THE ROLE AND FUNCTION OF EMOTIONS IN PRIMARY SCHOOL CHILDREN'S MEANINGFUL LEARNING

by

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Submitted in fulfilment of the requirements for the degree of

MASTER OF EDUCATION

in the subject

PSYCHOLOGY OF EDUCATION

at the

UNIVERSITY OF SOUTH AFRICA

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NOVEMBER 1999
DECLARATION

I declare that The Role and Function of Emotions in Primary School Children’s Meaningful Learning is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

[Signature]

11/02/2000
DEDICATION

Dedicated to:

My late beloved grandmother Martha Phuti Rasefate who became my source of inspiration.

My parents and my sisters and their children for their moral support.

My daughter Gemmy Mologadi Langa and her cousin Kgadi for being there for me.
ACKNOWLEDGEMENTS

I would like to acknowledge the following people for their assistance and support:

My supervisor, Prof P.S. Visser for his incisive guidance, support and prompt response to my queries, frustrations and problems. His understanding, encouragement and support have borne fruit.

Prof G. Bester for his invaluable contributions and patience in the processing and interpretation of empirical data.

The Northern Province, Department of Education, Arts, Culture and Sports for granting me permission to conduct research in their schools.

Mrs A. Olivier and S. John for their help in selecting English and Mathematics meaningful learning tests.

Mr S.G. Moto for his help in the translation of the CRIP into Northern Sotho.

Ms Santa Oosthuizen for editing my work.

Ms Rebecca Manaka for typing my work.

Finally, the Almighty God for giving me health, courage and strength to undertake this research study.
THE ROLE AND FUNCTION OF EMOTIONS IN PRIMARY SCHOOL CHILDREN'S MEANINGFUL LEARNING

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SUMMARY

The aim of this study was to critically examine the role and function of emotions in primary school children's meaningful learning. Emotions that are commonly experienced by primary school children were identified and an indication was given of how they relate to meaningful learning. Factors that affect both emotions and meaningful learning were also discussed. In an empirical investigation that was undertaken, it was found that emotions influence meaningful learning of primary school children either positively or negatively. The following emotions pointed to both positive and negative significant correlations with regard to meaningful learning: anger, aggression, anxiety, fear, love, joy and affection. Factors like family size, gender and the environment (life world of primary school children) also influence meaningful learning.

Key terms: emotions, meaningful learning, primary school child, cognitive structure, cognitive style, anchoring ideas, children's relational image profile, problem solving, transfer, forgetting, environmental deprivation, child rearing practices.
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CHAPTER 1

INTRODUCTORY ORIENTATION, ANALYSIS AND CLARIFICATION OF CONCEPTS, STATEMENT OF THE PROBLEM, AIM OF THE STUDY, RESEARCH METHODS AND RESEARCH PLAN

1.1 INTRODUCTORY ORIENTATION

A child is a human being; a person. He is a person who would like to come to an understanding of his world but does not know how to proceed and therefore needs help, support and guidance of adults. It is with this aid and support that he will grow up and become what he ought to become; an adult responsible for his life (Vrey, 1993:11).

Engler (1985:110) says:

"Each individual seeks to cope with his or her environment and develop superiority in a unique way. Each of us shares the common goal of striving for superiority, even though there are many different ways by which we may achieve this goal".

In trying to achieve this goal in the world around him, the child engages in becoming, self-actualization, significance attribution, involvement and learning. According to Vrey (1990:7), learning, living and becoming are interrelated. They are continuous and part of being human.

"Growing up and learning are inherent to humanity. These two basic tasks (growing up and learning) do not develop independently or parallel to one another. They interact and are always mutually dependent on one another". (Vrey, 1990:7)
Hurlock (1978:23) takes the idea further by indicating that inherent in each child is an inner force, an urge, a pressure towards growth and development, an inner drive towards self-actualization.

The child feels he wants to move forward towards greater independence and greater responsibility. It satisfies him to grow rather than to remain a child.

Mouly (1973:106-107) presents the following as characteristics of the person in the process of becoming:

(1) The self-actualizing person has a more adequate perception of and a more comfortable relationship with reality.

(2) The self-actualizing person is willing to be part of the process of change.

(3) The person in the process of becoming has a positive view of himself and an increasing trust in his ability to arrive at adequate behaviour.

(4) His complete openness to experience guarantees a high level of personal and social integration.

(5) The self-actualizing and becoming person also has a strong sense of identification with his fellow men. He has a sense not to fear uniqueness, individuality and originality, for he accepts responsibility for his actions.

The above indicates the ideal picture of a self-actualizing and becoming adequate person. Of course, this will depend on a variety of factors like the child’s life world; socio-economic status, etc.
Every child finds himself in a particular situation. His situatedness is determined by the fact that he is unique and therefore responds uniquely to each demand made on him. He constructs his life world according to how he experiences it.

A life world is therefore not conceivable apart from a person, since it is the totality of meanings discovered or assigned by a person (Vrey, 1993:15).

The situation in which the child finds himself may work to discourage this urge inherent in the child to do what he is fitted to do. Successful development, according to Hurlock (1978:22) requires guidance, support and knowing the developmental patterns, since that will enable parents and teachers to guide the child appropriately because lack of opportunity and encouragement may delay normal development. Teachers and parents should always be on the look out for the various developmental tasks and stages.

The most common stages of development are amongst others pre-school phase, primary school phase, and adolescence. Vrey (1993:116) explains that the child in the primary school phase considers the teachers as very important and gladly identifies himself with the teacher. This shows that the teacher should take a positive view of the child so as to enhance his self-esteem. Self-esteem, according to Van den Aardweg and Van den Aardweg (1993:214) is the degree of positive or negative feeling that one has on the assessment or evaluation of oneself. It is what you feel about yourself. In order to achieve this, the teacher should be aware that the emotional life of the child has an impact on the way he learns. This is the heart of this study.

Schools, however seem to place more emphasis on the cognitive aspect ignoring the other aspects of development of the child, especially the emotional aspect. According to Mouly (1973:187) and Mwamwenda (1995:56) the school has at the heart of its
functioning, a socialization task. The values, norms, behaviours, beliefs and attitudes adhered to at home should be continued by the school.

The child as a totality should be catered for by the school; or else an imbalanced personality will be produced by the school.

1.2 ANALYSIS AND CLARIFICATION OF CONCEPTS

1.2.1 Emotions

According to Plutchik (1994:1-2), emotions are part of our lives. They are so much a part of our lives that one would think that they are easy to define and study. Their study is difficult and confusing since there is very little agreement on how to define and name them. The following definition might serve to throw light on this aspect: Emotion is a complex set of interactions among subjective and objective factors, mediated by neural/hormonal systems, which can

(a) give rise to affective experiences such as feelings of arousal, pleasure/displeasure;

(b) generate cognitive processes such as emotionally relevant perceptual effects, appraisals, labelling processes;

(c) active widespread physiological adjustments to the arousing conditions; and

(d) lead to behaviour that is often, but not always, expressive, goal directed and adaptive (Plutchik, 1994:5).
Societies differ, the same as their languages. These makes even the agreement on the list of basic emotions difficult to compile.

Emotion terms are grouped into certain families or clusters (Plutchik, 1994:60).

However, Plutchik (1962:41-42) simplifies the complexity of emotions by giving six postulates of the theory of emotions:

**Postulate 1:** There is a small number of pure or primary emotions.

**Postulate 2:** All other emotions are mixed; that is, they can be synthesised by various combinations of the primary emotions.

**Postulate 3:** Primary emotions differ from each other with regard to both physiology and behaviour.

**Postulate 4:** Primary emotions in their pure form are hypothetical constructs or idealised states whose properties can only be inferred from various kinds of evidence.

**Postulate 5:** Primary emotions may be conceptualised in terms of pairs of polar opposites.

**Postulate 6:** Each emotion can exist in varying degrees of intensity or levels of arousal.
The above postulates indicate clearly that it is difficult to come with just the exact number or list of emotions. Emotions are combinations, and they vary from situation to situation. This will be analysed further in Chapter 2.

1.2.2 The Primary School Child

A primary school child, according to Morrisson (1991: 294, 297-298) is a child who is between the ages of six to twelve, the years between early childhood and adolescence. This is a very significant stage (period) because it inducts children in the process of formal schooling. This process always determine whether the children will like or dislike schooling. It is a period where children should be engaged meaningfully so as to introduce them to success which lead to high esteem, rather than to failure which brings about feelings of inadequacy and inferiority.

The above attributes are very significant for this research study as it strives to look at the role and function of emotions in primary school children’s meaningful learning.

This study will focus on senior primary school children who are between the age of nine (9) and twelve (12) years.

1.2.3 Meaningful Learning

According to Goodwin (1975:186); Van den Aardweg and Van den Aardweg (1993:47); Woolfolk (1993:283) and Klausmeier (1971:39), meaningful learning involves the means available to the learner to incorporate and relate new information to the information he had already learned.
Research shows that we best remember information that is most meaningful to us: information that makes sense in terms of what we already know and that is clear, organised and personally relevant (Woolfolk, 1993:283).

According to Ausubel (1969:52 & 54), meaningful learning is learning that takes place after the learner has taken effort to relate new information in a nonarbitrary fashion to his cognitive structure. This means that for a learner to learn new information meaningfully, the new information should fit into the frame of reference that this learner has established for it to find its meaning.

Ausubel (1968:40-41) further explains that classroom learning is mainly concerned with the acquisition and retention of large bodies of knowledge or information. It is up to the learner to make this information, which is potentially meaningful, meaningful to himself. He further points to a relationship between anxiety and meaningful learning and indicate how this emotion can affect meaningful learning negatively. These two aspects will receive more attention in chapters two (2) and three (3).

When a learner has learned meaningfully, new meanings that are unique to him should emerge. These new meanings complete a meaningful learning process (Ausubel 1968:41).

1.3 STATEMENT OF THE PROBLEM

1.3.1 Background to the problem

Children in their early years have a crucial need to form loving attachments. When those bonds are disrupted, they show disturbance in their emotional development, and they may even, in extreme cases, actually fail to thrive.
This implies that the love bond between the parent and the child is very vital for the child's emotional adjustment and mental health (Chandler, 1985:113). Perhaps it is not an exaggeration to state that the African child still needs to be understood. The study of the African situation in terms of how children learn, the factors which may influence their learning positively and/or negatively, their potentialities, their social, economic and cultural needs are still matters for great concern. Some teachers still believe that children can only learn by constant punishment, particularly corporal punishment.

Children who do not progress well are ignored because they are labelled as stupids and fate will just tell where and what they will do (Lenyai, 1995:8). Van den Aardweg and Van den Aardweg (1993:17) explains that to understand the child and his emotional behaviour the educator should take the child's home and social background into consideration. Agreeable, constructive stimuli should characterise the classroom and stimuli which arouse fear, anger and anxiety should be minimised, for example, sarcastic remarks, unnecessary punishment, ridicule and embarrassing situations.

The child brings to class with him his particular store of knowledge, experiences, beliefs, family problems and family joys. This affective experiences all contribute to how a child will avail himself to the learning process. Confused, uncertain, insecure, fearful, anxious, regretful, stressful and unhappy children often fail to learn and therefore do not actualise their potentialities to their maximum.

A senior primary school child is a child at a stage where he is expected to have a greater deal of control over his emotions. He may not throw temper tantrums randomly and burst into tears any time he is confronted by a problem like in the preschool years. Techniques for the control of emotions are given in Plutchik (1962:152-155). The child at this stage is expected to gain better insight into social relations, display loyalty to the
group, become more responsible, well motivated, form a sound and healthy self-concept and an adequate self.

1.3.2 Formulation of the problem

This study is concerned with the role and function of emotions in primary school children's meaningful learning. To conduct a meaningful investigation the following problem can be stated:

What is the role and function of emotions in primary school children's meaningful learning?

This question also implies other questions such as:

- How do emotions relate to meaningful learning?
- What relationship areas are key determinants of meaningful learning?
- Which environments are conducive to the achievement of meaningful learning?
- Is family size a contributory factor to the attainment of meaningful learning and emotional stability?

1.4 THE AIM OF THE STUDY

The aim of this study is to analyse the role and function of emotions in primary school children's meaningful learning.
1.5 RESEARCH METHODS

Researchers use certain methods to generate solutions to problems for possible utilisation and implementation. The quality of research findings is directly dependent on the accountability of the research methodology followed. In this study the following methods will be applied; a literature study, and an empirical investigation.

1.5.1 Literature Study

The researcher will collect the relevant data in this research study by reviewing literature, periodicals, magazines, newsletters and any published script which has a link to this field of study.

1.5.2 The Empirical Investigation

The empirical investigation will be conducted by using a translated adjustment of the “Children’s Relationship Image Profile” (CRIP) (See Kokot, 1988:253) to assess the emotional relationships of the children. [See Appendix D and E].

To evaluate the attainment of meaningful learning some Mathematics and English exercises will be used. [See Appendixes F, G, H and I].

To gather information about the children’s profiles, a biographical questionnaire was prepared by the researcher and was completed by the children during the Empirical Investigation [See Appendix K]. This empirical investigation will further be outlined in chapter 4.
1.6 RESEARCH PLAN

Chapter one has given an overview of the concepts emotions and meaningful learning and the introduction to this study.

Chapter two will investigate the relationship between emotions and meaningful learning.

In chapter three a description of meaningful learning will be given.

The empirical investigation will be described in chapter four and the results of the empirical investigation will be given in chapter five.

Chapter six will give the conclusions and recommendations.
CHAPTER 2

THE RELATIONSHIP BETWEEN EMOTIONS AND
MEANINGFUL LEARNING

2.1 DEFINING THE CONCEPT EMOTION

When one is asked to define the concept "emotion", it is very hard to come up with a straightforward and simple answer because of the complexity that goes with the meaning attached to emotional experience by different individuals. Lewis and Michaelson (1983:21) and Morgan (1986:310) agree on the fact that emotions are hard to define. Experience confirms the existence of emotions (i.e. we feel, we know we feel, and we know what we feel) but when asked to define it, the question turns from what an emotion is to how many emotions there are, and place the task of classifying emotions above just what they are. Instead of defining the concept, lists are given of fundamental emotions and what relationships exist among specific emotions and between emotion and cognition (This research work is focused on the latter, which is the relationship between emotion, and cognition and that will receive attention later in the chapter). There are many definitions of emotion. The reason for so many definitions is that emotions have numerous aspects to them. An emotion is many things at once. Morgan (1986:310) further agrees that the question of defining an emotion is often answered by compiling a list of what should be in the definition if it is to be comprehensive: The following is such a list.

It should:

• say something about the way we feel when we are emotional;
• mention the physiological, biological or bodily basis of emotional feelings;

• include the effects of emotions of perception, thinking, and behaviour;

• point out the driving or motivational properties of certain emotions such as anger and fear;

• refer to the ways in which emotions are expressed in language, facial expressions, and gestures.

Clarke-Stewart (1985:293) also confirms the difficulty of defining what an emotion is by pointing to the fact that emotions are varied and diverse, that they have many different aspects, tend to occur in mixtures and when experienced, they affect the whole person rather than a single biological system. He argues that emotions are complex and come from within a person and, when stirred up, affect the whole being. With regard to expression, they are also varied.

Silverman (1985:272) explains that an emotion may be expressed overtly (externally) or covertly (internally). The overt component includes the expressions, e.g. facial expressions, gestures and actions that we normally associate with the presence of an emotion, e.g. a smile (Morgan, 1986:311; Morris, 1982:412). The covert component includes the internal bodily reactions and subjective feelings which are hard to see and label. The feeling states that go with the covert component are amongst others, an increase in heart rate and an elevation of blood pressure. This is evidence to the fact that emotions are experienced and expressed differently by different people. Morris (1982:296) confirms this by giving an example of an experiment on emotional expression done on a group of college students who were asked to solve a set of very
difficult problem without using paper and pencil. After they had failed to do so, they were accused of being stupid. Three kinds of emotional expressions occurred: some of the students showed fear and anxiety at being unable to do tasks assigned to them and being scolded by experimenters; others expressed anger at the experimenters while the third and last group also expressed anger, but blamed themselves for their failure. This makes the study of emotions very hard because of their being subjective, uniquely expressed by each individual, very complex and varied, and difficult to predict.

Lewis and Michaelson (1983:1) take emotions to be a subset of feelings; and moods, the enduring aspect of emotions. Emotions are a result of a feeling: one has to feel that he is happy to experience and express joy. Moods result from a prolonged feeling of some sort, which ends up conditioning an individual to react in a mood relevant to the experience, and takes longer than emotion. One may be in a bad mood for two days after an emotional reaction that lasted for twenty seconds. According to Mahlangu (1990:66), emotions are feelings of great strength and short duration which can be associated with powerful, physical phenomenon. A person who is fearful may be identified/detected by his physical movements, reactions and expressions.

Van den Aardweg and Van den Aardweg (1993:82) regard emotion as an aspect of the affective life, along with moods, sentiments and feelings. The two authors agree with Morgan (1986:310) when he sites the fact that life would be dreary without emotions because they add colour and spice to life. We anticipate our wedding ceremonies with pleasure but remember with great disappointment the loss of loved ones. Above all, emotions are a means of communication. Our actions and feelings have great impact on others. It is human to share joy with people close to you as it is with grief. The same situation may be very negative: instead of sharing joy with a friend who has won a big price at a show, one may be jealous.
Emotions, in the researcher's view, are unpredictable. Morris (1982:302) explains the need to control, and sometimes conceal emotions because they may get one into trouble, destroy one’s self-image and make one very unpopular. They are a means of communication, but they have to be seriously controlled so that they do not become other people’s problems. He further suggests that it sometimes becomes necessary for one to deny and diminish an emotion one feels, especially if it is negative. It may not be wise of anybody to express anger at a wedding ceremony. It may make that person look very antisocial, stupid and unpopular.

Studies of emotions, according to Hurlock (1972:184), have revealed that all emotions, not just the pleasant ones, play an important role in life and that each contributes to the kind of personal and social adjustment the individual makes. It may not be possible to keep the child away from all the situations that will evoke negative emotions. This is an indication that even the unpleasant emotions such as anger, fear, jealousy, etc. are necessary for life because they encourage social interaction. For emotions to lead to good adjustments, they should be directed into wholesome patterns of expression, and this the child will not achieve on his own, he has to be guided and directed by adults. Adults should help a primary school child to learn how to control his emotions, but not to hide how and what he feels. It might be embarrassing for a standard five pupil to throw a temper tantrum after a playmate has broken his flask during break; but he may show sadness.

From the vast amount of research work done on emotions, Smart (1977:167) came up with what he called a working definition of emotion. He regards an emotion as a feeling plus a tendency towards a certain kind of action. A stirred-up state of the whole being occurs with an emotion. The whole person, body, mind and feeling is involved in emotional expression or experience. Lewis and Michaelson (1983:22) confirms the
latter, when he mentions that an emotion is an acute disturbance of the individual as a whole, psychological in origin, involving behaviour, conscious experience and visceral functioning. It is said to be acute because when it confronts a person, it becomes difficult to ignore; one has to react to it and get over it. According to Clarke-Stewart (1985:266), emotions are felt by everybody, as everybody reacts to them. The infant, the toddler, the five year old, the teenager, everybody, all feel and react to an emotion. The infant gurgles as his mother touches his cheeks; the toddler crawls in anger when a playmate grabs his toy or another child sits on his mother’s lap; a five year old gets frightened by the situation in a kindergarten on the first day, whereas a senior primary school child may feel frightened and fearful when she sees her first menstruation. This indicates clearly how emotions are varied and diverse, from person to person and from situation to situation.

To the researcher, an emotion is regarded as a stirred-up event of short duration that disturbs or excites a person’s whole being, physical, psychological, moral and spiritual, and compels him to act or respond in a particular way. A human being will not ignore an emotion because it touches his inner being. He is bound to react to it and get over it. It is after the experience or expression that one may think of ignoring it or moving away from the source of the emotion. The focus of this research work is on the emotions of primary school children and how they affect meaningful learning.

2.2 EMOTIONS IN THE LIFE OF THE CHILD

For a human child to develop into a responsible being, he needs the assistance of adults. For him to realise the ultimate goal of becoming, which is adulthood, he is to develop. He should be assisted to develop as a totality. He should be seen as a social, physical, affective, moral, aesthetic and religious being. In the life of the child these
different aspects of becoming are experienced as an integrated whole. The overemphasis of one at the expense of the other may lead to an imbalanced human being (Feeney 1987:99).

The affective aspect of the child’s becoming refers to those experiences that emphasise a feeling tone, an emotion. The affective life of the child is therefore integrally fused with his total personal being and is particularly affected by education (Van Niekerk, 1982:7).

Children develop as they learn. For the child to learn and develop, he is to form relationships with objects, ideas, people and himself. He also has to give meaning to, be involved with and experience these relationships.

Van Niekerk (1982:7) further indicates that emotional experience forms the basis for intellectual and gnostic learning and it should preferably be of a stable nature as this is a pre-requisite for the child’s receptiveness to the subject matter. Every meaning which is not emotionally, cognitively and normatively integrated by the child leads to anxiety. The child thinks, feels, behaves and acts as a total being.

Every aspect of behaviour is influenced by our emotions (Silverman, 1985:275).

Studies of emotions have revealed that all emotions are important, irrespective of their being positive or negative. Both contribute uniquely to the development of the child. Emotions are a means of communication, and variety to life, but have to be controlled. They interfere with mental activities and affect social interaction (Hurlock, 1972:184-185). This is an indication that senior primary school children should be taught how to control their emotions. They should be taught that the emotions they experience during these years are part of growing up and being human. Slavin (1991:78) indicates that adults must encourage children to talk about their emotions and their fears.
Parents should try and minimise feelings of guilt and inadequacy that are often caused by children’s actions and their parents’ values and standards of life. As already mentioned, parents and teachers should note the fact that it may not be possible for a child to experience pleasurable emotions only. Children will definitely experience both positive and negative emotions, but the negative ones will have to be kept at a minimal lest they develop into habits. No one likes a moody and angry child, but a joyous child will be acceptable in many social settings.

2.3 THE PRIMARY SCHOOL CHILD’S EMOTIONAL DEVELOPMENT

For a child to be admitted to primary school education, he must have attained school readiness. He must be emotionally, socially, intellectually, spiritually and physically ready for school. He must show readiness to listen to and carry out instructions from teachers, share living space with other children and, above all, be willing to co-operate. This will ensure that his primary school years are fruitful and enjoyable.

The school situation is quite a challenging situation.

As children move out of their families and into school, new challenges greet them. This can be a happy time for many children. They are growing physically, becoming more and more skilful. They are learning to read, write, solve problems and understand the world. They are developing good friends. But failures in these areas can be devastating. The child who continually fails in school or who is rejected by other children can be a very unhappy person (Woolfolk, 1993:95-96).

In order to achieve the sense of separateness, the child needs support from both parents and teachers. To get used to new noises, objects, activities, programmes and tasks may be frustrating for a child. The child will only be able to best make the transition from
home when the introduction is gradual and family aspects are integrated into their new lives in the classroom. An ideal thing would be for the teacher to present some aspects of the school programme on a home visit before the child’s first day in school. That would give the child an opportunity to experience that unfamiliar face related to his home environment where he feels more secured and protected. It may boost his confidence in the teacher when he meets him for the first time in school. The most important function of the teacher during this hard time is to demonstrate his calmness and eagerness to help, protect and comfort the child in that new, and possibly scary place (Feeney, 1987:130-131).

According to Dreyer (1988:38) during primary school years the child has an increased range of affective experiences, e.g. feelings of certainty, pride, pleasure, guilt, etc. which are a result of a variety of emotions that the child experiences. Teachers should therefore be very careful in planning educational programmes for these children as the first four years of school are a critical period. Behavioural tendencies crystallised at this time are the ones that persist into adulthood.

The education support which the child needs in this respect is indispensable. He must experience appreciation, encouragement and praise with every attempt that may lead to success. A very real danger during the early primary school years is the possibility of developing feelings of inferiority and inadequacy that may suppress his attitude of daring (Vrey, 1993:86).

Van der Westhuizen and Schoeman (in Louw, 1992:337) believe that a variety of factors and their interaction, determine how the child experiences schooling. Children who are emotionally secure, who have gained a reasonable amount of pre-school and home social experience, who have also developed some emotional independence from
their parents, are better adjusted to school than those who had little or no social experience outside the home.

2.3.1 Emotions play an important part in the life of each primary school child

When a primary school child begins his schooling, his life changes dramatically. The familiar home environment is left behind and the child enters the relatively unfamiliar school environment. He sees new people, a new environmental setting, new demands and new goals. He is expected to work hard and achieve success and that puts pressure on the child (Louw, 1992:337). The child has to be assisted to be well adjusted to school life. He should be given emotional support in order to be able to shoulder all those tremendous responsibilities, and in this respect the child's emotional life plays a significant role. Parents and teachers should be emotionally involved in the child's daily activities. They should be concerned for his well being. They should encourage communication where the child can voice his problems; relate his frustration and rest assured that he will find help.

