaller number of participants is in keeping with qualitative research principles (Cresswell, 2008).

1.6.1 Paradigm

Given the fact that this study seeks to explore educators' understandings of the effects of hunger and malnutrition on learners' academic performance, the interpretivist paradigm was selected. The reason this paradigm is selected is that the study seeks to understand the participants' points of view (Cohen, Manion & Morrison, 2009). For the generation of qualitative data, the study relied on participants' verbal responses to interview questions. For Creswell (2008), within the context of the interpretivist paradigm, the researcher and his or her participants are co-dependent as there is a constant dialogue between them. For Angen (2000), the interpretivist paradigm is known by its characteristics of being receptive to others and the ability to entertain multiple viewpoints.

1.6.2 Sampling

Purposive sampling was used to select these participants. Six primary school educators within the same school were selected to take part in the study. Participants' experience in the field of education and their qualifications were used to select these participants because they have potential to yield more informed responses to interview questions than the novice educators with limited experience. As a result of these choices, data that is gathered is rich, relevant and relatively adequate in addressing the critical research questions in this study.

1.6.3 Research site

This study was conducted at one primary school in the Umlazi District, Durban, in the province of KwaZulu-Natal. The community in which the school is situated is very poor and has a high unemployment rate. This research site is preferred because of its convenience in the sense that it was accessible as there was no travelling to another site since the researcher and participants are in the same school. This minimized costs and saved time.

1.6.4 Research instruments

Given the fact that this is a qualitative study, unstructured interviews, classroom observations and field-notes were used. According to Cresswell (2008), these instruments make qualitative studies possible and manageable as they yield reliable data.

1.6.4.1 Interviews

The researcher will use interviews as a tool to generate data in this study. Interviews were chosen because the study was designed to explore ideas, beliefs, views and opinions the participants had regarding the phenomenon under investigation. Cohen, Manion and Morrison (2009) and Goulding (2006) all agree that unstructured interviews allow the in-depth description of a phenomenon. Bertram (2003) and Cresswell (2008) also share this viewpoint. Open-ended interview questions were also used to generate data in this study. Angen (2000) and Bertram (2003) argue that researchers generate more data using these instruments because participants are free to respond without any limitation on the part of the researcher.

1.6.4.2 Classroom observation

The researcher also conducted classroom observations to gather data on educators' treatment of hungry and malnourished learners in class and to understand interventions that educators use to help these learners. Classroom observation further made it possible for the study to contribute to attempts to understand poor performance and factors that hinder the effectiveness of the teaching

and learning such as resources available at school. During classroom observation field notes were taken (Vithal & Jansen, 2004).

1.6.4.3 Tape recordings

Tape recordings were used by the researcher to capture data from the participants. Cresswell (2008) points out that tape recordings allow and benefit the interviewer to collect and accumulate the data without being misrepresented. Tape recordings limit the basis of biasness on the side of the interviewer. This is advantageous because no data is lost.

1.6.4.4 Transcripts

In this study interviews were transcribed. Robinson (2002) alludes to this idea where he points out that all qualitative research studies involve some degree of transcription. In the context of this study the researcher kept a written record of what the participants said during the interviews. Robinson (2002) supports this idea where he argues that transcripts contain a written or printed copy of words that were spoken during the interview.

1.7 Theoretical and conceptual frameworks

With regard to this study, the researcher used the Ecological Systems Theory, the Systems Theory and the Transactional Model Theory. These theories were utilized as a frame of reference to better understand the phenomenon studied. For the sake of this study, the following concepts were defined so that they were understood in context. These concepts were: hunger, malnutrition, poverty, educator, learner and academic performance. In essence, these theories and concepts were used because of their relevance to the phenomenon under study.

1.8 Literature review

In this study the literature related to educators' understandings of the effects of hunger and malnutrition was reviewed. The researcher reviewed research on educators' understandings of the effects of hunger and malnutrition on learners' academic performance. The researcher further

engaged with literature on the effects of poverty on learners' scholastic performance and well-being. This literature is appropriate to the phenomenon in this study. Local and international scholarship was also consulted in order to establish comparisons with the South African context. Internet sources were not left out in engaging with current thinking in the field. For the sake of this study, in many instances, inferences were drawn with regard to South African schools contexts.

1.9 Data-analysis

The data generated in this study was analyzed using thematic analysis. The researcher organized data into separate categories and themes in order to find meanings, patterns, trends, and tendencies. The researcher explains the data and accounts for its gathering. The researcher made sense of data in terms of participants' definitions of the situation, noting patterns, themes and categories. This idea is supported by Cohen et al., (2009) where they point out that qualitative research data analysis commences during the data collection process and that once the data has been collected, the researcher can be ready to formulate theme statements to develop the story line.

1.10 Ethical considerations

While permission to conduct this study was obtained from the Department of Basic Education, the University of KwaZulu-Natal (UKZN) granted the Ethical Certificate. The participants signed written consent that they will take part in the study. Pseudonyms for study participants and research site were used to protect the identities of the participants and research site. Participation in the study, furthermore, was voluntarily after participants were informed about the purpose of the research and the tools that were going to be used to generate data.

1.11 Reliability and validity

Cresswell (2008) argues that in the interpretivist paradigm, reliability and validity become a moral question. He further points out that researchers need to ask if research is helpful to the target group and also ask if something has been learned from the work. In the context of this study, the researcher established a rapport between herself and the research participants. Questions were asked in an acceptable manner, with the hope that participants were going to be sincere and motivated to answer questions in good faith. This study thus reveals how long present trends might persist and how they portray the future of the school.

1.12 Trustworthiness of the study

Cohen, Manion and Morrison (2009) argue that reasoned judgement might be used to guide future researchers to the extent which findings from one study are generalisable to another situation. Since the researcher followed all the necessary procedures to conduct this study and have reviewed the existing literature relating to the phenomenon under study, the researcher believes the research findings in this study will be trusted if they are to be read by other researchers. The researcher believes this study will be trusted because the data that will be generated from the participants will be verified, cross-checked and validated by participants.

1.13 Overview of the study

Chapter One describes the background to education in the South African context, post-apartheid regime, critical research questions, aims of the study, rationale for the study, the research purpose, statement of the problem, research design and methodology, theoretical and conceptual frameworks, literature review, data-analysis, ethical considerations, reliability / validity, trustworthiness of the study and the overview of the study. *Chapter Two* deals with the literature review within which the study is framed. *Chapter Three* deals with theoretical and conceptual framework that provides the building blocks for this study. *Chapter four* focuses on the research methodology used in this study. *Chapter Five* analyzes the data generated for the purpose of this study. *Chapter Six* enumerates the research findings and recommendations in terms of this study.

1.14 Conclusion

This chapter outlined the background of the study, critical research questions, aims of the study, the rationale for the study, the research purpose, and statement of the problem, research design and methodology, as well as ethical considerations. The next chapter discusses the literature reviewed for the purposes of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The broader argument in Chapter 1 is that access to sufficient, safe and appropriate food for learners is a basic universal human right, and is a right particularly urgent in the research site investigated in this study. Indeed, proper nutrition is a fundamental requirement for adequate learner development (Sutherland, Gill & Binns, 2004). The centrality of meeting learners' nutritional requirements is fundamental. Without meeting this pre-condition for educational success, both learners' behavioural and academic performance can be negatively affected. By means of a thorough literature survey, this Chapter hopes to demonstrate that, despite the centrality that nutrition might have on child development, scholarship on the care of learners has given limited attention to research that includes learners themselves who are malnourished. This study is different in that it explores educators' understanding of the phenomenon they live with everyday in the Umlazi District.

Sutherland, Gill and Binns (2004) note that although researchers in the social sciences have increasingly emphasized the importance of contextual variability for learners' development, their focus has been on the psychosocial context, such as family characteristics, peer groups, the neighbourhood, and the larger culture. There has been a far less attention given to the biological context such as nutritional issues, including availability and quality of food available to the individual. It is in this context that situations of poor nutrition and food insecurity of learners may arise from different risk factors, such as parental neglect of the learners' nutritional needs, poverty, or parental lack of knowledge about how to meet the nutritional needs of children (Sutherland, Gill & Binns, 2004). These risk factors will be discussed in details in this chapter.

2.2 Educators' understandings of the effects of hunger and malnutrition on learners' performance

As already indicated in earlier sections of this study, educators in most developing countries understand that malnutrition in schools has long been a matter of concern. They understand, for example, that victims of hunger and malnutrition suffer significant and long-term adverse effects

on their cognitive and physical well-being (Klugman, 2002). With young people attempting to achieve an acceptable balance between modern-day societal standards, educators have the responsibility to empower learners to effectively deal with the demands and challenges of everyday life (Mohangi, 2003). Most studies, however, show that educators tend to be less concerned about nutrition-related components of their work and, instead, put more emphasis on psycho-social-educational aspects of the process of learning and teaching.

One of the reasons for this tendency could be lack of sufficient knowledge that enabled educators to integrate this subject into their daily activities with learners. This, in turn, may come in part from the fact that nutrition issues have not been considered to be an integral part of the guiding theoretical frameworks presented in their academic training. In the UNESCO (2000) report, for example, it is recorded that educators did not receive any training with regard to nutrition. In the United States, for example, educators indicated that it is heart-breaking to see the hungry learner and, as an educator, one is not empowered to assist. Educators endlessly lament a high rate of families that have one or both parents unemployed. In some instances educators are frustrated by parents who party and spend their money on drugs, cigarettes and alcohol. There are thus many hungry learners that go unnoticed as parents are addicted to substance abuse (UNESCO, 2000).

The helplessness demonstrated by educators indicates that educators urgently require a very specific, hands-on knowledge-base to handle hungry and malnourished learners in their classrooms (Alaimo, Olson & Frongillo, 2001). There is thus a need to advance an integrative approach in education programs of future educators in which attention to biological components, such as, nutrition issues, will be considered an integral part of the training. Such an integrative bio-psycho-social-educational approach will allow educators to relate to nutrition as a dimension which they have to include in their work with learners who are hungry and/or malnourished.

Presently, professional literature focuses on the program level of nutrition as a topic to be included in the teaching curriculum in educational institutions. However, in order to assist individual learners whose life circumstances involve multiple risk factors, such as parental neglect or economic constraints, educators need to acquire a type of knowledge different from the one presented at the program level. Educators, however, do not necessarily need to be experts in the area of nutrition. They need to know how to identify the different, yet sometimes interrelated

and often independent factors of poor nutrition, how to distinguish between them and when to seek professional help from nutritionists and from other professionals, such as social workers and psychologists (Alaimo et al., 2001). In their work on how to address the needs of homeless learners in the school system in situations which include malnutrition, Alaimo et al. (2001) suggest that training programs could help educators more easily identify impoverished learners and address the challenge of helping them. Increasing educators' knowledge about how to incorporate nutrition-related components in their assessment of learners at risk of poor nutrition, such as questions about the learners' level of food security, could enhance, not only their sense of self-efficacy about handling the complexity of such situations, but also be one of the factors leading to a more balanced emphasis between the psycho-social-educational components and the biological components.

Alaimo et al., (2001) further suggest that, because of the multiple risk factors which could lead to situations of poor nutrition and the multi-factorial nature of problems arising from poor nutrition, a well-organized interdisciplinary effort is necessary to deal with them. They argue that educators may be less able to reduce the risk factors of poor nutrition without such collaborations. Alaimo et al., (2001) notes that the immediacy of educators' knowing where to turn for help from experts in the area of nutrition is the key for serving learners at risk of poor nutrition because their living circumstances may be truly dire. Therefore, an interdisciplinary orientation which includes collaboration with specialists in the area of nutrition should also be incorporated into the education programs of future educators (Alaimo et al., 2001).

In the context of South Africa, however, it is not possible to assume that all citizens have the same definition of the term: 'proper nutrition'. Proper nutrition for one racial and/or tribal group might be un-proper to the next. There is thus an urgent need to include a multicultural dimension in educator training programs in an attempt to understand what 'proper nutrition' means. This is the pre-condition for educators in training to understand the effects that the culture of families and their context of living may have on perceptions of what is considered proper nutrition. Such knowledge can enable educators to overcome differences which may exist between their perceptions of what are the nutritional needs of learners, and how to meet those needs, and the perceptions of parents whose culture (such as immigrant group) or context of living (such as living in poverty) may be different from that of the educators (Alaimo et al.,

2001). World bodies such as UNICEF (2002), WHO (1996) and the World Bank (1993a), for example, strongly endorse the involvement of schools and educators as cost effective health elements (UNESCO, 2000). Classroom-based interventions that address nutrition problems are crucial and effective components in a series of attempts designed to reach learners. These might also take the form of educators taking the initiative to teach about nutrition and involve learners in some form of physical education. Not only do such initiatives have potential to lead to healthy changes in learners' eating patterns, they also lead to greater awareness of how to tackle hunger. Indeed, this is because these are practical, easy, classroom-based programmes designed to improve learners' performance. Nutrition classroom-based intervention used in the US, for example, showed that educators who are specifically trained and experienced in nutrition were able to achieve improved knowledge scores. One of the practical things they did was to encourage a higher consumption of fruits and vegetables. It is in this context that this study argues that educators are the single most important factor in creating an effective, inclusive classroom that takes as one of its priorities issues concerning nutrition (WHO, 2002).

2.3 Educators' understandings of learners' situations

When responding to a question on what is an educator's role, scholars such as Duniford and Kowaleski-Jones (2003) argue that an educator's work is to teach. For educators, however, this role often gets compromised by learners' hunger and malnutrition. These are the two stumbling blocks that hamper their commitment and dedication to their roles. Educators also claim that despite hunger and malnutrition, there are other dimensions that hinder effective learning and teaching process. In addition to hunger and malnutrition, anger, fear, opportunistic illness, conflict among learners as a result of short temperedness, all affect learners' ability to perform academically. Learners vulnerable to such conditions cannot be receptive to learning, regardless of the type and quality of learning materials, or teaching methods employed (Duniford & Kowaleski-Jones, 2003).

For Murrell (2001), this is precisely what educators need to recognize and understand; that there is a myriad of factors that impact the learning and development of learners. It is in this context that educators need to be trained thoroughly, especially because they are supposed to be

managers and implementers of the pre-determined content (Curriculum News, 2002). Thus, institutions of teacher training and education need to develop a strong knowledge-base relating to issues of poverty for incoming and practicing educators. The curriculum needs to include, among other things, the effects of poverty on learning, awareness of the resources available in the school and the community to alleviate poverty, and acknowledgement of additional, potentially helpful bureaucracy that can lend support in matters of poverty found in most large urban and rural schools.

2.4 Educators' attitudes towards hungry and malnourished learners

Across various media sources such as television and newspapers, and even scholarly research published in various forms, it often seems like everyone is looking for someone to blame for the failures of the country's education system. As a consequence of a plethora of messages coming through these various means, the public blames the school system, principals and educators. More often than not, it is easier to blame educators' practices as the source of learner failure. Research even shows that, in some classrooms, one might even want to plug their ears out because of the way educators interact with learners (Sutherland, Gill & Binns, 2004). Such studies warn educators that it is vitally important to go to classrooms with the right attitude, and that they are going to save learners. As far as Sutherland et al. (2004) are concerned, there is no better resource for teaching than a positive attitude.

Recent studies, however, show that children are going to school hungry, and that poverty badly affects the well-being of some children. Educators lament the fact that everyday they become aware of a child suffering due to poverty. In the US, one educator confessed that he had to contact parents because a child had infected toes due to feet squashed into shoes way too small. More children from lower income families are not going on school trips, and these families find it difficult to meet the basic cost of living (Sutherland, Gill & Binns, 2004). In 2011 the study conducted in the UK, 8 in 10 educators said poverty affected the performance of learners. In 2011 in the UK a study for the Association of Educators and lecturers found that just fewer than 80% of educators say they have learners of families living below the poverty line. In another case the educator said one of his learners had not eaten for three days because the child's mother had no money until pay day. Another educator said one boy had been laughed at by classmates

when changing for PE (Physical Education) because he was not wearing underpants. Still in the UK, the poll which used interviews of more than 600 educators, found that 80% of learners were in poverty and this is affecting the well-being of some learners (Sutherland et al., 2004).

The risk factors are not independent of each other. A parent's difficult economic situation may be interrelated with his or her lack of attention to the child's nutritional needs. Educational systems provide a valuable avenue for educators to assess and work with hungry and malnourished children and their parents on ways to reduce the risks of poor nutrition and food insecurity and to reduce the emotional impact of such situations. Sutherland, Gill & Binns (2004) note that educational institutions have what no other setting in the community has, with the exception of the home environment that is continuously in contact with hungry and malnourished learners at risk for the first two decades of their lives. Therefore, educators have unique opportunities to reinforce health promoting behaviours of learners and their families within a supportive environment and to reach out and work with at risk children as a result of poor nutrition and their parents. It is in this context that educators have an important role to fulfill in identifying and preventing situations of learners at risk of poor nutrition (UNESCO, 2000).

2.5 Pedagogic relationship between the educator and the poor child

Learners from poor families often get excluded from the educational decision-making processes as they are viewed as un-intelligent and this is the reason their skills are undervalued (Von Broan & Pandya-Lorch, 2005). In this context, educators tend to make higher evaluations and give more pedagogic commitment to those learners whose academic and social behavior is closest to the classroom standards, rules and expectations. According to Sanchez (2005), the need exists for educators in urban schools to perform juggling acts with the realities of the context in which they teach or prepare to teach. In reviewing recent research on successful educators, three characteristics appear to relate most directly to educators being effective in those schools. These characteristics include knowing themselves, the environment in which they teach and maintaining high expectations. Von Broan and Pandya-Lorch (2005) maintain that children from lower socio-economic status are more likely to perform poorly in scholastic activities because educators favour and spend more time with children from upper socio-economic backgrounds. They also

argue that these poor learners are said to have come from 'bad families'; poor and characterized as unstable and un-cooperative. In this context, interaction between educators and these learners is underpinned by the adverse attitudes and expectations held by educators. VonBroan and Pandya-Lorch (2005) also point out that these children cause problems for educators who are frequently angry because of the lack of money for educational materials. Although most educators conceded that these families are financially constrained, they still claim that the lack of money for school items represents a lack of commitment towards the education of their children.

2.6 Individual work with malnourished learners

In educational institutions, the subject of nutrition has been addressed primarily by providing direct services, such as balanced meals, and developing and implementing nutrition education programs in the school curriculum for learners and their parents. Consequently, research on nutrition issues in educational institutions has focused mainly on the efficacy of various aspects of school programs designed to reduce and/or prevent poor nutrition. This means a shift of focus from educators' role in their daily contact with learners and parents who may suffer from poor nutrition and food insecurity. However, due to the multiple factors which may be involved in situations of poor nutrition, intervention at the program level in schools may not be sufficient (Sutherland, Gill & Binns, 2004). Slack & Yoo (2005) argue that there is a need that educators identify and address the specific circumstances which have led to the situation of each learner (e.g. neglect of the learner's nutritional needs, parent's lack of awareness of good nutrition and elements of poverty), as well as the emotional and psychological impact of their circumstances. These are aspects of the learner's situation to which educators may not be attentive as part of their regular teaching assignments.

Slack and Yoo (2005) note that nutrition related deficits such as poor nutrition are not simple problems with simple solutions. An underlying complexity in assessing such situations of poor nutrition is that the biological related dimension (e.g. parent's knowledge about the effect of poor nutrition on child development and how to manage the nutrition of the child) and psycho-social-educational dimensions (e.g. awareness of the emotional impact that situations of poor nutrition might have on the child) are often interrelated and it may not be possible to reach a comprehensive assessment of the risk to the child without examining all dimensions. Therefore,

in educational systems educators may need to collaborate with nutritionists or other professionals in the community (e.g. mental health professionals) when intervening in individual situations of poor nutrition (Slack & Yoo, 2005). Inclusion of the subject of nutrition in the individual work they do with children at risk in educational institutions means including nutrition related components along with psycho-social-educational components when assessing and working with children at risk and their families, as well as referring to or collaborating with specialists in the area of nutrition (Slack & Yoo, 2005).

2.7 Educators' expectations

Successful educators believe that all children can learn. Therefore they maintain high expectations for all learners, regardless of where they teach and the background of their learners. Effective educators also believe that they, as the educators, are responsible for teaching learners. Feeling sorry for learners because of their environment, and subsequently lowering demands, does a disservice to the learners (Andersen, Pelletier & Alderman, 1995). Warren (2002) found that when American middle-class educators entered urban school, they visualized hunger as an overwhelming problem. Such a view has led to a lowering of expectations for 'learners at risk' because of the social ills in those learners' homes and communities. Beginning educators in Guyton's study did not let the home environments of the learners affect their expectations. They realized that lowering expectations is not an effective means of working with learners who live in poverty (Warren, 2002). When educators have lower expectations for learners because of a belief that there is little that can be done given the learner's environments, learner achievement lags and school reform is not possible (Warren, 2002).

In Phoenix, Arizona, an educators' foundation exists that rewards successful public school educators in urban poor schools where a lack of learners and building resources often result in labels of underperforming or failing (Warren, 2002). With success defined in terms of achievements scores, these exemplary educators consistently maintain high expectations for their students as recipes for success. As one reward recipient stated in Dunlap (2004:119) "*I have high expectations and students know there's going to be consequences and reward for what they do*". Another recipient added, "*You don't settle. If you say a project has to be two or three pages,*

that's how long it has to be. Then they take pride in their work and they raise the bar themselves". Principals in these urban schools describe their successful educators as those educators who don't let excuses such as poverty, language barriers or other socio-economic factors interfere with the learners' learning.

2.8 Demography

According to Warren (2002) people are not born educators, and that teaching is a skill that is learned. He argues that disruptive learners keep the educator from teaching the way she or he should. As far as Warren (2002) is concerned this translates into low standardized test scores and achievement scores. However this scholar laments the fact that reward and punishment provides a temporary solution to an ongoing problem (Warren, 2002). Facing the challenges of urban poor places some educators defy the odds and achieve increases in learner success (Mayer, 2008). Today, as far as Mayer (2008) is concerned one out of six American children is poor, two-thirds or more of these children fail to reach even the basic level of achievement on national tests. Urban schools are where most states face the greatest gap between their expectations for learners and the reality in terms of resources, achievement and educator quality (Warren, 2002). Effective teaching, as defined by learner outcomes and improvement, is a result of combinations of methods, materials, learner characteristics and the context in which teaching and learning occur. These educators face a challenge very different from other school environments and perhaps very different from their own schooling experiences (Warren, 2002).

Recent descriptions of urban schools continue to include conditions of overcrowding, high turnover of faculty, limited resources, economic differences in salaries and supplies, and a great number of learners at risk of academic failure. Adequate time to address individual learner needs is essential in all educational settings; however, the large number of learners at risk of academic failure in urban poor schools places heavy demands on the individual educator's time (Warren, 2002). In addition to demands on time and resources in urban schools, a mismatch exists between the backgrounds of most educators and the learners for whom they are responsible. As in decades past, the preponderance of educators in American schools consists of American, middle class females. Demographic changes and the increase in the diversity of learners, including in the area

related to social class, have led to an increasing gap between the backgrounds of educators and learners (Warren, 2002).

2.9 Self-awareness and self-reflection

In terms of self-awareness and self-reflection, scholars such as Weiner (2000:97) have this to say:

Educators teaching in urban poor schools must reconcile two factors: their desires to meet learners' learning needs in an individual, personal manner, and a system that requires uniform conduct, treatment, and outcomes. The demand is now on the educator to accommodate learner diversity in a climate of standardized results. Knowing what works, but being bound by a system that limits the ability of individuals to make curriculum decisions, means that educators must know themselves in terms of their levels of frustrations and capabilities.

In addition, Weiner (2000) suggests that practicing educators repeatedly mention the need for educators to be aware of what they believe about learners' capabilities. Those personal values influence perceptions and ultimately affect educator's expectations and practices. Educators need to reflect on their belief systems and assumptions, especially in instances where their social backgrounds and experiences differ greatly from those of the learners they teach. Educators must bring their beliefs and assumptions to a level of self-awareness (Weiner, 2000). Mayer (2008) suggests that activities that improved the pre-service educators' self-awareness included journaling, composing essays that relate to readings and practice, and participating in weekly discussions focused on expectations and reflections. These activities helped prepare these pre-service educators to be able to analyze and reflect on the impact of their misconceptions of teaching and learning in an urban poor school and to increase their effectiveness later with their own learners. Mayer (2008) is of the view that knowing one's cultural, and social identity also leads to a better understanding of learners and their identities and experiences. Subsequently, with this understanding of the perspectives and situations of the learners, Mayer (2008) argues that the educator is able to establish connections that facilitate engagement, for instance, when learners do not have resources available for writing and researching outside of the school environment,

educators can structure time within the school day for projects requiring such commitment, or, for learners whose lives may always be in a state of uncertainty, a classroom with consistent routines provides much welcomed security. Mayer (2008) further points out that genuine learning takes place when the educator is able to make education meaningful by having an awareness of the learners' backgrounds.

2.10 The effects of hunger and malnutrition on learners' well-being, general behaviour and performance

Hunger and malnutrition, together with a long-term exposure to a deprived social environment, radically affects a child's capacity for achievement which has, in turn, grave implications for the whole education system (May, 2003). Atinmo et al., (2009) perceive hunger as both a violation of dignity and an obstacle to social, political and economic progress. To them, the fact that the damage is caused by hunger is irreversible and is linked to lower intelligence. They maintain that hyper-irritability against a background of general apathy, emotional lability, undue credulity, uncritical mob psychology and illogical behaviors have all been observed in malnourished populations (Atinmo et al., 2009).

Similarly, Mohangi (2003) argues that there is a close relationship between malnutrition and health problems, particularly infectious diseases. This scholar maintains that malnutrition and infection are very closely interlinked. The child who is malnourished is often infected with diseases, while infection in the sub-optimally nourished child may precipitate Kwashiorkor or Marasmus, which have all been observed in malnourished populations. According to Mohangi (2003) the overwhelming majority of the undernourished learners are in developing countries.

2.11 The relationship between scholastic progress and nutritional status

The research shows that the majority of the children who are grossly growth-retarded could be classified as slow learners and that malnutrition can cause permanent brain damage and intellectual impairment. Van Rensburg (2005) conducted a study to determine any defect of

reading progress in primary school children; in all instances he found that chronic malnutrition results in abnormalities. He also found that children who come from unskilled labourer class families, show growth retardation and have problems in learning to read. A lack of parental and environmental stimulation rated as one of the causes of the latter problem. VanRensburg (2005) conducted another study and found that improvement in the quantity of school lunches with few exceptions of white bread and vegetable sandwiches became apparent in the school performance. In view of present knowledge, it may be said that nutrition is central to proper growth. This study also showed that children who were given daily requirements of vitamins A, B, C and D showed improvement in school behaviour.

2.12 Factors contributing to hunger and malnutrition

According to Chern and Rickertsen (2003) there are various factors that contribute to hunger and malnutrition. Factors that jeopardize good health and reinforce hunger are generally known, and as well as the fact that affordable solutions are widely available. These factors are interrelated. Changes in one may be ineffective unless others are changed simultaneously. These factors include diseases and socio-economic status.

2.12.1 Diseases

According to the World Hunger Series (2007) just as hunger and health care are related, so are malnutrition and diseases. Similarly, the relationship between malnutrition and disease is bidirectional and mutually-reinforcing. Malnutrition leads to a state of poor health that puts the individual at risk of infectious and chronic disease. This two-way relationship extends to the major killers today such as HIV and AIDS, Tuberculosis (TB), Malaria, acute respiratory infections and diarrhoeal disease by depressing the immune system and allowing opportunistic diseases to colonize, further depleting the body of essential nutrients. A lack of energy and micronutrients compromises the immune system, which in turn increases susceptibility to infectious and chronic diseases. According to Chili (2006) the interaction of disease and malnutrition is bidirectional: the one causes and is worsened by the other. The results of this

malnutrition can be seen not only in disease and stunting growth, but in the death rate and the high mortality rate. Educators need to do away with the bridge between them and the learners. Chili (2006) argues that educators understand the environment that their learners are coming from, and that they are deprived of love. Educators should be able to see deep down inside their learners to what they need most. Sometimes learners will not grasp what they are being taught because they are hungry, sick or emotionally disturbed.

2.12.2 The socio-economic status

Scholars such as Kim, Frongillo and Han (2003) view malnutrition as an extensive socio-economic problem. Mohangi (2003) maintains that the outcome of these multi-factorial conditions can be devastating for the lives of learners not only affecting the material conditions of their lives, but also their sense of self worth and agency. Low income and little education can be attributed to poor learner performance. Due to poor socio-economic status of the family, the learner cannot access programmes that are available on the Internet such as 'Learners Online'; this program is helping learners capitalize on the wealth of Internet learning opportunities and resources. A family's socio-economic status is based on family income, parental education level, parental occupation, and social status in the community. Families with a high socio-economic status often have more success in preparing the development of their young children. These families have easy access to information regarding their children's health, as well as social, emotional and cognitive development (May, 2003).

Across all socio-economic groups, parents face major challenges when it comes to providing optimal care and education for their children. For families living in poverty, these challenges can be formidable. Educational toys, games, and books may appear to be luxuries, and parents may not have the time, energy, or knowledge to find innovative and less-expensive ways to foster a young child's development. According to Moletsane (2003) even in families with above average incomes, parents often lack the time and energy to invest fully in their children's preparation for school, and they sometimes face a limited choice of options for high-quality child care, both before their children start school and during their early school years. Moletsane (2003) maintains that families with a low socio-economic status often lack the financial, social, and educational supports that characterize families with high socio-economic status. Demographic and socio-

economic characteristics of households are commonly cited as important determinants of school participation and school performance as well. Poor families also may have inadequate or limited access to community resources that promote and support children's development and school readiness.

2.13 The relationship between nutrition and learners' performance

Historically, analyses aiming at the improvement of accessibility and quality of schooling in countries struggling with educational issues have focused on school related factors such as location, availability of teaching materials, educator quality and institutional management. In the developing countries 25% of learners entering school are malnourished (UNICEF, 2002). Malnutrition affects learners' aptitudes, time of enrolment, concentration, attendance and infection rates (Ani& Grantham-McGregor, 1999).

Studies show that pre-school learners of 4 or 5 years may actually be better nourished than those who are a few years older. This is particularly poignant for learners who are both nutritionally at risk and unable to eat before coming to school. If learners are not ready or capable or healthy at school, the synergistic relationship between deprivation and duration erodes the benefits of any earlier investments. The lifetime effect is to diminish their potential as productive adults. Learners who are already at risk due to nutritional sequelae come to school tired, hungry, hurting, unable to cope and benefit from lessons (Ani& Grantham-McGregor, 1999).

Absenteeism, delayed enrolment, lowered cognitive capacity and reduced academic performance are all associated with either an over or under supply of important nutrients. Learners, educators and parents grapple with these problems daily. It can be said that malnutrition brings with it harmful consequences for body and mind alike (Ani& Grantham-McGregor, 1999). One of the most common widespread nutritional insults to learners is iron deficiency syndrome. Severe anaemia is associated with increased childhood mortality, and mild to moderate anaemia is associated with lowered work capacity and productivity, immune function, altered behavior and cognitive development. School life-style programmes that involve families have been shown to provide some benefit since learners are at the period of greatest risk of malnutrition. It is a common finding in many countries that poorly nourished learners underachieve (Wagaman,

2009). In 2005 studies that were conducted in Jamaica all show improved test results and reduction in behavioural problems with improved nutrition, particularly in households that have limited resources. These effects include IQ, reasoning, motor co-ordination and language skills. According to Wagaman (2009) these problems are usually associated with poverty which may operate to confound results where low socioeconomic status parallels deficiency. Wagaman (2009) argues that overcrowded classes demands efficient educational interventions and policy review that will yield the maximum benefit in return for the resources allocated to education. While educational efforts can be damaged by the problems discussed, reaching children early during their learning years reduces risk factors and promotes healthy habits of consumption. The incidence of malnutrition can be reduced through community and school exercise and healthy life-style programmes. With the increasing conditions of malnutrition comes limitation to educational progress of learners and greater costs of health care and educational systems (Wagaman, 2009).