When a primary school child experiences pleasurable emotions like love, trust, happiness, joy, etc. he gains courage to venture into the unknown to actualise his potentialities. When the same child experiences negative emotions such as hatred, rage, anxiety, anger, worry, etc. this may result in emotional instability. The anxious child shows a difficulty in shouldering the full responsibility that goes with school tasks (Van Niekerk, 1982:21). That is also confirmed by Vrey (1993:86) as he believes that the experience of pleasure on completion of a task paves the way for the ability to find pleasure in labour.
Learning is not only a cognitive process or activity. It is also social, emotional and moral. It is a social process for entry into school brings with it a huge expansion in the child’s social world. Parental influence decreases and shared space comes with peer and teacher’s influence. During this important stage of development children want to see things happen. When they succeed they gain a sense of industry, a good feeling about oneself and one’s abilities. Failure on the other hand creates a negative self-image, a sense of inadequacy that may hinder future learning (Slavin, 1991:41). For a primary school child to experience success with whatever activities he will do, interpersonal relationships are to be treated with great care; e.g. relationships with teachers, peers and parents. To be able to relate his frustrations, he should be encouraged to communicate his problems and fears with the people he finds in his life world.

2.3.2 Emotions are probably the most complicated of all psychological processes

The emotional aspect of a primary school child is not realised and actualised in isolation. It is part of being human and is dependent upon other aspects of development. This is evidenced by Smart (1977:269) who sites the fact that affective experiences are part of interaction with other people. According to her, social experience is closely related or linked with the development of the self and emotions.

Emotional growth is influenced by both cognitive and social development. But one thing different about emotions and emotional development is that it has proved to be the most complicated aspect of being human: it is difficult to see an emotion unless it is expressed. Silverman (1985:282) confirms this when he says that several important theories exist about emotions but none of them explain all aspects of an emotion. Morgan’s definition (1986:310) (see subheading 2.1) and an experiment done on college students explained by Morris (1982:296) confirm the idea that emotions and
emotional expression are the most complicated of all aspects of development. According to Mussen (1990:136) emotion and emotional expression refers to changes in the brain and body and broadens to include even encounters with pain, sorrow, danger and social interaction. This indicates clearly that emotions are the most complicated of all aspects of development because they can be denied and hidden, exaggerated and even withheld.

2.3.3 The emotional and intellectual development of a primary school child is affected by socio-economic variables

Every child begins life in the social and economic reality of his family. Physical care, child rearing practices, stimulation or non-stimulation by the environment, family interaction and all opportunities for development vary with the socio-economic status of the family (Smart, 1977:448). The child’s development is adversely affected by all those factors that constitute his life world. The child’s intellectual development is no exception.

Although the school’s primary concern is with classroom performance, the academic difficulties of lower-class children can only be understood in the context of the ghetto; crowding; stimulus deprivation; hunger; lower-class values and life-style; unemployment; welfare; crime and delinquency and other components of the poverty syndrome (Mouly, 1973:161).

Children who find themselves in these conditions have very little intellectual stimulation. When they go to school for the first time, they find the school environment very strange, because what they find there does not relate to what is familiar to them. The researcher will briefly discuss some of the socio-economic variables that directly
or indirectly affect the primary school child's emotional and intellectual development. Such variables include among others; environmental deprivation, poverty, child rearing practices, child abuse and neglect.

2.3.3.1 Environmental deprivation

According to Readers’ Digest Dictionary (1988:420) deprivation relates to the condition of lacking, shortage or deficiency of something; e.g. lacking the financial means, education, family environment or social ties considered necessary to achieve a fulfilling life: that is a deprived childhood. It means deficiency of the elements required for the child's adequate development or the elements that are essential for the satisfaction of his basic needs. De Witt and Booysen (1995:122) explains the same concept as a state of being culturally or socially disadvantaged, deprived, hampered and weak. In the researcher's view environmental deprivation prevents children, especially primary school children, to benefit properly from school even if they were born with tremendous abilities. These children are found to be held back by their social and cultural backgrounds. This point will be discussed in detail under the causes of emotional instability (2.3).

2.3.3.2 Poverty

Primary school children who are caught up in the poverty syndrome suffer a lot as a result of malnutrition; underfeeding; disease; abuse and neglect. Poverty itself does not directly affect intellectual development but some conditions associated with it lead to that. Such conditions relate to overcrowded homes, physical and emotional neglect, disease, ignorance, underfeeding and malnutrition. According to Smart (1977:308-309), the culture of poverty includes restrictions that affect every member in every aspect of life and development. She further indicates that most of these people live in

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very crowded homes, where children develop from a very early age a tendency to ignore sounds and stimuli that would have impact on their senses if they were in normal home situations. These poverty stricken homes offer young children very few (if any) toys and play materials to stimulate their growth. Such children's intellectual development gets affected because in regard to language development one finds that they have a backlog. This affects their logical and proper thinking because language is a vehicle of thought. This is confirmed by Louw (1992: 196) who mentions that it is popularly assumed that children from a low socio-economic class show poorer language ability. They know fewer words and as a result lack concepts and conceptual foundation. Studies on intelligence, according to Berns (1985: 121) show that children from smaller families score higher on intelligence tests than children from larger families due to the aspects mentioned above.

2.3.3.3 Child-rearing practices

Ways of bringing up children differ from culture to culture, from society to society, from community to community, and from family to family, due to differences in parenting styles. Parenting styles refers to the general patterns of behaviour used by parents when dealing with their children. Parents have the earliest and strongest influence on the child (Slavin 1991:65).

Child rearing practices and parenting styles vary from warm-accepting to cold-rejecting; authoritative to permissive; warm to hostile and anxious-emotional to detachment. Warm, accepting parents are able to show and provide their children with the necessary warmth, love and security; enabling their children to relax and talk to them about a number of things that affect their lives. In contrast to this, one finds hostile, cold, detached and restrictive parents who do not encourage their children to
feel comfortable in talking to them about a variety of things in their lives. They want to instruct and not to be asked why. They do not want to be involved with their children and set no goals and demands on their children with regard to values, behavioural tendencies, attitudes, tasks, and achievement (Louw, 1992:363-364; Papalia and Olds, 1993:328). The most healthy and appropriate parenting style, according to Ammerman (1990:174) and Papalia (1993:442) is one in which parents are both demanding and child-centred, a style that is referred to as authoritative. Their involvement is a source of stimulation for intellectual development and emotional development.

Especially in the new South Africa, growing children have a lot of problems that confront them daily. Social, economic, political, and educational changes are so hard and fast on them that they often feel marginalized. Each child will therefore need a parent who can sit with him and assure him of tomorrow; provide solutions for the problems he sees and watch on television. Talking to a child helps, because he will also feel safe to voice his emotional frustrations (Le Roux, 1994:123-124).

2.3.4 The influence of teachers on the emotional life of primary school pupils

Teachers do not only play a central role in the teaching function, they also exert a powerful influence on every aspect of the child's development. They are often counsellors for many children who have domestic or personal problems (Louw, 1992:338-339). This is also confirmed by Mouly (1973:12) who mentions that the concept of teaching has made the work of the teacher very difficult. Instead of concerning himself only with a few patterns of effective presentation of the subject matter, the modern teacher's responsibilities include seeing that the child gets the maximum benefit in his total development. Instead of concentrating on his life of
knowing, he should cater even for the emotional aspect of the child, because attempts
to restrict education to the promotion of the academic and intellectual only, can be
ineffective and definitely harmful.

Primary school children are at a stage where they can still be "formed" and it is
therefore necessary that they get teachers who can parent them; portray good examples
and images; teachers who can be role models for children and have faith in the pupils
they teach. Feeney (1987:299) emphasises the idea of modelling things to children,
especially primary school children. She suggests that teachers should model the process
of writing, talking, making charts and saying letters as they write. Papalia (1993:423)
further states that teachers exert a great deal of influence over their pupils through their
behaviour and example. If the teacher believes that the pupils he teaches are capable
of high achievement, they will do better in school than if he has less faith in them.
Children want to be loved and recognised for what they are and not for what they are
capable of achieving.

When primary school children during middle childhood experience personal, emotional
or interpersonal problems, teachers can serve as the best source of help and motivation
because children at this stage approach the school, classes and teacher's motivation with
unmistakable interest. Teachers are in a better position to help children in primary
schools who face very difficult home circumstances; homes that are very chaotic and
unpredictable. They are in a position to help these children if they create in school
environments that are warm, firm and authoritative (Woolfolk 1993:92). Mwamwenda
(1990:37) explains that some of the school rules could actually be opposed to children's
feelings and emotions; where children are not even allowed to express their feelings and
concerns. He sites an example of a teacher who denies a child permission to go to the
toilet during his period and tells him to go during break, even if he has an immediate
need to do so. Children in those situations start to experience and develop fear, it erodes the trust they have for the teacher and makes them very anxious.

Hamachek (1990:456) concludes by saying that only normal, well-adjusted persons should be teachers. Good teachers according to him are healthy, balanced personalities who are warm, flexible and interested in the student they are responsible for and are therefore able to positively affect their attitudes and learning.

2.3.5 The influence of the mother-child relationship on the child’s emotional life

The family is the child’s introduction to society and should bear more responsibility for socialising the child. The primary task of socialising the child rests with the mother. According to Vrey (1993:94 & 97), a particular developmental task for the infant is to trust the mother. From a very tender age, the child must learn to trust the mother because trust is a basic prerequisite for sound interpersonal relationships. Mothers are the ones who interact frequently with the child emotionally and it is from this frequent and warm interaction that a child learns to know the world he is in, what to expect from people and what to give to other people. The mother should care about the child, be concerned about his well being, his joys and sorrows, worries and frustrations. She is the one who is supposed to interpret the child’s action and respond appropriately. This contributes to good bonding and attachment.

In the research done by Lenyai (1991:133), the significant role played by the mother in bringing up a child is clearly indicated. She indicates a belief held by Northern Sotho mothers that babies are born weak. The size of the body is associated with being weak in all respects. Although the emphasis in her research work was placed on language acquisition, it will be used in this research study in relation to emotional
development. The belief referred to has many implications for the child's total development, especially the emotional aspect. It makes them carry the children wherever they are, in the fields when they plough, in the bushes when they cut grass, and when they fetch water. This has many implications for emotional growth and independence. When these children grow up, or when the mother has a new born baby, she wants a child to become independent of her overnight; and that becomes hard to achieve. In the same research work; the idiom "Ngwana ke wa mosadi" (A baby belongs to a woman), is used to emphasise the load placed on a Northern Sotho mother to bring up children. This shows why a belief is held by the writer of this dissertation that mothers have a very important role to play in as far as emotional development and security are concerned.

The writer may not dwell much on other cultures as, according to Le Roux (1994:178), black family life is the one that was affected by migratory labour system and pass laws that completely eroded normal family life. Men and women were forced to live apart; children were raised by single parents when they actually had both parents. In the mines the men would be referred to as `boys' and back home as `men' who should see to the well being of the family. This is one reason that made black communities to put a heavy load on women for the bringing up of the children because men would come home once in a year or never come back from cities. In other population groups, life would be normal. A man and a woman would stay together to bring up their children jointly.

According to Berns (1985:75) a good mother is a mother who sees to the total well being of her child. She will take care of the child physically, emotionally, psychologically, morally and spiritually and on top of that provide for basic needs, e.g. provision of food, love and clothing. It is also a mother who should see to the
emotional well being of the child by keeping the child happy and joyous; provide for mental growth by stimulating the child's mental powers, and finally, by relating lovingly to the child.

It should be noted from the above discussion, that the point which is emphasised is that a child who has a mother that fulfils the said roles, is likely to develop a feeling of adequacy which will lead to a positive self concept and emotional stability.

2.3.6 Language as communicator of emotions

Fischer (1991:55) stresses that language is one of the most important tools by which we are able to recognise and elucidate specific feelings in ourselves and others. Kokot (1988:180) states that humans use language to verbally convey their internal feelings to each other, and they as well use the non-verbal signals that animals use. She further stresses that only man can speak about his emotional experiences and there are words to describe them in every human language. One individual can tell another that he is feeling happy or sad. Plutchik (1994:121-122) takes the importance of language further by indicating that it is not only suitable, but is, however, one of the cheapest stimulus or response measures available because it is easily obtained and does not require an extensive support technology. He also add that measures of emotion based on language have shown evidence of reliability and validity in a number of different research situations.

Researchers should however guard against over emphasising the reliability of language in communication of emotions because it is influenced by a variety of factors like personality differences, cultural differences, situations as well as the prevalence of fear and anxiety. According to Strongman (1992:210-211) when a climate of fear is
pervasive, people fail to answer more questions. People, in this case children, might be afraid to say what they really experience. They may choose to say what they think the researcher want to hear.

According to Plutchik (1994:50) language is a complex structure that has evolved over a period of thousands of years. One word might have a multiple of meanings and those meanings may also be influenced by contexts in which they are used.

What was true of the early origins of language is true to some degree today. Words are not precise symbols that have a single, unequivocal meaning. They are inherently ambiguous and depend on context to help establish meanings (Plutchik, 1994:53).

Meanings of words are greatly influenced by the kinds of words available to the individual and the kind of linguistic community he or she is in. Fischer (1991:52-53) adds by indicating that emotion words are one of the means by which people categorise emotions. The daily communication of feelings seems rather difficult without emotion labels. They enable people to describe their feelings, their intentions, goals, urges, interpretations of what has happened. Emotion words are assumed to hold a lot of emotion knowledge, thus, many researchers have thought emotion language to be an interesting source for studying the seemingly endless amount of different emotional states in which we can imagine ourselves.

Verbal or self-reports of inner, private, emotional states are influenced greatly by many factors (Plutchik, 1994:53); that is why Plutchik (in Kokot, 1988:181) says that without doubt, the language of emotions is confusing. The confusion relates to the fact that
one may choose to say what he is not experiencing. A child who knows that his teacher is very cruel may not reveal his true emotions to him. He may choose to say 'I am happy' while his behaviour indicates that he is sad or disgusted. Lewis and Michaelson (1983:236) indicate clearly that for children of all ages, there is no single behaviour that can serve as a necessary and sufficient reference for any emotion; for example, crying may be signal feelings of anger, sadness or even joy. This makes the reading, labelling and interpretation of emotions very difficult.

Language still remain one of the best tools to learn and evaluate emotions as it allows individuals to communicate their internal feelings to others in a way that will make them share space, joy, happiness, sadness, sorrow, etc. to add variety and spice to life.

2.3.7 Meaningful learning requires a stable emotional life

For a child to learn meaningfully, he should have interest in what he learns and display a positive attitude towards both the learning material and the educator. This will enhance his involvement, significance attribution and hence self-realization and self-actualization, development and becoming. George (1973:214) indicates the role that should be played by the home in promoting emotional security. The social and emotional maturity required for meaningful learning is best promoted through the dual process of providing the child with security and the opportunity to practice socially productive behaviour. If this climate is created in the home, the school will find the primary school child in a better position to learn and learn meaningfully. Smart (1977:342) explains the need for the child to be helped to reach complete readiness and maturity in the home before coming to school because, instead of being confined to the family, home and neighbourhood, the child is on his own in the school.
According to Le Roux (1994:185) most fathers who have been affected by feelings of importance, have difficulty in influencing their children's growing up. Some are restricted to live with their families for political reasons and some for socio-economic reasons. These have an adverse effect on the father's interaction with his children. Such fathers cannot assist in shaping and forming their children's self concepts, self-images, self-estees and the emotional aspect which is so vital in the child's development. He emphasises the fact that every child would like to admire his father and find him worthy. Buck (Le Roux 1992:57) says every child would like to say with pride: 'My father can ...', 'My father is ...', 'My father says ...'. This is an indication of how important the father is to the total development of his child, especially the emotional development. To his son especially, he symbolises what it is to be a man.

Primary school children between the ages of six and twelve are emotionally vulnerable. They are going through a phase that Erikson describes as a time for developing a sense of industry or feelings of inferiority, depending on what a child experiences after venturing (Woolfolk, 1993:68-69; Feeney, 1987:90). This is a time in their lives when they uncritically absorb what they experience, see and hear. They come to the primary school with self-concepts that are poorly and incompletely formed and that renders them more susceptible to the feedback they get from adults and peers. If emotional feedback is essentially positive and ego-enhancing, children will be more apt to develop and explore, probe, expand and develop a sense of industry necessary for school life. If feedback is ego-deflating, such children may likely develop low self-esteem that nurtures a sense of inferiority and inadequacy (Hamachek, 1990:87-88).

According to Feeney (1987:171), studies carried out on teaching and learning environments indicate that soft environments are conducive to greater productivity,
higher motivation and morale. Softness according to her, changes the character and feeling of the environment; as well as what happens in it. This indicates clearly that the early childhood classrooms should be characterised by softness because they serve to bridge home and school. The softness can only be felt if classrooms (teachers and materials) provide warm, physical contact with children by allowing children to hug them in time of need and encouraging intimate conversations. That will eliminate fears and anxiety because children who feel loved, can easily trust and, from that trust build positive emotional relationships with teachers and peers. In the researcher's experience, the situation in black schools is different. It has proved to be hard. One hardly finds a teacher who can hug a child, rub his back or comfort him. This may need to be researched to find out why that is the case.

Prawat (in Woolfolk, 1993:90-91) sites a few examples of the role of a teacher in the child's emotional growth, and how teachers they interviewed emphasised affective aspects rather than cognitive aspects. It was discovered, during the research, that many teachers judged the success of a school day based upon affective accomplishments, describing their ideal students as those who possess personal qualities such as eagerness, self-motivation, high standards, pleasant and well mannered personalities combined with academic abilities.

According to Vrey (1993:27) the psychological atmosphere in the classroom determines the mental welfare of the pupils as well as their ability to achieve. In a warm classroom atmosphere in which one senses inspiration; comprehension; the acknowledgement of personal growth; encouragement and comprehensibility, learning proceeds in a relaxed manner with contributions from the pupils. A teacher is the one to create this atmosphere because he is in authority and directs the teaching learning situation. Van Niekerk (1982:7) adds that by way of lived experienced, the child takes
up an emotional and intellectual stance towards all that he is to learn and gives personal meaning to it.

Van der Aardweg and van der Aardweg (1988:111-129) explains that school work which gives rise to ridicule by peers or teachers, distress the tempo of work, and that unfair reprimands and accusations by teachers do not only make children feel emotionally frustrated and traumatised, but is even a cause of truancy which leads to delinquency. Teachers should make children feel accepted, productive and wanted in the classrooms. They should frequently give positive, immediate feedback for appropriate behaviour.

A further example of the role of emotions in promoting success comes from Lewis and Haviland (1993:16) from his research done on the effect of anxiety on intellectual performance and achievement. It was discovered during the research that the relationship between anxiety and performance is not linear. Large and small amounts of anxiety may seriously affect cognitive as well as motor performance; whereas moderate amounts of anxiety may be facilitating. Experience indicates that teachers can help create a stable emotional life at school, which is necessary for meaningful learning to take place by providing emotional support for the children they teach. Teachers should not expect children to achieve, behave and respond the same way to instructions. They should assist every child to learn, so that even the child who frequently fails Mathematics, should in the end have the courage to say 'I am not good at Maths, but at least I have a teacher who cares about that'.
2.4 POSITIVE AND NEGATIVE EMOTIONS EXPERIENCED BY PRIMARY SCHOOL CHILDREN

2.4.1 Negative emotions

Emotions are either pleasant or unpleasant (positive or negative). Pleasant and positive emotions include love, joy, trust, pleasure, delight, etc. Unpleasant and negative emotions include anger, rage, aggression, fear, sorrow, jealousy and hatred (Behr, 1990:75). It has already been indicated (in paragraph 2.1), that one is able to identify these emotions because they go with expressions, which may be covertly or overtly shown. For this research, the following emotions will receive attention: Negative: anger, aggression, anxiety and fear. Positive: love, joy and affection. They are considered to be the most basic ones because research has proved that they are experienced by all primary school children.

2.4.1.1 Anger and aggression

Anger, according to Van den Aardweg and Van den Aardweg (1993:22) is an active feeling against another person, object or thing and is usually provoked. It involves passion and even rage, wrath and revenge.

Clarke-Stewart (1985:278), Vrey (1993:70), and Smart (1977:160) discuss anger as a type of emotion that occurs when a person is prevented, restrained or frustrated because he cannot do as he wishes. It results from situations where a person feels he is taken advantage of by, among others, frequent interruptions by means of actions or remarks and, as a result, prevented from going his way.
Lewis and Haviland (1993:294) describe anger as an emotion that is expressed when a person experiences an unexpected loss, failure, or aversive state and refuses to accept being in the resultant state. The intensity of anger increases especially when a person believes that there is a possibility that the conditions surrounding the loss or aversive state can be changed; for example, the loss of a loved one. It may be difficult to contain anger at a funeral when relatives believe the death could have been avoided and that something can be done to restore the situation.

Research has proved anger to be the most common emotion during primary school years because the child at this stage is faced more frequently with anger provoking situations (Van den Aardweg and van den Aardweg, 1988:16). Such situations include the struggle to adjust to the new school environment, sibling rivalry, rejection by peer group, accomplishing tasks and making his mark in the classroom, school and society as a whole. Experience indicates that the child at this stage, is also faced with the big problem that maltreating parents and teachers also take advantage of him, because he does not pose a threat to them both physically and intellectually. The abusive parent or teacher can pin him down and do what he likes with him.

The story that appeared in the *Star* by Aitcheson (18 August 1995) of a six year old boy, who was found chained like an animal in a yard is a clear example. The abusers had taken advantage of his lack of physical strength and level of intellectual development. He thought like a child and as a result he was helpless.

According to Hurlock (1972:271), Lewis and Michaelson (1983:270-271) and Plutchik (in Kokot, 1988:192), the language of anger includes the following: protest and movement towards a stimulus, furious, hostile, outraged, defiant, quarrelsome, angry, rebellious, aggressive, loathful, fight, antagonistic, hurt, argue, shout, kick, blood pressure up, a sense of being keyed up, a feeling of bursting or exploding, hitting,
throwing, stomping, throwing self on floor, kicking, pushing away, rejection of engagement and breath-holding.

Plutchik (1962:133-134) writes about an experiment that was carried out with children on their perceptions of the emotions. The children were asked to write down how they feel when they are angry. The children usually said they felt "mad" and wanted to fight; they feel they can push the world out of their lives. The situations producing anger all involve some frustration. It is most likely to occur in connection with situations that contain barriers to reaching goals (Plutchik, 1994:355). They range from interruption in an ongoing activity, failure of events to conform to specific expectations, physical restraining to removal, separation, physical attack and being taken advantage of (Hurlock, 1972:271; Lewis and Michaelson, 1983:270-271).

Like all other emotions, anger changes with development. The further the child develops from babyhood through infancy to adolescence, the more controlled his anger becomes. A standard five pupil may not throw temper tantrums like a two year old toddler. He should express his anger in a more controlled way (Smart 1977:161).

On the other hand, aggression according to Epancin (1987:111), Fogel (1988:300), Argyle (1990:25) and Papalia (1993:345) is behaviour that inflicts physical or psychological injury on another person. It is behaviour which is hostile and intended to hurt somebody or establish dominance.

According to Izard (1991:255), there are typically many causes for aggressive behaviour, which include culture, family life and particular experiences of the individual. Aggressive behaviour may be observed in childhood, and evidence has shown that children who are high on aggressive behaviour are more likely to show
aggressive behaviour and criminal behaviour in adulthood. It can take on trait like characteristics and become a stable part of a person’s personality, especially children who grow up in environments or families where aggression is glorified.

Slavin (1991:414); Van den Aardweg and Van den Aardweg (1988:117) and Papalia (1993:223) indicate to the following as a language of aggression: disobedience, jealousy, destruction, vandalism, depression, rejection, antisocial behaviour, frustration, hyperactivity and selfishness. Unlike anger, it may occur unprovoked, but like anger, it changes with age, because even parents become very intolerant of such behaviour as the child grows older. They are aware that the child must be prepared for the world outside his home and if such aggressive behaviour does not become limited, he may experience problems of rejection and being unpopular with peers, teachers and society at large. The ability to control and handle anger and aggression is one of the skills that mark the development of a child into a positive direction (Van den Aardweg and Van den Aardweg, 1993:17). Frequent expression of anger and aggression may end up affecting the child’s self-realization and self-actualization in a negative way. Parents should model behaviour that discourages aggression.

Research has proved that most of the children who are found to be aggressive, are from aggressive families, where aggression is frequently displayed. Children who display a quick temper and short fuse, who fight and attack people verbally, indicate indirectly the way they were reared at their homes (Feeney, 1987:353). Children, especially primary school children, should be taught to be assertive and not aggressive.

A child who politely claims his rights is not aggressive but assertive, but a child who attacks another child physically or verbally because he has taken his pen or any belonging, is displaying aggression (Feeney, 1987:352). Television is also cited as a
source of aggression because it is on the television screen that aggression is often
glorified (Engler, 1985:402). Parents and teachers should work to reduce aggression
in children by indicating to them that most people do not like aggressive behaviour, that
the violent and aggressive behaviour they see on the television is not very real, and that
there are better ways of resolving conflict than resorting to aggressive behaviour
(Woolfolk, 1993:85).

2.4.1.2 Anxiety

According to Readers' Digest Dictionary (1988:78), anxiety is a state of uneasiness and
distress about future uncertainties, apprehension and worry. It is regarded as a state
of apprehension, fear or dread without a concrete realistic threat of danger. It is a
subjective feeling of tension, apprehension and worry caused by a combination of
cognitive, emotional, physiological and behavioural cues. The cause of anxiety is often
an unknown or an uncertain event; which may be fear of failure, fear of rejection or
about future success. Mouly (1973:97) confirms this by stressing the fact that anxiety
is not related to an external threat, it originates from a situation where an obstacle
prevents the individual to satisfy his needs. According to Van den Aardweg and Van
den Aardweg (1993:21), the senior primary school child sees rejection by the teachers
and peer group as failure.

It is emotion accompanied by a feeling of helplessness because the anxious person feels
blocked, apprehended and unable to find a solution. Unlike fear, which has a source
which might be concrete, anxiety is very subjective. It originates from things
imagined, which may not have an existing solution. Morris (1982:379) indicates that
anxiety is a source of stress. Anxious people become stressful because they do not
know why they feel anxious.
Anxiety is the most common emotion during the senior primary school years as the child is faced with a great many new situations he cannot handle with ease. He has to be separated from the warmth of his family, be part of a peer group and earn acceptance unconditionally. He has to learn to share with others a living space both in a classroom and outside (Dreyer, 1988:40).

Anxiety and stress are part of everyday life and if managed, anxiety can motivate individuals to improve and grow. Parents and teachers should be on the lookout for children suffering from anxiety and try to alleviate their fears. There are many ways in which a child can reveal anxiety disorders, e.g. through phobias, school refusal, behaviour disorders, etc. Research has proved that many parents use the television as a child minder. Children watch everything on the television unsupervised and hence become very anxious about what is happening around them.

2.4.1.3 Fear

Fischer (1991:169-171) regard fear as an emotion that is universal; it occurs in everyone's life. Unlike anger which excites fear paralyses. The elements describing fear are: the appraisal of threat and or uncertainty, and the characteristic action tendencies of freezing, protecting oneself, withdrawal and fleeing. According to Plutchik (1994:132-133) an experiment was carried out with regard to the children's perception of an emotion of fear. The children were asked to write down how they feel when they are fearful. The following were reported: "I would like to jump out of my skin"; "I feel very shivery, scary and chilly, cold and nervous and afraid that something will happen". The causes were reported as darkness, animals and bad dreams. In a similar experiment Fischer (1991:172) recorded the following quotations in respect of fear:
"Fear is based, because it prevents you from doing things".

"Fear can damage yourself, or your way of life. You must be alert not to let it affect your whole life".

"Fear is overpowering, and it is very difficult to control; it takes you by surprise".

"You are turned by the power of forces that you are not able to control. Things happen over your head, and you know that the result is unpleasant, that is why you are afraid".

In all the quotations, there are two dominant characteristics of fear: unpredictability and uncotrollability. One should therefore learn to control fear because it can make one a slave.

Izard (in Kokot, 1988:194) and Lewis and Michaelson (1983:265) define fear as an emotion that motivates the avoidance of danger. This shows that fear is a necessary emotion if it is managed humanly.

According to Slavin (1986:83); Hurlock (1972:192) and Lewis and Michaelson (1983:265-268) the following is a language of fear: falling, loss of support, tremble, run, scream, scared, bodily tension, crawling or running away, crying, fussing, sobering, frowning, screwing up the face, lip trembling and cry face. These may be caused by situations such as not being accepted into a peer group, not having a best friend, being punished by their parents, having their parents divorced, not doing well in school, getting hurt, fanciful and supernatural or remote dangers, the dark, imagined creatures associated with the dark, death or injury, characters recall from stories, movies, sight of strangers, unfamiliar environments, absence and separation from the mother and startling toys.
As long as fear is kept within bounds, it need not be a highly dreaded emotion nor a maladaptive one. Its efficiency and power in protecting us from danger by causing us to think carefully about the risks that we have to take is not only adaptive but essential to well-being and happiness" (Izard, 1991:304).

Fear is a common emotion during primary school years. Primary school children are at a stage where their cognitive levels start with the handling of abstract ideas. Their level of thinking is no longer tied to the concrete only, but rises beyond the concrete and present situations to the abstract and things imagined. As abstract thinking sets in, it increases the imagination of supernatural and remote dangers (Van den Aardweg & Van den Aardweg, 1988:16). Unlike anxiety, fear is caused by real or imagined things.

Primary school children’s fears, according to Slavin (1991:77), centre around the following: not being accepted into a peer group, not having a best friend, being punished by their parents, having their parents divorced, not doing well in school and getting hurt. According to Hurlock (1972:192) primary school children’s fears are also concentrated on fanciful and supernatural or remote dangers, the dark, imagined creatures associated with the dark, death or injury, thunder and lighting, characters recalled from stories, movies and television.

Children of primary school age should not be made to avoid sources of fear because that may become dangerous for their socialisation. They will need to deal with these objects and situations in their lives. They should be encouraged to overcome their fears by their own activities and should be helped to find practical methods and techniques to deal with what they fear. They should be made to observe other people handling
those objects and situations they fear with ease - especially children of their age (Papalia, 1993:344). If a mother gets into a big chain store during the festive season and find Mr Simba in the shop and her child gets upset and cries terribly, the best solution would not be to leave the shop, but to let her observe how other children of her age can play and share space with Simba.

Fear is a negative emotion, but it is vital in life. Its impression is an interaction with the environment (Smart 1977:156). It serves a social function. It can motivate one to work harder, it can bring people together as a family, society or a nation. As long as fear can be kept within bounds and as long as it is appropriate to the reality of the situation, it serves an essential adaptive function (Izard, 1991:304).

The above implies that it is normal for a primary school child to fear but that the fear should not be left to be intensified. Fears should not be left to become habitual because they may damage the child’s life (Hurlock, 1972:184).

2.4.2 Positive emotions experienced by primary school children

2.4.2.1 Love

Love is a basic and fundamental emotion; it can be defined as a pattern of emotions, drives and cognitions. It includes feelings and thoughts and that makes it a complex and mystical emotion. There is no single definition of love, because there are several types of love.
Love is excitement and joy in sharing and caring (Izard, 1991:394).

According to Plutchik (1994:319) love always involves the components of intimacy, passion, and commitment in various combinations. Love between components of a couple, members of a family and between friends involve the three. Vrey (1993:121) and Hurlock (1972:204) view love as a basic need for human existence. It is qualified by mutual knowledge, care, responsibility and trust. It is a two way-affair and grows better when it is both given and received.

Love is a basic need for human existence, especially to the child.

The relation with parents is qualified by love, which implies mutual knowledge, care, responsibility and trust. If a child interprets his parents' attitude as hostile, the same aggression manifests itself in his behaviour (Vrey, 1993:121).

Research has proved that the child is dependent on love and he should receive it (Le Roux, 1992:28-29).

According to Plutchik (1994:320); Izard (1991:394); Hurlock (1972:204) and Vrey (1990:71); the following represent the language of love: respect, attachment, attraction, hugs, kisses, general contentment and relaxation that may also be expressed in words, outgoing, striving approaching kind of behaviour, patting, capability and sense of being useful. It prevails in situations of acceptance, joy, attraction, friendliness, sympathy, adequacy, independence and freedom.
According to Hurlock (1972:204) love seems to be a two-way affair and grows best when it is both given and received. Bester (1986:23) further explains that research has revealed that there exists a significant link between the mother’s warmth or indifference towards the child and the quality of his overall adjustment. This shows clearly that the provision of love is always necessary for self-realization, self-actualization, development and becoming.

2.4.2.2 Joy

Joy, according to Izard (1991:138-139), is an emotion that makes us feel that we have a distinctive bond between ourselves and the world. It is more than a positive attitude towards self and the world. It is a special kind of link or bond. It is an emotion that makes one have a sense of belonging, and is often accompanied by feelings of strength and vigour. Izard (in Kokot, 1988:200) relates joy to feelings of loving and being loved; which can be accompanied by confidence.

The feeling of joy also has a social function. It is a rewarding experience. When one experiences joy, all his internal systems function easily and smoothly and the body and mind also have time to recover from periods of stress and strain. It is best defined and explained in terms of self-fulfilment. It is the feeling that comes from the fulfilment of one’s potential (Izard, 1991:143).

In an experiment in respect of the emotion of joy, the children described that they were feeling happy, full of fun, good, merry and jolly, fine, relaxed, felt like laughing (Plutchik, 1994:136). Such feelings were produced by gifts, birthdays, when something good happens, when everything goes right and including earning good marks in school. The language of joy, according to Lewis and Michaelson (1983:273);
Hurlock (1972:205) and Izard (1991:164) is the following: smiling, laughter, positive hedonic tone, quiet, calm, general relaxation of the whole body, sociable, helping others, being involved in something stimulating, self-confident and doing one's favourite thing.

According to Hurlock (1972:203-205) joy is pleasant, an emotion that aids personal and social adjustment. It is an emotion that enhances the child's well being. A joyous child is loved by everybody because joy has a positive effect on the child's physical, spiritual and emotional condition. When expressed, it attracts others and improves the ability to socialise. Like all other emotions, it can be transferred to others and, as a result, makes a favourable impression on others. In its milder forms, it is known as pleasure, delight or happiness.

Primary school children also experience joy. The stimuli that aroused pleasant emotions at a younger age continue to do so even during primary school years; but the expression of this joy becomes controlled. Children want to be happy. They derive their joy from being recognised, being loved, being wanted and being praised. They become joyous when they find out that people love them, play with them and share space and time with them.

2.4.2.3 Affection

Affection is the most valuable emotion because it contributes enormously to good personal and social adjustment. It is a positive emotional reaction directed towards a person or a thing. It is evidenced by warmth, friendliness, sympathy, passion and helpfulness and may be physically or verbally expressed (Hurlock 1972:204).
Papalia (1993:283) and Hjele (1981:372-373) regard the following as the language of affection: outgoing, striving, approaching kind of behaviour, for example, hugging, patting, verbal responses like ‘ok’ or ‘good’; expressing intimacy, basking in the sense of worth, sharing feelings and secrets, recognition, reputation and appreciation. Situations that nurture and allow affection are: lack of criticism, being liked and loved, home situations where happiness prevails, feels comfortable, experiencing feelings of worth, a healthy self-concept, being given pleasure and being loved and valued.

Young children learn to love things, people, pets, toys and objects that give them pleasure. They express their affection non-verbally by hugging, kissing, etc., but primary school age children are able to express their affection verbally (Hurlock, 1972:123). They are able to tell their mothers that they love them, the same as friends and teachers. This is an indication that like love, affection should be two-way. What the child gives, should also be what she receives in turn. Children get feelings of adequacy when they experience affection. According to Mussen (1990:362-363), it has been proved that high achieving children have parents who are at least moderately affectionate and involved with them. The positive relationship between parent and child affects achievement because it forms a basis for the child to accept the parents’ expectations, demands, set goals, and values and standards of doing things in life.

2.5 **THE CAUSES OF EMOTIONAL INSTABILITY IN PRIMARY SCHOOL CHILDREN**

Research has proved that most of the problems with regard to emotional instability during primary school years centre around the child’s home, school and the peer group. Relating to the home causes include an unstable and insecure home life: step-mother; separation and divorce; abuse and neglect; ignorance; death in the family and low
socio-economic status of the home. Relating to the school and peer group, causes include uneasiness with school tasks; fear of failure; the teacher's personality; the need for acceptance and fear of ridicule (Van den Aardweg & Van den Aardweg, 1988:16).

Experience indicates that the causes of emotional instability may extend even to societal and socio-political factors. Because of the complexity that goes with the factors mentioned above, they will be looked into so that clarity on how they affect emotional development can be attained. This will also form part of the empirical investigation.

2.5.1 The home

For a child to grow up and develop into what he ought to become, he needs a safe home. He needs a home where members live as a family and are always there for each other. A primary school child needs a home where love prevails. Unfortunately, especially in Black communities, many families are just not what they are supposed to be due to a variety of factors, e.g. factors discussed under paragraph 2.5.3 and 2.5.4.

2.5.1.1 Family size and parental patterns of behaviour

According to Berns (1985:120-121), both parents and children are affected by the number of children in the family. Parents in larger families tend to be more authoritative, use physical punishment and do not always set standards, rules and behavioural norms as compared to parents in smaller families.

Because of lack of space; most members being unemployed; lack of authority; inadequate housing; deprivation, neglect and abuse, such children's emotional development is affected, because parents in such overcrowded families often show scant interest in their educational task (Le Roux, 1994:184; Le Roux, 1993:61).
2.5.1.2 *Abuse and Neglect*

Child abuse and neglect have become common practice, that occur in all population groups in South Africa, among both rural and urban societies and the rich and the poor. It occurs in divergent ways, depending on the situation, people involved and their socio-economic levels. Abused children have been reported to be children who are very difficult to manage because of their aggression, irritation, restless and behavioural problems (Fogel, 1988:67).

2.5.1.3 *Broken Homes*

Children who are caught up in a divorce situation usually blame themselves for the break up, especially children of senior primary school and above. They respond to divorce with sadness, fear, anxiety, feelings of deprivation and some anger. Divorce is upsetting to everyone, but it is probably worse for a child. The child needs to be assured, to be told that both parents love him, that they are divorcing but they are not divorcing him (Berns, 1985:81).

Divorce challenges the child’s safety and security. The decline of intimate family relationships spells isolation and estrangement for the teenager. When parents separate, the child feels threatened and guilty. He needs to be assured that each parent is concerned about him. That they will both fulfil his needs, secure him, be concerned about him emotionally and see to his well being (Le Roux, 1992:42).

2.5.2 *Environmental Deprivation*

The term ‘deprivation’ and ‘environmental deprivation’ have already been defined in paragraph 2.3.3.1.
Experience indicates that deprivation prevents children, especially primary school children, from benefitting properly from school, even if they are born with tremendous abilities. School has been set on road through life. The child, irrespective of many conditions, has to see it through (Le Roux, 1992:68). Deprived children come to school not having been prepared for school. From the deprived background, characterized by ignorance, neglect, disease, underfeeding, malnutrition, etc., they find the school situation very strange. It is strange because they lacked stimulating materials like toys, books, televisions, etc. They do not have opportunities to travel to places, to see and widen their lived experiences.

Bishop Desmond Tutu, in Le Roux (1993:30) is quoted as saying

> Depending on your pigmentation, you are placed high or low on the social pyramid ... It will determine where you can live ... what sort of health care is available for you ... your chances of survival or whether you will become part of the dismal infant mortality statistic ... It will determine what sort of education you are likely to get ... whether you can in fact hope to have a decent, stable home environment where father is not a migrant worker separated for eleven months of the year from his loved ones ... whether you can ever hope to be treated as a human person ...

The heart of the matter in this discussion is how a deprived child is emotionally affected.

The researcher would extend the issue of deprivation, according to experience, to reflect on the situation of black rural children in South Africa. The greatest percentage of rural children find themselves in very dull homes and schools with no teaching facilities at all. One finds that the classes they use, if ever they do, are dull and dark inside because they are not constructed according to prescribed standards and are
without lights. They are in most cases taught by unqualified or poorly qualified teachers under trees, with no sitting and writing facilities and lack of basic resources. This is confirmed by Anstey in *Sunday Times* (10 August 1997). It showed pictures of rural settings in schools where children battle with filth during their learning. A teacher, Beatrice Kgopa was quoted as saying that she only heard on the radio that curriculum 2005 was starting the next year. In the Northern Province, which is mostly rural, the majority of these type of schools are found very far from education authorities, where the communities are merely left at the mercy of the teachers most of the time. The majority of the children found in such situations fail to learn meaningfully and hence drop out at a tender age because they find themselves in very confusing situations, where goals and aims of life are never spelled out.

According to Nasson and Samuel (1990:106) ways will have to be found of ridding rural schooling of its cinderella status. If illiteracy and cultural deprivation are to be fought, access to schooling of good quality in rural areas is a national priority.

The teaching and learning conditions in rural areas should be improved to boost the images of those teachers and pupils involved. Those children should feel important and wanted in the schools. The situation in the school should be such that it will evoke both positive and negative emotions to enhance emotional stability. Children should watch games and take part in games to express their happiness and joy rather than always experiencing fear, anxiety and aggression.

2.5.3 The Consequences of Discrimination

Research has proved that many Black families in South Africa are unavoidably split up due to a number of political and economic factors. Such factors include amongst others, discriminatory laws which resulted in detention without trial, imprisonment of
both parents and children, migratory labour and child labour (Le Roux, 1993:39-40). Mamaila K. in Sowetan (1 August 1995) published touching stories about the Mokoena, Mabasa and Tsotetsi families who live on farms where children from the age of nine are already bread winners.

According to Le Roux (1993:39), besides the hard conditions on the farms, mothers and fathers in townships got detained and killed for many reasons, leaving their children unattended to, sometimes relying on the neighbourhood. These children are deprived of their right as children to play, to fantasise and to construct their childlike life worlds. These factors have very negative impacts on these children’s emotional development because they are pushed to become adults overnight. That had many emotional and social implications for children. Students, parents and teachers complained about the quality of education the Black children received from a system of separate development.

The believe that the aim of the system was not to liberate and educate a child but to socialise him and make him a white collar servant made those children to approach learning in schools with mixed emotions and feelings and that prevented them from learning meaningfully (Graham-Brown, 1991:207).

Experience has indicated that most of the farm schools only extend to the primary school level. Children of farm workers are expected to leave school after the senior primary phase to work permanently on the farms because it is believed that the primary school work has prepared them thoroughly for farm life. In an interview with Mamaila K. of Sowetan (1 August 1995), a farm labourer, Mr William Lebea, confirmed the above view, indicating that children of farm workers can only go to school up to Standard 2.
They can then no longer continue with their education no matter how smart they are, as there is no higher primary school. After passing standard 2 or reaching the age of 14, the children are forced to work on the farm (Mamaila, Sowetan 1 August 1995).

The major problem is, as it is indicated in the same paper, that these children are deprived of a chance of experiencing their childhood, e.g. to play, learn and develop, and this has a very serious negative impact on the children's emotional development.

2.5.4 The effects of migratory labour on children's emotional development

Research has indicated that most Black South African men spend almost 80% of their life-time away from their families, where they live in hostels that are predominantly male units. The majority of these people leave their families with the hope of working to improve the standards of living of their families (by providing them with basic needs and putting them through education). One major problem is that women are left with the burden of educating and raising children all by themselves, with children seeing a father figure once or twice a year. De Witt and Booysen (1995:33) characterises the absent parent situation as a situation that deprives the child the love and attention he deserves from his parents; which leads to no effort to control the child’s behaviour and hence a lack of emotional security. According to Le Roux (1993:32), a large number of Black children are likely to grow up in an environment which lacks adequate care. Fathers come home only during festive seasons and one finds that their stay is too short to be enjoyed by anybody. They become strangers to their own children. The services which mothers and fathers habitually render their children are very much taken for granted by these people, especially of low socio-economic status (Bowlby, 1990:78).
Every father has the function of orientating his children in respect of society and its various contexts. A father as head of the family, has a complex task of demonstrating by example principles, interests, values, norms and standards of life to his children (Le Roux, 1992:69). Children who miss the father figure in the home are placed at a disadvantage compared to children with a caring father present. A father symbolises authority in the home. He represents the world outside and the demands it will make on the child. He expects a child to show responsibility, to control his emotions and therefore become emotionally responsible.

2.5.5 Violence

The South African nation has been caught up in a very disruptive pattern of violence where the lives of all people, including children, are touched and affected by a low intensity civil war. Some penetrate it, some are victims, some witnesses - first hand or through the media. It has affected all the people of South Africa to an extent that it is already seen as a way of life (McKendrick and Hoffman, 1990:38).

In the researcher's experience, the violence in South Africa has already become chaotic and disastrous for children and their emotional development. They witness the deaths of significant people in their lives; their parents; brothers; sisters; cousins; teachers and priests. Their homes are vandalised, the same as the schools. When parents leave for work, they doubt if they will come back alive. Everybody is traumatised. According to Mamaila, K. in the Sowetan (7 July 1995), the experience of trauma causes children to question their very being and protection from their environment. They loose the most fundamental aspect of growth and development and that is trust. The trauma in these children is deep seated because some have escaped death narrowly when their parents were hacked to death. They find it very difficult to forget what has happened.
to them. This has done a very serious damage to their development and therefore also to their emotional development because most of their time is spend experiencing negative emotions.

South Africa is a country full of children who are filled with hatred, rage, anger and revenge. Most of these traumatised children do not fit in the classrooms any more because of their behavioural and emotional problems.

2.6 THE INFLUENCE EMOTIONS HAVE ON MEANINGFUL LEARNING

Experience and research have proved that there is a very close connection between learning and emotions, especially meaningful learning. According to Hurlock (1972:184), emotions can affect all mental activities. Concentration, paying attention, learning, recall, reasoning and all other mental activities are adversely affected by the unpleasant emotions like anger, rage, jealousy, anxiety, aggression and fear. A child who frequently goes through such emotions is likely to perform below his intellectual capabilities and become an underachiever. This is a problem mostly to children who grow up in environments that provide an abundance of unpleasant emotional experiences; children who are deprived of affection and starve emotionally.

Bester (1986:67) explains meaningful learning as learning that occurs when a pupil learns new subject matter and is able to relate it to existing knowledge in his cognitive structure. If a child is unable to link new subject matter to existing knowledge in his cognitive structure, he is forced to memorise it in parrot fashion. According to Ausubel (1968:41), meaningful learning involves the acquisition of new meanings, and new meanings, conversely are products of meaningful learning. The emergence of new meanings in the learner reflects the completion of a meaningful learning process.
Slavin (1991:162) defines meaningful learning as the mental processing of new information leading to its linkage with previously learned knowledge. Learning becomes easy if the new material that is to be given meaning is relatable to the learner's cognitive structure. Fourie (1992:215) defines the cognitive structure as a personal frame of reference of previously imprinted concepts and representations (existing knowledge) which a child has built up from his experience of a particular field of reality. It is in the cognitive structure that meanings, concepts, facts, formula and ideas are arranged to serve as anchoring ideas for material that is going to be learned. Ausubel (1968:166) stresses the fact that school learning requires the incorporation of new concepts and information into an existing and established cognitive framework with particular organisational properties, and that framework is the cognitive structure.

For meaningful learning to occur, the child must be oriented towards the learning material. The material to be learned must be related to other meanings in the cognitive structure because the meaning of the material does not lie in that material, but in the learner himself. This has to do with how he systematizes, organises, re-order and rearrange facts, concepts, ideas and thoughts to form a base of foundation for the newly learnt material.

Meaning is therefore found in the child's frame of reference, that is, beacons of meaning within the cognitive structure of the child (Wentzel, 1985:68).

According to Slavin (1991:162), most human learning, particularly school learning, involves making sense out of information, sorting it in one's mind until it fits in a neat and orderly way into old information to help assimilate new learning. Woolfolk (1993:270) indicates that the best single method for helping students learn is to make each lesson as meaningful as possible. Meaningful lessons are lessons presented in
vocabulary that makes sense to the child. Children feel happy to be in such classrooms; they feel they want to be involved because they are interested in what they do. New terms are classified through associations with more familiar words and ideas. Meaningful lessons are also well organised, with clear connections between the different elements of the lesson. Finally, meaningful lessons make natural use of old information to help students understand new information through examples or analogies. This topic will receive more attention in chapter 3 of the dissertation as it deals specifically with meaningful learning.

School learning takes place in a social context and as a result teachers will obviously be concerned with group and social factors that affect human learning. According to Mwamwenda (1995:56), the school is another powerful social agency of socialisation whereby cultural values and norms adhered to and treasured for years and years, are formally transmitted and prescribed to young children. The socialisation process is extended and children are expected to relate to a new situation, new people, new ideas in new life worlds. The school provides the child with knowledge and skills necessary for social and economic adjustment. Slavin (1991:89) emphasises this idea by indicating that if school is to be a place where students are helped to understand the world around them and to interpret their experiences in it, educators have to pay attention to interpersonal and social factors. The teacher in the classroom must open up chances for children to voice their emotional frustrations. They should feel free to discuss their personal problems with teachers, their successes and failures, their fears and misconceptions, etc.

Primary school children have their unique problems. Some have problems from peer groups; some from parents who expect too much from them; feelings of inadequacy originating from homes, peer groups and classroom failure. Teachers should help in
reducing emotional problems in children by helping them and their parents to set realistic goals in life, trust each other and do things together. It has been discovered that teachers are responding to things that students say during only five percent of the school day, and this indicates that the schools do not do enough to teach children to express themselves and even voice their problems (Clarizio, 1987:85).

The idea of helping students learn in a meaningful way rather than by rote is not an end in itself. The reason for that is the outcome: meaningful learning (Reilly and Lewis, 1983:140). Meaningful learning as an outcome is determined by the following: cognitive structure, motivation and transfer.

2.6.1 Emotions and the cognitive structure

The cognitive structure of a child is the structure which consists of meanings that are clear to the child; and form a base for the new material that is presented to him. Once acquired, the cognitive structure becomes the most significant independent variable influencing the learner's capacity for acquiring more new knowledge in the same field (Ausubel, 1968:167). Only if new learning material can be attached to relevant and appropriate anchoring ideas in the cognitive structure will accurate, clear and unambiguous meanings appear for registration in the cognitive structure and even become available for future use.

When students learn new material, attention is very important. To learn something, one must pay attention to it. Paying attention is a prerequisite for learning and accompanies all learning. Highly anxious students evidently divide their attention between the new material and their pre-occupation with concerns about how nervous they feel (Woolfolk, 1993:310). This prevents children from paying full attention to what should be learned.
According to Slavin (1991:245), straight, dry lectures are boring, and bored students quickly stop paying attention to even the most carefully drafted lesson. To maintain the child’s attention, especially that of the primary school child, the teacher should introduce variety, activity or humour to enliven the lesson and make it pleasant and interesting for the child and to stabilise him emotionally because he feels happy and secured. Students learn more and pay more attention to lessons that are presented with enthusiasm and expressiveness rather than to dull and dry lessons. Teachers should vary their tones, types of questions, lengths of lessons and presentation modes. This will help children add clear facts to their cognitive structures.