2.14 Effects of nutritional status on academic performance

Academic performance of learners and the factors affecting it have been well studied. These factors include infant feeding practices, perinatal factors, socio-economic factors, facilities available in the schools and at home, parental supervision and a host of other factors (World Health Organization, 2002). There is considerable research evidence to show that the socio-economic and background factors particularly the social background of the child have considerable influence on academic performance. In 2005 a study that was conducted in New Zealand demonstrated that breast feeding not only confers protective effects against respiratory and gastrointestinal infections but is also associated with consistent and statistically significant increase in intelligence quotient (IQ) and academic performance of learners (World Health Organization, 2002). Of interest is that this effect is pervasive and relatively long lasting. Several School Breakfast Programs highlighted the importance of breakfast to learners in that the academic performance of learners was better among those who took breakfast compared to those who did not (World Health Organization, 2002).

More recently, the importance of the three regular meals were evaluated and it was pointed out that these played a more important role than physical growth. Furthermore it has been noted that regular meals affected the academic performance of this cohort of learners. In 2001-2005 the study that was conducted in Malaysia indicated that the academic and intellectual performances of learners were affected negatively. The study showed learners who are malnourished did poorly in all academic subjects. A trend was also observed that those in the higher income group tended to fare better compared to those in the lower income group (Van Rensburg, 2005). This was further supported by the Pearson's Correlation test, which demonstrated that the mean monthly household income was positively correlated with the academic and intellectual performance of learners. The findings concur with those of others in that malnourished and stunted learners generally perform poorer academically compared to normal learners. As expected the data showed that malnourishment caused learning failure (Kim, Frongillo & Han, 2003).

The study also showed that environmental problems affect the development of thought processes and nutrient intake precedes both growth and learning failure. Thus, in an enthusiastic attempt to better the learners' performance by improving the learners' nutritional status it should not be overdone lest the reverse results are obtained. In a study of 6463 Korean learners in grades 5, 8 and 11, the performance was strongly associated with dietary behaviours, especially with regularity of the three meals. The regularity of meals was greater than that of socio-economic status and physical status in teenagers (Kim, Frongillo & Han, 2003).

Besides the importance of the three main meals, the role of breakfast had been evaluated. When malnourished learners received no breakfast, their performance in various cognitive tests deteriorated. It was possible that alleviation of hunger was one of the mechanisms by which school feeding programme improved academic performance (Kim, Frongillo & Han, 2003). Several studies have showed that factors including socio-cultural factors and nutritional factors were associated with academic performance of learners. Given that better nutrition is associated with improved academic performance, and attempts are made to improve the nutritional status of learners it must not be overenthusiastic. A balanced approach in nutritional intake with regular monitoring and adequate physical activities should be encouraged. This should form part of the

school health programme involving parents, educators, health care providers and health educators in providing comprehensive school health care(Kim, Frongillo& Han, 2003).

2.15 The impact of poverty on learners' scholastic performance and well-being

Children of the world are innocent, vulnerable and dependent. They are also curious, active and full of hope. Their youth should be full of joy and peace, of playing, learning and growing. Their lives should mature as they broaden their perspectives and gain new experiences. But for many children, the reality of childhood is altogether different(Klugman, 2002).According to Rooth, Stielan, PlantagieandMaponyane(2006) people are under-going periods of plenty and times of food scarcity, of growth and decline.Klugman (2002) argues that poverty involves not only hunger and death but, also massive disruptions in the social fabric of the community. He points out that poverty and hunger work hand in hand in destroying the children of developing countries. Today, millions of people living in poverty face a number of challenges that leave their most basic needs not met and that perpetuate hunger from one generation to the next. The World Food Production is more than enough to feed everyone on earth, yet hunger still reigns in most parts of the world and remains a constant threat to humanity (Rooth et al., 2006).

All people understand the physical sensation of being hungry.Most of the literature reveals that hunger and malnutrition is indeed a global problem. It views hunger as a societal issue. Hunger and malnutrition among the poorer population groups in South Africa, a food exporting country, is a major and growing problem (Klugman, 2002). Normal social relationships are strained, families disintegrate, and the better-off may take advantage of the situation to exploit the worse-off. He further argues that chronic hunger is still a staggering problem for millions of people (Klugman, 2002).Rooth, Stielan, PlantagieandMaponyane (2006) affirm that people who do not get enough food often experience hunger that leads to malnutrition in the long term, but someone can become malnourished for reasons that have nothing to do with hunger. He further argues that even people who have plenty to eat may be malnourished if they do not eat food that provides the right nutrients, vitamins and minerals.WorldHunger Series (2007)affirms that malnutrition is a leading killer and that the majority of deaths from famine occur among pre-schoolers. They further suggest that children suffer from malnutrition in a multitude of ways such as losing weight

and contracting diseases. The World Hunger Series (2007) points out that since the beginning of human existence, people have struggled to be free from hunger. Scholars such as Mohangi (2003) state that children who are exposed to poverty are more likely to experience impaired physical and mental development. These children have parents with mental health problems and live in a context of violence, poor health and environmental instability. According to Rooth, Stielan, Plantagie and Maponyane (2006) the interaction of disease and poverty is in both directions: the one cause and is worsened by the other. The results of this malnutrition can be seen not only in disease and stunting growth, but in death rate and in high mortality rate. They also argue that a person's mind can be hungry for school as much as the body can be hungry for food.

Children's basic needs for food, clothing and shelter must be met otherwise the children will be in danger of dropping out or not being able to concentrate during class (United Nations Estimates, 2001). Littlejohn (2001) argues that rises in the cost of living make poor people less able to afford items. Children are more likely to be food secure and protected when the family has a solid asset base to sustain their livelihoods. Children's Institute (2009) suggests that the school must be a place that children look forward to going to every day. A pleasing physical environment is much more welcoming than untidy, uncared for and over-crowded surroundings. Although many schools are not well resourced and struggle to cope on a tight budget, if the whole school is involved, improvements can be made at relatively low cost. If learners are involved in creating a pleasant environment, incidents of vandalism also usually tend to decrease.

2.16 Enrolment figures and absenteeism

Enrolment figures remain important measures of development in human capital. Furthermore, rates of enrolment, high rates of absenteeism, early drop-out, and low school attainment are linked to learner's health status and malnutrition rates (World Bank, 1993a). The net enrolment ratio is the total number of learners enrolled in a schooling level who belong to the relevant age group for that level (UNESCO, 2000). Accordingly, there is a gap between primary and secondary school enrolment ratios that reflects the failure of one in four primary school learners to advance to a higher level without repeating (UNESCO, 2000). Given the complex association between nutritional status and cognition and grade achievement, the gap can be partly attributed to poor nutritional status of school-age children.

According to a World Bank (1993a) review of policy options to improve Primary Education, two of the most significant continuing problems facing educational planners are: (i) Late enrolment, i.e. learners who are unprepared to begin school at the usual age of 5 years and (ii) Poor school performance, i.e. failure of learners to learn adequately while at school (World Bank, 1993a). These two problems are especially significant because they constitute major barriers to the achievement of quality education. They affect large population subgroups and they are in large part a consequence of poor nutritional status of learners. These two problems can also be viewed chronologically. Late enrolment is often a consequence of malnutrition that is experienced during the preschool years (i.e. under the age of 5) while poor school performance is mainly an issue during the primary school years (i.e. between the age of 5 and 12). This chronological sequence highlights the importance of designing nutritional interventions that start in the preschool years and continue through the primary school years (UNESCO, 2000).

2.17 Educators as key factor for success of learners

The team which conducted a study in India observed that a lower improvement in scores of learners in government schools because of the lack of enthusiasm on the part of their educators and the limited availability of supplementary teaching materials. The team alluded that educator orientation is a necessary part of nutrition education interventions. Most studies on nutrition education have included educator orientation. These studies reveal that educators participating in nutrition courses had better knowledge of nutrition, a more favourable attitude towards teaching nutrition and spent more classroom time on this and that knowledge scores of learners who had participated in the training improve (Ani & Grantham-McGregor, 1999). The team also found that educators with nutrition training made more use of community resources and supplementary materials. They also noted a significant increase in the post-intervention knowledge scores of learners who had participated in the training. Similarly, Sagor (2005) found that educators needed training and background information on nutrition. Time constraints were a concern; team building and sharing of responsibilities was a key strategy. This was evident where in one of the schools only a single educator was responsible for nutrition lessons. The involvement of parents was suggested to support the educators.

The studies conducted in Kolkata suggest that parental involvement can make classroom teaching more effective, especially with younger children. Nutrition lessons can be easily modified and adapted to different socio-cultural settings and used to reach out to the community. Nutrition education can be extremely useful in creating awareness among school children. They can be used to start activities such as kitchen gardens and increase community involvement. Although nutrition education is offered in schools, its actual implementation is often left to the discretion of individual districts, schools and educators. The study indicated that local administration should be taken into confidence and school authorities and educators must be convinced that nutrition education will not add to their work burden. This calls for innovation and creativity on the part of the educator (Sagor, 2005).

2.18 Learners as key agents of change

According to the World Health Organization(2002) learners are a nation's most important resource and promoting their health through schools can both reduce common health problems and make the education system more efficient, leading to economic development. It is certainly possible to make learners aware of broader public health issues such as food security. The St Gregorius School demonstrated that schools can provide the most effective way to reach out to large sections of the wider community, including young people and their families. However, more intense efforts may be needed to make primary school learners understand their role in tackling food insecurity. The bottom line is that any initiative that might be taken must be adapted in keeping with the learner's age, level of understanding as well as their socio-cultural environment. Learners attributed hunger and malnutrition to poverty and had a clear understanding of the social factors responsible (World Health Organization, 2002).

In the Dakar Education Conference, authors such as Chern and Rickertsen (2003) took a position that all young people have the right to quality education. They argue that learners must learn to incorporate life skills to address challenges they encounter in their daily lives. As far as these authors are concerned, learners should apply life skills and qualities such as self-esteem, sociability and tolerance, action competencies to address their daily challenges. Learners need to take action and generate change and have the capabilities to exercise the freedom to decide what

to do and who to be. In many cases you find teenagers and/or adolescents take premature or unwise action (Curriculum News, 2002).

2.19 Filling the gap to feed hungry and malnourished learners

Public schools in the U.S. are well positioned to make sure that learners don't go hungry to school through federal lunch programs. The community volunteer for a food program that provides needy learners with backpacks full of food on Fridays to ensure they have enough to eat on the weekends. Learners return the bags on Mondays, so they can later be refilled in the office. The bags are filled with healthy foods such as cereal, packaged fruit, apple sauce, beans and franks. The donors deliver sacks of food to the school, where they're packed by volunteers. Educators identify learners who are most in need (Sanchez, 2005).

Still in the U.S. another similar initiative has been taken to fight the scourge of hunger. The community through the local church, local service club and the school district started a programme. Learners pick dry food for the weekend. Learners return the backpacks on Monday and they are eligible to get another that come on Friday. In the back packs they put dried soup, powdered milk, granola bars, peanut butter, canned fruit, canned vegetables, canned meat, bread and fresh fruit. All that food can be prepared without a stove/ oven or a fridge. They are also customized for those learners with food allergies. They rely on educators and school administrators to help identify the learners that are in need. Educators are, however, warned not to label the learners (Sanchez, 2005).

In India the study of 2005 found the majority of homeless families, orphans, destitute, the unemployed, child labourers, illiterates and victims are prone to hunger. In India they make learners realize the disadvantages of fast food and soft drinks. The learners learn about the harmful effects of eating too much fast food, energy-dense oily preparations and skipping meals, especially breakfast. In India a number of studies on nutrition for education for children of school age have been conducted that aim at improving the knowledge, skills and attitudes of children to understand food and nutrition issues so they can choose a healthy diet. Programmes based on nutritional science and aim to change knowledge, attitudes and dietary

intake. Still in India the study showed the positive effect of nutrition education on learner's nutritional knowledge (Van Rensburg, 2005).

Van Rensburg (2005) observed that a state-wide nutrition education curriculum had a significant impact on eating behaviors. He also found that nutrition education can be used as an effective tool for developing suitable nutritional practices. The study conducted in India found that classroom lessons can be effective in promoting learners' awareness of the "who, what, why and how" of hunger. In India home gardens have been effective when combined with educational interventions in improving vitamin A intake and nutrition (Van Rensburg, 2005). According to UNESCO (2000) kitchen-gardens for nutritional education are needed. There is also a need for food-based interventions.

2.20 Food security and its relation to poor performance

Food insecurity in the home may translate into a source of family stress that could affect parenting behaviours and learners' reactions as well as learners' functioning in educational institutions (Alaimo, Olson & Frongillo, 2001). Alaimo et al., (2001) in their analysis of 5,433 learners in the U.S. found that food insecurity was significantly associated with arithmetic scores and grade repetition. They also examined the relationship between dysfunctional behaviour and risk of hunger in a study of 328 families with at least one learner younger than 12 years old. Learners who were hungry were categorized as more dysfunctional than those who were not hungry. In addition, learners who were hungry were more likely to be receiving special education services, more likely to have a past or current history of mental health counseling, and more likely to have had to repeat a grade. Furthermore, hungry learners scored higher on aggression and irritability scales and were more likely to engage in fighting and stealing behavior than other learners.

Dunifon and Kowaleski-Jones (2003) found in their study of 3,500 children who participated in a School Lunch Programme that food insecurity is associated with fewer positive behaviours among school age children. Similarly, Slack and Yoo (2005) found in a sample of 1,363 learners that, controlling for other indicators of poverty, food insecurity is generally associated with behaviour problems in children. Slack and Yoo (2005) noted that with the relatively

widespread existence of food assistance programs for low income families in USA, practitioners may currently be inclined to either rule out food insecurity as a contributing factor to behavior problems, or simply refer families experiencing food security to these programs, thus ignoring treatment of the individual risk factors of poor nutrition. Due to the impact that situations of food insecurity and poor nutrition might have on a learner's development, it is essential to include the subject of nutrition when assessing and working with learners.

2.21 Conclusion

While the empirical basis for evaluating the impact of hunger and malnutrition is still maturing and in some cases inconsistent, there is already sufficient evidence to conclude that, overall malnutrition is probably an important determinant of both school participation and school performance. From the information given, a strong case can be made for the negative effect of nutritional problems on school-related outcomes. Research has consistently found hunger and malnutrition to have significant negative effects on tests of cognitive function in both preschool and school-age learners, and on school attendance and school performance (UNESCO, 2000). Several questions face education policy makers regarding school-based interventions to improve school enrolment and school performance. The issues of primary importance are the nutritional problems affecting learners and what could be the possible interventions to address these nutrition problems. Schools have a major role in identifying and solving these problems. The following chapter will present the theoretical and conceptual frameworks that lay the foundation for this study.

CHAPTER THREE

THEORETICAL AND CONCEPTUAL FRAMEWORKS

3.1 Introduction

In this study, the researcher will use the Ecological Systems, the Systems and the Transactional Model Theories in order to provide a clear understanding of the phenomenon under study. These theories form the basis of the study and the researcher decided to use them because of their relevancy to the study since they view the child not in isolation, but as being in the context and surroundings that may have an influence on his well being. Since teaching and learning is a complex human activity process, it is vital to take into account the cause and effects of all processes that prompt the child to excel or decline in his or her performance at school.

3.1.1 The Ecological Systems Theory

Donald, Lazarus and Lolwana (2010) state, that Ecological Systems Theory is based on the interdependence between different organisms and their physical environment. Donald et al., (2010) also state that these relationships between organisms and their environment are seen holistically. According to them things that happen in one part of the system can affect other parts, and ultimately the ecological system as a whole. The notion of balance is also a central ecological concept. The researcher chose to use Ecological Systems Theory because of its relevance to the phenomenon that is being studied. This study involves educators' understandings of the effects of hunger and malnutrition on learners' performance.

Like ecosystems children develop in the context of a process of mutual accommodation. This implies that as a human being a learner is dependent on other people for his or her development and well-being. When there is a major disturbance in one part of the system, the balance of the whole system may be threatened. Bronfenbrenner (1989) argues that Ecological Systems Theory helps to understand vulnerability to risk behaviour as being influenced by multiple contexts. Risky behavior can be as simple as smoking, drinking too much alcohol and overeating. The researcher felt there is a need to understand the individual factors that influence one's behavior since learners do not behave in the same way all the time.