Teachers should encourage feelings of adequacy by respecting children for what they are and not for what they are capable of achieving. Teachers should help children by creating pleasant school experiences where children will feel secured, relaxed and pay attention to what is taught in an organised manner. The new material will then find meaning in the cognitive structure (Slavin, 1991:201). It is the duty of teachers to help highly anxious students to set realistic goals so as to make them approach learning with unmistakable interest and desire and set realistic goals that matches their potential. This will stabilise them emotionally.

### 2.6.2 Emotions and Motivation

Every teacher would like to impart knowledge to children who are highly motivated and who show willingness to be involved in learning.

If learning is to be active, greater responsibility for its accomplishment must lie with the pupil (Ausubel, 1968:402).
Teachers should bear in mind that every child is unique and would like to learn and actualise his potentiality. He is a totality, a whole being with emotions and moods that may fluctuate according to circumstances. Jere Brophy (in Clarizio, 1987:304) argues that since classrooms are work settings, which stress compulsory activities of an intellectual nature, more attention should be paid to the cognitive aspects of motivation. He stresses classroom motivation as motivation to learn and not to perform, which leads to increases in knowledge or skill. Slavin (1991:339-348) discusses ways of enhancing intrinsic motivation by showing the importance for teachers to try and get their students interested in the material they are presenting, and then to present it in an appealing way that both satisfies and increases students’ curiosity about the material itself. He emphasises the need to whet the student’s appetites for knowledge by convincing them about the importance of the subject matter in their daily lives; and by maintaining their curiosity by showing them some information that would invite them to want to know more about that field of knowledge.

For most primary school lessons, the most relevant would be the use of interesting and varied modes of teaching and the use of games and stimulations. After students have performed the set roles, that subject becomes theirs. Slavin (in Clarizio, 1987:304), emphasises the importance of co-operative incentives to influence high achievement. He argues that, instead of changing the content or delivery of instruction, a relatively simple change in the classroom incentive system can increase student achievement. He emphasises the need to set clear expectations for children, to give feedback to students about achievement in a clear manner, as well as the need for frequency of assessment, feedback and reward and the value of rewards. Students should be recognised for doing better than they did in the past, and the teacher should communicate very clearly and reward if need be.
Co-operative incentives help a lot because the slow pupils are uplifted by the academically gifted and the academically gifted do not fear to outshine others because they work in a group. The above is also supported by Gage and Berliner (1992:345) when they indicate that co-operative learning helps to enhance motivation because the high-ability and low-ability members must work together to achieve a reward. In any learning situation the teacher is the facilitator, characterised by his genuine interest in the student. He must accept, praise, trust and regard the learner as a person of worth. This makes the child trust and respect the teacher and whatever programme he has for the child. He becomes interested in the teacher, loves the teacher and even feels he wants to be involved with him. He feels safe.

Instead of being role models, some teachers come to school drunk, unprepared, late and improperly dressed (Mwamwenda, 1990:251-252). This shows that teachers can also demotivate students. Van den Aardweg and Van den Aardweg (1993:140) explains that from the moment the teacher enters the classroom, he should motivate the learner by his very bearing and his facial expression, his enthusiasm for teaching and the topic to be learned, and his approachability. The material he is to present should be meaningful and geared towards the learner’s interest. According to Vrey (1993:220) interest enhances involvement, and involvement in turn enhances motivation. For a child to learn, he should be motivated.

Learners who have little need to know and understand quiet naturally, expend relatively little learning effort. They manifest an insufficiently meaningful learning set. They fail to develop precise meanings to reconcile new material with existing concepts, and to formulate new propositions in terms of their own idiosyncratic background and vocabulary (Ausubel, 1968:402).
This is an indication that motivation and meaningful learning are personal matters. A child will need to take a personal stance and attitude towards the learning of material.

2.6.3 Emotions and Transfer

Vrey (1993:303) explains transfer as the name given to the phenomenon that occurs when knowledge acquired in one field influences the way in which work is done and the level of achievement in some other fields. Mwamwenda (1990:215) explains that the goal of education goes beyond mere learning and retention. The learner is expected to use his newly acquired knowledge outside the school, for example, for personal accomplishment, fulfilment, in social and personal adjustment and to facilitate subsequent learning. What is learned in school should be applicable at school or outside the school and teachers should work to achieve that. During transfer, the learning results are applied and used in other situations - either modification of old situations or totally new ones.

For the child to be able to use the material learned in one situation to another requires meaningful learning. Meaningful learning is not possible if the child experience factors which disturb him.

Making learning meaningful really implies teaching for transfer, teaching for permanent storage, deep processing and easy retrieval (Woolfolk, 1990:287).

The learning of basic skills like reading, writing, computing and speaking are very significant in every human being's life because they are life itself. This indicates that these skills should be taught very accurately, clearly and systematically because greater
transfer can be ensured by overlearning. Overlearning implies practising and repeating a skill or producing beyond competency. This will help students to retrieve information especially basic skills quickly and accurately when needed (Woolfolk, 1990:287-288).

Emotional instability destabilises the cognitive structure which should keep information for transfer. When the subject matter is learned by the child, it is expected to be integrated into his experiential world. If the experiential world is not pleasant to him, it interferes with the way the information is received and therefore retards retention and transfer of such information into new situations.

2.7 THE DEVELOPMENT OF A QUESTIONNAIRE TO EVALUATE THE EMOTIONS EXPERIENCED BY PRIMARY SCHOOL CHILDREN

As indicated by Kokot (1988:210) and Cohen and Rudolph (1977:73), the primary school child is, because of his level of development, still unable to analyse, describe or express his emotions on an abstract level. According to Plutchik (1994:187 & 213) the study of emotion in infants and young children creates many conceptual problems. Research done on children's use of emotion words depends on the child being old enough to use words; which means that for research to be successful, it must be done with children from about 2 or 3 years to adolescence. To overcome this obstacle, it will be necessary for the researcher to use the CRIP test (Children's Relational Image Profile) (Kokot, 1988:394-397) as it is made up of statements which are written in the first person "I" to help the child to identify himself with the statements. The statements or sentences in the CRIP represent the language of emotions that will validly identify each of the emotions experienced by a primary school child. Each emotion will be evaluated by five sentences.
The format of the questions is deliberately planned to suit the primary school child’s developmental stage and therefore may not meet grammatical requirements of the languages used. It should also be indicated that the CRIP questions have been translated into the mother tongue of Northern Sotho speaking children to avoid misinterpretations and misunderstandings that could derail the research study. The translations are also not made to follow grammatical rules but to suit the level of development and comprehension of the primary school child. Although the CRIP was standardised by Kokot (1988:394-397), verbal permission was obtained from her to use and to translate it for the sake of this research study (See Appendix D & E). Mr Moto, the head of Department of Northern Sotho at Kwena Moloto College of Education was asked to translate it into Northern Sotho for Northern Sotho Speaking children.

2.8 SUMMARY

This chapter dealt with the concept emotion and its relationship to meaningful learning. In this research project reference was made to what is meant by emotions in paragraph 2.1 and emotions in the life of a child in paragraph 2.2.

It also became imperative, in this chapter, to describe the primary school child’s emotional development and causes of emotional instability. Both positive and negative emotions experienced by primary school children were also identified and explained.

Valid reasons were also advanced on why it is believed that emotions have a role to play in meaningful learning. This led to the development of a questionnaire to evaluate the emotions experienced by primary school children.
CHAPTER 3

LEARNING AS A PROCESS, CERTAIN VIEWS ABOUT LEARNING AND MEANINGFUL LEARNING

3.1 INTRODUCTION

The discussion in the foregoing chapter laid emphasis on different types of emotions and their relationship to meaningful learning. Both positive and negative emotions have a role to play in the life of a child. It is not possible for a child to experience positive emotions only because life is too varied and challenging. Throughout his becoming and development, he will experience joy, sadness, love, anxiety, sorrow, affection, etc. The child should however, learn how to control his emotions as he grows older (Hurlock, 1972:184-185).

For the child to become what he ought to become, he should continually learn. Becoming and learning are interdependent. The child learns as he becomes and becomes as he learns. He learns language, physical skills, certain behaviour, habits, customs, norms and values, and even how to control emotions in accordance with cultural norms. He must learn how to conduct himself, e.g. table manners, behaviour in church, on public transport, on the sport field as well as behaviour towards peers, older people and those in authority, irrespective of their age (Vrey, 1990:219). This is an indication that learning is not bound to the school, classroom and the teacher; the child learns everywhere, every moment when he is confronted with problems and obstacles that need to be overcome. He becomes fascinated by the unknown and that increases his curiosity to discover "why" when he goes to school, he has to be taught relevant subject matter to satisfy his desire to learn and understand the world around him (Vrey, 1990:219-220 & 222; Kember, 1994:62).
Since the purpose of this chapter is to explain the process of learning, views about learning and meaningful learning, it becomes necessary for the researcher to focus on learning theories and meaningful learning.

3.2 THE CONCEPT "LEARNING"

For one to give a comprehensible definition of the concept learning, it is necessary that it be viewed from the perspectives of two broad learning theories namely, behaviouristic (connectionists) and cognitivists. According to Hamachek (1985:163) theories from both camps agree that learning results in modification or change in behaviour but disagree when it comes to describing how it occurs and how to best establish those conditions that make learning occurs.

3.2.1 Learning from a behaviourist point of view

Most behaviourists agree that learning is a process by which behaviour is either modified or changed through experience or training. Child (1993:92); Clarizio (1987:6); Gage and Berliner (1992:225); Gagne (1985:3); Goodwin (1975:175); Hamachek (1985:164); Klausmeier (1971:12); Mwamwenda (1993:122); Papalia (1993:159) and Woolfolk (1993:196-197) hold the view that learning occurs everyday in our lives as we learn language, habits, skills, customs and traditions. They view learning as a process through which behaviour is either modified or changed through experience or training. It is through this process that experience causes permanent change or behaviour. The emphasis in this approach to learning is on behaviour that can be seen (overt). It is concerned primarily with observable and measurable aspects of human behaviour; which are stimuli and response (S-R). The overt (external) behaviour of an organism; the association of stimulus and response (S-R), be it a human being or an animal are always the starting point.
Behaviourists risk the danger of reducing human beings to the level of animals, and hence simplify the complex mental products carried out by human beings in their learning. Such mental acts include problem-solving, creativity and insight. These complex activity cannot be predicted. It is difficult to predict a human being’s behaviour because he has a will, desire, moods, interests and feelings that make him unique.

3.2.2 Learning from a cognitive point of view

While behaviourists believe that the mere forming of associations is equivalent to learning, cognitive theorists believe that learning is more than the formation of associations. They regard learning as a complex process, which is not only the result of external forces, but an internal process which one might not see taking place (Papalia, 1993:189).

Cognitive theorists are concerned mainly with human learning, laying great emphasis on an individual’s internal cognitive operations during the learning process, particularly the unobservable mental processes individuals use to learn and remember new information or skills and all the other aspects of development that affect learning like emotions. Words such as understanding, thinking, memory, insight, cognitive structure, cognitive style, meaningfulness, organisation of information in learning are characteristics of cognitive theorists because they see learning as a global activity. It is a process carried out in a series of steps unique to each individual. They regard learners not only as products of incoming environmental stimuli but as sources of plans, intention, goals, ideas and memories (Child, 1993:99; Goodwin, 1975:178-180; Mwamwenda, 1995:213; Papalia, 1993:189; Reilly & Lewis, 1983:154; Woolfolk, 1993:237).
Woolfolk (1993:238-239) and Ausubel (in Klausmeier, 1971:23) in sharp contrast with associationists, argue that in learning, people become processors of information and initiate experiences that lead to learning, seek out information to solve problems and reorganise what they already know to achieve new learning. An individual in his learning is not passively influenced by environmental events, he actively chooses practices, pays attention, ignores, analyses, evaluates, criticises and synthesizes information in his own unique manner. Woolfolk (1993:238-239) concludes by saying that learning is the result of our attempts to make sense of the world by using all the mental tools at our disposal to gain knowledge (the outcome of learning). The knowledge that is gained will in future guide and determine what we will learn. Cognitive theorists emphasise the importance of the total situation during the learning process (Goodwin, 1975:179).

A comprehensive definition of the concept learning can be found in Van Rensburg (1994:433) who regards learning as a progression towards internalising or making particular contents one's own, mastering valuable conduct, experiencing and acting of volition to gain competency in certain skills. It implies the acquisition of significant content, the realization of meaningful conduct and the ability to understand skills in a meaningful way. He further states that learning is marked by a significant change in those relationships to reality which are known as behaving, experiencing, willing and knowing. This is an indication that learning is concerned with the person as a totality and not only as a reactionary being or organism.

According to Hamachek (1985:164) both approaches; (cognitivist and connectionist) help us understand the learning process because each has something to offer. Cognitive learning theories help us understand the need for developing a broad outlook on learning as a process, to give it its proper status of being a complex mental product.
which does not only involve the cognitive aspect of a human being but the human being as a totality. Associationist theories help us understand the conditions in the environment that can give rise to learning and thereafter the response, with the emphasis on association of stimulus and response.

For the purpose of this research study, more emphasis will be laid on the cognitive approach to learning for it regards learning as a process that is very complex, a process that involves the whole child, including his emotional aspect.

Learning is a phenomenon inherent in being human. People, old and young, learn to come to terms with reality every day. It is possible for a fifty year old man to learn for the first time in his life that a bulb is replaced by being pushed up and twisted sideways. He may learn that from a fifteen year old boy.

The emphasis in this research work is on classroom learning. In the teaching learning situation, the central theme for all learning is meaningfulness.

Learning is the primary reason for the existence of schools and a means by which socialization is affected. It is difficult to imagine how man can be separated from learning, for the two are inseparable. Without learning, you would not be able to read the information nor would you be able to speak the language you speak or take care of your physiological needs. For better or for worse, man is a creature of learning (Mwamwenda, 1993:121).

For the child to learn, develop and become what he ought to become, he needs assistance. Van den Aardweg and Van den Aardweg (1993:137) believe that pedagogical learning occurs when an educator, or anyone with relevant knowledge or
skill, intervenes in the life of a child by way of giving assistance, guidance, instruction, direction so that the learner is able to move from the pole "I cannot" or "I do not know" to the pole "I can" or "I know". According to Gagne (1985:3-4), for learning to take place the following elements need to be present: the learner; the events that stimulate the learner’s senses; the learner’s memory and the response. In this research study, greater emphasis will be laid on the fact that the child learns as a totality and that in all cognitive ways and levels of learning, affective aspects such as feelings, emotions, moods and desires play a role.

3.3 **THE CONCEPT "MEANINGFUL LEARNING"**

When students or pupils learn new information, they try to relate it to what they already know. If the learner attempts to retain the idea by relating it to what he already knows, and thereby make sense out of it, then meaningful learning will result (Ausubel, 1969:44). According to Slavin (1986: 174), most human learning, particularly school learning, involves making sense out of information: sorting, organising and restructuring it in our minds until it fits in an ordered and systematized manner; using old information to help assimilate new information. This mental processing of new information leading to its linkage with previously learned knowledge is termed meaningful learning. This is further emphasised by Ausubel (1969:52 & 54), Mouly (1973:281-283) and Reilly and Lewis (1983:139) who indicate that meaningful learning is learning that takes place after the learner has taken effort to relate the new information in a nonarbitrary fashion to his cognitive structure; to find its meaning. Ausubel (1969:54) and Goodwin (1975:187) emphasise the idea that meaning is the direct product of a meaningful learning process. After the new information has been assimilated into the cognitive structure, differentiated cognitive content emerges.
A cognitive structure is the quantity, clarity and organisation of the learner’s present knowledge in the form of facts, concepts, prepositions, theories, patterns, ideas, formulae and raw perceptual data (Ausubel and Robinson, 1969:51). For the learner to learn meaningfully, he should have that available at any point in time. These concepts in the cognitive structure can be used for interpreting, analysing, synthesising, etc. Each of us has a cognitive structure under both types of meaningful learning, the principal way to get new information into the existing cognitive structure is to assimilate it via the process called subsumption.

Subsumption involves relating a new idea to an existing one in such a way that both are modified and yet both are given meaning. A new idea is thus anchored, through subsumption, to a concept already existing for the learner. This anchoring gives the new information stability (i.e. resistance to forgetting) and provides the mechanism for remembering (Goodwin, 1975:186).

According to Vrey (1990:282), meaning does not lie in the symbol or material that represents it, but in the individual. The person’s frame of reference contains meaning which must be reconciled with or assimilated into the concepts and images that have already been consolidated. Meaningful new material is assimilated into the cognitive structure if that cognitive structure is clear, organised and stable.

A stable cognitive structure is a structure that has been personalised and given a unique pattern that suits individual interpretation. The anchoring ideas in the cognitive structure will determine the meaningfulness of new material. Anchoring ideas are those ideas, concepts, schemas which are already present in the cognitive structure. If there is a logical coherence between the new material and the old material learned, meaningful material can be assimilated (Van den Aardweg and Van den Aardweg,
When new and meaningful contents have been assimilated and subsumed into the cognitive structure, both form one structure that makes it difficult to dissociate the new from the old (Vrey, 1993:282). When the above happens, meaning is consolidated and internalised. Internalisation occurs when experiences are arranged in schemas. New information is learned when it fits into the schemas that have been internalised. According to Piaget (in Vrey, 1993:304) those schemas will be arranged in the cognitive structure for future use. The quality of meaningfulness will depend on the arrangement, clarity, organisation and stability of the cognitive structure.

The example that follows here is intended to show that success in learning depends on how the cognitive structure is organised as has been emphasised. If a teacher wants his lesson on multiplication to succeed, he should make sure that the child has, in his cognitive structure, organised clues and ideas about addition and subtraction. The child should first be able to recall, in an organised way, patterns of addition and subtraction so that a multiplication pattern can be subsumed into the pattern of addition to find relevance, meaning and retention. He will then be able to interpret something like $4 \times 2 = 8$, that is 4 is repeated twice to make 8.

Every human being is a unique individual. Each learner thus has his own unique cognitive structure which will shape his unique cognitive style. By a cognitive style it is meant the unique way in which each individual learns; his unique techniques, methods, organisation and interpretations. It is a self-consistent and enduring individual difference in cognitive organisation and functioning. This implies that all acquired new meanings are unique to learners and as such should be taught in a way that will suit each learner (Ausubel, 1968:38 and 203).
In addition to relating new information to old information; each learner, in order to learn meaningfully, should build a personal interpretation of the world from his own experiences. The personal interpretations according to Biehler (1993:428), are influenced by a variety of factors such as the learner’s age, gender, race, ethnic and cultural background and knowledge base.

Duminy (1991:68), in trying to indicate how meaningful learning can be affected by some of the factors mentioned above, relates the story of an Indian boy who grew up in a remote rural area in India. The boy was taken to a large city one morning where he was shown many modern objects and things that were new and strange to him. When he was asked to relate what he saw, he said he saw "nothing" except the man carrying bananas. This shows that children can only interpret things they can link to their existing knowledge. What the boy saw was only potentially meaningful. What was actually meaningful was the man carrying bananas, because, through the process of subsumption, as explained by Goodwin (1975:186), that experience was subsumed into his existing knowledge where it found meaning and retention. The other things that he saw were not meaningful to him because they were not relatable to what he already knew. The things that he saw have logical meaningfulness which is a guarantee that they will be meaningful to the learner. The learner’s past experiences, emotions, cognitive structure, cognitive style, attitudes and state of mind play a significant role in making the said material meaningful.

On the other hand, if a boy from a large city is taken to a remote rural area, the same will apply. If he finds women grinding mealies or a group of men at an initiation school, he might not be able to interpret what he sees if asked to do so because what he sees does not form part of his lived experience and therefore does not feature in his cognitive structure. It may not be easily subsumed into his pattern of information
because according to Mwamwenda (1993:237) information meets the criterion of meaningfulness if the new information can be related in some way to what the learner already knows.

Another example that can be cited to indicate how factors mentioned above, such as knowledge base, ethnic and cultural background and socio-economic factors, may also influence or affect learning and meaningful learning, i.e. the processing, analysis and interpretation of facts and information and hence creativity and problem solving, is that of a standard four teacher at a multiracial school who decides to do reassessment at the beginning of the year. He decides to do so by asking oral questions in Mathematics to assess his pupils' abilities in problem solving. He asks them this question: How many three bedroomed houses would one need to accommodate twenty four adults? For a child to interpret this question, he has to link it to his daily experiences and his cultural background. One child might say three: three bedroomed houses. A child from a low socio-economic home may think that one three bedroomed house can accommodate that big number of adults because he is perhaps used to overcrowding and large and extended families as they are a characteristic of low socio-economic status families. A child from a different background may start by thinking about them as couples, and might in the end say twelve three bedroomed houses where each couple will occupy a house.

The examples cited above indicate clearly that learning, and therefore meaningful learning, is influenced by what one already know.

The most important single factor influencing learning is what the learner already knows. Ascertain this and teach him accordingly. Meaningful learning occurs when the students perceive the relationship between prior experience
(knowledge) and new information to be acquired. Previous experiences becomes the filters through which we interpret new information (Rakow, 1992:18-29).

From the discussion above, it becomes clear that meaningful learning should be the concern of everybody who teaches; the learner would want to get meaning out of what he learns and meaning itself is the product of a meaningful learning process (Ausubel, 1969:54). All learning outcomes are meaningful.

The essential feature of meaningful learning is that it embodies a distinctive kind of a learning process in which the learner employs a "set" to incorporate within his cognitive structure, in non-arbitrary, non-verbatim fashion, potentially meaningful materials which are subsumable by established entities within that structure (Ausubel, 1963:34).

Rakow (1992:18) supports the idea by indicating how important the entities within the cognitive structure are because they serve as hooks upon which new learning is hung. He refers to meaningful learning as learning by building upon previous knowledge. It implies that the experience of a child who is to learn new information should not be poor, but rich.

Gingerich (1992:25) shares his experience as a child who grew up on a farm. He shows how enriched his knowledge and experience of the world was. He emphasises the importance of direct experience as a base for learning. Learning about something (how to milk a cow) is not the same as gaining the experience of milking a cow by milking it on daily basis. Direct experience helps one to remember and place new knowledge into meaningful categories which aids the subsumption of new information and give it meaning and structure.
It should however be pointed out that emphasis should also be put on the fact that in meaningful learning the materials are not already meaningful, but only potentially meaningful. For meaningful learning to take place, they should be converted from being potentially meaningful to being actually meaningful (Ausubel, 1968:149). The information learned will then avail itself for transfer, problem-solving and for storage for future use. Potential and logical meaningfulness is clearly a property of the material that will be learned but does not guarantee that material will be learned meaningfully. Meaningful learning is the product of a meaningful learning set. It is a factor that both the teacher and the pupil should be serious about.

The teacher, since he is the one who does the planning, organisation and selection of content, should present the material in a way that the pupils will attain meaning. He may be unable to guarantee that it will be meaningful to the pupil since the pupil also has a responsibility to make it subsumable to his cognitive structure (Ausubel, 1968:41; Reilly and Lewis, 1983:139). Material may be presented in a very clear and proper way but if the learner does not take responsibility to learn in a meaningful way; to get positive learning outcomes, and to relate it to his cognitive structure, he will still learn it in a rote fashion (Reilly, 1983:139). Rote learning occurs when a learner commits information to memory without understanding it. Ausubel (1968:41), Reilly and Lewis (1983:139-140) and Slavin (1986:347) agree on the fact that students commonly develop a rote learning set because they are not rewarded for learning in a meaningful way. This will receive attention in the paragraphs that follow.

Meaningful learning, according to Ausubel (1968:159), is not the only way in which students learn new information. Contrary to meaningful learning is rote learning. Rote learning occurs when new information is incorporated into the cognitive structure in an arbitrary and verbatim manner. The new information is committed to memory without
understanding. The idea of helping students learn in a meaningful way rather than by rote to help them to find meaning. For the learner to attain this meaning, he must have an intention to and desire of learning in a meaningful way (meaningful learning set). He should be motivated to employ his cognitive style to arrange facts and concepts in his cognitive structure, so that what he learns will find a unique interpretation which will give rise to his unique meaning (Reilly and Lewis, 1983:140). Although insight is not to be equated with meaningful learning as such, Duminy (1991:72) regards the attainment of insight (understanding) as some unique experience that supplies the child with a feeling of security, adequacy and safety. After the attainment of insight, the learner says loudly or internally. "I have conquered", "I know now!", "I know where I am going to!". This implies that the attainment of insight is a prerequisite for meaningful learning and teachers and pupils should therefore strive for it.

From all the sources indicated above, meaningful learning can be summarised as follows:

Meaningful learning has to do with the following:

1. The child’s knowledge acquired in the past.
2. The knowledge the child is to acquire.
3. Functional information.
4. Usable information.
5. The situation of each child.
6. Curriculum that is linked to life.
7. Material that is subsumable into the cognitive structure.
3.4 THE CONDITIONS OF MEANINGFUL LEARNING

The conditions of meaningful learning as outlined by Ausubel (1968:4 and 159) show how important a role the learner and the learning material play in meaningful learning. The researcher extends the list by including factors such as the school, the teacher, the home, language and emotion as further conditions for meaning learning.

3.4.1 Potentially meaningful material

The material to be presented to children should have the potential to become meaningful to them; a lot of nonsensical syllables can hardly become meaningful to learners (Duminy, 1991:69; Slavin, 1986:180; Ausubel, 1968:42). If a sum like $2 + 2 = ?$ is taught to Grade 1 pupils, the teacher may not guarantee that it will become meaningful to all of them but at least, it has potential to become meaningful to them. Their duty and responsibility is to make it actually meaningful to themselves. On the other hand, if Grade 1 pupils are given a sum like $a^2 + a^2 = ?$, it lacks potential meaningfulness to the learners of that level of development and learning. It will only make sense to those pupils who have clues in their cognitive structure that can be linked to such a structure as the one above. The same applies to stories, sentences etc.; the ones chosen for each level of learning should be checked if it has potential to become meaningful for learners at a certain level of development. The learning material should be such that it represents what is real to the child - something relatable to what forms part of the child's lived experience. In this case one may say the material possesses logical meaningfulness. The learning material must be relatable to the needs of the child and those of society.
The child must see some of the things he does at school being practised and appreciated by society (Hamachek, 1990:473; Dekker, 1985:387). In the South African situation, being highly technological, students who do Business Economics would enjoy it if they can be taken to a big chain store or supermarket to do stock taking. That will give them a chance to experience their subject in real life, namely where they and their parents and society at large do their shopping.

The above is emphasised by Hamachek (1990:473) when he speaks of connecting in-school learning to out-of-school experiences. He cites an example of Richard Brooks, a high school Mathematics teacher, who took efforts in enhancing meaningful learning and hence transfer, by giving students assignments and projects about interest charges, figuring out tax returns, planning family budgets etc. in order to make mathematics more enjoyable and meaningful to them.

Ausubel (1963:39) goes further by referring to potential meaningfulness as meaning that is inherent in the material. For it to be converted into actual meaningfulness, the learner, employing a meaningful learning set, should incorporate a potentially meaningful proposition within his cognitive structure which possesses advance organisers and anchoring ideas. Actual meaningfulness will depend on what the teacher and the learner intend doing with the subject matter or learning material. The teacher should explain and open up the material so that the learner can attain its meaning. On the other hand, the learner should struggle to make it subsumable into his cognitive structure with the aid of his own unique cognitive style. (The terms cognitive structure and cognitive style were explained earlier in the chapter in paragraph 3.3). If the teacher does not explain the material, thereby exploiting its potential meaningfulness to reveal its meaning, its clarity and its relevance to pupils, they may choose to commit it to memory without concern for its meaningfulness and the result
will be rote learning. The teachers should help learners by, amongst others, making sure that they are attentive, able to separate important information, and able to see relationships between old and new information (Hamachek, 1990:209).

Pienaar (1988:77) brings the following points to light about what pupils should learn for meaningfulness and relevance: He argues that whatever we do in classrooms, we must educate the whole man. At the end of primary and secondary education, the pupil or student should be equipped to choose wisely and to make right decisions.

All our curricula, programmes and structures must be vigorously scrutinised for usefulness, or pay-off. We cannot afford to educate for obsolescence, irrelevance or anarchy. We must educate for life, and life as we envisage it in the future (Pienaar, 1988:76-77).

Towards the year 2000, learning material that has potential and logical meaningfulness will be that which is presented by using modern technological equipment, like computers and that which is highly technological because it is the future as envisaged by children.

Education is the activity by which a person develops abilities, skills, attitudes and other behavioural forms valuable to society, the subject matter should be so designed such that it will enhance all the above. Theory and practice must reinforce each other (Lenyai, 1995:8).

The focus of this research work is on the relationship between emotions and meaningful learning. The learning material may be relevant and may possess potential meaningfulness; be presented in clear terms to be unfolded, but if affective areas are ignored, they may impair on meaningful learning of such information. Gage and
Berliner (1992:484) strengthen this view by indicating that learning is acquiring new information or experience and personally discovering its meaning. Schools fail, not because they do not allow students to develop personal meanings and feelings about objects, events and knowledge. Schools should not be places which are interrelated with ridicules, scorns, threats, humiliating experiences and devalues that evoke in children negative feelings and emotions. Definite emotions such as joy, anger, anxiety, aggression, fear and affection affect meaningful learning to a large extent. A child who experiences emotional instability often experiences problems with the integration of new subject matter into his cognitive structure. Emotional problems destabilise the child's cognitive structure and as such prevents or retards reinforcement. Woolfolk (1993:107) gives an example of a student whose parents are about to divorce, and indicates how such a student may need the teacher who can become an advocate for him. This is an indication that teachers should be concerned with both cognitive and affective factors in the teaching learning situation.

3.4.2 The School

The main reason for the existence of schools, be it in Africa or Europe, is learning (Mwamwenda, 1995:5). The school exist because it is an agent to facilitate learning and the socialization of an individual. Lindgren (1980:6) explains the value of schools by indicating how the concept of a school came into being because of growing economic and political changes. It is in the school that young people are taught a number of skills that will enable them to cope with life and its varying challenges and needs.

It is in the schools that children should be shaped and moulded; with regard to attitudes, behavioural standards, manners, etc. Sometimes it becomes necessary to teach them
even how to use their leisure time; to play, exercise, read and write for pleasure. They must also be taught to respect other people and their points of view (Pienaar, 1988:76).

The environment in the school should be conducive for this. The nature of the buildings, security systems, sanitary facilities, equipment necessary for day to day activities and play grounds should always promote learning. The school should also be managed to see to it that everybody works for the welfare of the school. Everybody attached to the school must see to it that it is capable of administering its service to the people it serves.

In this regard, Cole and Flanagan (1995:18) indicate the following about a well functioning primary school:

- administering for excellence
- democratising the functions of the school
- creating an ethos for learning and teaching
- instituting a language policy which ensures achievement, social mobility and competence to cope with the transition to the next phase of schooling
- establishing a policy for a representative school population and equal employment opportunities.

- developing a common understanding among parents, teachers and the community of the desirable standards of learning in each school subject
• gaining parental involvement in, and support for school activities

• organising programmes to improve teaching performance

• teaching respect for human differences, beliefs and moral values

• motivating children through a stimulating and balanced curriculum

• having no drop-out and a minimum of repeater rates

• practising continuous assessment and diagnostic assessment

• referring children with special needs

• tapping all regional education support services

• sharing facilities and scarce resources with other schools

• purchasing resources selectively and using these intelligently and regularly

• maintaining school property and resources

• keeping records of pupils and informing individual families of their children’s educational progress and achievement

• instituting incentives for staff who choose to remain expert classroom teachers
• appraising teachers in a collaborative context, emphasising what the pupils are learning (or not learning) and developing strategies to improve learning outcomes.

Cole and Flanagan (1995:17) further indicate that if such criteria are met by schools, the following desirable outcomes may be envisaged by the year 2020:

• a school system which is stable and has absorbed all the children needing primary education

• school curriculum which is non-sexist and non-racist, and works towards national unity while respecting difference

• high levels of achievement in core learning areas and essential skills

• acceptance by parents, teachers, the general public and enterprise that the school system is serving the needs of all children and the country as a whole

• a school system which improves the literacy and numeracy rates and has the majority of children completing general education (Grade 9) in the years

• a school system which ranks in the top performing group of medium human development countries on the Human Development Index

• a telephone, water, ablutions and electricity

• a physical environment conducive to learning and playing
• a transport system for all children

• teachers with appropriate qualifications who attend regularly and enjoy their work

• a core set of quality textbooks, a range of reading and library books, essential teaching aids for all subjects in the reprographic equipment and overhead projectors

• a reliable security system.

Achieving such a well-functioning primary school is not an easy task, it needs the cooperation of all stakeholders in education, and a state that cares about its people.

Contrary to the above, Lenyai (1995:3) argues that the history of the primary school in South Africa is one of neglect, they were forgotten, they were pushed to the background. He argues further that this was the case for the majority of South Africa’s children, who have never ever, been a priority. Lack of access, inequalities of opportunity and the dropout problem remain characteristics of primary schooling. Kgware (in Lenyai, 1995:4) points to the fact that out of every 10 children who entered sub-Standard A, only 5 completed standard 2. This indicates the task facing South Africa to upgrade present primary schools to meet the requirements of well functioning primary schools.

Poor quality in primary education is a serious matter, because this is the only formal education that most of today’s African children can hope ever to receive, and because the quality of primary education plays a great role in determining the quality of all higher levels of education (Nkuhlu, 1988:49).
3.4.3 The teacher

The foregoing paragraphs indicated the importance of a well functioning school that provides a climate conducive to learning and teaching. It is in this school that one may find a pleasant and motivating classroom atmosphere. The classroom is the teacher’s as well as the pupil’s working and living space. There can be no successful teaching if the classroom resembles a battlefield or a circus, instead of a calm and restful working and living space - a proper environment for education (Fourie, 1992:94) and hence meaningful learning. The teacher is responsible for creating this climate because he is in authority. He should not be too autocratic and rigid or too permissive because both have negative results. The teacher’s personality traits affect children from a very tender age. Pupils who had stable teachers show relatively good mental health and emotional security because such teachers can model good behaviour to their pupils (Hamachek, 1990:398). The same author goes further to indicate top ranking personality traits of teachers considered by their pupils to be the most helpful.

They display the following traits:

1. Co-operative, democratic attitude
2. Kindliness and consideration for the individual
3. Patience
4. Broad interests
5. Pleasant personal appearance and manner
6. Fairness and impartiality
7. A sense of humour
8. Pleasant disposition and consistent behaviour
9. Interest in pupil’s problems
10. Flexibility.
Teachers who possess these traits are or can be treasured by anyone, more so that they will model these to the pupils.

Successful teachers understand the backgrounds from which their students come, the values placed on various achievements and the array of family structures: the father-absent matriarchal family, the home in which both parents are working, homes where people are there for each other. Good and successful teachers learn to understand the social and physical conditions under which the children they teach live (Hamachek, 1985:389).

The goal of the existence of schools is learning and the same applies for the employment of teachers. The teacher, according to Slavin (1986:230-231), is the one who organises for instruction and plans an approach to the teaching task. This focuses on the issues teachers must resolve before the first student walks into the classroom. He should answer questions like what to teach, how to teach it and the arrangement of the physical environment of the classroom; so as to enhance learning and therefore meaningful learning. The teacher should not only see his task as that of simply presenting the subject matter. He should set and organise varied tasks, ranging from actually presenting lessons to dealing with differences among students, setting aims and objectives, managing student behaviour and testing and evaluating students (Davidson and O’Leary, 1990:30; Slavin, 1986:230). To make lessons meaningful to students, teaching should be seen as an interactive approach; where students are given a chance to discover facts and relate them to their daily experiences. Kember (1994:62-633) states that teachers must know their fields very well. Knowledge of the subject one teaches must be sound. Teachers must be able to teach, to guide students in the process of learning, so that students have an understanding of how they can approach subject materials and actually learn instead of memorise.
According to Cruickshank (1980:200) teachers are not only concerned with the possession of skills but also how to transmit this knowledge, skills and attitude to their students. For teachers to get satisfaction from their work they must at the end of the day really feel that they have helped their pupils to become successful. Kember (1994:62) takes the idea further by indicating how teachers and lecturers should help or train the students to be able to think or analyse problems critically, so that they can relate what they learn in school or college into the community. Learners should not only gain subject matter and regurgitate facts, they have to be creative, do problem solving and relate what they learn to life.

Classroom learning, we believe, is concerned primarily with the acquisition, retention and use of large bodies of potentially meaningful information (Ausubel, 1968:40). For meaningful learning to occur, educational programmes for children should have the ultimate goal of helping them to solve problems. This will happen if teachers are continually engaged in finding solutions to problems which they encounter everyday in their classes.

According to Cruickshank (1980:209), teachers who can achieve this are those who are amongst others, effective and clear, enthusiastic, use a variety of teaching styles, give the children the best opportunity to learn the material in a meaningful way. They are those teachers whose goals include a desire to have their students gain achievement and are businesslike and work orientated, recognise that pupil motivation is related to the personal needs of the pupil, and finally, those who go beyond information to help the pupil to get the most out of school. This implies that teachers should teach what will have meaning to children (Hamachek, 1990:473; Woolfolk, 1993:485).
To fulfil this demanding task, Child (1993:366) gives a clue of some of the personal qualities of teachers as related to effectiveness. The teacher should be friendly, organised and stimulating. With regard to his professional conduct he should have a sense of responsibility, strong moral sense, punctual and appropriate standards of dress. He should have appropriate attitudes to teaching; enthusiasm, motivation, imagination, vitality, courage and a sense of humour.

Contrary to the above, Baxen (1995:1) points out at the crisis in South African education where teachers are faced with problems of teaching very large and overcrowded classes, teaching classes for which they have no specialised training, a lack of opportunity for promotion or movement, the lack in availability of resources, poor economy and education that have favoured the ruling classes, and vandalised schools. As the above factors may affect meaningful learning negatively, prominent ones will be discussed in the paragraph which follow.

3.4.3.1 *Overcrowded classrooms and meaningful learning*

Basic education is about establishing adequate levels of literacy, oracy, numeracy, thinking skills and life-skills to attain self-employment, skills trainability, access to further education, responsibility and informed citizenship (Cole and Flanagan, 1995:7). This indicates the importance of establishing a good culture of teaching and learning that will not permit children to filter and slip through the school system without having learnt those skills in a meaningful way. Overcrowding disturbs learning because teachers become overloaded with the task of marking and controlling the work of many children - more than they can manage. This makes it impossible also, to give individual attention. To solve this problem, authorities in the Northern Province have allowed schools to operate under trees and in tents - which is still a problem. Keeton,
in *Sowetan* (31 January 1996) talks to Dr Motsoaledi who indicated that there are 360 registered schools which operate under trees, in tents, church buildings or are accommodated in other schools as "parasites". It is a desperate situation that will affect learning and meaningful learning a lot. It discourages teachers; and in the end affect the quality of work they do. Lenyai (1995:5) pointed to the issue of overcrowding as an urgent situation in black education and concluded that, in the Northern Province only, there is a shortage of more than 35 000 classrooms to meet the requirement of 40 pupils to a class.

With regard to teachers to fill posts if these classrooms are provided, the Northern Province Education Department will not face a problem because they have 22 colleges in their province that are producing more teachers than they can employ. If they provide more classrooms, they will be able to employ those teachers. One problem might be that those teachers have never taught anywhere after being trained, they went from place to place looking for teaching posts and are discouraged, disillusioned and hopeless. Most of them might be losing touch with the teaching profession itself and that already makes it difficult for them to teach children properly and enhance meaningful learning.

3.4.3.2 *Misplacement of teachers and meaningful learning*

Misplacement of teachers refers to the allocating teachers to subjects in which they did not specialise or are not qualified to teach. Lenyai (1995:6) indicates that most Black primary school teachers need further training (preparation) or retraining in the natural, commercial and modern sciences since they have, through no fault of their own, been deprived of this type of education.
They need to have this type of knowledge so as to be relevant to their pupils; to master their responsibilities, and to carry out their tasks with confidence. Mokgalane and Vally (1996:10-11) indicate how urgent it is that the Departments of Education (National and Provincial) should treat the issue of teacher development and support. Efforts should be taken to improve the quality of teaching. That can only be achieved if teachers are helped to develop their skills in the teaching profession. It is obviously necessary that education should be reconstructed. That can be attained if teachers are developed to fit well in their career, schools, classrooms and lessons. To take it further, teachers who work hard and are committed to their work should receive incentives such as teacher performance related pay. If teachers are supported, serviced and developed, they become more interested in their work. They move away from punitive, and rigid methods and ways of behaving in classrooms. They will prepare good lessons with spelled out objectives that inform children of what is expected of them. They will exude a sense of confidence, and pupils will also perceive them as being well organised. This is a good ground for meaningful lessons and hence meaningful learning (Mwamwenda, 1993:314).

3.4.3.3 Lack in the availability of resources and meaningful learning

Cole and Flanagan (1995:17-18) as outlined earlier in the chapter, indicated to the dire need to have schools equipped with both human and physical resources as a step to the reconstruction of education in South Africa. The school with no electricity and water (running water) may not function well because water is a basic need for human existence. If those resources are made available in all schools, then laboratories and Home Economics centres can be built for use by teachers and students. Experiments can be carried out with ease; television, sewing machines and computers can be used to facilitate meaningful learning because this equipment, according to Mulopo
(1988:107), Lenyai (1995:5), have assumed greater responsibility in the lives of our children and as such they identify and learn easily when they are used in their learning. Lack of resources has hampered the development of quality primary education especially in the previous DET, SGT and TBUC schools (Cole & Flanagan, 1995:14) and thus hampered meaningful learning. Such equipment would also help the teacher to make the content of the curriculum more meaningful for the learners.

Baxen (1995:1-3) emphasises the need to reconstruct education in South Africa but at the same time points out that the reconstruction should focus more specifically on the needs of the child and society, in order to make education more relevant and effective. Schools should be equipped with resources so that the subjects they do, like Business Economics and Accounting, are associated with modern ideas and technology in the world and in society. Students doing Accounting, Typing, Physical Science, etc. should be able to see it in shops, in laboratories, in hospitals and in banks because technology in their schools will have introduced them to life. They can learn those subjects meaningfully because they link them with what they already know.

Baxen (1995:1) indicates the problem of lack in availability of resources as related to the past inequalities in South Africa. Most rural and farm schools as indicated in chapter 2 give evidence to that.

3.4.4 The Curriculum

The people of today are citizens of tomorrow, the work force of the twenty-first century. It is very important that their decisions should be as informed as possible and that provision should be made in the curriculum to ensure that relevant skills are introduced to them at a tender stage. The curriculum should prepare them to respond positively to:
(a) the ever increasing demands of the workplace,
(b) the ways in which they conduct their individual responses to "trade and
commerce" and
(c) the deepening of their appreciation and application of politics, both locally and
internationally (Fields, 1994:5).

The same author proceeds to indicate how the British government, through the auspices
of its National Curriculum Council, has heightened teachers', governors', parents', and
pupils' awareness to the need for a higher profile of the skills needed in the work
places; seeing that their research has proved that most of primary aged children may
not have an idea of how commerce and industry function; which means their curriculum
does not prepare them for economic growth.

The determination of the curriculum in any country should revolve around four main
factors: The society, the child, the subject matter and the teacher (Lenyai, 1995:8).

According to Cole and Flanagan (1995:11), for many years what hampered curriculum
development in South Africa was central control. The curriculum was centrally
(nationally) controlled and thus ignored people's local needs and expectations. It purely
lacked public accountability. For children to learn meaningfully they should relate
what they learn to what they see, experience and expect in their lives. It must be related to their basic needs. Rangaka (1995:3) identifies those needs as essential learning tools (such as literacy, oral expression, numeracy and problem-solving) and the basic learning content (such as knowledge, skills, values and attitudes) required by human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions, and to continue learning.

According to Lenyai (1995:9) there is little doubt that most pupils experienced primary schooling (in South Africa) as a series of largely lifeless lessons taught by repetition and rote methods. Teachers, according to the same author, resort to those methods because most school textbooks are still produced by Europeans for black schools. One finds that teachers find it difficult to understand those books properly, to be in a position to teach those children meaningfully. They cannot get the real meanings of concepts because the content does not relate accurately with what they know. They lack concepts and conceptual foundation because these text books are written in a foreign language. When they fail to teach these children to learn meaningfully, they find the best thing being to resort to using corporal punishment and put all their hopes in that practice, to enhance learning. This has failed (Lenyai, 1995:8).

Lebenya (1988:44) sums up all problems related to curriculum development in South Africa by indicating how our curriculum should be improved to cover the following areas:

(a) handwork skills and crafts
(b) exploiting the country’s agricultural potential in type and quality of produce
Because of the political transformation that occurred in South Africa in 1994, big changes were expected in the education system that was very notorious for its segregation.

The new education and training system introduces a lifelong learning education system which is people-centred. For the first time ever, high quality education will be available for everyone - irrespective of age, gender, race, colour, religion, ability or language (Curriculum 2005:2)

The following are extracts from the same document. In the extracts, the word curriculum is defined in the context of the South African situation (see Appendix A).

3.4.5 The learner

In constituting his life world, the pupil in the classroom is always confronted by new situations, new ideas and new attitudes during his learning.

Every pupil daily encounters new challenges in the form of new learning matter or skills which he is required to master. It can truly be said that each new learning situation is a problem situation. To tackle this learning situation, the child requires courage and trust in himself and his abilities. If he masters this learning situation successfully, it strengthens his confidence in himself and makes him prepared and eager to tackle further learning activities and to accept them as assignments to be fulfilled. If, however, he fails to master what he has to learn (or fails as a learner), his eagerness to learn is suppressed. Failures
prevent him from accepting further challenges with enthusiasm and a feeling of confidence (Fourie, 1992:86).

For learning to become pleasurable to the learner himself, the teacher should in his planning and choice of subject matter always take certain characteristics of learners such as age, level of intellectual development, readiness for learning, motivation, attitudes towards the subject, personal problems, needs and interests into consideration (Mulopo, 1988:99). If teachers have consideration for such aspects, learners can be found to display positive attitudes, enthusiasm and motivation because that enhances their self-worth. For learners to become effective, expert, self-regulated, they need both the skill and the will to learn. They need knowledge about themselves, the subject, the task, and strategies for learning. They should know when they learn best, their preferred learning styles, what is easy and what is hard for them, how to cope with the hard parts, what their talents and interests are. They should know why they learn and how they should learn (Woolfolk, 1993:487-488).

According to Gage and Berliner (1992:485) learning is easiest, most meaningful and most effective when it takes place in a non-threatening situation. Unfortunately, schools, for many children, has already been associated with feelings of guilt, ridicule, humiliation, devalues, scorns and deafening threats. Rogers (in Gage & Berliner, 1992:485) indicates that if such threats are directed to the child himself, his perception of himself, his self-worth it is disturbing to learning and hence meaningful learning. Children should be made to feel calm, happy, confident, worthy and relaxed in order for them to learn. Bott (1971:23) suggests that teachers should take advantage of interesting occurrences that capture individual children’s attention. That can be achieved if this teacher understands the nature of being a child.
Ausubel (1963:23) raises a very important point about learning. Meaningfulness, according to him, is an individual matter. The material, with its potential meaningfulness, may be relatable to what the learners already know, but the cognitive structures of those individual learners, with their requisite intellectual capacities, ideational contents and experiential backgrounds, will bring forth unique interpretations and meanings. Those formulae, ideas, facts, patterns, etc. receive the new material and give it structure and meaning. This is an indication that two children may be taught similar material under similar conditions and still not attach similar meaning to it, because each one applies his unique cognitive style to solve problems.

According to Mouly (1973:312-313) teaching and learning are two complex activities. Regardless of what the teacher does, the final outcome is geared to the highly idiosyncratic internal process operating within the learner. This happens because of the unique nature in which each learner perceives, recognise, analyse, synthesise and conceptualise due to their differences in intellectual abilities and levels of intelligence, motivation, desires, will, interests, etc. For both the teacher and the learner to get positive results from these complex activities, the teacher should vary his teaching style from subject to subject, class to class and purpose to purpose.

Gage and Berliner (1992:344-345); Woolfolk (1993:376) and Slavin (1986:395) point to a strategy which promote meaningful learning called co-operative learning. This is a classroom arrangement that is not based on competition or on a single notion of ability. Students work in mixed-ability groups of four to six members and co-operate with one another to learn academic materials meaningfully. The groups are rewarded according to how much all members learned. This structure increases the number of winners in the class and allow more students to feel competent. Co-operation leads to higher achievement than competition, especially for low-ability students. All the
members of the group feel important because when they fail, they all say "We all messed up!". Co-operative learning seems to result in improved ability, to see the world from another person's point of view, better relations among different ethnic groups in schools and classrooms, increased self-esteem, and greater acceptance of handicapped and low-achieving students.

Genuine co-operation enhances learning because the more students co-operate the more they learn from each other. According to Davidson and O'Leary (1990:31-32), Johnson and Johnson (1984:55 & 69) co-operative learning should instill motivation in the students. The teacher must provide them with clear instructions, meanings of concepts, collaborative strategies so that no student can hide behind the group because he does not know the work. If the procedures for doing the task have been outlined by the teacher and he is sure that they understand them, each member will then be willing to get involved in the group task because he has a contribution to make. As they exchange views, make discoveries, explore, talk, have fun as a group, the child does not only learn academic material, he also learns attitudes, behaviours and tolerance of other people's views.

3.4.6 Language and Meaningful Learning

There is no way one can think of learning without considering the role played by language in all thinking and learning. Language is a pre-requisite for meaningful learning. When a child is to engage in meaningful learning, he should have concepts at his disposal to employ in carrying out meaningful tasks (Fourie, 1992:77).

Language is a medium of thought. It is a means to symbolise objects, concepts, generalisations and attitudes (Vrey, 1993:155). Le Roux (1994:159) refers to the
development of language as a challenge for the child and says that it serves to stimulate
creative and expressive communications. A child with well developed language may
learn better because he may not struggle with concepts and conceptualisation but may
struggle only with the meanings of concepts in the context of the subject in question.

According to Woolfolk (1990:270), meaningful lessons are lessons presented in
vocabulary that makes sense to the child. A child may not learn better, successfully
and meaningfully if the lessons are presented in a language he does not understand,
where he finds it difficult to understand concepts and manipulate the same concepts in
his learning. New terms are clarified through associations with more familiar words,
ideas and concepts. Material may have potential to become meaningful, that is,
amongst others, have relevance to the needs of the child, be on their level of
development, but one finds that the child sits in the classroom with the problem of
being bombarded with language and concepts he cannot interpret or comprehend.

The way European languages are taught and used as media
of instruction throughout the formal school system in South
Africa, in many cases as if they were the first language of
students, is partly responsible for the high degree of
dropout and failure in the school system. This practice is
bound to impede economic take-off of African countries
and misdirect their priorities (Barry, 1995:6).