Intrapersonal factors include knowledge, attitudes, beliefs, motivation, self-concept, developmental history, past experience and skills (Donald et al., 2010). As far as the researcher is concerned, the Ecological Systems Theory will help to provide understanding of how different systems interrelate with each other and help educators understand the performance of learners in class. After noticing these behaviours, an educator will be able to help the learner. In terms of this study an educator will note that a performance of a particular learner is declining and will then offer the necessary help.

In essence Bronfenbrenner's Ecological Theory has been used in this study because it attempts to understand how children's development is shaped by their social contexts. Bronfenbrenner has had a particularly wide and significant influence in shaping our understanding of how different levels of system in the social context interact in the process of child development. He has shown that the interactions that occur in face to face, long-term relationships are the most important in shaping lasting aspects of development (Swartz et al., 2011). For Bronfenbrenner (1989) child development happens within four nested systems which interact with the chronosystem. These nested systems are:

3.1.1.1 Microsystems

These are systems in which children are closely involved in proximal interactions with other familiar people such as the family. Microsystems involve roles, relationships, and patterns of daily activities that shape many aspects of cognitive, social, emotional, moral and spiritual development (Donald et al., 2010). It might happen that a learner is staying with a step-mother or step-father and is not treated well or a learner's parents are going through a divorce; all these things can affect the learner's performance at school. Even the home chores or any responsibility that the child is assigned at home if it does not suit the child, the child may be stressed emotionally and that can influence the way the child performs at school. Microsystems theory involves the biological aspect of the child as well. This implies that if the child is sick, that child can not learn properly.

3.1.1.2 Mesosystems

Donald et al., (2010) define the Mesosystem as a set of microsystems that continuously interact with one another. They argue that the Mesosystem is sometimes referred to as neighbourhood or local community. For example, a child who is not supported by her family may experience care and understanding from a neighbour, peer, or an educator (Donald et al., 2010). Thus, what happens in the family or the peer group can influence how children respond at school, and vice versa. For example, the lack of support from the child's family may make the child anxious and insecure. Interactions with the neighbour, peer or teacher may, over time, change her sense of insecurity. This idea is supported by Bukatho and Daehler (1995), who argue that this may change the interactions the child has at home.

It is a given fact that children are unique, and some children feel bad if they see that they are suffering. Not having a lunchbox, spending money or go to school hungry, while other children from their neighbours carry lunchboxes, have spending money, and wear nice clothes, can be very depressing to those who do not have. Some children may drag that pain to school and that can affect their academic performance.

3.1.1.3 Exosystems

Donald et al., (2010) maintain that this level includes systems in which a child is not directly involved, but which may influence the people who have proximal relationships with the child in the child's microsystems. The example here will be the parents' workplace, a brother's peer group, or an educator's involvement in a local organization. What happens at the workplace of the child's parents has an exosystemic influence on the child's family microsystem, and the child's development. For example, a child is affected by the loss of parent's job.

3.1.1.4 Macrosystem

The scholars, Donald et al., (2010) point out that the macrosystem involves dominant social and economic structures, as well as values, beliefs and practices that influence all other social systems. For example, a cultural value may include obeying authority and respecting senior members of the community. This value will then influence how the state distributes resources to society affects every level of system. The macrosystem is equivalent to what is referred to as

wider community and the whole system (Donald et al., 2010). With regard to this study, if the state is failing to deliver resources that are needed by the school, teaching and learning cannot be effective and that will result in learners performing poorly. With regard to this study, this theory will render assistance in understanding that there are other factors except hunger and malnutrition that have an influence on learners' performance.

3.1.1.5 Chronosystem

According to Donald et al., (2010) developmental time affects the interactions between these systems, as well as their influences on individual development for example, families, and all the other systems in which developing children are involved, continuously change and develop themselves. These changes all interact with a child's progressive stages of development. Finally, children's perceptions of their contexts are central to how they engage with them. Influenced by the world's views, values and practices of those in proximal relationships with her a child will perceive and engage with her social context in similar ways. Children are active participants in their own development. If a child perceives her world as basically threatening, she will be less likely to explore it and to engage in interactions that might promote her development. The opposite will be true of a child who feels secure and confident in her ability to engage in new situations (Donald et al., 2010).

3.1.2 Systems Theory

As far as Donald et al., (2010) are concerned theorists have applied similar concepts to relationships between human beings and the interactions between groups of people in their particular social contexts. The relevance of this theory in this study is that it has been found to be in line in developing our understanding of families, classrooms and schools. In essence, this theory sees different levels and groups of people as interactive systems where functioning of the whole is dependent on the interaction between all parts. A school, for instance, is a system with different parts, such as its staff, its learners, its curriculum and its administration. The researcher chose to use this theory because it is appropriate to the phenomenon being studied.

As the study looks at the educators' understandings of the effects of hunger and malnutrition on learners' performance, this theory looks at how people interact where functioning takes place. In

this study the functioning takes place at school. This implies that the learner must interact with educators and other learners at school. If the learner does not interact very well with educators at school, that may result in the learner bunking periods of learning areas that are taught by educators that he or she wants to avoid. When assessment is done that particular learner will produce poor results. Some activities in class require learners to work as a group or as a team, if the learner does not interact well with other learners that learner may not be accepted in the group or else the learner will decide to isolate himself or herself and not participate in the group. In the long run that particular learner may not produce good results. So this theory will be of great help in understanding how the learner relates to other learners and educators at school. This is alluded by Donald et al., (2010) where they point out that Systems Theory is useful because in order to understand the whole system of how children develop and learn educators need to examine the relationships between its different parts (Donald et al., 2010).

3.1.3 The Transactional Model Theory

According to Donald, Lazarus & Lolwana (2010) this model emphasizes how the interpersonal transactions between an individual and those in the child's social context influence the course of development differently at various critical periods in her life cycle. A child continually carries forward her existing psychological capacities (cognitive, emotional, social, etc) from previous transactions to her current situation. Her current proximal or close, face-to-face transactions are then shaped not only by these existing capacities but also by her present social context and the particular developmental period she is in. This model suggests that transactions at particular critical points in development may consolidate or modify capacities that were laid down earlier. This differs from the more traditional view that what is established early in development has permanent effects.

The Transactional Model Theory suggests that lasting effects are the result of consolidating earlier transactions at successive critical points (Donald et al., 2010). Different social contexts have different relative influences on a child's psychological development. The researcher preferred to use the Transactional Model Theory in this study because this theory seeks to understand a more precise path of development of an individual. The Transactional Model Theory also helps to clarify how specific contextually shaped transactions affect (positively,

negatively) a person's developmental pathway differently at particular critical points. The family, for instance, will have a different kind of influence during infancy and early childhood than it has during adolescence.

Since this study involves the learner, this theory will be appropriate in helping the educator to understand how different learners behave in class. For instance the learner from a stable family background, who gets parental support, may behave differently from the learner who happened to be raped, or a learner who is an orphan and comes from a home where the parents are divorced and does not receive parental support. The Transactional Model Theory will help the researcher as an educator to consider the bearing of the things that happened in the past (history) with a learner and will help to understand that there can be other factors that may lead to poor performance beside hunger and malnutrition. This is supported by Donald et al., (2010) where they point out that equally, the peer group and the local community will have a different kind of influence during adolescence than they have during the earlier periods.

3.2 Conceptual framework

For the sake of this study, the following terms will be defined so that they will be understood in context. These concepts are: hunger, malnutrition, educator, learner, academic performance and poverty.

3.2.1 Hunger

In this study hunger refers to the body's signal that it needs food. Hunger is when a person goes on an empty stomach. Hunger involves the condition in which people lack the required nutrients, both macro and micro, for fully productive, active and healthy lives. Hunger can be a short-term phenomenon or a long-term chronic problem that can have a range of effects ranging from mild to severe. It may result from people not taking in sufficient nutrients or their bodies not being able to absorb the required nutrients. Hunger can also result from poor food and child care practices (Littlejohn, 2001).

3.2.2 Malnutrition

In this study malnutrition refers to inadequate nutrition. Malnutrition is the condition that occurs when your body does not get sufficient nutrients. It also refers to a lack of healthy food in the diet or an excessive intake of unhealthy food. Even people who have plenty to eat may be malnourished if they do not eat food that provides the right nutrients, vitamins and minerals (Hubbard, 1995).

3.2.3 Educator

In this study educator refers to somebody who teaches learners at school, especially as a professional (Chili, 2006). As far as Chili (2006) is concerned educators supervise learners and exercise necessary discipline to learners. Educators play a parenting role at school. This implies that educators act in loco-parentis. Educators develop the learners academically, socially and culturally. They maintain good communication between themselves and the learners and between themselves and the parents. Educators develop and maintain loyalty and respect for the profession (Chili, 2006).

3.2.4 Learner

In this study a learner refers to somebody who is learning a subject or a skill in a school situation. Basically, a learner learns and takes up knowledge or beliefs from the educator who is an expertise in the field of Education. A learner acquires new knowledge and skills. In essence, a learner goes to school to gain knowledge, comprehension, or mastery of new experience. In this study a learner receives education (The South African Schools Act, No. 84/1996 as cited in Weiner, 2002).

3.2.5 Academic performance

In this study academic performance means the progress of a child or the manner in which the child functions at school (Chili, 2006). This scholar puts it clear that quite a number of factors contribute towards the academic performance of the learner, such as positive attitude shown by

parents, self motivation of learners, attitude of the learner, home background, the school itself. Thus,academic performance really means three things:

- The ability to study and remember facts or being able to study effectively.
- Seeing how facts fit together to form larger patterns of knowledge or being able to think for yourself in relation to facts.
- Being able to communicate your knowledge verbally or put it down on paper (Chili, 2006).

As far as Chili (2006) is concerned, goodacademic performance gets you ahead in a competitive world.Education is the only road to success in the working world, much effort is made to identify, evaluate, track and encourage the progress of learners in schools. Parents care about their child'sacademic performance because they believe good academic results will provide more career choices and job security (Chili, 2006).

3.2.6 Poverty

In this study poverty can be understood as a condition whereby a person cannot satisfy his or her basic needs, namely food, shelter, clothing, clean drinking water, sanitation facilities, lack of voice, physical security, information, health care and education. Poverty is a pronounced deprivation in well-being, and comprises low income, homelessness, inadequate housing, unsafe environments and social discrimination and exclusion from the community decision making processes and the inability to acquire the basic goods and services necessary for survival with dignity (United Nations Estimates, 2001).Similarly, Mayer (2008) points out that fundamentally, poverty is a denial of choices and opportunities, and a violation of human dignity.Poverty is a condition characterized by severe deprivation of basic human rights.

3.3 Conclusion

The theories that will be used in this study have been chosen because of their appropriateness and relevance to the South African social contexts, and their implications for education. The researcher believes that the theoretical framework used in this study will provide understanding of how any social problem is caused and maintained, not only by individual psychosocial factors,

but also by families, peer groups, schools, communities and ultimately the whole society. This chapter provides a clear understanding that all human systems change and develop over time. As the child's learning takes place at school, it is necessary to consider that schools are systems that change and develop over time, as are communities. The development in one influences the development in other in continuous cycles of interaction. In chapter four the research design and the methodology will be presented.

CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

This chapter outlines the methodological procedures that will be applied to obtain and utilize data as mentioned in Chapter One. The paradigm within which, and the approach to be used in the study are discussed in this Chapter. The sampling techniques and the research methods used to generate data are also explained. A case study methodology was used to conduct this study. This chapter also discusses the ethical considerations of the study. As a reminder, the critical research questions and aims of the study were:

- What are educators' understandings of the effects of hunger and malnutrition on learners' performance? and;
- How should educators improve the performance of hungry and malnourished learners in class?

The aims of the study were:

- To explore educators' understandings of the effects of hunger and malnutrition on learners' performance and;
- To help educators improve the performance of hungry and malnourished learners in class.

4.2 Qualitative approach

Qualitative research aims to gather an in-depth understanding of human behaviour and the reasons that govern such behaviour (Henning, Gravet & Van Rensburg, 2004). Given the purpose of this study, the qualitative approach seemed relevant since it investigates variables (educators and learners) in their natural setting where they are found (in school where teaching and learning takes place). This idea is supported by Andersen (1995). Terre Blanche, Durrheim and Painter (2006) further argue that qualitative researchers intend to make sense of feelings, experiences, social situations or phenomenon as they occur in the real world, and they therefore want to study them in their natural setting. Cresswell (2008), for example, points out that qualitative research aims to gather an in-depth understanding of human behaviour and the reasons that govern such

behaviour as dictated by the context they are in. In this study, the researcher seeks to get an in-depth analysis of the phenomenon: the educators' understandings of the effects of hunger and malnutrition on learners' performance.

In this study, detailed data is gathered through open-ended questions that provide direct quotations. In qualitative research, the interviewee is an integral part of the investigation. This claim is supported by Cohen, Manion and Morrison (2009) when they point out that the human person is the primary data collection instrument. Qualitative research seeks a wide understanding of the entire situation. Cohen et al. (2009) further argue that qualitative research aims to gather an in-depth understanding of human behavior and the reasons that govern such behaviour. This approach also enables researchers to focus on social reality (Henning et al., 2004), for it ensures an investigation of the qualities rather than the quantities of phenomenon. In this way, the approach stresses the socially-constructed nature of reality, the intimate relationship between the researcher and what is being studied, and the situational constraints that shape the inquiry (Henning et al., 2004). It also gives a clear and detailed account of action involved and the researcher thus gains a better understanding of the world and tries to use it to bring about social changes. The aim is for qualitative depth rather than quantitative understanding (Terre Blanche, Durrheim & Painter, 2006).

This approach therefore acknowledges an interactive relationship between the researcher and the participants and their own experiences, and how they have constructed reality based on those experiences. As far as Cohen et al. (2009) are concerned, human activities are investigated in terms of meaning relating to why people say something, do that, or do something that way. That needs to be interpreted by linking them to other human events to enable greater understanding, thus produces more in-depth, comprehensive understanding.

4.3 Interpretivist Paradigm

This study is located within the Interpretivist paradigm. This is because it seeks to understand the participants' point of view. As already mentioned, educators' understandings of the effects of hunger and malnutrition on learners' performance is the focus of the study. The Interpretivist paradigm enables the researcher to understand and interpret the data in ways that will facilitate

an in-depth engagement with the phenomenon. Hence, this paradigm may be understood as a basic set of beliefs that guides action (Schwandt, 1993). This is because its underlying assumption is that the whole needs to be examined in order to understand a phenomenon. In essence, meanings are emergent from the research process. In general, within this social context, the researcher will be relying on the participants' experiences to get the required data.

4.4 A case study

A case study focuses on individual actors or groups of actors, and seeks to understand their perceptions of events. In the context of this study, the case study is conducted in one primary school. Given its characteristics, a case study highlights specific events that are relevant to the case. The researcher is integrally involved in the case (Cohen et al., 2009) and this is the reason case study is both a process of inquiry about the case and the product of that inquiry. By optimizing an understanding of the phenomenon by pursuing scholarly research questions, a case study observes effects in real contexts, and recognizes that context is a powerful determinant of both cause and effect. A case study method involves an in-depth, longitudinal examination of a single instance, event or a case. It provides a systematic way of looking at events, collecting data, analyzing information, and reporting the results (Lamnek, 2005).

Case studies investigate and report the complex dynamic and unfolding interactions of events, human relationships and other factors in a unique instance. Case studies are set in temporal, geographical, organizational, institutional and other contexts that enable boundaries to be drawn around the case. A case study enables the readers to understand how ideas and abstract principles can fit together (Cohen et al., 2009). A case study focuses on a bounded system, usually under natural conditions, so that the system can be understood in its own habitat (Stake, 2005). As a result the researcher may gain a sharpened understanding of why the instance happened as it did, and what might become important to look at more extensively in future research.

4.5 Sampling

Sampling involves where and from whom the data will be generated. This is a process whereby the researcher chooses his or her target group or participants. In this study the researcher will use purposive sampling. Purposive sampling means that participants are selected because of some

defining characteristics that make them the holders of the data needed for the study (Robinson, 2002). Maree (2007) affirms that purposive sampling refers to the selection of the sample that is based on the judgement of the researcher as to which subjects best fit the criteria of the study and selected based on the particular purpose of the experiment.