She continues to indicate how important language is in society. It can open the way to
education, or it can close the door to educational opportunities. It serves as a key to
knowledge, information and effective communication. Language and literacy therefore,
can modernise and develop a country. This becomes a clear indication that in South
Africa many children might fail to learn meaningfully due to failure to understand
textbooks written in a foreign language, even though they possess good potentialities
and capabilities. According to Le Roux (1994:159) no child should be expected to cast of the language and culture of the home as he enters the school threshold. The school and the home should not be seen or perceived to represent two totally separate and different cultures which have to be kept apart. The children should use their mother tongue in school, for them to get the best out of school.

McDonald (in Barry, 1995:9) indicates that the majority of South African children are very disadvantaged because they find themselves in a terrible situation where they are required to learn all subjects through the medium of English and function in an all English environment. According to the same author, there is complete "loss of meaning" when pupils are in a situation where the total learning experience takes place in "absence of meaning" in the classroom situation. One may also find that, both the teacher and the pupil are out of their depth linguistically. They read words in books but they lack in-depth understanding of those words and will therefore have only a superficial understanding of the work.

According to the National Qualifications Framework (1996:8-11), an outcome is anything which you can show that you know and can do. It goes further to indicate two categories of outcomes - essential and specific. For the clarification of outcomes as related to outcome based education, extracts have been taken from the above source. In this research work, emphasis is placed on specific outcomes because they are the exact skills and information required in a particular situation (subject) (see Appendix B).
3.5 LEARNING OUTCOMES AS EVIDENCE OF MEANINGFUL LEARNING

It is not easy to determine when meaningful learning has really occurred, especially when the teacher does not have aims and objectives to attain. It needs a conscientious teacher to determine whether his pupils really learned meaningfully because it may be his purpose of teaching.

According to Mwamwenda (1993:215), Gage and Berliner (1992:325) and Hamachek (1985:369), meaningful learning can be evidenced or seen by positive learning outcomes such as transfer, problem solving, retarded forgetting and successful learning.

3.5.1 Transfer

When a person plans to teach a child, he should really look beyond teaching the child to succeed within the four walls of the classroom by obtaining very high marks, but rather to succeed in life itself. The goal of education should go beyond mere learning and retention of information. The learner is expected to use his newly acquired knowledge outside the school environment; for example, for personal accomplishment, in professional skills, in social adjustment and to facilitate subsequent learning. Transfer of learning means that what is learned in one situation facilitates learning in a similar, but different situation (Gage and Berliner, 1992:325; Mwamwenda, 1993:215; and Hamachek, 1985:369).

Transfer occurs when something previously learned, influences current learning. It is evident that meaningful learning has occurred because for one to be able to apply knowledge in a different situation, he must have assimilated and learned that information in a meaningful way. A student who is able to use a mathematical
principle he has learned in the first period to solve a physical science problem in the fifth of sixth period has succeeded in making positive transfer (Woolfolk, 1990:314; Van den Aardweg and Van den Aardweg, 1993:140). Woolfolk (1990:314), in illustrating the value of transfer for meaningful learning, gives an example about a student, who after having done mathematics for all of his school life says, after some years, "I remember nothing that I learned in high school". This indicates clearly that the child never learned the subject meaningfully and that he does not have mathematical concepts in his cognitive structure. He therefore cannot recall and apply the knowledge because it is forgotten as it was never meaningful to him. That may also happen due to a lack of re-use or repetition of material learned. If the new information is subsumed into the old information structure, (cognitive structure) it is then married to the old information so that it is understood in the context of information which the learner is already familiar with. The meaning and transfer of information is derived from its association with familiar and meaningful concepts; because meaningful concepts can be retained in the long-term memory (Mwamwenda, 1995:217-218).

According to Mouly (1973:302) the school hopes that what the child learns in school, will help him meet future situations, whether at school or at home, now or in later life. The child is taught to read, to add, subtract and to use language because these skills are life itself. They will use these skills to read books, newspapers and magazines, to look up information and to share ideas. These skills will enable them to deal effectively with the various situations they will subsequently encounter.

There is no subject in the curriculum for any standard that is just taught to be relevant within the four walls of the classroom. Each subject represents a piece of reality, and as a result it should be transferable to those situations where it is relevant. This shows that teachers should actually teach for transfer. If they fail to do that, they will have
wasted all those years and hours they spent in front of children. Teaching for transfer implies that during their teaching, as they proceed with their lessons, they should pause every now and then to point out how what is being studied will transfer to other lessons or to life in general. Primary school pupils should be told that they should master spelling for enhancing their performance now and at the secondary level, in reading and writing. Pupils can also be given mathematics problems based on real-life experience. Home Economics pupils should prepare meals for special occasions organized by the school, in order to make them put what they have learned to use (Mwamwenda, 1995:305).

When a teacher teaches, in order to enhance transfer, it is not enough to give the student advice to explain that he will have a future. The best thing to give him skills that will make him successful in the future (Clarizio, 1987:20).

3.5.2 Problem-solving

To solve a problem one must recognise that a problem exists. A woman who sits next to a fire with a toddler and allows her to touch the firewood without foreseeing that she might burn, obviously cannot solve the problem if she is burnt. In the classroom, less mature and less able students often fail to see that a problem exists (Gage & Berliner 1992:205). They fail to do so because they fail to set goals. The goal of all learning should be meaningful learning, learning that will give the child confidence to face the real life situation with its problems, and use the useful knowledge he has acquired to solve problems.

According to Goodwin (1975:271) problem-solving is at the apex of human learning and a very important component of learning for both adults and children. What is
important is that the school should develop in the children, skills for problem-solving because life is a mixture of problems. When teachers teach, they should present problems to students but provide them with clues that helps in problem-solving; clarifying the essentials of the problem, generating ideas around the problem, how to view the problem from different perspectives and how to evaluate his ideas in light of the relevant facts of the problem situation. If they learn these in school they will apply that in their lives because problem-solving does not occur in the classroom only, it occurs everywhere where there are people.

Problem-solving is a complex kind of discovery learning. For problem-solving to take place, the learner should realise that there is a gap between what he already knows and what he ought to know. He should realise the problem that faces him, namely filling that gap. This means that the presentation of the subject matter should allow for that. The teacher should present the subject matter in such a way that it calls for the learner to fill that gap and rise beyond the known facts. The child should reconstruct, rearrange, analyse, assemble, associate and transform known information to use it to suit his cognitive style (Fourie, 1992:80). According to Ausubel (1968:571) the existing cognitive structure plays a key role in problem solving because for every problem situation to be conquered, there must be reorganisation of past experiences so as to fit the requirements of the current problem situation. Without those ideas in the cognitive structure no problem-solving can take place. When a child is sent to the shop to buy something, for him to be able to calculate the amount of change correctly, he will use structures and patterns of addition and subtraction in his cognitive structure.

A stable cognitive structure is the result of meaningful learning and therefore makes meaningful learning a prerequisite for problem-solving. Without the relevant schema derived from the cognitive structure, problem-solving may not occur. Woolfolk
(1993:296) gives evidence to that by pointing at the way a schema from the cognitive structure can facilitate the solving of a problem. It indicates that if the schema is not activated, an attempt will be made to solve it by trial and error. This might not lead to a solution (Goodwin, 1975:268; Woolfolk, 1993:296). For a clearer understanding of problem-solving as an outcome of meaningful learning see Appendix C.

3.5.3 Mastering

Successful learning, according to Vrey (1990:262), implies understanding the content of the subject taught, mastering it. Mastering the subject means in this instance, subsuming it into the cognitive structure to give it meaning, pattern and structure. It implies adapting instruction to the needs of diverse students, making sure that all or almost all students have learned a particular skill to a pre-established level of mastery before moving on to the next skill (Slavin, 1986:329). Pupils should be given time to learn and master information or skills to be successful in their learning.

Planning for successful learning, according to Woolfolk (1993:478-489), needs teachers who are clear, precise, specific and not vague. Lack of knowledge may cause teachers to be vague and that makes students get lost. They cannot learn because they do not know what to learn. Teachers should explain facts in clear terms, connect ideas, construct ideas and integrate them. Teach in such a way that students will attain meaning and learn meaningfully.

Clear teachers provide for student understanding (teachers who try to find out what pupils know and understand and then teaches that way), they explain with many examples; they relate the subject at hand to the real life of their pupils; they are verbally fluent and they help students organize their work (Cruickshank, 1980:210-211).
These are teachers who will help children experience successful learning. Children should be able, at the end of each day, to remember what they have learnt and relate it with problems in real life.

3.5.4 Retarded forgetting

Forgetting is the inability to recall information which has been assimilated into the cognitive structure. It presupposes the existence of learning results that can no longer be recalled because one cannot forget what he has never known. It results from disuse with the passage of time, omissions, additions of information that was never clearly understood (Mouly, 1973:291; Vrey, 1990:296).

Forgetting, according to Goodwin (1975:413), results from four major factors: disuse, interference, reorganization and motivated forgetting. Material is forgotten easily when it is not used, when new learning interferes with previously learned material. Instead of the material subsuming meaningfully in the cognitive structure, it interferes with it due to lack of clarity, understanding and explanation. Sometimes an individual learns certain material or a skill, but does not learn it very well or does not use it for a period of time and when he needs to use it, he reorganises it and recalls it in a different form, which might even be wrong. The last factor is motivated forgetting, which occurs when an individual decides not to remember information, especially unpleasant things.

Meaningful learning retards forgetting. According to Mwamwenda (1995:248), when teaching children, emphasis should be on what is distinct and meaningful and, wherever possible, rote learning should be avoided. The same applies to learning. Pupils should be made aware of what is meaningful so that they should try to understand it clearly, relearn it, use it frequently to retard forgetting.
The above shows that the teachers should always be concerned with the forgetting of material and he teaches his students and should do all in his power to counteract that tendency. The following are some of the factors that can contribute to children forgetting or not forgetting material learned:

1. how thoroughly material is learned,
2. the type of learning used,
3. meaningfulness of matter learned,
4. method of learning,
5. interval between what is learned and its use,
6. arrangement of material, and

The above revolve around the three main factors necessary for meaningful learning to occur: the teacher, the material and the learner. The teacher should prepare, teach and explain the learning material clearly and thoroughly to children so that the children can learn meaningfully. The material should also appeal to the children so that they should want to be involved. If the teacher can present the material clearly, the children will not have a problem in making it belong to their cognitive structures. If all this factors are taken into consideration, forgetting becomes retarded. Retarded forgetting will result in material being learned and retained.

3.6 THE EVALUATION OF MEANINGFUL LEARNING

The theory in paragraph 3.5, points out the following learning outcomes as evidence of meaningful learning: transfer, problem-solving, mastering and retarded forgetting.
Outcomes are the observable/measurable knowledge, skills and values that learners are expected to have acquired and developed at certain stages of their schooling. They describe what students should know, should be able to do, and should value as a result of their learning experiences (Ontario Ministry of Education: 1996:p.1).

In this study, it is emphasised that affective outcomes must be integrated with academic outcomes to achieve the highest level of student learning in both areas, for example, group music performance where academic skills (reading the music, playing the instrument, following the conductor) are integrated with the affective (relate to the music, express themselves, working cooperatively).

The evaluation of meaningful learning in this study will be carried out in tasks and questions that will reveal whether the children have learned in a meaningful way. The questions and tasks are designed in a way as to indicate if they can do transfer and problem-solving. Mastering and retarded forgetting will not be included in the questions and tasks. It is assumed that their evaluation is covered and incorporated in transfer and problem-solving. A student who is able to use a principle that he has learned in one situation in a different situation indicates clearly that he has mastered the principle and has not forgotten it.

The tasks and questions were taken from the aspects of Grade 7 (Std. 5) English and Mathematics curriculum which are linked to everyday life and can test transfer and problem-solving.
3.6.1 Learning outcomes and their evaluation

As indicated earlier in the chapter, only transfer and problem-solving will be evaluated by the use of the tasks and questions that will follow in this chapter.

3.6.1.1 Transfer

As explained in paragraph 3.5.1, transfer of learning means what is learned in one situation facilities learning in a similar, but different situation.

3.6.1.2 Problem-solving

To solve a problem, one must recognise that a problem exists. According to Goodwin (1975:271) problem-solving is at the apex of human learning and a very important component of learning for both adults and children. The school should develop in the children, skills for problem-solving because life is full of problems.

According to McDermott and Rakgokong (1996:29) discussion of problems that arise in the classroom makes the learners aware of the fact that life is full of problems - they are daily occurrences in our lives. The teacher should therefore explain that we need to find solutions for these problems.

Such problems should:

- revolve around practical situations within context
- be about things children are interested in
- require a number of steps or stages for their solution
be around information that has been collected and placed at the disposal of the learners

- demand that learners search for more information and that they engage in discussion (McDermott and Rakgokong, 1996:29).

3.6.2 Problem-solving and Transfer Exercises

3.6.2.1 English Exercises

English exercises are taken from Culshaw and Waters (1992:pp.30, 31 & 34).

The book is based on the following assumptions:

(i) that we learn to read by reading,
(ii) that reading is in essence a problem-solving process,
(iii) that different types of reading matter demand different strategies (Culshaw & Waters, 1992:4).

A. EXERCISE 1

Exercise 1 is a matching exercise. It is a problem-solving and transfer exercise. The children have learned the concepts in the exercise in different situations and now they have to use it for problem-solving and transfer. According to McDermott and Rakgokong (1996:31) a learner understands concepts by solving problems. He develops problem-solving skills and understands the different contexts in which such skills can be used. The title of the exercise is CONNECTIONS (See Appendix F)
B. EXERCISE 2

Exercise 2 is also for problem-solving and transfer. Standard 5 or Grade 7 pupils are at a stage of development where they are expected to show and carry out some independent tasks. They should be able to at least know what is expected of them when they have to clean their own shoes. It is not a big deal for a twelve year old! It is a problem to be solved. The title of the exercise is HOW TO CLEAN A PAIR OF SHOES (see Appendix G).

3.6.2.2 Mathematics Exercises

Standard 5 or Grade 7 pupils have already learned the four basic operations; which are addition, subtraction, multiplication and division. The exercises are designed to evaluate if the pupils have already learned those operations in a meaningful way. The exercises should test if the operations have been mastered and can be used for problem-solving and transfer.

A. EXERCISE 1

Exercise 1 is based on the four basic operations. Pupils who are able to complete the wheels will obviously indicate that they have mastered those operations and can use them in their daily lives to solve problems (Dreyer, 1979:18) (See Appendix H).

B. EXERCISE 2

Exercise 2 is based on addition and subtraction. The word sums are designed in a way that require pupils to reflect on their daily life experiences. To answer such problems, they should transfer what they have learnt in school to life outside the classroom. The
exercise is from Dreyer (1979:39) (See Appendix I).

3.7 SUMMARY

This chapter dealt with the concept learning and learning as a process. In order to clearly define and outline the above concept, it become imperative to look at certain views about learning and how they relate to meaningful learning. Learning was then defined from both behaviourist and cognitive points of view. Thereafter the concept meaningful learning was dealt with.

In dealing with meaningful learning, it became necessary to outline the conditions of meaningful learning, learning outcomes as evidence of meaningful learning and how meaningful learning relate to emotions. An indication was also made to the relationship between Curriculum 2005 and meaningful learning in schools (see Appendices A - C).

Lastly, the evaluation of meaningful learning and its outcomes was dealt with. Both transfer and problem-solving as outcomes of meaningful learning were outlined and thereafter exercises (tests) to evaluate those outcomes were also presented.
CHAPTER 4

THE EMPIRICAL INVESTIGATION

4.1 INTRODUCTION

This chapter seeks to look at the empirical investigation as a process. Its findings will be reported in chapter 5.

4.2 LITERATURE STUDY

Literature on emotions and meaningful learning is available and has been studied. The sole purpose of obtaining the theoretical information was to establish a conceptual framework of reference which could serve as a basis for further empirical investigation and interpretation.

The literature study highlighted the following aspects of the role and function of emotions in primary school children's meaningful learning (See chapters 2 and 3).

(1) Emotions are hard and difficult to define, list and categorize. (see par. 2.1)

(2) Emotions, not just the pleasant ones, play an important role in the life of a primary school child. (see par. 2.3.1)

(3) Every aspect of our behaviour is influenced by our emotions.

(4) Emotions play the most important role in the life of each primary school child. (see par. 2.3.1)
(5) Emotions are probably the most complicated of all psychological processes. (see par. 2.3.2)

(6) The emotional and intellectual development of a primary school child is affected by socio-economic variables. (see par. 2.3.3)

(7) Teachers have an influence on the emotional life of a primary school child. (see par. 2.3.4)

(8) The parent-child relationship has an influence on the emotional life of a primary school child. (see par. 2.3.5)

(9) Language is a communicator of emotions. (see par. 2.3.6)

(10) Emotions have an influence on meaningful learning. (see par. 2.3.6)

(11) The goal of the existence of schools is meaningful learning. (see par. 3.4.2)

(12) Teaching and learning are two complex activities. (see paragraphs 3.2.1 and 3.2.2)

(13) Meaningful lessons are lessons presented in vocabulary that makes sense to the child. (see par. 3.6.4)

(14) Learning outcomes are evidence of meaningful learning. (see par. 3.5)

4.3 FORMULATION OF HYPOTHESES

The main aim of this study is to indicate the function and role of emotions in primary school children’s meaningful learning. Emotions identified in chapter 2 (see 2.4.2)
included love, joy, affection, anger and aggression, anxiety and fear. With this aim in mind and in the light of the literature study the following hypotheses should be stated:

When the CRIP was discussed with Dr Kokot, an alteration to the terminology used in grouping emotions was made and resulted in the following: aggression (disgust, rejection), anger (sadness, depression), affection (expectation, orientation), joy (intimacy), love (acceptance) and anxiety (fear, withdrawal). These relationship areas were grouped for being adapted for use of the CRIP. This implies that the researcher and Dr Kokot might have used different labels for emotions identified, but that they belong to similar relationship areas and emotional experience.

4.3.1 Hypothesis 1

There is a significant difference between the achievements of pupils from urban, semi-urban and rural environments, who were involved in meaningful learning.

RATIONALE:

It has been proved by the literature that children from urban, semi-urban and rural areas have different emotional experiences and might therefore learn in different ways.

In chapter 2, paragraph 2.5.2, an indication was made to the way in which environmental deprivation affects rural children and meaningful learning contrary to their urban counterparts. Rural children often learn in very dull environments, overcrowded classrooms and poor teaching and learning facilities. In paragraph 3.4.2, 3.4.3.1, and 3.4.3.3, it was indicated that the school environment which is not conducive to learning can affect children’s achievements.
Cole and Flanagan (1995:18) in paragraph 3.4.2 gave a description of a well functioning primary school that can hope to attain meaningful learning for the children and community it serves. It will be in this type of an environment, where teachers should according to Cruickshank (1980:200) in paragraph 3.4.3, continually be engaged in involving their pupils in problem-solving tasks, make lessons meaningful for them and help them realise and attain meaningful learning. Teachers should help pupils to be able to analyse problems critically so that they can relate what they learn in school into the community.

4.3.2 Hypothesis 2

There is a significant correlation between meaningful learning and the size of the family.

RATIONALE:

The literature study has revealed that during the primary school years the size of the family influences or affect the emotional development of the child and the way he learns in school.

According to the literature study in paragraph 2.5.1.1., it was indicated that both parents and children’s behaviour are affected by the number of children in the family. The size of the family and parental patterns of behaviour might have an effect on the way a child learns in school; especially the way he experiences meaningful learning. Factors like inadequate housing, deprivation, lack of space, abuse and neglect affect children’s development and their interest and motivation in their educational tasks.
In paragraph 2.5.1, it was indicated that for children to develop into what they ought to become, they need a safe home, where members live as a family and are there for each other. Unfortunately, in overcrowded families, children are often ignored.

4.3.3 Hypothesis 3

There is a significant correlation between meaningful learning and rejection (aggression)

RATIONALE:

It was to be expected that primary school children who experience (disgust, aggression) might fail to learn meaningfully.

In paragraph 2.4.1.1, it was indicated that frequent expression of rejection and aggression towards the child might affect his self-realisation and self-actualisation in a negative way. Children who grow up with rejection and aggression might end up releasing it outside their homes and in school. This will have a negative impact on the child's meaningful learning.

4.3.4 Hypothesis 4

There is a significant correlation between meaningful learning and expectation (affection, exploration).
RATIONALE:

It would seem that primary school children who experience expectation (affection, exploration) learn in a meaningful way. It was indicated in paragraph 2.4.2.3 that when primary school children in their homes and in schools experience affection (expectation) they experience feelings of adequacy. According to Mussen (1990:362-363) high achieving children have parents who are at least moderately affectionate and involved with them. In paragraph 2.5.4., an indication was made to how the absence of a father figure in the home deprives the child of the affection he deserves.

4.3.5 Hypothesis 5

There is a significant correlation between meaningful learning and intimacy (joy).

RATIONALE:

It was to be expected that primary school children who experience intimacy (joy), learn in a meaningful way. In paragraph 2.3.6., Vrey (1993:27) emphasises that in a warm classroom atmosphere in which one senses inspiration, comprehension, the acknowledgement of personal growth and encouragement, learning proceeds in a relaxed manner. In the same paragraph, Van den Aardweg and Van den Aardweg (1988:111-129) explains that schoolwork which gives rise to ridicule, might make children feel emotionally frustrated and traumatised and therefore not learn in a meaningful way.

Paragraph 3.4.1 emphasises the idea that schools fail to teach children meaningfully not because they do not provide information, but because they do not allow students to develop personal meanings and feelings about objects, events and knowledge.
4.3.6 **Hypothesis 6**

There is a significant correlation between meaningful learning and acceptance (love).

**RATIONALE:**

It has been indicated in the literature study that primary school children who experience acceptance (love) will experience meaningful learning and hence achieve better than others who do not experience love. Acceptance and love are basic to the experience of trust. In paragraph 2.6.1, teachers should encourage feelings of adequacy by respecting children for what they are and not for what they are capable of achieving. In the same paragraph, an indication is made that acceptance should be encouraged amongst learners (pupils), they should work co-operatively in groups to promote meaningful learning. It has been shown in the literature study done that children who experience acceptance in school will learn meaningfully.

4.3.7 **Hypothesis 7**

There is a significant correlation between meaningful learning and orientation (affection).

**RATIONALE:**

It has been indicated that primary school children who experience orientation (affection) might experience meaningful learning than those who do not experience orientation. In paragraph 2.4.2.1., it is emphasised that the provision of love is always necessary for self-realisation, development and becoming. Paragraph 2.5.4. gave an indication to the fact that because of the effects of migratory labour, the
absence of one parent or both in the home deprives the children of the love and attention they deserve. Every parent has a function of orientating his children in respect of society and in various contexts. Children who grow up with this type of deprivation are placed at a disadvantage as compared to children with caring and loving parents. In paragraph 2.3.3.3., it was indicated that for children to develop and grow well, they need warmth, love and security.

According to Gage and Berliner (1992:485) in paragraph 3.4.5., learning is easiest, most meaningful and most effective when it takes place in a non-threatening situation. Unfortunately, school, for many children, has already been associated with feelings of guilt, ridicule, humiliation, devalues, scorns and deafening threats. In such type of situations children might fail to learn meaningfully.

4.3.8 Hypothesis 8

There is a significant difference between the achievement (means) of boys and girls with regard to meaningful learning.

RATIONALE:

Woolfolk (1993:175-176) points out to some differences between mental abilities of boys and girls during primary school years. Although these differences might be slight, their implications in primary school children’s meaningful learning have far reaching results.

4.3.9 Hypothesis 9

There is a significant relationship between meaningful learning and a combination of emotions.
RATIONALE:

In paragraph 2.6., it has been indicated that there is a very close connection between meaningful learning and emotions. According to Hurlock (1972:184), emotions can affect all mental activities. Children who grow up in environments that provide an abundance of unpleasant emotional experiences might end up not learning in a meaningful way. Positive emotions might promote meaningful learning. Teachers should therefore help in reducing emotional learning. Teachers should therefore help in reducing emotional problems in children by helping them and their parents to set realistic goals in life, trust each other and do things together.

4.4 THE EMPIRICAL INVESTIGATION

To test the hypotheses as stated in paragraph 4.3 the following empirical investigation was undertaken:

4.4.1 The Process of the Investigation

Three schools in Region 2 of the Northern Province were asked for permission to allow the researcher to use her pupils for the investigation. The questionnaire and the tests were administered directly to the children by the researcher. Before they could be administered, the children were guided as to how to complete the questionnaire and were urged to be true to themselves. Questions relating to the tests were also explained.

Having received the completed questionnaire, the researcher checked and scored them. The questionnaires (both CRIP and the Biographical Questionnaire) were then coded.
and submitted to the Computer Section of the University of South Africa. The data was programmed by the computer staff for analysis. The interpretation and results will be offered in chapter five (5).

4.4.2 The Questionnaires

The use of the questionnaire (CRIP) for this study is supported by a wide range of research sources. Kokot (1988) in particular, standardized the CRIP on primary school children and hence afforded the researcher an opportunity to use it, (after verbal permission was obtained from her) for the study. According to Mouly (1970:242), questionnaires permit a wide coverage of the population with minimum effort, and leading to candid and objectivity of results because of their impersonality.

According to Ary, Jacobs and Razavieh (1990:344-345) a questionnaire can guarantee confidentiality because the respondents are not directly and face to face with the researcher. The researcher's personal appearance, mood or conduct may not influence the response unlike in an interview. There is however, a major disadvantage that respondents may misinterpret some of the questions.

In this study, the questionnaire was administered directly to respondents by the researcher. The researcher was therefore able to keep some of the problems that could arise to a minimum level.

The biographical questionnaire which was made to probe the respondent's profile was also made short. The respondents were only required to give information that would assist the researcher to understand their home backgrounds, which relate to socioeconomic levels and family sizes.
The aim of the questionnaire (CRIP) utilized in the present study was to establish the Relational Image of each primary school child involved in the Empirical investigation and thereafter relate it to the results of the meaningful learning exercises. It consists of a list of questions (5 per emotion) which are made of statements written in the first person for better identification with the statements.

4.4.3 Meaningful Learning Exercises

Meaningful learning exercises for Mathematics and English were selected by the researcher with the help of lecturers from a college of education, responsible for Mathematics and English. The exercises were administered after the children have completed the CRIP. The instructions were thoroughly explained to children and aid was given during the process of answering.

4.4.4 Sample

The questionnaires and meaningful learning exercises were completed by sixty (60) grade 7 children from three primary schools situated in urban, semi-urban and rural areas. These schools were randomly selected. Each school participated with 20 children, 10 boys and 10 girls which brings a total of 30 boys and 30 girls. All sixty (60) children completed the questionnaire and exercises on meaningful learning.

4.4.5 Biographical Data of Respondents

This section contains questions about each respondent: their names; where they live; their age; who they live with; the gender and occupations of their parents (see Appendix K).
4.5 SUMMARY

In this chapter, it was described how the sample was selected, the questionnaire and tests were administered, collected, scored and sent for computer analysis.

The results from the investigation will be explained in chapter 5.
CHAPTER 5

RESULTS OF THE EMPIRICAL INVESTIGATION

5.1 INTRODUCTION

To test hypothesis 1, an analysis of variance was carried out to determine whether the means of urban, semi-urban and rural children differed significantly.

To test hypotheses 2-7, the Pearson Product-Moment correlations were calculated to determine whether significant correlations exist.

In order to test hypothesis 8, a t-value was calculated to determine if there is a significant difference between the means of boys and girls with regard to meaningful learning. In order to test hypothesis 9, variables which explain the largest proportions of variance in meaningful learning were tested through a Regression analysis.

5.2 TESTING HYPOTHESES

5.2.1 Testing hypothesis 1

With regard to hypothesis 1, stated in paragraph 4.3.1, the following null hypothesis was tested:

There is no significant difference between the achievements of pupils from urban, semi-urban and rural environments who were involved in meaningful learning.
TABLE 5.2.1: Achievement of rural, semi-urban and urban children

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>GROUP</th>
<th>NO</th>
<th>MEAN</th>
<th>S</th>
<th>F</th>
<th>DF</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban pupils</td>
<td>A (1)</td>
<td>20</td>
<td>79.6</td>
<td>9.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-urban</td>
<td>B (3)</td>
<td>20</td>
<td>49.8</td>
<td>15.1</td>
<td>2.47</td>
<td>57</td>
<td>p&lt;0.05</td>
</tr>
<tr>
<td>Rural</td>
<td>C (2)</td>
<td>20</td>
<td>16.4</td>
<td>10.45</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 60

According to Table 5.2.1, an F-value of 2.47 was obtained with p<0.05. The results reveal that there is a significant difference between the means of the three groups and therefore the null hypothesis can be rejected. One can therefore conclude that urban, semi-urban and rural children differ with regard to achievement in meaningful learning. Their means differ (see Table 5.2.1). The numbers A(1), B(3) and C(2) were used as codes on the data that was computer processed.

According to paragraph 2.5.2., children from these three types of backgrounds might not learn in the same way. Rural children are mostly deprived whereas urban children are mostly favoured by the environments in which they live and learn. They usually have better facilities. Rural children usually grow up in very dull environments, both class rooms and their homes whereas semi-urban and urban children are better off with regard to that. Urban children in this study achieved far above both semi-urban and rural children with regard to meaningful learning. The following achievements are evidence to that: urban = 79.6; semi-urban = 49.8; rural = 16.4.

Paragraph 2.5.3, supports and add to the factors mentioned above. The consequences of discrimination have already made rural life and schooling suffer. Most rural children involved in this study live with one or no parent in their homes because most parents are migratory workers.
5.2.2 Testing Hypothesis 2

To test Hypothesis 2, stated in paragraph 4.3.2., the following null hypothesis was tested:

There is no significant correlation between meaningful learning and the size of the family.

To test this null hypothesis, all 60 children were used. The Pearson Product-Moment correlation was calculated and which appear in Table 5.2.2.

TABLE 5.2.2: Correlation Coefficient between Family Size and Meaningful Learning

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaningful learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Size</td>
<td>$N = 60$</td>
<td>$r = -0.67$</td>
<td>$p &lt; 0.01$</td>
</tr>
</tbody>
</table>

$N = 60$

The calculation of the Pearson Product-Moment revealed a $r = -0.67; p < 0.01$. This means that the null hypothesis should be rejected at a 1% level of significance since there is a significant negative correlation between meaningful and family size. It appears that the bigger the family, the lower the meaningful will be.

In paragraph 2.3.3.2, it is indicated that most families that are poor, live in crowded homes, where children develop from a very tender age tendencies of ignoring sounds and stimuli that would have impacted on their senses if they were in normal home situations.
In the same paragraph, it has been indicated that children from smaller families score higher on the intelligent tests than children from larger families; which is an indication that overcrowded homes offer children very little sense of belonging and security, few toys and materials if any, to stimulate their growth.

5.2.3 Testing Hypothesis 3

In order to test hypothesis 3, stated in paragraph 4.2.3., the following null hypothesis was tested:

There is no significant correlation between meaningful learning and rejection (disgust, aggression) (see Table 5.2.3).

TABLE 5.2.3: Correlation Coefficient between Meaningful Learning and Rejection

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>REM</th>
<th>REF</th>
<th>REP</th>
<th>RET</th>
<th>RESC</th>
<th>RESE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaningful learning</td>
<td>0.17</td>
<td>-0.13</td>
<td>0.42*</td>
<td>-0.10</td>
<td>-0.16</td>
<td>-0.20</td>
</tr>
</tbody>
</table>

* p < 0.01; for the rest p > 0.05

N = 60

REM : Rejection towards mother

REF : Rejection towards father

REP : Rejection towards peers

RET : Rejection towards teachers

RESC : Rejection towards school

RESE : Rejection towards self.
According to Table 5.2.3, there seems to be a significant positive correlation between meaningful learning and rejection with peers.

To test this null hypothesis, all 60 children were used. The Pearson Product-Moment correlation was calculated and a correlation coefficient of $r = 0.42; \quad p < 0.01$ was obtained between meaningful learning and rejection with peers. According to Table 5.2.3, the null hypothesis should be rejected at a 1% level of significance in the case of peers since there is a positive correlation between meaningful learning and rejection towards peers. It seems that the higher the meaningful learning, the higher the rejection towards peers.

According to paragraph 2.6., primary school children have their unique problems. Their problems range from those with peer groups, from parents, feelings of inadequacy originating most of the time from peer pressure. It sometimes happen that children who are motivated to do their work and learn meaningfully might become unpopular and be rejected by their peers. Reasons might range from jealousy to rivalry amongst themselves. Concentration and commitment to their work might take their leisure time to be involved with their peers outside school. Teachers also seem to like children who perform well. They always shower them with praises that may evoke jealousy and rivalry which might lead to rejection, irrespective of their achievement.

5.2.4 Testing Hypothesis 4

With regard to hypothesis 4, stated in paragraph 2.4.4., the following null hypothesis was formulated:

There is no significant correlation between meaningful learning and expectation (affection). See Table 5.2.4.
TABLE 5.2.4: Correlation Coefficient between Meaningful Learning and Expectation

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>EXM</th>
<th>EXF</th>
<th>EXP</th>
<th>EXT</th>
<th>EXSC</th>
<th>EXSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaningful learning</td>
<td>0.17</td>
<td>0.03</td>
<td>0.52**</td>
<td>-0.15</td>
<td>-0.33*</td>
<td>-0.23</td>
</tr>
</tbody>
</table>

**p < 0.01  *p < 0.01 for the rest p > 0.05
N = 60

EXM = Expectation towards the mother
EXF = Expectation towards the father
EXP = Expectation towards peers
EXT = Expectation towards the teacher
EXSC = Expectation towards the school
EXSE = Expectation towards the self.

According to Table 5.2.4, there seem to be a significant positive correlation between meaningful learning and expectation towards peers and a significant negative correlation between meaningful learning and expectation towards the school.

To test this null hypothesis, all 60 children were used. The Pearson Product-Moment correlations were calculated and revealed a correlation of $r = 0.52; \ p < 0.01$ between meaningful learning and expectation with peers and $r = -0.33; \ p < 0.01$ between meaningful learning and expectation towards the school.

According to Table 5.2.4, there is a significant positive correlation between meaningful learning and expectation towards peers and therefore the null hypothesis should be
rejected at a 1% level of significance. It seems that the higher the meaningful learning, the higher the expectation towards peers.

According to Hurlock (1972:123) in paragraph 2.4.3, young children learn to love things, people, pets, toys and objects that give them pleasure. Learning should also give children pleasure. For children to learn meaningfully, they should find pleasure in their learning environments and activities.

With regard to orientation with peers, it has been indicated in paragraph 2.4.2.3, that situations that nurture and allow expectation (affection) are amongst others lack of criticism, being liked or loved, feeling comfortable, experiencing feelings of worth, a healthy self-concept, being given pleasure and being loved and valued. This is an indication that if a primary school child experiences the above attributes with regard to peers, he can end up having pleasurable experiences about learning and hence meaningful learning. Peers matter a lot to children of primary school going age because they are a very important part of their life-worlds.

In the same Table 5.2.4, there seem to be a significant negative correlation between meaningful learning and expectation (affection) towards the school. The null hypothesis should therefore be rejected at a 1% level of significance. It seems that the lower the meaningful learning, the higher the expectation towards the school.

According to Mwamwenda (1995:5), in paragraph 3.4.2, schools exist because they are agents to facilitate learning and the socialisation of individuals. In paragraph 3.4., the conditions of meaningful learning have been outlined. One might find that the child has a feeling of expectation (affection) towards the school, but find that the conditions that are key to the promotion of meaningful learning in school are not adhered to; e.g.
teachers might come to classes ill prepared and less motivated to carry out their teaching functions. According to Slavin (1986:230-231) in paragraph 3.4.3, the teacher is the one who should organise for instruction and plan an approach to the teaching task. The system of education should be such that the curriculum, the teacher, school buildings, availability of resources, learners, and the language should all enhance meaningful learning.

5.2.5 Testing Hypothesis 5

In order to test hypothesis 5, stated in paragraph 4.2.5., the following null hypothesis was tested:

There is no significant correlation between meaningful learning and intimacy (joy). Consider Table 5.2.5.

TABLE 5.2.5: Meaningful Learning and Intimacy

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>INM</th>
<th>INF</th>
<th>INP</th>
<th>INT</th>
<th>INSC</th>
<th>INSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaningful learning</td>
<td>0,03</td>
<td>0,13</td>
<td>0,28**</td>
<td>-0,40*</td>
<td>-0,24</td>
<td>-0,14</td>
</tr>
</tbody>
</table>

**p < 0,05; *p < 0,01. For the rest p > 0,05.
N = 60

INM = Intimacy towards the mother
INF = Intimacy towards the father
INP = Intimacy towards peers
INT = Intimacy towards teachers
INSC = Intimacy towards the school
INSE = Intimacy towards self.
According to Table 5.2.5, there seems to be a significant negative correlation between meaningful learning and intimacy with the teacher and a significant positive correlation between intimacy and peers.

To test this null hypothesis, all 60 children were used. The Pearson Product-Moment correlations were calculated and revealed a correlation of $r = -0.40; \ p < 0.01$ between meaningful learning and intimacy with the teacher and $r = 0.28; \ p < 0.05$, between meaningful learning and intimacy with peers.

According to table 5.2.5, there is a significant negative correlation between meaningful learning and intimacy with the teacher and therefore the null hypothesis should be rejected at a 1% level of significance. It seems that the lower the meaningful learning the higher the intimacy with the teacher.

In Lenyai (1995:9), paragraph 3.4.4., an indication was made that most primary school lessons are presented as series of lifeless lessons taught by repetition and rote methods. One finds that teachers do not understand the concepts they deal with and would therefore prefer that children should always memorise facts and reproduce them in time of need. Primary school children, because of their level of development, might prefer those teachers to those who struggle to assist them to get meaning out of the subject matter.

Those children might not experience meaningful learning but still be intimate to those teachers because they might be teachers with good personalities who only lack skills and competencies to teach for meaningful learning.

There is also a significant positive correlation between meaningful learning and intimacy with peers (in the same table) and therefore the null hypothesis should be rejected at a 5% level of significance. It seems that the higher the meaningful learning the higher the intimacy with peers.
According to Gage and Berliner (1992:344-345); Woolfolk (1993:376) and Slavin (1988:395) in paragraph 3.4.5, a strategy called co-operative learning has become the most relevant and current which teachers should be familiar with and employ for meaningful lessons. This strategy encourages children to work together and co-operate rather than competing each other. They learn to respect each other’s point of view, trust each other and above all, value each other. The co-operation necessary for learning according to this strategy leads to higher achievement than jealousy and competition. This makes it possible to relate higher meaningful learning to higher intimacy with peers.

5.2.6 Testing Hypothesis 6

In order to test hypothesis 6, stated in paragraph 4.3.6., the following null hypothesis was tested:

There is no significant correlation between meaningful learning and acceptance (love). Consider Table 5.2.6

TABLE 5.2.6: Meaningful Learning and Acceptance

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>ACCM</th>
<th>ACCF</th>
<th>ACCP</th>
<th>ACCT</th>
<th>ACCSC</th>
<th>ACCSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaningful learning</td>
<td>0,10</td>
<td>0,17</td>
<td>0,05</td>
<td>-0,32**</td>
<td>-0,36*</td>
<td>0,07</td>
</tr>
</tbody>
</table>

**p < 0,01; *p < 0,01; For the rest p > 0,05

N = 60

ACCM = Acceptance towards the mother
ACCF = Acceptance towards the father
ACCP = Acceptance towards peers
ACCSC = Acceptance towards the school
According to Table 5.2.6., there seem to be significant negative correlations between meaningful learning and acceptance towards the teacher and school.

To test this null hypothesis, all 60 children were used.

The calculation of a Pearson Product-Moment correlation revealed a correlation of $r = -0.32; p<0.01$ for acceptance towards the teacher and $r = -0.36; p<0.05$ for acceptance towards the school.

According to Table 5.2.6., there is a significant negative correlation between meaningful learning and acceptance with the teacher and therefore the null hypothesis should be rejected at a 1% level of significance. It seems that the lower the meaningful learning, the higher the acceptance towards the teacher will be. This might sound unusual but perhaps relating it to paragraph 2.5., one might find that children who have been affected by such factors as those listed, have very low levels of motivation and interest in their schoolwork. They might be going to school because schooling has been set on their way of development but they do not have realistic goals. This makes them to relate and accept teachers not for how meaningful they would teach them but because of some other reasons.

With regard to paragraph 3.4.4., the curriculum that does not relate to the needs of the child and society may hamper meaningful learning. When things that are taught do not make sense to the child, a child chooses something to hang on. One might find that children accept teachers for reasons like being popular in terms of sporting activities, arranging and organising functions and trips and also befriending them.
That happens especially in rural schools where parents are very ignorant about teachers' roles and how they could intervene in schools in time of need.

With regard to Table 5.2.6., there is a significant negative correlation between meaningful learning and acceptance towards the school and therefore the null hypothesis should be rejected at a 5% level of significance. It seems that the lower the meaningful learning, the higher the acceptance towards the school will be. The reasons for this might be similar to those cited for the rejection of hypothesis 4 in relation to Table 5.2.4.

5.2.7 Testing Hypothesis 7

In order to test hypothesis 7, stated in paragraph 4.2.7., the following null hypothesis was tested:

There is no significant correlation between meaningful learning and orientation (affection). Consider Table 5.2.7.

**TABLE 5.2.7 Correlation Coefficient between Meaningful Learning and Orientation**

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>ORM</th>
<th>ORF</th>
<th>ORP</th>
<th>ORT</th>
<th>ORSC</th>
<th>ORSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaningful learning</td>
<td>0,22</td>
<td>0,26**</td>
<td>0,25**</td>
<td>-0,34*</td>
<td>-0,19</td>
<td>-0,02</td>
</tr>
</tbody>
</table>

** p < 0,05  * p < 0,01, the rest is p > 0,05

N = 60

ORM = Orientation towards the mother
ORF = Orientation towards the father
ORP = Orientation towards the peers
ORT = Orientation towards the teacher
ORSC = Orientation towards the school
ORSE = Orientation towards the self.

The above table reveal a significant negative correlation between meaningful learning and orientation towards the teacher, and significant positive correlations between meaningful learning and orientation towards the peers and the father.

In order to test this null hypothesis, all 60 children were used. The calculations of the Pearson Product-Moment correlation revealed a correlation of $r = 0.26; p < 0.05$ for orientation towards the father, a correlation of $r = 0.25; p < 0.05$ for orientation towards peers and a correlation of $r = -0.34; p < 0.01$ for orientation towards the teacher.

According to Table 5.2.7, there is a significant positive correlation between meaningful learning and orientation towards the father and therefore the null hypothesis should be rejected at a 5% level of significance. It seems that the higher the meaningful learning, the higher the orientation towards the father will be.

In paragraph 2.5.4., research has indicated that most Black South African men spend almost 80% of their life-time away from their families. De Witt and Booysen (1995:33) describes the absent father situation as the one that deprives the child of the love and attention that he deserves from both his parents. Children who grow up in this type of situations lack the orientating function of the father and are at a disadvantage as compared to those with caring fathers.

A father symbolises authority and security in the home and his function cannot be substituted for anything. This is an indication that a father who plays a meaningful role during the development years of his children might assist even in the way they conceive schooling and its challenges.
Table 5.2.7 also reveal a significant positive correlation between meaningful learning and orientation towards peers and the null hypothesis should therefore be rejected at a 5% level of significance. It seems that the higher the meaningful learning the higher the orientation towards peers.

Table 5.2.7 also reveal a significant negative correlation between meaningful learning and orientation towards the teacher and therefore the null hypothesis should be rejected at a 1% level of significance. It seems that the lower the meaningful learning the higher the orientation towards the teacher will be.

According to paragraph 2.5.2 and 2.5.3, children from deprived backgrounds are characterised by ignorance, neglect, disease, underfeeding, poverty and less interest in school. These make them find the school situation very strange. They have not been prepared for the challenges of schooling and therefore do not look at teachers as people who should assist them to attain their goals since they have not set any.

The situation in farm schools as explained in paragraph 2.5.3, might be another example. Children in farm schools according to the explanation in the said paragraph know that they will be in school for a short time, depending on whether the farm owner would like them to continue with schooling. Their orientation towards teachers might be confusing because they do not see schooling beyond farm life and meaningful learning is therefore not one of their goals.

5.2.8 Testing Hypothesis 8

In order to test hypothesis 8, stated in paragraph 4.4.8, the following null hypothesis was tested:
There is no significant difference between the achievement of boys and girls with regard to meaningful learning.

A t-value was calculated to determine whether the two means differ significantly. To ascertain whether the means of boys and girls differ, the means of all two groups were calculated and appear in Table 5.2.8.

TABLE 5.2.8: Achievement of boys and girls with regard to Meaningful Learning

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>NO</th>
<th>MEAN</th>
<th>STD DEV</th>
<th>t</th>
<th>DF</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaningful learning:</td>
<td>30</td>
<td>44,1</td>
<td>27,9</td>
<td>1,22</td>
<td>58</td>
<td>p&lt;0,05</td>
</tr>
<tr>
<td>Boys</td>
<td>30</td>
<td>53,0</td>
<td>28,9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 60

According to Table 5.2.8, a t-value of 1,22 was obtained with p<0,05. The null hypothesis is therefore rejected at a 5% level of significance. The results reveal that there is a significant difference between the means of boys and girls with regard to meaningful learning. The mean for girls is 8,9 higher than that of boys.

In this research study, this aspect was not given attention by the researcher; but to support this rejection, Woolfolk (1993:175-176) indicate that from infancy to pre-school, most studies recorded some differences between mental abilities of boys and girls; but during school years such differences cease to exist. Some studies that were further done, reflected such differences, though they are small. This question of sex differences in relation to learning has been controversial and might need further research.
5.2.9 Testing Hypothesis 9

In order to test hypothesis 9, stated in paragraph 4.4.9; the following null hypothesis was tested:

There is no significant relationship between meaningful learning and a combination of emotions.

To test this null hypothesis, all 60 children were used and a regression analysis was used to determine which variables (emotions) were the best determinants of meaningful learning in primary school children.

Meaningful learning was used as the dependent variable while emotions were used as the predictor variables.

In Table 5.2.9, $R^2$ indicates the proportion of the variance of meaningful learning that can be explained by the predictor variables. See table 5.2.9.

TABLE 5.2.9: A regression analysis

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>NO</th>
<th>$R^2$</th>
<th>F</th>
<th>DF</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expectation towards peers</td>
<td>60</td>
<td>0.280</td>
<td>22.57</td>
<td>1.58</td>
<td>p &lt; 0.01</td>
</tr>
<tr>
<td>Intimacy towards teachers</td>
<td>60</td>
<td>0.434</td>
<td>21.88</td>
<td>2.57</td>
<td>p &lt; 0.01</td>
</tr>
<tr>
<td>Rejection towards peers</td>
<td>60</td>
<td>0.461</td>
<td>15.98</td>
<td>3.56</td>
<td>p &lt; 0.01</td>
</tr>
<tr>
<td>Expectation towards school</td>
<td>60</td>
<td>0.476</td>
<td>12.53</td>
<td>4.55</td>
<td>p &lt; 0.01</td>
</tr>
<tr>
<td>Orientation towards peers</td>
<td>60</td>
<td>0.495</td>
<td>10.62</td>
<td>5.54</td>
<td>p &lt; 0.01</td>
</tr>
<tr>
<td>Intimacy towards peers</td>
<td>60</td>
<td>0.516</td>
<td>9.42</td>
<td>6.53</td>
<td>p &lt; 0.01</td>
</tr>
<tr>
<td>Acceptance towards school</td>
<td>60</td>
<td>0.521</td>
<td>8.09</td>
<td>7.52</td>
<td>p &lt; 0.01</td>
</tr>
</tbody>
</table>
* No other variable met the 0.5000 significance level for entry into the model.
* The above were the significant emotions in relation to meaningful learning.

The following were the elevations from the Regression Table:

In Table 5.2.9., $R^2$ indicates the proportion of the variance explained by the predictor variables which are the emotions. When expectation towards peers was entered, 28% of the variance of meaningful learning could be explained. Intimacy towards the teacher was also entered and 43% of the variance of meaningful learning could be explained. Rejection by peers indicated a 46% of the variance of meaningful learning. When expectation towards the school was entered, 47% of the variance of meaningful learning could be explained.

Orientation towards peers was also entered and a 49% of the variance of meaningful learning was explained. Intimacy with peers pointed to a 51% of the variance of meaningful learning. When acceptance towards the school was entered then 52% of the variance of meaningful learning could be explained. No other variable could explain a significant larger proportion of the variance of meaningful learning than that already explained by the previous variables. It could therefore be concluded that expectation towards peers, intimacy towards the teacher, rejection towards peers, expectation towards school, orientation towards peers, intimacy towards peers and acceptance towards the school are the emotions which jointly relate to learning.

5.3 CONCLUSION

In this chapter the following findings were noted:
5.3.1 **SIGNIFICANT POSITIVE CORRELATIONS WERE FOUND BETWEEN:**

- Meaningful learning and rejection towards peers
- Meaningful learning and expectation towards peers
- Meaningful learning and intimacy towards peers
- Meaningful learning and orientation towards the father
- Meaningful learning and orientation towards peers.

5.3.2 **SIGNIFICANT NEGATIVE CORRELATIONS WERE FOUND BETWEEN:**

- Meaningful learning and the size of the family
- Meaningful learning and expectation towards the school
- Meaningful learning and intimacy towards the teacher
- Meaningful learning and acceptance towards the teacher
- Meaningful learning and acceptance towards the school
- Meaningful learning and orientation towards the teacher.

5.3.3 **SIGNIFICANT DIFFERENCES WERE FOUND BETWEEN:**

- The means of boys and girls with regard to meaningful learning
- The means of urban, semi-urban and rural children with regard to achievement in meaningful learning.

Emotions which jointly explain the largest proportions of the variance in meaningful learning were:
- Expectation towards peers
- Intimacy towards teachers
- Rejection towards peers
- Expectation towards the school
- Orientation towards peers
- Intimacy towards peers
- Acceptance towards the school.
CHAPTER 6

FINDINGS, CONCLUSIONS, LIMITATIONS OF THE STUDY AND RECOMMENDATIONS

6.1 INTRODUCTION

This study is aimed at an analysis of the role and function of emotions in primary school children's meaningful learning. In order to do this, an analysis was made of the relationship between emotions and meaningful learning through a study of relevant literature and research findings (see chapters 2, 3, 4 and 5). The role and function of emotions in primary school children's meaningful learning was first analysed by outlining and clarifying key concepts, relating emotions to meaningful learning and identifying emotional factors affecting meaningful learning (see chapter 2). This analysis revealed some relationship areas and outcomes of learning as key determinants of meaningful learning (see chapter 5).