Purposive sampling will be used because of its appropriateness in this study because it will help the researcher to get data that is rich, relevant and accurate to address the critical research questions. On that basis, the researcher will choose participants (educators) who are knowledgeable and possess necessary experience in the field of education. Educators interact with learners on daily basis at school. The researcher believes educators will provide data that will be specific in answering the research question. The qualitative approach uses smaller but focused samples. The researcher will therefore choose six educators to participate in the study (three males and three females). The researcher believes that this number of participants will enable her to complete the study; even if one or more participants decide to withdraw others will be left to complete the study.

4.6 The research site

The study will be conducted at one primary school in the Umlazi District in KwaZulu-Natal province. The community that the school is situated in is extremely poor with a high rate of unemployment. The research site will be more accessible, as there will be no travelling to another site as the researcher and participants are based in the same school, and therefore can remain behind after school to proceed with the study. This will minimize costs and save time.

4.7 Research participants

Cohen, Manion & Morrison (2009) point out that participants are described to indicate who will be involved in the research. Participants may propose solutions or provide insight into events, but the focus is mainly on their own perceptions of the event or phenomenon being studied. For the purpose of this study the following participants will be used:

Participants	Male	Female	Teaching experience	Academic qualifications	Portfolio in school
Educator A		1	30 years	PTD, BA, Bed Hons, MED & ABET Cert.	Convener of OVC, member of Admissions committee & Environmental committee. L/areas: LO / EMS
Educator B		1	25 years	UED, BA, Bed Hons & MED	Chairperson for examination / condonation / Readathon. Member of Admissions committee. L/areas: English / AC
Educator C	1		29 years	PTD, BA, BSC & ABET Cert.	Chairperson for IQMS and Educator Support Team. Secretary in Admissions committee. L/areas: Maths / NS
Educator D	1		28 years	PTD, BA, Bed Hons & MED	Chairperson for Admissions committee. Secretary for Disciplinary committee. L/areas: Tech / Afrikaans
Educator E	1		23 years	UED, Bed Hons & MED	Co-ordinator for sports & Cultural committee. Member of Admissions committee. L/areas: SS / Isizulu
Educator F		1	21 years	PTD, BA & Bed Hons	Member of Admissions committee. Chairperson of safety and security committee. L/areas: Maths / NS

Table 4.1: Participants in the study.

Looking at the table above, one can see that these participants were purposively chosen because they are knowledgeable and have expertise in the field of education. They are highly qualified and possess much experience. They hold important portfolios in the school as indicated in the table above. In the Orphans and Vulnerable Children (OVC) committee, these educators engage with learners who are orphans and those who come from poor backgrounds. The researcher believed that these participants will provide rich, accurate, specific and adequate information that will answer the critical research questions. The chosen participants live within the community

where the study is conducted and are aware of challenges facing the community such as poverty, high rate of employment, homelessness and diseases.

4.8 Research instruments

Research instruments refer to the strategy followed in gathering and analyzing data retrieved from responses and also outlines the plan of action used to examine the problems under investigation (Cohen et al., 2009). Interpretivists rely heavily on naturalistic methods that include interviews, surveys and observations. In this study the researcher will use interviews, tape-recordings, observations, transcripts and field notes to generate data from the participants (Angen, 2000).

4.8.1 Interviews

The researcher will use interviews to generate data from the participants. An interview is a face-to-face attempt to obtain reliable and valid measures in the form of verbal responses from participants (Maree, 2007). An interview is a two-way conversation in which the interviewer asks the participant questions to collect data and to learn about the ideas, beliefs, views, opinions and behaviours of the participant. An interview is an ordinary everyday conversation (Goulding, 2006). An interview can be understood as an interchange of views between two or more people on a topic of mutual interest. Interviewers and interviewees co-construct the interview (Cohen, Manion & Morrison, 2009). The researcher will interview individual actors (in this case educators), and seek to understand their perceptions and events (in this case their understandings of the effects of hunger and malnutrition on learners' performance).

As such, the interview is a social encounter therefore the interviewer will establish rapport and ask questions in an acceptable manner. The participants will be free to air their views based on subjective and individual experiences. This idea is supported by Schwandt (1993). The interview will take place at the participants' workplace (which is at school in this case). The researcher will interview one participant per day. Interviews will be conducted after school in consecutive days. Interviews will be 30 minutes each.

Interviews allow the interviewer to clarify questions. It allows the participants to respond in any manner they see fit. Interviews allow the interviewers to observe verbal and non-verbal behaviour of the participants. Interviews are the means of obtaining personal information, attitudes, perceptions, and beliefs. Interviews reduce anxiety so that potentially threatening topics can be studied (Kvale, 1996).

Semi-structured interviews will be used because they are flexible in nature and allow the interviewer to probe so that she may go into more depth analysis of the phenomenon and comprehensive information and will make follow-up unexpected clues. The researcher will penetrate behind initial answers and will redirect the inquiry into more fruitful channels (Cohen et al., 2009). This implies that the interviewer will be free to move the conversation in any direction of interest that may come up. Unstructured response formula will be used because it will allow each participant to have more freedom to give his or her answer as fully as he or she chooses. The researcher relies on the participants for the data with regard to the phenomenon being studied. Open-ended questions allow the researcher to gain much information as possible without limiting the participants (Magi, 1999).

4.8.2 Tape-recordings

The researcher will use a tape-recorder to record the interview. The researcher will request permission from the participant to use the tape-recorder before the recording commences. Even though the interview has been taped the researcher will take notes in order to review the answers and ask additional questions at the end of the interview. Interviews will be tape-recorded while the interview is in progress. Similarly Miles and Huberman (1994) are of the idea that tape-recordings are advantageous because no data will be lost without being captured. For the sake of this study as soon as the interview is finished, the researcher will listen to the tape and review notes. Thereafter the researcher will reflect on the interview to identify the gaps that need to be explored in a follow-up interview (Maree, 2007).

4.8.3 Transcription

This is another tool that the researcher will use to transcribe data. The researcher will keep a written or printed copy of words that the participants said during the interview. In terms of this study data captured during the interview will later be transcribed and drawn to the attention of

participants for verification (Cohen et al., 2009). In this study the researcher will listen to the tape again, with the transcript in front of her. Interpretations of the data captured with tape-recorder will then be communicated to the participants for verification purposes. This is in line with what Lincoln and Guba (1986) call member checks.

4.8.4 Observation

Observation will be used by the researcher as another tool to generate data in this study. Observations will offer the researcher the opportunity to gather live data from naturally occurring social situations. In this way, the researcher will be looking at what is taking place rather than relying on secondhand accounts (Bertram, 2003). Observation will provide the researcher with a reality check and it will enable the researcher to gain a deeper insight and understanding of the phenomenon being observed. During observation the researcher will be able to see things that might otherwise be unconsciously missed, discover things that participants may not freely talk about in the interview as well as to move beyond perception-based data that will be reported by the participant (Patton, 1990).

The researcher will keep a detailed record of what occurs, including those things that are characteristically taken for granted. The researcher will record the notes as quickly as possible after observation. The researcher will make at least two copies of field notes. The researcher will type on a master copy for reproduction purposes. This idea is supported by Sagor (2005). The researcher will look for patterns of behaviour in particular to understand the assumptions, values and beliefs of the participants, and make sense of the social dynamics – but will remain uninvolved and will not influence the dynamics of the setting (Maree, 2007)

The researcher will be observing educators' attitudes towards hungry and malnourished learners. In other words how educators are treating hungry and malnourished learners. The researcher will also observe the interventions that educators are using to help the hungry and malnourished learners. Resources available in class will also be observed. Since the researcher is an educator at the very same school where the study is conducted, observations were done spontaneously. The researcher will develop a checklist for rating categories of behaviour that the researcher will be observing (Appendix: B). The researcher will use the same checklist for all participants. Magi

(1999), Maree (2007) and Cresswell (2008) support this idea where they point out that the same checklist should be used for all participants taking part in the study.

4.8.5 Field-notes

The researcher will record notes as quickly as possible after observation since the quantity of information forgotten may be minimal over a short period of time but accelerates quickly as more time passes (Cohen, Manion & Morrison, 2009). Based on the above argument, for the sake of this study field notes will be made in the situation. The researcher will make two copies of field-notes and will type a master for production.

4.9 Data Analysis

Miles and Hubberman (1994) argue that qualitative data analysis involves organizing, accounting for and explaining the data. In short, data analysis involves making sense of data in terms of the participants' definitions of the situation, noting patterns, themes, categories and regularities. In this study the researcher will use thematic analysis to interpret data gathered. The researcher will properly interpret the responses of the participants. The themes will not be imposed upon by the researcher, but will emerge from the data. In essence themes are groups of codes that recur through being similar or connected to each other in a patterned way. The researcher will identify patterns found in the data and categorize the data by theme. The researcher will label by a word the expression taken directly from the data and will create the expression which seems to best characterize the essence of what is being said (Schwandt, 1993).

In this study the researcher will listen to the tape-recordings to study the discussions of interviews. The researcher will list patterns of experiences from the transcribed conversations. This will come from direct quotes or from paraphrasing common ideas. The researcher will identify all data that relate to the already classified patterns. After that the researcher will combine related patterns into sub-themes. The researcher will move backward and forward between transcripts and the field notes. The researcher will incorporate the literature reviewed up until she is satisfied that no new issues are arising. Lastly, the researcher will refer back to the literature to look for information that will allow her to make inferences from the interview.

4.10 Ethical Considerations

In terms of this study consent was received from the interviewees in oral and written form. In this study confidentiality was guaranteed in the sense that information provided by the participants did not reveal their identity (names). The permission was granted by the principal to conduct the study. This idea is supported by Maree (2007) and Cohen et al., (2009). The principal confirmed the permission in writing. After that a letter was hand delivered to the District Manager of KZN Department of Education to request permission to conduct the study. The permission was granted by the DoBE to conduct the study. Consent letters were sent to chosen participants to request their participation in the study. It was stated in participants' letters that permission has already been received from the principal and from the KZN Department of Education. It was mentioned that the fact that permission had been granted by the principal and the DoBE that does not in any way compel them to take part and that their participation is voluntary. The letter revealed the purpose of the research and the tools that will be used to generate data. In terms of this study the participants have the right to withdraw from the study at any stage if they so wish. The consent forms were signed by the research participants.

4.11 Reliability /Validity

In qualitative research reliability can be regarded as a fit between what the researcher records as data and what actually occurs in the natural setting that is being researched. In this study the researcher will ask the participants if research was helpful and also ask if they have really learned anything from the study. This idea is supported by Bertram (2003) where he points out that in the interpretivist paradigm validity becomes a moral question. For the sake of this study the researcher will frequently give the feedback of the findings to the participants. Transcripts or quotations will be sent back to participants to check accuracy or consent for use.

4.12 Trustworthiness of the study

Findings from this study will be trusted if read by other researchers, but cannot be used for generalization purposes since the study was conducted in one school. The fact that the researcher is working at the site where the study is being conducted, that gives her study more credibility

and depth as she is aware of all the socio-economic issues affecting the learners and educators and challenges that educators face.

4.13 Conclusion

In this chapter the research design and methodology was presented. This includes the paradigm in which the study is located, the sampling and the research tools that were used to generate data. The data generated was solely aimed to respond to critical research questions. In Chapter Five the research findings are presented. The findings will be categorized into themes that will be used for recommendation purposes.

CHAPTER FIVE
DATA ANALYSIS

5.1 Introduction

In this chapter the analysis of the data collected through interviews, classroom observations and field notes and from the literature that has been reviewed in relation to the phenomenon under study will be presented. Based on the literature survey and what educators said during the interview and what has been observed, the following themes emerged:

- Educators’ understandings of hunger and malnutrition on learner performance;
- Educators’ understandings of effective teaching and learning and;
- Educators’ role to improve performance of hungry and malnourished learners.

These themes are further divided into sub-themes as indicated in Table 5.1

Themes	Sub-themes
5.1.1 Educators’ understandings of hunger of hunger and malnutrition on learners’ performance.	5.1.1.1 Hunger due to poverty in the family 5.1.1.2 Child- headed households 5.1.1.3 Absenteeism
5.1.2 Educators’ understandings of effective teaching and learning	5.1.2.1 Schools are under-resourced 5.1.2.2 Government provisions
5.1.3 Educators’ role to improve performance of hungry and malnourished learners.	5.1.3.1 Educators lackof proper nutritional knowledge 5.1.3.2 Educators’ expectations 5.1.3.3 A home-school relationship

Table 5.1 Themes and sub-themes

The analysis under the above themes and sub-themes unfolded as follows:

5.1.1 The effects of hunger and malnutrition on learners' performance: teachers' understanding

Educators understand that the issue of hunger and malnutrition in schools is a matter of concern (*cf*:2.1). There are typical facts stating, in simple language, the correlation between adequate nutrition and behavior and the ability to learn in school. Educators claim that, despite hunger, there are other dimensions that hinder effective learning (*cf*:2.2). These factors have an influence on learners' health, education and well-being.

5.1.1.1 Hunger due to poverty in the family

Educators lament the fact that everyday they become aware of a child suffering due to poverty. (*cf*: 2.4). The study reveals that the damage that is caused by poverty is a major challenge and cannot be underestimated. The study reveals that children go to school hungry and badly affected by poverty. As a result, children exposed to poverty experience impaired physical and mental development. Educators lament the fact that they have to deal with learners who do not have educational materials needed by educators (*cf*:2.4). Educators are frustrated by parents who are addicted to drugs at the expense of their children's education.

Families living in poverty fail to provide optimal care and education of their children. The literature also reveals that poor learners lack parental supervision (*cf*:2.14). Due to poverty basic needs of children such as food, clothing and shelter are not met. Children are dropping-out and are unable to concentrate during class. Learners from poor family backgrounds fail to hand in assignments because they could not go to the library because they do not have money (Appendix: G). All this indicates a considerable influence that poverty has on learners' performance. The studies reveal that hunger cause learning failure. The literature reveals that hungry learners display inappropriate behaviours such as aggression, fighting, stealing and are dysfunctional (*cf*:2.21). As far as the researcher is concerned these behaviours are the results of poverty. Interestingly, the literature reveals that learners who took breakfast perform better than those who don't.

Participant A had this to say:

“Learners from poor family background come to school hungry and without lunch-box. Many of these learners come to school with their homeworks not done. They come late in class and miss out important learning content”.

Participant B stated:

“Learners from poor family background hate it when teaching and learning takes place, some of them hate even to play with other learners because they feel inferior to them just because they do not have what children from rich families have”.

Participant C explained:

“You find that a learner did not have supper the previous night and did not have the breakfast and it is disturbing to hear such news from the learner. Sometimes we sacrifice our sandwiches for the sake of these learners”.

Educators confirmed what the researcher has observed that in almost all grade seven classes, there were few learners who were carrying lunch boxes. The researcher witnessed that the majority of the learners rely on the Nutrition Programme that is provided by the DoBE (Appendix: E). The researcher has observed that if learners have been fed they have better concentration. They are calm and pay more attention to lessons and behave well. They learn effectively.

5.1.1.2 Child-headed house-holds

The study reveals that most of the learners are orphans, their parents died of HIV and AIDS and related diseases. Some of these children, young as they are, are heads of the house-holds in the sense that they are the older ones who look after their siblings. The literature reveals that these children are vulnerable and are deprived of love (*cf.* 2.12). Learners who are already at risk due to nutritional sequelae come to school tired, hungry, hurting, unable to cope and benefit from lessons (*cf.* 2.13). The literature also revealed that grossly growth retarded learners could be

classified as slow-learners (*cf*: 2.11).The researcher has observed that educators are doing all that is in their powers to help these learners. Educators keep a register of needy learners and offer practical support documents. In that register they indicate what they are going to do, when and by whom(Appendix: J). On the other hand the DoBE has provided OVC to cater for the needs of these learners.

Participant B stated:

“Most of our learners are orphans, their parents died of HIV/AIDS and related illnesses”. There researcher’s interpretation is that these learners do not have anybody to take care of them. They are on their own. They have socio-economic constraints which affect the way they perform at school.

Participant C explained:

“The orphans eat a little from their neighbours and sometimes they are afraid to ask. It is sad because some of the learners drag with them to school all the suffering they are exposed to. That pre-occupies their minds and affects their performance”.