In this chapter, some findings, general conclusions and recommendations will be made.

6.2 FINDINGS OF THE RESEARCH

The theoretical study has revealed a number of very important factors relating to the role and function of emotions in primary school children's meaningful learning, so that parents, educators and key role players in education (administrators) can better understand the emotional aspect of a child and its role in his learning.
6.2.1 Literature Study Findings

- The theory indicates that the emotions anger and aggression, fear and anxiety, love, joy and affection are experienced by all primary school children during their becoming and development (see paragraph 2.3 and 2.6).

- All emotions, both positive and negative are important in the life of the child. They all contribute uniquely to the development, becoming and self-actualisation of the primary school child (see paragraph 2.6.1, 2.6.2 and 2.6.3).

- Learning is not only a cognitive process or activity. It also includes the social, emotional, spiritual and moral aspects (see paragraph 2.2).

- Emotional experience forms the basis for intellectual and gnostic learning and it should preferably be of a stable nature as this is a pre-requisite for meaningful learning (see paragraph 2.3.2 and 2.6).

- Every child is unique and can become what he ought to become through proper guidance and support (see paragraph 1.1).

- Meaningful learning should be the goal of all teaching (see paragraph 3.4).

- Meaningful learning is a solution to the problems relating to economic empowerment and growth (see paragraph 3.3).
6.2.2 Findings of the Empirical Investigation

The empirical investigation done in chapter four consisted of a questionnaire and meaningful learning exercises directed at Std 5 or grade seven children in three primary schools of Region 2; Northern Province, Department of Education, Arts, Culture and Sports. It was one urban, one semi-urban and one rural school.

A revelation that came out of the investigation indicated that emotions have a role and function in primary school children's meaningful learning.

After the CRIP was scored, the following emotional relationship areas were revealed as key determinants of meaningful learning. The other relationship areas did not meet the 0.5 significant level (see paragraph 5.2.1).

- Expectation towards peers
- Rejection towards peers
- Acceptance towards the teacher
- Acceptance towards the school
- Intimacy towards peers
- Intimacy towards the teacher
- Orientation towards peers
- Orientation towards the father
- Orientation towards the teacher.

The CRIP also revealed the following factors as key determinants of meaningful learning:
• The environment, i.e. urban, semi-urban and rural.
• Family size - the bigger the family the less emotional stability the child experiences (literature support)
• Gender - boys and girls experience meaningful learning differently.

The results of meaningful learning exercises indicated a problem with regard to the differences between the scores of urban, semi-urban and rural children. Urban children scored very high in the exercises and were also very enthusiastic about their school work. Semi-urban children showed less interest as compared to urban children but more enthusiasm, interest and understanding of the work as compared to rural children. Rural children seemed to be less prepared and motivated for their schoolwork. The above is evidenced by the following averages (means) of those three groups:

<table>
<thead>
<tr>
<th>Group</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>79.6</td>
</tr>
<tr>
<td>Semi-urban</td>
<td>49.8</td>
</tr>
<tr>
<td>Rural</td>
<td>16.3</td>
</tr>
</tbody>
</table>

The revelation was that urban, semi-urban and rural children do not experience meaningful learning in a similar manner.

6.3 RECOMMENDATIONS

6.3.1 The need for teaching the child as a totality

Since the child is seen as a totality, it is vital that the teaching of children in schools should also take other aspects of development, especially, the emotional aspect into
consideration. This research study has proved that a combination of emotions have an effect on meaningful learning. This compels teachers to place emphasis on teaching the child as a totality rather than only concentrating on the cognitive aspect.

6.3.2 Understanding the child’s relations

Without doubt, the child’s relations with people influences his meaningful learning. The child’s relationship with peers, teachers, parents and the school determines the extent to which he will meaningfully learn. If this relationships are not positive, especially the relationship with peers, a senior primary school child’s learning gets affected. Teachers and parents should make it a point that they struggle to create an atmosphere in school and home that will nurture those relationships. Children at a senior primary school age thrive on sound and positive relationships with peers because that is necessary for their self conceptualization, image and feelings of adequacy.

6.3.3 Feeling at home in school

The primary focus of schools is the pupils and it should be their well-being in the first place that should attract attention. Pupils should in the first place be orientated towards the school. They should be made to realise a connection between home and school and where possible, the school should do more than the home because of the professional nature of its functions. Children should really feel free and accepted at school, experience pleasure in working with their teachers, peers and all other people in doing their work. The quality of experience of the pupil at school not only affects his meaningful learning, but may lastingly influence the formation of his basic relations. Teachers and parents should work together to make schools a save haven for children, especially primary schools. Schools should also be properly fenced and be made save for young children.
6.3.4  **Meaningful learning requires a stable emotional life**

Since meaningful learning and emotions are interconnected, it is vital that more emphasis be placed on the child’s emotional development. Considering that the findings are consistent with a combination of positive and negative emotions and high and low achievement (meaningful learning), nurturing the emotional aspect of a child becomes imperative for both teachers and parents. This can be done if adults understand that children are not objects, but people with feelings, desires and wishes; they need to be understood.

6.3.5  **The need for remedial and counselling systems in schools**

According to paragraph 3.4.1, when children experience ridicules, scorns, threats and humiliating experiences, that evokes negative feelings in them. Such feelings can impede meaningful learning. The explanations given in paragraph 2.5.4 and 2.5.5, indicate that a large number of Black children are likely to grow up in environments which lack adequate care and support. These are children that are affected by violence, poverty, abuse and neglect and might fail to learn meaningfully. These experiences and conditions need remedial and counselling services that could provide and assist teachers in particular to understand such children and those children to understand their problems.

The results of the meaningful learning exercises were very low for rural children. One wonders if these children will ever catch up with the skills or will out and become a statistic of semi-illiteracy. **It is therefore recommended that remedial and counselling systems be put in place in rural schools so that the above-mentioned children could be supported through their emotional problems.**
6.3.6 The need for supervision

Education got destabilised prior to the 1994 general elections and since then teachers, being highly unionised came into direct opposition with class visits and supervision by both principals and circuit managers. Teacher’s unions argued that class visits were more of a witch-hunt than of help to them and their development.

The greatest challenge is how then will teachers be controlled and supervised for improvement of instruction and their development? There should be supervision programmes which clearly define the role and function of each participant in the classroom so that no one suspects another person of witchhunting and the relationship is that of mutuality. The teacher’s roles in the classroom as laid down in paragraph 3.4.3, and ideal personality traits can be enhanced through such aid.

The results of the meaningful learning exercises in the rural school involved in the research study indicates a need for support, mentoring and supervision of the teachers concerned because all those children performed terribly low in comparison with their semi-urban and urban counterparts. It would seem that the problem might be with teachers rather than with those children. The department of education should put in place proper mechanisms to monitor, supervise and evaluate teachers’ instructional expertise to ensure quality delivery in classrooms.

6.3.7 The need for staff development programmes to improve teaching and meaningful learning

In paragraph 3.4.3, an indication is made of the personality traits and conduct which ideal teachers should portray. Above all, Cruickshank (1980:20), adds that teachers should not only be concerned with the possession and transmission of skills but rather
with the sharing of knowledge, skills, values and attitudes. For teachers to be conscious of this values, there need to be support and staff development programmes running for teachers. Teachers should be encouraged in the first place, to register for courses that would lead to their improvement of performance in classrooms. The department of education should also organise in-service programmes through their various sections to assist in teacher development to improve the quality of teaching and learning. The research findings in chapter five have pointed to the poor experiencing of meaningful learning in rural children. This might be related to the literature findings in chapter 2 and 3 about the status of rural schools and the effect of certain backgrounds on the emotional lives of children.

6.3.8 The need for equal allocation and distribution of resources

This study, in paragraph 2.5.2 above, revealed that rural schools are not well provided with both physical and human resources. Most rural schools like it is indicated in the chapter are found far from the education authorities and with communities which are very alienated from the schools that serve them. They become afraid to ask about issues that affect the learning of their children because they are seen to be illiterate.

In paragraph 3.4.3.3, an explanation is made of the way in which lack of resources impede on meaningful learning. According to Cole and Flanagan (1995:14), lack of resources has hampered the development of quality primary education and hence meaningful learning. In paragraph 3.4.2, characteristics are given of a well functioning primary school that can hope to attain quality primary education and meaningful learning. Overcrowding is also cited as one of the problems related to rural school education as those schools have a history of being built by their communities that are poor to raise money to built schools that can fully cater for their children and their needs. Children in this type of situations often slip through the education system
without having attained the skills relevant for those levels of development because it might become difficult for teachers to offer them individual support. A recommendation is therefore made that the government departments, should combine efforts and built and revive rural primary schools. Anstey in *Sunday Times* (10 August 1997) confirms this when he reported shocking conditions at Chokoe primary school in the Northern Province.

6.3.9 The need for general educational and social upliftment of rural communities

In paragraph 2.5.2., an indication is made that if illiteracy and cultural deprivation are to be fought, access to schooling of good quality in rural areas should be a national priority.

Rural communities in the Northern Province in particular, are characterised by illiteracy, poverty, ignorance, disease and lack of resources. These problems affect schooling and meaningful learning in a negative way. An indication is made in the same paragraph that efforts should also be taken to rid rural school communities of their Cinderella status. For rural communities to rise above these problems, they should be assisted through literacy and health programmes. In paragraph 2.5.3 and 2.5.4, indications were made to the consequences of discrimination and effects of migratory labour as other causative factors to children’s emotional instability as a hindering factor to meaningful learning.

6.3.10 The need to revive primary education as a whole

In paragraph 3.4.2, Lenyai (1995:3) argue that the history of primary schooling in South Africa is one of neglect. He explains that lack of access, inequalities of
opportunity and the dropout problems remain characteristic of primary schooling in South Africa.

The above statement points to a need for the reviving of primary schooling which has become imperative due to changes relating to curriculum 2005. If primary school teachers were forgotten, not upgraded to deal with the old curricula, how then will they be able to cope with teaching children meaningfully in curriculum 2005? This points to a need for vigorous revival with regard to material development, structuring and preparation of lessons, staff development in general and education management development programmes because for schools to function well, managers should have their visions and missions in place.

6.3.11 The need for the establishment of centres for emotional support for both teachers and pupils

The problem of the role and function of emotions in primary school children's meaningful learning has been examined and a conclusion was made that such a relationship exist and is strong. This gives an indication that traumatised, abused and neglected children should be helped in centres that are operated and serviced by experts in emotional development and support for meaningful learning to take place in schools.

It might also be necessary to provide teachers with emotional support in such centres because teachers are also part of society and are affected by problems affecting society as a whole. The recent shootings in different schools around the country point to such a need.

Problems like divorce, broken families, abuse, neglect and violence affect teachers and when they are that devastated it becomes difficult for them to teach properly and teach
for meaningful learning. They lose the necessary courage and motivation and values of their profession.

6.3.12 The need for parent involvement in schools

In order for education to serve the purpose it was originally made to serve the involvement of parents in the education of their children remain imperative. The parents of today should really play an active positive role in schools because education has been so politicised and it is only parents who can help the government to restore a learning culture in schools for the lives of their children.

6.3.13 Continuation and support of the primary school nutrition programme

Although the above-mentioned programme is planned and mentored by the Department of Health and Welfare, the researcher would like to point to its importance for primary school children, especially those of low socio-economic status. Especially in Black rural and semi-urban communities, the nutrition programme serves as a relief because there are children who come to schools with no provision for food and therefore spend the whole day starving. Hungry children might fail to learn in a meaningful way. Poverty has an indirect link with emotional problems because it is difficult to bring up children when one does not meet their basic needs. The Departments of Health and Education should combine efforts to put in place solid plans of provisioning of the nutrition programmes, so that it is not left open for abuse by officials. If officials abuse this service, it runs a risk of being closed completely and it will be to the disadvantage of rural children and children from low socio-economic background.
6.3.14 The need for restructuring of farm schools and their activities

Due to current changes in the education system of South Africa, there seem to be a need for planning for and reviving farm school education. In paragraph 2.5.3, it has been indicated by a farm labourer that his children on that farm can only attend school up to standard two (2) or age 14, whichever come first. They can be how smart, he indicates, they have to drop out because there is no higher primary school and they must work on the farm.

This remains a challenge for South Africa. There needs to be mechanisms put in place and steps taken to revive farm school education, elect accountable school governing bodies in those schools and involve their management in capacity building training programmes.

Farm owners should also be educated and be enlightened about the rights of children to decent and quality education for life.

6.4 LIMITATIONS OF THE STUDY

This study has the following limitations:

- The understanding of the translated CRIP into Northern Sotho was problematic due to meanings of English and Northern Sotho words that may affect the original meanings of the sentences.

- Due to compilation of the sample, the results of this study cannot be generalised.
6.5 RECOMMENDATIONS FOR FURTHER RESEARCH

All research studies are intended to suggest further research because no research is complete in itself. Further research suggested by this study includes the following:

1. Supervision in schools
2. Meaningful learning and curriculum 2005
3. Curriculum development
4. Teacher effectiveness
5. The establishment of centres for emotional development
6. Farm schools in a new South Africa

6.6 CONCLUSION

This research has revealed a number of problems relating to the role and function of emotions on meaningful learning and it can be asserted with confidence that if its recommendations could be implemented, there could be improvement of meaningful learning in primary schools. It is further hoped that the recommendations made in this study will open up this neglected field around the study of emotions, so as to allow parents, educators and administrators in education to understand the role of emotions in meaningful learning.
BIBLIOGRAPHY


Baxen, J. 1995. The Revitalisation of the Existing Primary Education Infrastructure to Restore Quality. Speech delivered at the National Primary Education Conference, Magoebaskloof: Gestetner.


Kember, D. 1994. **Orientations to Teaching and their Effect on the Quality of Student Learning.** Hong Kong: Ohio State University.


Thabiso, you used the word ‘curriculum’. What is this?

The curriculum is everything that influences a learner, from the teachers and the work programmes, right down to the physical buildings.

The curriculum – a definition

A curriculum is everything planned by educators which will help develop the learner. This can be an extra-mural sporting activity, a debate, or even a visit to the library. When the curriculum is being planned, the physical resources, work programmes, assessment criteria and extra-mural programmes should all be taken into account.

A good curriculum produces thinking and caring individuals. All knowledge is integrated and teaching and learning are not sharply divided. This means that a person’s intelligence, attitudes, knowledge and values are easily developed.

I thought the curriculum was just the syllabus. Some say it always stays the same!

A curriculum is influenced by the needs of a community. It is therefore relevant and flexible.

I don't like this. I think teachers should be told exactly what they have to do. Where do these strange ideas come from?

A flexible and relevant curriculum

The curriculum is to be planned by parents, teachers, education authorities and learners – in fact, as many people as possible are encouraged to participate. This means that it will vary from place to place, and will respond to very specific community needs and wants.

Well, many countries have changed to OBE and are now gaining from their experience. We are building on a system that has already been researched.
### OLD
- passive learners
- exam-driven
- rote-learning
- syllabus is content-based and broken down into subjects
- textbook/worksheet-bound and teacher centred
- sees syllabus as rigid and non-negotiable
- teachers responsible for learning; motivation dependent on the personality of teacher
- emphasis on what the teacher hopes to achieve
- content placed into rigid time-frames
- curriculum development process not open to public comment

### NEW
- active learners
- learners are assessed on an on-going basis
- critical thinking, reasoning, reflection and action
- an integration of knowledge; learning relevant and connected to real-life situations
- learner-centred; teacher is facilitator; teacher constantly uses groupwork and teamwork to consolidate the new approach
- learning programmes seen as guides that allow teachers to be innovative and creative in designing programmes
- learners take responsibility for their learning; pupils motivated by constant feedback and affirmation of their worth
- emphasis on outcomes - what the learner becomes and understands
- flexible time-frames allow learners to work at their own pace
- comment and input from the wider community is encouraged
What is an outcome? Many new words are used to describe the NQF. It may seem confusing and different, but once you are familiar with these ideas and words it is easy to understand.

Yes, but it also means other things. Like having ideas, understanding things, knowing how to make decisions and how to solve problems. And having good personal skills, like being able to communicate well, and many more.

Yes, but they are useful things. If you don't understand what you are learning you are not really learning. Remember how we memorised things at school and tried to learn everything off-by-heart?

Ja, but it all sounds like too much hard work to me!
No, it's very useful. If you learn how to solve problems, make decisions, plan, organise and collect information, you will be better equipped to find a job. Think about it! It will help you start a business of your own, or move more easily from one type of work to another, and from one area of study to another. These are called essential outcomes.

But I reckon I can do all these things already. I can make decisions, I can solve problems. I'm communicating with you now - what more must I do?

You're right, some of us can do all these things. But, the NQF is trying to make essential outcomes an important part of all areas of learning. Then people will be better prepared for their work and their personal lives.

Okay, I can see I'll have lots of useful skills and information to use in many different situations.

Essential outcomes are not linked to a particular subject or course. They are common to all subjects or courses. They form a very important part of the entire education and training system.

Give me an example to help me understand this!

Hmm ... What things do you think both a carpenter and dressmaker need to know how to do?

Oh! You mean they both have to get and then apply mathematical info so that they can produce something. Like being able to measure it correctly?
Great, you're getting there! Think about it, they also have to know how to choose and order materials. If they can't measure the piece of wood or material accurately, they'll make a mess of the job.

I think I understand what you're saying: the essential outcomes are common to all areas of work. Come to think of it, engineers need to measure things accurately, also plumbers and electricians!

Here are some of the essential outcomes which will become an important part of education and training in South Africa:

- use different ways of learning
- solve problems and make decisions using critical and creative thinking
- work with others as part of a team, group, organisation or community
- collect, organise, examine and understand information
- communicate using mathematical and language skills
- make wise and safe choices for healthy living
- use science and technology and show responsibility towards the environment and health.

Ok, I get the essential outcomes. Now tell me about specific outcomes.
Specific outcomes are the exact skills and information required in a particular context. Remember the carpenter and dressmaker we spoke about earlier? Well, a carpenter has to know how to use an electric saw. This is a skill only useful in a situation where there is wood that has to be cut. That skill would not be useful to a dressmaker. Sawing and sewing skills are specific outcomes.

Check me if I'm right: Essential outcomes are not linked to a particular subject or course. They are common to all subjects or courses.

Specific outcomes are the exact skills and information required in a particular situation.

See, it wasn't too difficult after all. The last important thing to remember is that the NQF makes both the essential and specific outcomes equally important.
Adopting a Problem-Solving Approach in the Classroom

Why teach PROBLEM-SOLVING?

It enables us to cope with change - to adapt and to predict

It gives children the opportunity to learn by doing

It teaches children to use knowledge for relevant and practical ends

Problem-Solving nurtures a child’s natural curiosity

It develops confidence in making decisions and working together

It makes learning fun

It develops a questioning attitude and thinking skills that are both critical and creative.

Problem-Solving activities can unify and enrich every aspect of the Primary Curriculum
<table>
<thead>
<tr>
<th>Column 1</th>
<th>Columns 2 &amp; 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am a</td>
<td></td>
</tr>
<tr>
<td>1: boy</td>
<td></td>
</tr>
<tr>
<td>2: girl</td>
<td></td>
</tr>
<tr>
<td>I am</td>
<td>09 10 11 12</td>
</tr>
<tr>
<td>years old</td>
<td></td>
</tr>
</tbody>
</table>

**NAME:**

<table>
<thead>
<tr>
<th>When I am with:</th>
<th>my mother</th>
<th>my father</th>
<th>other children</th>
<th>my teacher</th>
<th>my schoolwork</th>
<th>my self</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel most like hugging and kissing . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2. I feel most that I want to know what's happening . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3. I feel most like saying something nasty . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4. I worry most about what other people will think of me . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5. I feel most shaky . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6. I feel most shy . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7. I feel most sorry for myself . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>8. I feel happiest . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>9. I feel most like doing things without thinking of what might happen afterwards . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>10. I feel most afraid of what might happen . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>11. I feel most like saying &quot;Shut up!&quot; . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>12. I know I belong . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Question</td>
<td>my MOTHER 1</td>
<td>my FATHER 2</td>
<td>other CHILDREN</td>
<td>my TEACHER</td>
<td>my SCHOOLWORK</td>
<td>my SELF</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
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<td>-------------</td>
<td>----------------</td>
<td>------------</td>
<td>---------------</td>
<td>--------</td>
</tr>
<tr>
<td>13. I feel I would most like to hurt someone</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>14. I feel most like starting arguments</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>15. I feel most cheerful</td>
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<td>16. I clench my fists most</td>
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<td>17. I most often feel that I can't believe what's happening</td>
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<td>18. I feel trapped and can't escape</td>
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<td>19. I feel most like sneering</td>
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<td>21. I feel most amazed</td>
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<td>26. I think that I may get hurt</td>
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<td>My Father 2</td>
<td>Other Children -3</td>
<td>My Teacher 4</td>
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<td>2. Mosetsana</td>
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**LEINA**

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1. Ke ikwa o kare nka, kissa goba ka gokara motho
2. Ke ikwa ke lokologile go nyaka go tseba gore go diregang
3. Ke ikwa ke lokologile go bolela matšhila
4. Ke tshwenyega kudu gore na batho ba bangwe ba gopoleng ka nna
5. Ke kwa ke tšhoga ke bile ke thothomela
6. Ke ikwa ke na le dihlong kudu
7. Ke kwa ke ikwela bohlolo kudu
8. Ke ikwa ke thabile kudu kudu
9. Ke ikwa ke duma go dira dilo tšeo ke sa tsebego gore di tša ntišetša eng ka morago
10. Ke kwa ke tšhoga gore go tša diregang
11. Ke kwa o ka re nka re "o a re foka"
12. Ke ikwa ke bolokegile
13. Ke ikwa o kare nka kgopiša motho yo mongwe
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<th>Morutiši wa ka</th>
<th>Mošomo wa ka wsekololo</th>
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<td>Morutiši wa ka 4</td>
<td>Mošomo wa ka wa sekolo 5</td>
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What to do

Look at these pairs of pictures.
Think of one word to put in each of these sentences.

1. A + J  Both have got four __________.
2. E + F  Both can __________ you if you are careless.
3. B + D  Both can __________ on water.
4. C + H  Both can be made from __________.
5. A + I  Both might be made from __________.
6. H + F  Both might be used by a __________.
7. I + G  Both might be used by a __________.
8. D + I  Both could help you to cross a __________.
9. G + A  Both could help you to get over a __________.
10. C + J Both can get wet and __________.
What to do

Here are some instructions that tell you how to clean a pair of shoes. Put them in the right order.

A. An old brush is best for this. Use the polish brush to give both shoes a thin coat of polish. Do not use too much polish.

B. Put away the polish, brushes and rag. Throw away the dirty newspaper.

C. Place the shoes on the newspaper. If the shoes have laces, then take these out. If the shoes are very muddy, clean the mud off.

D. Get the shoes, some polish, brushes and a rag. Spread some old newspaper on the table before you start.

E. Let this polish dry. Then polish the shoes with the rag. Replace the laces.
Complete the following wheels.

(a) \[\begin{array}{c}
\ldots + 11 = \\
16 \\
16 \times \ldots = 
\end{array} \quad \begin{array}{c}
- 3 = \\
\ldots = 9 \\
\ldots = 22
\end{array}\]

(b) \[\begin{array}{c}
17 - \ldots = \\
12 \\
2 \times \ldots = 
\end{array} \quad \begin{array}{c}
+ \ldots = 23 \\
\ldots = 3 \\
\ldots = 4
\end{array}\]

(c) \[\begin{array}{c}
2 - \ldots = \\
15 \\
15 \times \ldots = 
\end{array} \quad \begin{array}{c}
\ldots = 40 \\
\ldots = 4 \\
16 \div \ldots = 
\end{array}\]

(d) \[\begin{array}{c}
\ldots = 19 \\
1 \\
\ldots = 1
\end{array} \quad \begin{array}{c}
15 + \ldots = \\
4 \\
2 \times \ldots = 
\end{array} \quad \begin{array}{c}
\ldots = 9
\end{array}\]

(e) \[\begin{array}{c}
\ldots \times 1 = \\
1 \\
12 \div \ldots = 
\end{array} \quad \begin{array}{c}
\ldots = 9 \\
2 \times \ldots = \\
30 - \ldots = 
\end{array}\]

(f) \[\begin{array}{c}
\ldots = 19 \\
1 \\
12 \div \ldots = 
\end{array} \quad \begin{array}{c}
\ldots = 1 \\
2 \times \ldots = \\
30 - \ldots = 
\end{array}\]
PROBLEM SOLVING EXCERCISES

1. Henry collected R17.83 for the school while Phillemon collected R22.12. By how much did Phillemon's amount exceed Henry's amount?

2. Piet has R11. John has the same amount as Piet while Harry has twice as much as Piet. How much do they still need if they together wish to buy a bicycle for R48.95?

3. Mr. Johansen takes his wife and two children to a concert. If the admission fee for adults is R1.50 and that for children is 75c, how much does he pay altogether and how much change does he get from R10?

4. Nicholas and Kevin together have R12. If Nicholas has R6.84; how much does Kevin have?
APPENDIX K : BIOGRAPHICAL QUESTIONNAIRE

NAME : 
AGE : 
SEX : 
NAME OF SCHOOL : 
GRADE : 

HOME BACKGROUND

Suburb where I live : 

I stay with the following people in my home:

1. 
2. 
3. 
4. 
5. 
6. 
7. 

Occupations of my parents

1. Mother 
2. Father 

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