Participant D said:

“These children live with grannies or care-givers. Some of these children do not receive a child support grant, simply because the care-giver does not know that the child is entitled to get child support grant”.

Participant E stated:

“As educators, the least that we can do is to compile a list of learners who do not get child support grant and advice the care-giver to go to Home Affairs Department to register these children for this money”.

Participant F had this to say:

“Orphans are sometimes exploited, isolated and taken for granted”.

This is supported by many scholars when they argue that, children of the world are innocent, vulnerable and dependent. They are curious, active and full of hope. Their youth should be full

of joy and peace, of playing, learning and growing, but for many children, the reality of childhood is altogether different (cf: 2.16).

5.1.1.3 Absenteeism

The literature reveals that it often seems like everyone is looking for someone to blame for the failures of children. Entire communities blame the school system, the principals and educators. It is easy to point to an educator's practices as a source of learning failure (cf:2.4). The literature reveals that absenteeism lead to reduced academic performance (cf:2.13). The researcher believes that absenteeism and low school attainment are linked to a learner's health status and malnutrition.

Participants C said:

“Parents always shift the blame. Parents should make sure that children attend school regularly”. The researcher has observed that learners absent themselves from class even more than five days in a row, and come back without a medical certificate from the doctor.

Participants D stated:

“The high absent rate occurs among the learners who are orphans. The following day they come to school with stories to justify their absenteeism. This makes them to lag behind and decline in their performance. By so doing they make the educator's work to be difficult because the educator has to go back to teach the learning matter that he or she has already taught”.

Participant E stated:

“Some learners have been absent for valid reason such as that they went to bed on hungry stomachs the previous day and have nothing to eat before going to school. Others are absent because because of hunger and they do not have learning material required by the educator or else they did not do the task or homework”.

The researcher has observed the assessment sheet that has gaps next to the names of learners who do not submit their activities (Appendix:H). The number of absentees in grade 7 alone is more than 6, that level of absenteeism is alarming and is unacceptable (Appendix:I). This made

the researcher to believe that absenteeism affects the performance of learners and needs urgent attention.

5.1.2 Educators' understandings of effective teaching and learning

It has already been mentioned in chapter one that despite hunger and malnutrition, there are other dimensions that hinder effective teaching and learning. Among those dimensions is the lack of resources at schools. The lack of resources deprive educators the opportunity to teach the way they should teach.

5.1.2.1 Schools that are under-resourced

Recent descriptions of schools continue to experience conditions of overcrowding, many learning areas and limited resources; these conditions put learners at risk of academic failure (*cf*:2.8). Enrolment figures remain important measures of development in human capital (*cf*:2.17). This is in line with what the researcher has observed that educators are teaching overcrowded classes, the floor space is limited. Learners are squashed in groups. The researcher's interpretation is that overcrowding hinders effective teaching and learning since the educator can hardly move between the desks to facilitate activities (Appendix:D). The study also reveals that schools lack facilities such as libraries and teaching material, especially textbooks. According to the recent literature many schools are not well-resourced. Hence, a pleasant environment is much more welcoming than untidy, uncared for and over-crowded surroundings (*cf*:2.16).

The literature reveals that there is lower improvement in scores of learners in government schools because of the lack of enthusiasm on the part of educators and the limited availability of supplementary teaching materials (UNESCO, 2000). The literature reveals that successful public schools are not rewarded (*cf*: 2.7). The literature reveals that overcrowded classes demands efficient educational interventions and policy review that will yield the maximum benefit in return for the resources allocated to education (*cf*: 2.13). It is interesting to note that effective teaching is a combination of methods, availability of teaching materials, learner characteristics and the context in which teaching and learning occur (*cf*:2.8).

Participant A stated:

“If our school can get financial assistance, there is so much that we can do to help hungry and malnourished learners. The fact of the matter is that our school lacks financial resources”.

The researcher’s interpretation is that this might be true since the DoBE declared some of the schools ‘No Fee Schools’. In ‘No Fee Schools’ learners are not paying school fees and that disturbs the smooth running of the school.

Participant E said:

“It is difficult to teach without necessary teaching aids such as textbooks”.

Participant F explained:

“I use charts to make teaching aids, but because of vandalism they were torn up by intruders, the air gets through the windows because there are no window panes and glasses, then it fell down”.

This indicates that educators are passionate about teaching, but the lack of resources is an obstacle. Educators understand that their job is to teach and advance the education and the development of learners as individuals (Appendix:L). Educators come to class prepared (Appendix:G). They give learners assignments and projects. Sometimes the projects require learners to find information from the library, but because the school does not have a library, some of the learners fail to do that project (*cf*: 2.16) and (Appendix: G) as well. Educators assess learners regularly (Appendix: H) and give parents the progress report of their children at the end of each term (Appendix: K). Educators also analyse the results of learners and it is evident that learners who have poor marks are the ones who are always absent and that learners lack educational materials (*cf*: 2.18).

5.1.2.2 Government provisions

The literature reveals that better nutrition is associated with improved academic performance (*cf*: 2.15). The literature also reveals that in educational institutions the subject of nutrition has been addressed primarily by providing direct services such as balanced meals (*cf*: 2.6). The literature reveals that the importance of breakfast to learners in that the academic performance of learners

was better among those who took breakfast compared to those who did not (WorldHealth Organization,2002). The literature reveals that three regular meals a day is important (*cf*:2.14). The literature reveals that schools together with communities can make sure that learners don't go to school hungry by providing them with lunch at school and backpacks to eat on the weekends and that home gardens can be effective when combined with educational intervention (*cf*:2.19).

As it has previously stated that children have the right to life and a right to quality education (*cf*: 1.1),and that the DoBE has provided the Nutrition Programme to feed the hungry learners. The learners benefit from this programme (Appendix: E). The government provides the Nutrition Programme. This programme caters for learners from pre-school level (grade 0) to senior primary schools level (grade 7),but what the researcher has observed is that this provision is not enough since the food that is brought in class does not cover all learners who need it. The researcher has observed that learners are violent during the feeding time. This unacceptable behavior emanates from the fear that they might not get food as a result learners jump the queue and start to push each other to such an extent that the educator intervenes to bring order and discipline.The researcher witnessed that the educator remains with the class up until learners finish eating. The researcher noted that when learners get food they become excited and have smiles on their faces.

Participant A explained:

“The government is doing a good job but it is not enough. The Nutrition Programme should be extended to up to the high school level (Grade 12) because hunger does not go with age or grade”.

Participant B echoed:

“Hunger is the same and it affects every learner be it the learner is at primary school or at highschool. If the nutrition is extended to high school it will help to reduce the drop-out rate”.

In addition to the nutrition programme the government provides child support grants to learners whose parents are unemployed and OVC to cater for the learners who are orphans. To alleviate hunger the DoBE has introduced the ‘one school: one garden’ and the ‘one home: one garden’ initiative.

Participant C had this to say:

“The biggest challenge is that parents are misusing the child support grant. You find a person buying clothes for themselves, buying liquor and making their hairstyles to look nice not buying food or anything for the child, yet that money is intended to benefit the child”.

Participant D stated:

“There is very little that we as educators can do or say to that parent because the minute you start to say something, the parent will tell you that, this is not your business because he or she is not using your money, but the government money. We feel the government must lay down laws that will regulate the spending of these funds”.

The researcher feels all these dimensions hinder effective learning and affect the way the learner performs at school.

5.1.3 Educators’ role to improve performance of hungry and malnourished learners

As much as educators wish to improve the performance of hungry and malnourished learners, the challenge is that they lack proper nutritional knowledge. They indicated that it is heart-breaking to see a hungry learner in class.

5.1.3.1 Educators’ lack of proper nutritional knowledge

The study reveals that there is a lack of proper nutritional knowledge on the side of educators, parents and learners. The literature reveals that educators put less emphasis on nutrition-related components in their work and one of the reasons for this could be that they lack sufficient knowledge that could enable them to integrate this subject into their individual work with learners (UNICEF,2002). The literature reveals that poor nutrition and food insecurity may arise from parental neglect or parental lack of knowledge of nutritional needs of their children (UNESCO,2000). The researcher is convinced that educators have adequate knowledge of nutrition as they were teaching learners about a balanced diet and the researcher witnessed the charts on the wall that display food pyramid (Appendix:C).The researcher has observed that

learners are buying junk stuff with their pocket money rather than fruit. This shows that learners lack proper nutritional knowledge (Appendix:F). What the researcher concluded is that learners rarely employ their agency and knowledge to make sense of what is taught in classrooms or what is written in their textbooks. Educators expect learners to apply what is taught in class to solve problems they encounter in their daily lives.

The literature reveals that educators lack sufficient nutritional knowledge (Duniford&Kowaleski-Jones,2003). The literature reveals that educators lack knowledge to integrate nutrition related components into their individual work with learners (WHO, 2002). Educators do not know their role in their daily contact with hungry and malnourished learners (*cf:* 2.6) and therefore they require a knowledge base to handle these learners (*cf:*2.2). The literature reveals that educators did not receive any training with regard to nutrition (World Bank,1993a). As a result they are unable to refer these learners to specialists such as nutritionists, social workers, psychologists and other mental health professionals.

Educators with nutrition training made more use of community resources and supplementary materials (*cf:* 2.18). The literature reveals that educators lack multi-cultural knowledge base about the effects that the culture of families and their context of living may have on their perceptions of what is considered proper nutrition and that if they could be trained, they would be able to encourage a higher consumption of fruits and vegetables (UNESCO,2000). Educators' knowledge of where to turn for help from experts in the area of nutrition is the key for serving learners who are malnourished. Even though educators needed training and background information on nutrition, they should be convinced that nutrition education will add to their work burden (*cf:*2.18). Despite educators, learners themselves need to be aware of broader public health issues such as food security (*cf:* 2.19).

Participant A stated:

“It is our duty to teach learners about a balanced diet and to teach them about dangers of unbalanced diet. Learners must eat the right amount of food in each of these categories of food pyramid”.

Participant B stated:

“We need to be supported by the family in this regard because what is eaten at home is determined by the eating habits of their parents. Learners may fall for their friends eating habit which may not be deemed right by parents”.

Participant F stated:

“Learners must not be influenced by advertisements they see on TV. Family members should guide and direct young ones not to be carried away by media because media can be misleading as its aim is to market products and make profit”.

The researcher is of the view that the task of teaching a balanced diet must not be confined to schools only but must be continued at home. In that way what is learnt at school can be reinforced at home.

5.1.3.2 Educators’ expectations

The literature reveals that it seems like everyone is looking for someone to blame for learner failure (Sutherland, Gill & Binns, 2004). Interestingly the literature reveals that educators’ job is to teach (Warren, 2002). As such, educators believe that all children can learn (*cf*:2.7). The current thinking in the field is that successful educators maintain high expectations for all learners, regardless of where they teach and the background of their learners (*cf*: 2.8). That is their recipe for success. They understand that feeling sorry for learners and lowering standards constitutes a disservice to the learners (*cf*:2.7). The researcher’s perception is that educators understand that lowering standards can be interpreted as the violation of learners’ rights. This implies that if educators lower standards they will be not doing justice to the learners. Interestingly the literature reveals that people are not born educators, and that teaching is a skill that is learned (Mayer,2008).Hence it is in this context that the researcher assumes that educators realise that lowering expectations can lead learners to lag behind in their achievement.

The researcher feels that if all educators can follow suit, all learners might produce good results, but that can be possible if learners’ physical needs such as food have been met.Of utmost importance here is that successful educators do not settle,if they say a project has to be two or three pages, that’show long it has to be. The learners take pride in their work and they raise the bar themselves (*cf*:2.7).This is not the case in this study since the researcher witnessedthat

learners do not hand in their assignments by the due date (Appendix:H) and the educator accept it even when the due date is over because the educator understands the context and the family background of the learner.

Participant A explained:

“Learners do not submit their taskson the due dates, especially those who are orphans and those who come from the poor family background, on the following day they come up with excuses”.

The literature reveals that disruptive learners will keep the educator from teaching the way she or he should (Mayer,2008). Educators need to go to the classroom with the right and positive attitude (*cf:2.4*). Since educators are trained to be managers and implementers of the pre-ordained content (*cf:2.3*) they should defy the odds and achieve increases in learner success (*cf:2.8*). The literature reveals that it is important that educators have a desire to meet learners’ learning needs in an individual and personal manner (Weiner, 2000). The literature reveals that educators need to be aware of what they believe about learners’ capabilities, identities and experiences (Weiner, 2000). All this places heavy demands on the individual educator’s time (*cf:2.6.2*). The literature reveals that the need exists for educators to perform juggling acts with the realities of the context in which they teach or prepare to teach (Slack &Yoo, 2005).The study also reveals that when learners do not have resources for writing and researching outside of the school environment, educators can structure time within the school day for projects requiring such commitment (*cf:2.9*).

Interaction between educators and learners are underpinned by the attitudes and expectations, which educators have held regarding these learners. Educators expect that learners come to class with all necessary educational material. Educators are sometimes frustrated by parents who do not take the education of their children as a first priority (*cf:2.5*). Since learners receive child support grant from the government the researcher believes that educators expect that parents will ensure that learners have proper food and educational material that is required by the educator.

5.1.3.3 A home-school relationship

The literature reveals that food security in the home may translate into a source of family stress that could affect parenting behaviours and learners' reactions and functioning in educational institutions (Van Rensburg, 2005). Parental involvement can make classroom teaching more effective, especially with younger children in the sense that nutrition lessons can be easily modified and adapted to different socio-cultural settings and used to reach out to the community. (*cf*:2.17). The literature also reveals that a balanced approach in nutritional intake with regular monitoring and adequate physical activities should be encouraged. This should form part of the school health programme involving parents, educators, health care providers and health educators in providing a comprehensive school health care (Kim, Frongillo & Han, 2003).

Educators need to inform the parents that it is important for learners to have breakfast before going to school in the sense that taking breakfast has been found to improve the academic performance. One meal a day is not enough, there is a need to educate parents about the importance of the three regular meals that it plays an important role in academic performance than in physical growth. Parents need to know that malnourishment can cause a learning failure (*cf*:2.14).

The literature reveals that in educational systems educators may need to collaborate with nutritionists or other professionals in the community (e.g. mental health professionals) when intervening in individual situations of poor nutrition (Slack & Yoo, 2005). This would be possible if there is a better relationship between the educator and the parent. The researcher believes the educator will not be able to refer the learner to mental health care professionals without the consent from the parent.

A parent's difficult economic situation may be interrelated with his or her lack of attention to the child's nutritional needs. Parents often lack time and energy to invest fully in their children's education. Educational systems provide a valuable avenue for educators to assess and work with hungry and malnourished children and their parents on ways to reduce the risks of poor nutrition and food insecurity and to reduce the emotional impact of such situations (*cf*:2.4). The educator will be able to develop a better relationship between him or her only if the parent avails himself or herself at school.

The study reveals that education in meal planning and nutrition should be on-going. Schools should involve parents directly. This also creates a better home-school relationship. Ironically, the very same parents whom educators want to establish relationship with do not come to school and that is a major problem.

Disruptive learners will keep the educator from the way she or he should teach (cf:2.8). This implies that the educator must work hand in hand with the learners' parents. If there is that relationship it will be possible for the educator to let the parent know about his or her child's behaviour in class so that they will work together to address that situation.

Participant B had this to say:

“If parents are called to Open Day, parents who come are those that their children perform better in their schoolwork, those that their learners perform poorly, who are absent and who do not submit assignments in time, they do not come. So it's vice – versa”.

Participant D stated:

“Of course I am trying to develop a relationship with parents. The fact of the matter is that if you invite a parent to school, parents tell you he or she will not come because he or she is working, even those who are not working they usually come up with stories or excuses and that is very much discouraging”.

Participant E explained:

“Parents do not come to school even on the Open Day to see the work of their children. Some of my learners in my class said their parents are too sick to come to school, they will send somebody on their behalf and that does not happen”.

To make sure that learners don't go hungry to school local business people must give back to the community and provide needy learners with backpacks. In this regard educators help to identify learners as most in need (cf:2.19). The researcher is of the view that parents need to know that socio-cultural factors and nutritional factors indeed are associated with academic performance of learners.

5.2 Conclusion

The data that were captured through interviews were tape-recorded. Interestingly, the researcher's observations concur with the literature that the majority of learners come to school on empty stomachs and without a lunch-box and that the family background of a learner affects the way the learner performs at school. The literature reveals that proper nutrition is a fundamental requirement for adequate learner development (Sutherland, Gill & Binns, 2004). Based on that argument the researcher is of the view that without meeting this pre-condition for educational success, both learners' behavioural and academic performance can be negatively affected (Sutherland et al., 2004). In this study the educators' powerful ideas reveal that the issue of hunger and malnutrition hinders effective teaching and learning. The recommendations and conclusions for this research will be dealt with in Chapter Six.

CHAPTER SIX

RECOMMENDATIONS AND CONCLUSION

6.1 Introduction

Qualitative research was conducted to get educators' understandings of the effects of hunger and malnutrition on learners' performance. The researcher used a case study approach to get educators' understandings with regard to the phenomenon being studied. The study was conducted in one primary school. The researcher used interviews with open-ended questions to generate data from the participants. The interviews were tape-recorded. The researcher also used observation as another tool to generate data. During observation field notes were taken. The data were later transcribed and brought to the participants' attention for their verification. Purposive sampling was used to select participants that will take part in the study. Six educators participated in this study. These educators were chosen because the researcher felt they would provide rich, accurate and relevant data. In addition, these educators were chosen because of their experience in the field of Education and because of their qualifications. To unpack what the participants understand and to get their point of view with regard to the phenomenon under study, the researcher devised two critical research questions. The researcher used semi-structured interviews to interview the research participants. The researcher used the thematic data analysis to reduce the massive set of data into themes and categories in order to answer the critical research questions.

The aims of this study were:

- To explore educators' understandings of the effects of hunger and malnutrition on learners' performance and;
- To help educators improve the performance of hungry and malnourished learners in class.

This study indicated that despite hunger and malnutrition there are a myriad other factors that influence the performance of learners. Factors such as poverty, diseases, lack of resources, overcrowding and absenteeism- to mention but a few- have an impact on how learners perform at school. In this chapter, conclusions and recommendations with regard to the phenomenon under study are provided.

6.2 Recommendations in the form of guidelines

The two critical research questions were answered based on the findings in this study. Since the hunger and malnutrition are societal issues, it is important to conclude this study by providing guidelines in the form of recommendations. The majority of learners come to school hungry and that there are a myriad of factors that impact on the learning and development of learners. It has already been mentioned throughout the study that learners who are hungry are not receptive to learning regardless of materials or the methods used. Therefore each and every one of us has to play his or her role to make sure that learners enjoy quality education. In this study the guidelines will be provided in terms of the following categories:

- The Department of Basic Education (DoBE);
- Educators;
- Learners;
- School Management Teams (SMT);
- Parents and care-givers;
- Community and;
- Future research.

6.2.1 Recommendations for the DoBE

Teaching is a powerful tool for monitoring behavioural changes and nutrition in school learners. Given what is known about the probable effect of nutrition interventions on learning and attendance, and given the relatively modest cost of a well-designed and carefully targeted learner-nutrition programme, the implication for education policy makers is clear: targeted investment in learner-nutrition will pay off well for education and appropriate nutrition interventions in schools are likely to prove to be very high-yield investments.

- The DoBE should train educators to be able to equip learners in a climate of standardized results. Educators should be trained to teach new learning areas that are found fit for necessary skills needed. A strong knowledge base for incoming and practicing educators to handle hungry and malnourished learners should be developed by the policy makers. This knowledge base must include the effects of poverty on learning and awareness of the resources available in the school and the community;

- In educational institutions the theme of nutrition should include the role that educators should play in their daily contact with hungry and malnourished learners. The DoBE should train educators to identify and address circumstances which have led to the situation of each learner, such as neglect of the learner's nutritional needs, parents' lack of awareness of good nutrition, elements of poverty and emotional and psychological impact of their circumstances;
- Of importance here is to advance an integrative approach in training programs of future educators in which attention to biological components, such as nutritional issues, will be considered as an integral part of the training. Such an integrative bio-psycho-social-educational approach will allow the educators to relate to nutrition as a dimension which they have to include in the work with malnourished learners in schools;
- Educators should be trained to teach nutrition and physical education. The DoBE should train educators to be able to identify the different, yet sometimes interrelated and sometimes independent factors of poor nutrition, how to distinguish them and when to seek professional help from nutritionists and from other professionals such as social workers and psychologists. Training programs should be in place to help educators more easily identify impoverished learners and address the challenge of helping them. Educators should be trained to incorporate nutrition-related components in their assessment of malnourished learners. In the training of future educators, there is a need of interdisciplinary orientation which includes collaboration with specialists in the area of nutrition;
- The DoBE should provide a valuable avenue for educators to assess underperforming children and their parents on ways that will reduce malnutrition, food insecurity and to reduce the emotional impact of such situations;
- Overcrowded classes demand efficient educational interventions and policy review that will yield the maximum benefit in return for the resources allocated to education. Therefore the DoBE should convince educators that nutrition education will not add to their work burden; this call for innovation and creativity on the part of the educator;
- The DoBE should extend the Nutrition Programme in schools from grade R to grade 12 that will help to reduce the drop-out;

- The DoBE should continue to provide the OVC money to schools since it helps to cater for needs of the needy learners. This is greatly appreciated by educators and should be on-going, but it should be also monitored;

6.2.2 Recommendations for educators

The concept of a whole school approach involving health and education is compelling. The environmental education of acquiring healthy eating habits should continue from childhood through to adolescence promoting a lifelong influence for better health. Co-ordinating resources through family involvement, school support and national programmes become cost effective and educationally rewarding. Economic literature on nutrition and education shows that the product of schooling improves with an increase in the cognitive ability of chronically malnourished learners due to nutritional interventions.

- Educators should collaborate with nutritionists and other professionals in the community such as mental health professionals when intervening in individual situations of hungry and malnourished learners;
- Educators should maintain high expectations of all learners regardless of the background of the learners. Educators should not lower demands and standards because of the social ills in the learner's home and communities. Educators should not let poverty, language barriers and other socio-economic factors interfere with the learner's learning. They must perform juggling acts within the realities of the context in which they work. Disruptive learners keep educators away from the way they should teach so educators must keep learners focused on the task that would help to keep disruptive students from ruining the lessons;
- They should be resilient and defy all odds and increase learner success. They can do that by combining the methods, materials and the context in which learning and teaching occur. Of importance here is that educators should have a desire to meet learners' needs in an individual and personal manner. Educators need to reflect on their belief system and assumptions, especially where social backgrounds and experience differ from those of the learners they teach;

- If educators are serious about improving the performance of hungry and malnourished learners, they should establish connections that facilitate engagement so that when a learner do not have resources available for writing and researching outside the school environment. They should structure time within the school day for projects requiring such commitment;
- Since educators are managers and implementers of the pre-ordained content, they should know themselves, know what works in terms of their levels of frustrations and capabilities and be aware of heavy demands on their time when dealing with individual learners. Of utmost importance here is that educators must go to class with the right and positive attitude to save learners. Educators should re-inforce health promoting behaviours of learners and their families within a supportive environment. Educators should reach out and work with parents of hungry and malnourished learners. Educators should value the skills and capabilities of learners. Educators should understand the environment in which they work;
- It is vital important that educators do away with the gaps between them and the learners. They should offer practical support to learners and understand that they are deprived of love, especially those that are orphans.
- Educator orientation is a necessary part of nutrition education interventions. It is from this context that educators need training and background information on nutrition and more use of community resources and supplementary materials. Educators should modify nutrition lessons and adapt them to different socio-cultural settings and use them to reach out to the community. Educators should make learners realize the disadvantages and harmful effects of eating too much fast foods, soft drinks and energy-dense oily preparations as well as skipping meals, especially breakfast, and;
- Educators should design practical, easy classroom-based programmes to improve learners' performance. Given that better nutrition is associated with improved academic performance and attempts are made to improve nutritional status of learners, it must not be over-emphasized. If educators are serious about improving the performance of hungry and malnourished learners they should establish a soup kitchen so that learners can get something to eat.

6.2.3 Recommendations for learners

- Learners should exert intense efforts at improving their knowledge, skills and attitudes towards food and nutritional issues so they can choose a healthy diet. Learners themselves should be the agents of change and important resources in promoting their own health;
- Learners should take the responsibility to familiarize themselves with broader public issues such as food security. Learners need to understand their role of tackling food insecurity, but any initiative that is taken could be adapted in keeping with the learner's age, level of understanding as well as their socio-cultural environment; and,
- Learners should involve themselves in greater awareness to tackle hunger. Of importance here is that learners should re-inforce the version of social and school reality as filtered down to them by educators and books.

6.2.4 Recommendations for the SMT

- The SMT should make sure that a school health programme is in place that include parents, educators, health care providers and health educators in providing comprehensive school health care;
- The SMT's should ensure that they encourage a pleasant physical environment within their schools;
- The SMT's should encourage a balanced approach in nutritional intake with regular monitoring and adequate physical activities in their schools.
- The SMT should encourage team building and sharing of responsibilities amongst the staff; this implies that it should not be one educator who is responsible for nutrition lessons, physical education and gardening.
- They must support the government's 'one school: one garden' initiative to fight hunger at schools in a sense that all schools should start their own garden plots and their own feeding schemes and must also organize fund-raising activities within their schools. Of vital importance here is that nutrition education should be used to start kitchen gardens and increase community involvement.

6.2.5 Recommendations for parents and care-givers

- Parents should ensure that children's basic needs for food, clothing and shelter are met. Parents should take their children's education as a first priority and not spend the little money they have on drugs and alcohol, but on food and educational items. Parents, relatives and care-givers should see to it that their children take breakfast before going to school because that improves the performance. They need to know that three regular meals are important so it is important that they spend the child support money on educational items and;
- Parental involvement is recommended to support the educators, especially in attending parents meeting and the Open Days;

6.2.6 Recommendations for the community

- The community should support the government's 'one home: one garden' initiative to alleviate hunger in a sense that each and every home establishes a garden;
- It can be of great help if the community members volunteer their services to the school.
- The community should stop vandalizing the schools, but instead treat schools as their own, and;
- Local business people should give donations to schools. Donations could be in the form of cash or fruits and vegetables.

6.2.7 Recommendations for future research

The findings of this study provide information relevant to the advancement of future research in identifying and working with learners who are hungry and malnourished. Advancing this study as an integral part of the work in educational institutions may be especially important considering the detrimental effects that hunger and malnutrition may have on learners' performance. Since there is limited information available about educators' interventions to improve the performance of hungry and malnourished learners it is therefore recommended that research be undertaken to fill this gap. However, this study could be used as a foundation for future research as it provides

some information in this regard. The researcher trusts that this study will add value to the existing body of knowledge and will benefit all stakeholders in education.

6.3 Limitations of the study

It should be noted that, while considering the implications of the findings, because this research was conducted in one school and with a sample of 6 out of 27 educators at school, its generalizability may be limited and that if it involved other schools in the area, it should have provided different views as well. Perceptions and experiences of 6 educators with regard to the phenomenon being studied might not be as extensive and representative of all educators in school. Although these participants were purposely chosen, the sample could have involved all educators at school so as to gather different views regarding the phenomenon under study. Conducting such a study with Zulu speaking African educators living and working in a black township it should have involved other race groups can expand the knowledge on how educators can improve the performance of hungry and malnourished learners in class. Despite these limitations, the researcher believes that the case study achieved its goals regarding the phenomenon under study.

6.4 Conclusion

Hunger, malnutrition, starvation and the state of homelessness and no basic health care, put children's lives in jeopardy. Educators at schools recognize the possible long term effects of malnutrition on learners' performance. Children who are exposed to poverty are more likely to experience impaired physical and mental development. Throughout the study it has been clear that children, especially those who are orphans and those who come from poor family backgrounds, are innocent, vulnerable and dependent. Children are curious, active and full of hope. Their youth should be full of joy and peace, of playing, learning and growing, but for many children, the reality of childhood is altogether different. Poverty is a contributory factor to learners' poor performance since it denies children choices and opportunities and grossly violates their human dignity.

Clearly, the damage that is caused by hunger and malnutrition is irreversible. The education policy makers must consider nutrition as a key factor in the design of educational interventions to improve the participation and academic performance of learners. The resulting pressure on schools implies the need for cost-effective approaches that support both education and health. The key is the nutrition and learning nexus. Current problems found in both the developing and developed world are relevant to the role of nutrition for tangible educational impact and efficient use of resources as well as development of health promoting policies. All this information is the evidence that hunger and malnutrition attributes to poor learner performance and has the negative impact on schooling. All possible mechanisms should be explored and exhausted to combat this social evil before it is too late.

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Transcripts

Participant 1

1. Tell me what is your understanding of hunger and malnutrition?

Hunger is the signal that the body gives to indicate that it needs food. My understanding of malnutrition is that it refers to a dietary condition caused by an insufficiency or excess of one or more nutrients in the body. Malnutrition is the condition that occurs when the person's body does not get enough nutrients.

2. How does hunger and malnutrition impact on the learners' performance in the class?

Hunger and malnutrition have a negative impact on learner performance because learners come to school hungry. During the very first period they lose concentration and eventually fall asleep.

3. What would you do while you are teaching then you see the learner is sleeping, if you ask the learner why s/he is sleeping, the learner tells you s/he is hungry?

There is nothing that I can do for a learner who is sleeping because of hunger because I do not have time to attend one learner and ignore the whole class. I have to maintain order and discipline.

4. How would you help a learner who is under-performing in class because of hunger?

Yes I feel sorry for poor learners in my class who usually come to school on an empty stomach, but there is nothing that I can do about that because my job as a teacher is to teach, I was not trained to feed learners. If I may leave the class unattended I will be charged for whatever happened during that time and the Government is strict about depriving the contact time.

5. What would you do to enhance the performance of malnourished learners in the class?

Really, the issue of hunger and malnutrition need to be addressed by the Department of Education since there is no period set aside for attending to

hungry and malnourished learners. I normally teach and give the whole class homework, there are no special activities planned specifically for poor and malnourished learners.

6. If you were in a managerial position and having the influential powers, what would you do for the hungry and malnourished learners in your school?

I can ask for donations from local business people and from the nearest Supermarket. Donations can be in the form of cash or food vouchers. I can as well organize fund-raising activities to cater for poor learners. I can as well start garden projects within the school in-order to get vegetables for these learners.

7. What role do you feel should be played by the family to enhance the teaching of hungry and malnourished learner?

As far as I am concerned the family must support the 'one home: one garden' project that is initiated by the Government to fight hunger. If each and every home has a garden no matter how small it may be, it will help. The family members (adults) must support children with their school needs and home-works. The money that is provided by the Government must be spent wisely and strictly on buying food not other things.

8. What role do you feel should be played by the school to enhance the teaching of hungry and malnourished learners?

There is very little that schools can do for the poor learners, except to provide space for learning to take place. Sometimes the school can arrange a meeting to talk to parents about being supportive to their children and provide the informal education where necessary because there are many challenges that children face such as falling for peer pressure and lack of self discipline.

9. What role do you think should be played by the government to enhance the teaching of hungry and malnourished learners? If there is something that the government is doing, do you think it is enough?

The Government must extend the nutrition program (feeding scheme) from a Pre-School to the High School Level. All learners feel hungry the same way. This will help to reduce the drop-out rate because some of the learners if they do not get support they resort to leave the school. The state must also regulate the child-support grants (child allowance) because in other cases, the guardians mis-use 2and in that way not benefiting the child which it is intended to

Participant 2

1. Tell me what is your understanding of hunger and malnutrition?

As far as I am concerned hunger is when a person's stomach is empty and desire for food whereas malnutrition refers to a person who is eating but the food that s/he is eating does not have nutrients that are required by the body.

2. How does hunger and malnutrition impact on the learner's performance in the class?

Hunger and malnutrition have a negative impact on learner's performance since learners most of the time come to school without lunch boxes and even those who carry lunch boxes they are accompanied by any fruit. If a learner is hungry he become passive and lack concentration that is required for effective learning.

3. What would you do while you are teaching then you see the learner is sleeping, if you ask the learner why s/he is sleeping, the learner tells you s/he is hungry?

As a parent I feel sad, but as a teacher, I just continue with my work because I can not abandon the whole class and pay attention to the few. I would like to get something or organize something some sandwiches and a tea for these learners but I do not have means. I would like to sacrifice my sandwiches, but it becomes difficult because I normally carry four slices of sandwiches, if there are six hungry learners whom would I give or not give, then it does not work.

4. How would you help a learner who is under-performing in class because of hunger?

There is nothing much that I can do because I was not trained to help learners who under-perform because of hunger. I would like to go that extra mile but only after if have received training because dealing with poor learner performance due to hunger does not fall under my job description.

5. What would you do to enhance the performance of hungry and malnourished learners in the class?

I usually give learners homework. I do not have special activities designed specifically for malnourished learners. But if I have time I can interview the learner to get more information with his/her family background. The majority of them eat a little from their neighbours and sometimes they are afraid to ask.

6. If you were in a managerial position and having the influential powers, what would you do for the hungry and malnourished learners in your school?

I can ask for donations from business people within the community. I will write a letter and explain who will benefit from those donations. With the approval of the School Management Team (SMT) and the School Governing Body (SGB) I can organize fund-raising activities such as beauty contest, Concert, talent show and film viewing.

7. What role do you feel should be played by the family to enhance the teaching of hungry and malnourished learner?

I feel the family member can assist with informal education. In the sense that some of the children tend to fall for the peer pressure, whereby you find a learner doing a thing that he/she knows his/her parents won't approve. The idea that it is the white bread that is healthier than the brown bread is not true, but if that information is told by a friend a child can trust it. Some of the learners do not eat if at home a granny cooked cabbage or beans. There is that tendency with young ones that a cabbage is eaten by poor people.

8. What role do you feel should be played by the school to enhance the teaching of hungry and malnourished learners?

My point of view is that it is duty of the school to teach learners about the food pyramid that contains basic food groups. Learners should be taught the correct amount that they must eat in each category. Schools should also teach learners about the importance of eating the healthy diet.

9. What role do you think should be played by the government to enhance the teaching of hungry and malnourished learners? If there is something that the government is doing, do you think it is enough?

The Government is doing its best by providing learners with Nutrition Program (feeding scheme), but it is not enough. Of course half a loaf is better than no bread. Presently it is the Pre-School and Primary School which benefit from the Nutrition Program, my view is that it should be extended to the High School as well because even the High School learners feel the pinch of hunger.

Participant 3

1. Tell me what is your understanding of hunger and malnutrition?

I think hunger is when a person's stomach is empty. Hunger can make someone to be short tempered and eventually become violent on the other hand malnutrition is the situation where a person is eating but the food that he/she is eating do not have all the nutrients required by the body. Diseases such as Kwarshiorkor can be a result of malnutrition.

2. How does hunger and malnutrition impact on the learner performance in the class?

Hunger and Malnutrition impact negatively on the learner performance. The community from which our learners come from is very poor and most of the parents are unemployed. As a result they fail to feed their children. Their children go on hungry stomachs to school and without lunchboxes. Because of the stigma attached to the state of being poor, some of the learners are shy to eat the Government food at school.

3. What would you do while you are teaching then you see the learner is sleeping, if you ask the learner why s/he is sleeping, the learner tells you s/he is hungry?

It is sad and heart-breaking to see a learner sleeping because of hunger. Some of these learners complain of stomachache. These are the bad conditions that we face at work that hinder effective learning. I normally continue with my work and tell the learner to be patient and wait for their meal during break.

4. How would you help a learner who is under-performing in class because of hunger?

There is no special treatment or under-performing learners because of hunger. I think the issue of hunger must be addressed by the Department of education. If teachers neglect their work, to attend to under-performing learners due to hunger, a teacher can be subjected to disciplinary measures since he/she will not be doing what he/she is trained for.

5. What would you do to enhance the performance of hungry and malnourished learners in the class?

There is nothing much that I do for the malnourished learners except to teach them during the Life Orientation Period the health diet and healthy living styles. I can motivate them to start the garden plots in order to get fresh vegetables.

6. If you were in a managerial position and having the influential powers, what would you do for the hungry and malnourished learners in your school?

I can use my powers as the manager (Principal) to ask for donations from the local business people because I believe it will be good for them to give back to the community. I will also encourage learners to start vegetable garden at the back yard of the school. In this way I will be supporting the 'one school: one garden' initiative that is provided by the government. I can even start our school soup kitchen where poor learners can take away some ratios to help them at home.

7. What role do you feel should be played by the family to enhance the teaching of hungry and malnourished learner?

As far as I am concerned, the family can help in encouraging adolescents to eat because in most of the time they are weight conscious. They happen to omit certain meals because they mind their weight. The family members must spend the money that is provided by the Government wisely by buying the correct stuff of food not the junk food.

8. What role do you feel should be played by the school to enhance the teaching of hungry and malnourished learners?

My understanding is that a school should help with teaching of proper nutritional information. It is possible for the school to invite social workers to school to provide platform where learners can register for their birth certificates and to be able to access child support grant (child allowance). It has been found that some learners do not enjoy this benefit because they do not have birth certificate. When they receive that money they will be in a position to buy school needs and buy some groceries.

9. What role do you think should be played by the government to enhance the teaching of hungry and malnourished learners? If there is something that the government is doing, do you think it is enough?

Many of children live in the government subsidy houses (RDP) houses. These houses were introduced by the South African Government to reduce the level of homelessness. These houses accommodate destitute children and those who are living in the streets (street kids). Other learners still live in shacks because they lack information on how to register for these houses and sometimes have nobody to help them.

The education of these learners is being compromised because they are faced with overcrowding at school as well as at home. Other learners have no birth certificate to access the Government child support grant (child allowances) which is meant to address the issue of poverty to the citizens of this country. The Department of Education introduced the nutrition programs (known as feeding

schemes) to fight hunger at schools. The constitution states that all children have the right to quality education

Participant 4

1. Tell me what is your understanding of hunger and malnutrition?

Hunger is when somebody's stomach is empty and have nothing to eat may be for some days. Malnutrition is when a person is eating but eating food that do not contains necessary nutrients required by the body.

2. How does hunger and malnutrition impact on the learner performance in the class?

Hunger and malnutrition impact negatively on learner's performance since learners come to school on an empty stomach. In the class they tend to sleep and loose the lesson the learning content. For effective learning to takes place, the learners should be enough fed so that they can concentrate and pay attention.

3. What would you do while you are teaching then you see the learner is sleeping, if you ask the learner why s/he is sleeping, the learner tells you s/he is hungry?

I can ask the learner why s/he is sleeping if s/he tells me that s/he is sleeping because s/he is hungry, then, I will send him/her to the kitchen to check whether there is anything that she can eat.

4. How would you help a learner who is under-performing in class because of hunger?

It is the part of my job to design activities for expanded opportunities for each and every lesson. Those activities serve as follow-up activities that are intended to re-inforce what has been taught in the class. They normally do that work at home.

5. What would you do to enhance the performance of hungry and malnourished learners in the class?

I will try to teach all learners in my class and treat them equally and fairly without any discriminating them in terms of poor or rich family background they

come from so that they all benefit. I will also develop a friendly relationship so that the learner can approach me with whatever need s/he may have.

6. If you were in a managerial position and having the influential powers, what would you do for the hungry and malnourished learners in your school?

I will try by all means to eliminate unprofessional behavior among the teachers of discriminating learners according to the family background. In other instances teachers get tempted of ignoring those who are coming from poor family background.

7. What role do you feel should be played by the family to enhance the teaching of hungry and malnourished learner?

I think a family should co-operate in supporting the child development and health promotion and in terms of helping the child make better health choices. I think families can help to enhance the education of our children by directing it towards the development of the child's fullest potential.

8. What role do you feel should be played by the school to enhance the teaching of hungry and malnourished learners?

My opinion is that schools must maintain good communication between teachers and students and between teachers and parents. Schools are expected to provide regular information to parents on their children's progress.

9. What role do you think should be played by the government to enhance the teaching of hungry and malnourished learners? If there is something that the government is doing, do you think it is enough?

High teen birth rates are an important concern because teen mothers and their babies face increased risks to their health, and their opportunities to build a future are diminished. These teenagers are attracted to the child support grant and because of poverty they think they can give birth and qualify for this allowance and be able to feed herself and her siblings. My opinion is that the government must regulate the spending of the child support grant.

Participant 5

1. Tell me what is your understanding of hunger and malnutrition?

My understanding of hunger is that it refers to the state of having an empty stomach whereas on the other hand malnutrition can be directed to a person who have something to eat but what s/he is eating does not have the required nutrients that is needed by the body.

2. How does hunger and malnutrition impact on the learner performance in the class?

Hunger and malnutrition impact negatively on learner performance because learners come to school on a hungry stomach and loose the great deal of what is being taught in class. When the assessment is conducted the learner achieves poor marks.

3. What would you do while you are teaching then you see the learner is sleeping, if you ask the learner why s/he is sleeping, the learner tells you s/he is hungry?

As a teacher, I accept that the main reason for the child to be at school is to learn and develop academically, socially and culturally and avoid any activities that may disrupt the learning process. On that basis I can therefore ask the learner to be patient and wait for the break because normally their meal becomes ready during break.

4. How would you help a learner who is under-performing in class because of hunger?

I normally give learners extra-activities from what has been done at school to continue revise at home but there are no activities that are meant for under-performing

5. What would you do to enhance the performance of hungry and malnourished learners in the class?

I can motivate the learner to rise above all odds. I can talk privately to the learner and find some means to help the learner in particular with the application of a birth certificate so that s/he can access the child support grant.

6. If you were in a managerial position and having the influential powers, what would you do for the hungry and malnourished learners in your school?

I can encourage learners to start garden project then build hire a cook who will cook special meal for learners to take home in ratios. I can also organize fund-raising activities to assist needy learners.

7. What role do you feel should be played by the family to enhance the teaching of hungry and malnourished learner?

The family must support the child with his/her school work. The parent or guardian must not keep the child busy in such a way that the child does not get time to do his/her homework.

8. What role do you feel should be played by the school to enhance the teaching of hungry and malnourished learners?

According to my point of view the school must teach the child the healthy diet. The school must ply its role in teaching learners the right amount of food that they must eat in each group. Schools must educate learners that will be independent and responsible citizens.

9. What role do you think should be played by the government to enhance the teaching of hungry and malnourished learners? If there is something that the government is doing, do you think it is enough?

Most of the time malnourished learners are frustrated and distressed so for them to cope with schooling. It may be better if they receive Career guidance.

Participant 6

1. Tell me what is your understanding of hunger and malnutrition?

Hunger is when somebody goes on an empty stomach, whereas malnutrition is when a person is eating food that does not contain all vitamins needed by the body.

2. How does hunger and malnutrition impact on the learner performance in the class?

A hungry learner falls asleep during the first period and misses out on important subject matter.

3. What would you do while you are teaching then you see the learner is sleeping, if you ask the learner why s/he is sleeping, the learner tells you s/he is hungry?

I ask the child why is he or she sleeping and ask whether he or she had breakfast before coming to school. If the child tells me he or she did not take breakfast I arrange with the kitchen to get the child slices of bread and a juice.

4. How would you help a learner who is under-performing in class because of hunger?

I create expanded opportunities for that learner, like giving the learner an extra activity.

5. What would you do to enhance the performance of hungry and malnourished learners in the class?

I write the learner in the register of needy children and find out from the child whether he or she is receiving the child support grant.

6. If you were in a managerial position and having the influential powers, what would you do for the hungry and malnourished learners in your school?

I will start a soup kitchen for the needy learners and donations from the local business people.

7. What role do you feel should be played by the family to enhance the teaching of hungry and malnourished learner?

The family must encourage the child to eat food that contains the nutrients needed by the body.

8. What role do you feel should be played by the school to enhance the teaching of hungry and malnourished learners?

The school must start the garden plot behind the classes. Educators must teach learners a balanced diet. According to my point of view the school must teach the child the healthy diet.

9. What role do you think should be played by the government to enhance the teaching of hungry and malnourished learners? If there is something that the government is doing, do you think it is enough?

The DoBE must train educators how to identify the malnourished learners in class. The DoBE provides the learners with the nutrition programme at school, but it is not enough.

APPENDIX A

Interview Open-ended Questions

1. Tell me what is your understanding of hunger and malnutrition?
2. How does hunger and malnutrition impact on the learner performance in the class?
3. What would you do while you are teaching then you see the learner is sleeping, if you ask the learner why s/he is sleeping, the learner tells you s/he is hungry?
4. How would you help a learner who is under-performing in class because of hunger?
5. What would you do to enhance the performance of hungry and malnourished learners in the class?
6. If you were in a managerial position and having the influential powers, what would you do for the hungry and malnourished learners in your school?
7. What role do you feel should be played by the family to enhance the teaching of hungry and malnourished learner?
8. What role do you feel should be played by the school to enhance the teaching of hungry and malnourished learners?
9. What role do you think should be played by the government to enhance the teaching of hungry and malnourished learners? If there is something the government is doing do you think it is enough?

Isikhwelo Senior Primary School

G 407 Unkonka Road

Umlazi Township

4031

12 April 2010

Tel/Fax (031) 9075260

The District Manager

Umlazi circuit office

P.O. Umlazi

4031

Dear Sir/Madam

RE: Request to conduct a research project

My name is RhonasiaNelisiweNgcobo. I am a teacher at the above mentioned school. I am currently engaged in my Master's Degree specializing in Educational Psychology at University of KwaZulu-Natal. The partial requirement towards completion of this degree is that I should conduct a research project that relates to my research focus. My research focus is on hunger and malnutrition. I kindly request permission to conduct a research project within my own school.

The main purpose of my study is to explore the teachers' understandings of the effects on hunger and malnutrition on learner academic performance. Issues of confidentiality and anonymity will be observed. Participants will take part voluntarily and they will be allowed to withdraw at any stage of the interview should they so wish.

Interviews will be conducted after school so the daily activities of the school will not be disturbed. I intend to do my level best to keep this promise.

This research project will benefit the Department of Education by providing recommendations derived from the research findings. Findings will also be made available for academic references that will assist future researchers who intend to research the same phenomenon.

Attached at the back is the consent form.

Yours Faithfully

R.N. Ngcobo

CONSENT FORM

I(Full names of the District Manager) hereby confirm that I understand the contents of this document and the nature of the research project. I therefore allow RhonasiaNelisiweNgcobo to conduct a research project at her school.

I accept that interview will take place after school and that the daily activities of the school will not be disrupted.

I also understand that participation is voluntary and participants will be free to withdraw at any time should they feel to do so.

Signature:

Date:

APPENDIX C

Mrs. R. N. Ngcobo
31 Nova-Nova-Natalia
41 St. Andrews Street
Durban
4001
Tel: 031-9075260
Cell: 082 818 0346

Isikhwelo Senior Primary School
G 407 Unkonka Road
Umlazi Township
4031
12 April 2010
Tel/Fax (031) 9075260

My dear Colleague

RE : Request of your participation in a research project

I am currently engaged in my Master's Degree specializing in Educational Psychology at University of KwaZulu-Natal. I am conducting a research project on hunger and malnutrition. I have chosen you to be one of my participants that I will interview with regard to this phenomenon. All information received from them will be treated as confidential. Your name will not be recorded to ensure your anonymity. Your participation would be voluntarily and you will be free to withdraw at any stage of the interview should you so wish.

The main purpose of the research project is to explore teachers' understandings of the effects of hunger and malnutrition on learner academic performance.

I promise not to cause any disturbance of the daily activities of the school. Should you agree to take part, I will then arrange suitable time to all of us (me and you) to do interview preferable after school.

I hope this research project will benefit the school and other teachers by providing information that will address phenomenon that is contemporary and of a serious nature at school and will provide insights into strategies that are necessary at reducing the extent of the phenomenon. I want to make contribution to the school by providing the research findings to the School Management Team (S.M.T.) so that they grasp teachers' understandings of the phenomenon.

Attached at the back is the consent form.

Yours Faithfully

R.N. Ngcobo

CONSENT FORM

I(Full names of the Principal) hereby confirm that I understand the contents of this document and the nature of the research project. I therefore allow RhonasiaNelisiweNgcobo to interview some of my staff members.

I accept that interviews will take place after school therefore the daily activities of the school will not be disrupted and that those who will participate will do that on their free will.

Signature:

Date: