## CHAPTER 2

# HEARING IMPAIRMENT AS A BARRIER TO LEARNING AND PARTICIPATION: A THEORETICAL BACKGROUND TO EFFECTIVE LEARNING ENVIRONMENTS

"Making special schools ordinary: Is this inspirational or confused thinking?" (Westwood, 2001: 7).

## 2.1 INTRODUCTION

To avoid regarding BLP, HI and the ASC (in Chapter 3) as isolated phenomena and thereby oversimplifying the concepts, it is imperative to bear in mind the contexts in which the concepts operate. BLP, HI and the ASC of learners are formed and influenced by the context in which the learners find themselves and, therefore, by all the systems that they are part of: the education, school, class, family, social, personal and value systems and, less directly, the political and economic systems. In an attempt to validly reflect the many interdependent and interrelated, complex, multi-systemical and multi-factorial intricacies that form and influence HI and ASC, a bio-ecological perspective will be maintained on HI and the ASC. The implications of adopting a bio-ecological approach to education in South Africa are briefly mentioned in 2.2 to justify selecting the bio-ecological theory for a broad perspective on the study.

Complementing the recognition of strengths in diversity, and the collaborative, positive and preventative nature of inclusive education and participation, the tenets of an *asset-based approach* will also be recognised throughout the study. The asset-based approach is briefly contemplated in 2.3.

Once the broad perspectives of the study have been posed, the relevant theories will be dealt with. Theories are logical, coherent suppositions that either explain phenomena or are systematic descriptions of the relations among facts relating to the phenomena (Plug *et al.*, 1989: 362). Although similar phenomena can be located across the world, the explanations for and understandings of their existence might be different in different contexts. The different contexts might also result in the phenomena themselves having different appearances. Therefore, care must be taken before applying theoretical frameworks developed internationally to seemingly similar phenomena locally.

Chapter 2 further addresses internationally accepted, albeit disputed, theoretical frameworks for the phenomenon *special educational needs*, followed by an understanding of *BLP*, and an explanation of the various South African systems in understanding *BLP*, especially in the contexts in which the participants of the research find themselves. (Chapter 5 will give a description of the various contexts involved in the research, as a first step in the analysis of the ASC of learners with HI.) HI, as an example of a barrier to learning and participation, is then looked at, once again also with reference to the South African context. Thereafter, the main viewpoints on an effective learning environment to deal with BLP are discussed and contrasted, namely *exclusion* and *segregation*, *mainstreaming* and *integration*, and *inclusive education and participation*, and are related to the public school contexts in South Africa. Finally, the South African solution to BLP and effective learning environments is explained in the form of South African legislation and relevant policy documents.

## 2.2 BIO-ECOLOGICAL PERSPECTIVE

The ecosystemic perspective on human development preceded the bio-ecological perspective on human development. The ecosystemic theory is a synthesis of the *ecological* (Bronfenbrenner, 1979) and *systems* theories; hence its name. Essentially, the *ecological* theory concerns the interdependence and relationships of organisms [sic] (here, persons such as learners, educators and parents) and their physical environment (such as the family home and school building). The *systems* theory considers the important role that context plays in understanding phenomena. According to systems theory, different levels and groupings of the social context are viewed as systems, such as the educational, political, economic, individual and social system. A system consists of different parts or subsystems, for example a school as a system has parts or subsystems such as the learners, the educators, the curriculum and the classroom. The functioning of the whole system is dependent on the interaction among all the subsystems. To understand the whole, the relationships among the subsystems need to be examined (Donald, Lazarus & Lolwana, 1997: 36; Hoskins, 1995: 151). To understand the social context, one needs to look at the dynamic, reciprocal relationships among the various systems, and their various subsystems.

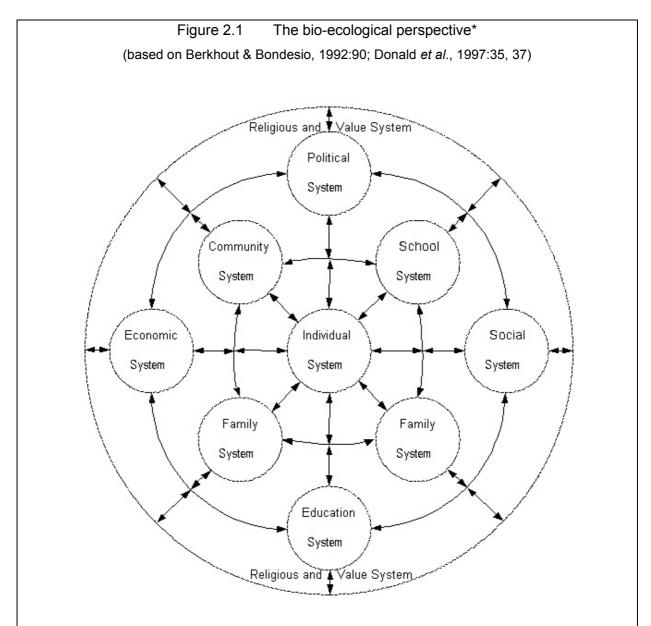
Bronfenbrenner (1979: 3-4, 7-8, 22, 25, 26; 1986: 723-724; Swart & Pettipher, 2005: 9-15) categorised the different levels of systems, particularly those involved in the process of child development. The *microsystem* refers to systems in which learners are closely involved, for example the family, school and peer groups. Individuals, significant others and events closest in a learner's life, continuous face-to-face contact and reciprocal influences are found in the microsystem. It would be the microsystem that is primarily responsible for forming and

influencing the ASC of learners. The *mesosystem* refers to the interrelations among the systems in which learners are involved, and is, as such, a system of microsystems. The *exosystem* refers to other systems in which a learner is not directly involved, but which may influence or be influenced by microsystems, for example local education bodies and employment conditions of the parents. The *macrosystem* refers to beliefs and ideologies that influence and may be influenced by all the other systems (see also Persson, 1998: 111), for example human rights, democracy and inclusive education policy. The *chronosystem* refers to normative transitions in life such as school entry and adolescence, and non-normative transitions such as severe illness and accidents. Transitions influence the learner's development over time, and may influence ASC and the experience of impairment.

In order to understand the functioning of the systems in the bio-ecological perspective, it is necessary to take note that each system plays a role in sustaining the other systems. Furthermore, each system can consist of different parts or subsystems which interact with the whole, but the whole is more than the sum of its subsystems and systems. All the systems are dynamically interdependent on, related to and in interaction with one another. This means that changes in one system will influence other systems, which in turn will influence yet other systems. Change, therefore, is a continuous, reciprocal and cyclical process. Tension occurs when change in one system or subsystem cannot be accommodated in the other systems or subsystems. When major tension among systems or subsystems occurs, the survival of the whole is threatened. (Bronfenbrenner, 1979: 41; Donald *et al.*, 1997: 34-39; Hoskins, 1995: 39; Swart & Pettipher, 2005: 9-15).

The bio-ecological perspective, therefore, shows how individuals and groups at different levels of the social context are connected in dynamic, interdependent and interacting relationships with systems and subsystems 'above', 'below' or 'next' to them (Donald *et al.*, 1997: 34, 39; Swart & Pettipher, 2005: 9-15). In this study, the ASC will be regarded as a 'currency' which describes the dynamic, interdependent and interacting relations among the systems, especially the individual system and the education system. The various systems operant in South Africa which bear relevance to BLP, HI, ASC and inclusive education and participation, will be discussed in more detail in 2.4.3.

Figure 2.1 is an attempt to represent the complexity of the systems in the bio-ecological perspective in a diagram.



\* Dotted lines, and not solid lines represent the systems, to indicate that systems cannot be demarcated unambiguously. The 9 systems have been chosen specifically to present education in context. All the various systems cannot be represented in one figure. The placement of the systems in the diagram has been done arbitrarily, and can change, according to the perspective held by the viewer. There are two family systems to indicate that more than one of some systems, such as the family, school and community systems, can exist. These systems, with their different subsystems, can also influence one another.

The bio-ecological perspective holds several implications for education in South Africa. Firstly, he bio -ecological perspective connects individuals to all the systems and subsystems in which they are involved. Changes in the individual system can be very powerful in bringing about change in the relationship and influence of other systems on other persons and systems. An educator, convinced of the virtues of a certain education policy, can influence the learners in the class, and the school as a system.

Secondly, although the placement of the systems in Figure 2.1 could be a matter for discussion, it is clear that changes in the education system can also be very powerful in bringing about change in especially the individual, family, school, community, social and economic systems. By focusing on the education system, it is believed that change can be brought about more effectively in the post 1994 South Africa.

Thirdly, all the systems together form a whole, and the functioning of the whole is dependent on the interaction among all the systems and subsystems. Therefore, changes in the education system can address a wide range of needs in its subsystems and other systems. Instead of following a 'fix it' approach – fix the parts, fix the educators, fix the schools – the education system itself should be 'fixed' (Daniels & Garner, 1999: 1; Dyson, 2003; Kochhar, West & Taymans, 2000: 4; Smith, 1998a: 163) in order to optimally influence all the other systems connected to it. Therefore, the combined, co-ordinated effort of all the component parts of the education system, such as curriculum, instruction, assessment, professional development, program evaluation, leadership, management, governance, learning support, community and accountability (Smith, 1998a: 163), will ensure better outcomes for the education system overall that can in turn benefit virtually all the other systems.

Lastly, educationists must be aware of possible tension, when changes in the education system and schools cannot be accommodated in the other systems or subsystems (such as the classroom, family, community and social systems), for then the functioning of the other systems is also affected. The Education White Paper 6 (EWP 6) which relates to inclusive education was the last education policy document to be formulated by the Department of Education. The changes to be brought about by implementation of the EWP 6 influence the implementation of other policy documents, such as the admission policy, curriculum (especially curriculum adaptation), assessment, even health and welfare, retrospectively. If the changes suggested in the EWP 6 cannot be accommodated, tension will ensue. Chapter 6 reports on tension in the education system related to the implementation of inclusive education policy.

# 2.3 ASSET-BASED APPROACH

The bio-ecological perspective emphasises recognition of a broad context when trying to understand phenomena. It remains, however, possible to consider the systems and subsystems in the broader context primarily in terms of their limitations and needs, and of what is troublesome or problematic. This 'needs-based' approach stands in stark contrast to an asset-based approach to situations which focuses on capacities, skills and assets within

the systems and subsystems. The asset-based approach does not ignore the deficiencies in systems or subsystems, but addresses the deficiencies by focusing on strengthening the assets in the systems or subsystems. With the strong focus on assets, the asset-based approach empowers the members of the system to take charge of their system and not to wait for outside 'experts' or professionals to rectify the deficiencies (Eloff & Ebersöhn, 2001: 148-150; Kretzmann & McKnight, 1993).

In a country such as South Africa, where resources are scarce, the asset-based approach holds much promise. Deficiencies are often perceived to require outside resources. With the asset-based approach, the assets inherent in the system, but often unrecognised, are mobilised to achieve goals. Assets can comprise, among other things, people, relationships, knowledge, expertise, facilities, resources, services, financial means, time and/or collaboration (Bouwer, 2005: 51-52). According to Eloff and Ebersöhn (2001:150), the needs-based approach is focused on surviving the *status quo*, and therefore seldom associated with real change or development. They were of the opinion that the needs-based approach is inefficient in addressing the challenges of modern day society and particularly inadequate in the South African context.

According to the asset-based approach, ways to successfully implement inclusive education and participation and address HI in schools can be sought in the already existing assets and capacities of the learners, the schools, the educators, the families and the communities. Learners, educators, parents and members of the communities can be made aware of their assets and possibilities to contribute to real change in the contexts of the lives of the learners. Assets, however, can only contribute to change if they can be accessed (Bouwer, 2005: 52-54). Assets might be available to learners with HI, but if the learners cannot access the assets (because of fear for the educator, shyness, lack of communication skills, time constraints in school, financial problems, lack of hearing aids, uninformed parents *et cetera*), the assets are rendered worthless. The full consequences of the asset-based approach include not only identifying assets, but facilitating access to assets.

# 2.4 UNDERSTANDING SPECIAL EDUCATIONAL NEEDS AND BARRIERS TO LEARNING AND PARTICIPATION

## 2.4.1 Special educational needs

In many countries, *special needs* and *exceptionality* are used in relation to each other. *Special needs* are seen as exceptions to 'ordinary' educational needs requiring specialised

educational intervention if successful education is to take place (Donald *et al.*, 1997: 68; Lipsky & Gartner, 1999:21). *Exceptionality* assumes that a problem inside the learner, for example physical, sensory, cognitive or other deficit, causes special need (Donald *et al.*, 1997: 68-69). In developed countries learners with special needs make up approximately 10% of the school-going population (Donald *et al.*, 1997: 68).

The term *special educational needs* seems to have different definitions in different settings. Persson (1998: 109) questioned to what needs special education should respond. For example, should special education respond to the needs of the learner, the needs of the system, or both? Ainscow (1998) gave a short, but meaningful answer to this question in saying that the term *special educational needs* referred to learners whose progress was a matter of concern.

Two important matters come to the fore. First, Ainscow (1998) did not define *special* educational needs in terms of the learners alone, but in terms of their expected progress. Hence, *special* educational needs are not identified in the learners, for example as hyperactivity or disability, but rather in their lack or slowness of progress. Second, it seems that when there is not a need for concern about the learner's progress anymore, the learner does not have *special* educational need anymore. *Special* educational needs need not be a lifelong label. This is in agreement with the view of Donald et al. (1997: 15) who claimed that learners with special needs might require special help and support to *overcome* contextual, social and individual disadvantages and difficulties which they face.

Not everyone in South Africa is in favour of the term *learners with special educational needs*. According to the Quality Education for All Report (Department of Education, 1997: 11), the term implies that there are two distinct categories of learners: those with ordinary needs and those with special needs. The latter category, whose needs historically have not been met adequately, resulted in a separate, sometimes inadequate system of education, exclusion from the regular (mainstream) system, and/or learning breakdown. The adjective *special* also fails to denote exactly what is regarded as special. "Thus the notion of learners with 'special educational needs' has become a catch-all phrase to categorise all those learners who somehow do not 'fit into' the mainstream education system ... " (Department of Education, 1997:11). Special educational needs will, therefore, not be used in the study, except when the term is used in a quote, used in respect of legislation prior to 1997, or explained otherwise.

# 2.4.2 Barriers to learning and participation (BLP)

A more descriptive term had to be found to replace and improve on the term special educational needs. Because the Quality Education for All Report (Department of Education, 1997) acknowledged that a range of needs exist among learners and within the education system, barriers to learning and development was adopted. The term refers to " ... factors which lead to the inability of the system to accommodate diversity, which lead to learning breakdown or which prevent learners from accessing educational provision." (Department of Education, 1997: 11-12). The term does not lead to dividing the education system into a special and a regular school system like the term special educational needs has often done in South Africa. Also, it gives a better description of needs to be addressed than the rather vague term special (also see Booth, Ainscow, Black-Hawkins, Vaughan & Shaw, 2000: 13). The term also replaces the term exceptionality, which assumes that special educational needs originate from inside a learner, and disregards the external factors that also can lead to special educational needs (Donald et al., 1997:69). Learners who experience barriers to learning and development are, therefore, learners who, for a variety of reasons, need special assistance to access the curriculum, assessment and examinations (Gauteng Department of Education (GDE), 2000a: 2).

An alternative notion is to consider the *barriers to learning and participation* (BLP) as a more encompassing way of conceptualising *special* or *exceptionality*. BLP locates obstacles within all of the learner, the school, the education system and/or the broader family, social, economic or political contexts that may hinder the learner from accessing *and participating* in educational provision. BLP was clarified in 1.4.3.

## 2.4.3 The systems involved in South African BLP

## (1) Introduction

It is estimated that between 40% and 50% of the school-going population in South Africa could experience BLP and thus require educational support, especially in the early stages of compulsory schooling (Donald *et al.*, 1997: 70). In some areas in South Africa, especially where the social and economic systems are unable to meet the demands of the other systems, the prevalence of a need for educational support is much higher even than the estimated 40% to 50%. These conditions often occur in historically disadvantaged, that is traditionally black, areas. In other areas in South Africa, especially where the social and economic systems are in harmony with the other systems, educational support requirements are much lower than 40% to 50%. These conditions often occur in historically advantaged,

that is traditionally white, areas. The disparity in prevalence relates to the historically enhanced support of white schools and the lack of access to education, employment, health, housing and wealth opportunities of the majority of black people in South Africa prior to the end of apartheid in 1994.

## (2) The various systems

The following discussion covers the proximal-distal division of the bio-ecological model in accordance with Figure 2.1.

# (a) Religious and value system

A religious system largely influences the values upheld by the people claiming association with the religion. Religious systems propagate values regarding human life, right and wrong, labour, children *et cetera*. People who claim not to be religious, also have value systems that influence their actions. When there is congruence between the values endorsed by persons and their actions, the values will largely influence their decisions, actions and attitude concerning issues in the political, economic, education, social, community, school, family and individual systems. Values are of special concern in respect of BLP and effective learning environments for diverse learner needs. Values regarding human life, children, human rights, education, diversity, impairment, equity and effectiveness, amongst others, influence the choice and implementation of an effective learning environment.

# (b) Political system

The Bill of Rights, as contained in the Constitution of the Republic of South Africa, protects the values of human dignity, equality and freedom (RSA, 1996a: 7). These values are fundamental in decisions regarding education, including the provision of education to learners who experience barriers to their learning and participation (refer to 2.8.2).

Not only does the political system make laws and policies, it also allocates funds to the various departments. According to the White Paper on Special Needs Education, human resources accounted for 85% to 90% of the budget for education at the time (Department of Education, 2000b: 20). The current average staffing rate in special schools was 1:10, and could not be expanded in the future (Department of Education, 2001: 39). The assumption was made that in the near future 'needs' would exceed 'means' (Department of Education, 2000b: 20). Already the expenditure on special schools had decreased from 2.85% of the total education budget in 1999/2001 to 2.82% in 2000/2001 (Department of Education, 2001: 38). Financial restrictions directly influence the provision of quality education for all learners, including those who experience barriers to their learning and participation. According to the

South African Schools Act (SASA) it is the responsibility of the governing body of a public school to take all reasonable measures within its means to supplement the resources supplied by the State in order to improve the quality of education provided by the school to all learners at the school (RSA, 1996b: section 36). The feasibility of and the practicalities involved in such a statement leave much room for discussion.

## (c) Economic, social and community systems

The Quality Education for All Report (Department of Education, 1997: 12) recognised the relationship between education provision and socio-economic conditions in a society. The Report (Department of Education, 1997: 12-15) cited lack of access to basic services; poverty and underdevelopment; physical, emotional and sexual abuse; violence and HIV/AIDS as examples of conditions linked to both the economic and social systems, and therefore the community as well, which could disadvantage learners. The learners' socio-economic background reflects the wealth-status of their parents, and therefore the economic resources available to them, including money, medical care (from pre-natal to the present), housing, stimulation during early childhood, nutrition, education, school facilities, a place to study and exposure to a variety of enriching experiences. Lack of such resources could contribute directly to many BLP.

#### (d) Education and school system

The education system, and therefore schools as well, are influenced by the economic, social and political systems and in turn deliver a 'product' to those systems, namely learners. Learners must master certain levels of knowledge, skills and values to be productive citizens who can contribute to the development and expansion of the economic, social, political, community, school and family systems (based on Department of Education, 1997: 11). Limited funding, large numbers of learners with diverse needs, discrepancies in the skill level of educators, limited facilities *et cetera* continue to burden the South African education system, and therefore influence the quality of the 'product' delivered.

Previously in South Africa, some learners who experienced BLP did not receive the same education as learners in the mainstream, with the result that many of them did not master the required levels of knowledge, skills and values to cope with and contribute to the other systems, and became dependent on the systems for welfare. According to the Department of Education (2000b: 4; 2001: 9), only about 20% (N=64 200) learners with disabilities or impairments out of a total of 400 000 learners with disabilities or impairments were at the time accommodated in about 380 special schools. That left potentially 80% of learners with disabilities or impairments unaccounted. Additionally, the Department of Education

estimated that up to 70% of all learners were adversely affected by barriers in the education system (Department of Education, 2000b: 20).

## (e) Family system

Every family system is unique in its composition of family members. Families range from single parent families, to nuclear families where both biological parents are present, to extended families, to restructured families, to children's homes and substitute parents. There are even many child-led families in South Africa on account of the AIDS pandemic. The family system in itself may, therefore, contain BLP and these must be addressed.

Some families value education and training highly, some only for the boys in the family; some families do not understand the value of education and training and do not motivate or even involve family members to seek education and training. In some households, learners must do chores that leave them no time for homework. The culture of learning is often passed on from generation to generation, thereby continuing either an unfavourable or favourable prognosis for the future of the children.

Family values regarding impairment may influence the learner with impairment significantly in his or her development. In families that reject impairment, learners with impairments will have to deal with much more when coping with the barrier of impairment than learners with impairment in families that tolerate and accept impairment. Similarly, learners without impairments can be socialised by their families to be either prejudiced or fair in their dealings with people with impairments.

# (f) Individual system

The individual system comprises the physical, biological, emotional, social, psychological, cognitive and spiritual characteristics of a particular person – characteristics which are inborn (intrinsic), as well as acquired and shaped through the influences of experiences and the other systems (extrinsic). An important component of Bronfenbrenner's bio-ecological model is to understand that people, also learners, play a vital role in their own development, and that people are not passive entities on whom systems merely impact extrinsically (Swart & Pettipher, 2005: 12).

# (3) Special educational needs / BLP revisited in the light of the systems

Donald *et al.* (1997: 69-73) suggested two perspectives on special educational needs<sup>1</sup> which incorporate a systemic approach to the special educational needs and BLP. Firstly, the phenomenon can be regarded in terms of the internal, external or interactive factors which lead to the special educational needs, or the educational support required. Secondly, special educational needs can be regarded in terms of the source of origin.

Considering the first perspective, an *internal factor* resides in an individual (for example, difficulty in hearing), but can often be the by-product of poverty and social disadvantage. Under conditions of poverty and social disadvantage the risks of developing physical, sensory, neurological and cognitive impairments and difficulties in learning are higher than in developed countries (Donald et al., 1997: 69). An internal factor, such as difficulty in hearing, is a BLP and may require additional educational support. An external factor resides outside an individual, and can therefore be located in any of the other systems. A policy or practice of teaching and learning in a second language is an example of an external factor (located in the political and educational systems or the decision of parents) that may be a BLP and may require additional educational support. In practice, it is often very difficult to determine whether a special educational need is exclusively internal or exclusively external, as these factors are in continuous interaction. When interaction between internal and external factors occurs, the need for educational support is often aggravated (Donald et al., 1997: 69). For example, in an advantaged context, there would be ways to identify and assist a learner with a HI from an early age, thereby enabling the learner to participate more fully in learning at the school. In a disadvantaged context, the learner with a HI would probably go unidentified and unassisted, thereby paving the road to successive failures at the school because of lack of participation (see Chapter 5 for an example).

Further examples of social and interpersonal barriers resulting from a combination of internal and external influences across all the systems, and becoming BLP in need of special educational support, are youth problems of alcohol or drug abuse, sexuality, violence, and prejudice on the basis of race, class, gender, culture, disability, religion, ability, sexual preference, illness or other characteristics (Department of Education, 1997: 15; Donald *et al.*, 1997: 72). Negative attitudes towards learners, often based on prejudice, fear and lack of knowledge, often result in the labelling of learners. Labelling impacts on the self-esteem of the learner and categorises the learner, without considering the role of the various other

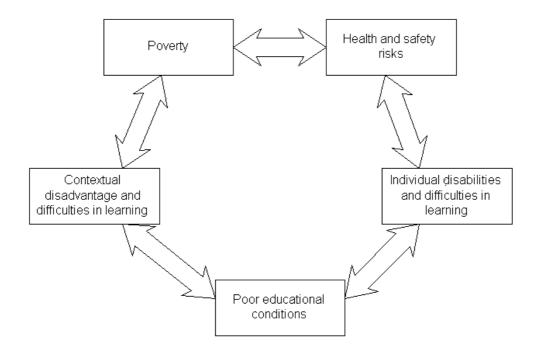
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Donald *et al.* (1997) do not regard the term *special educational needs* in the narrow way associated only with intrinsic factors. The two ways of classification that they propose are indicative of the similarity between their term *special (educational) needs* and *barriers to learning and participation*. Although the two terms are not used as synonyms, the relation between them should be clear.

systems involved. Examples of labels are 'drop outs', 'slow learners', 'repeaters', 'the AIDS-kid', 'the blind learner', 'the disabled learner', 'the kid whose father is in jail', 'the stutterer', 'the fat one' and 'the poor one' (based on Department of Education, 1997: 15).

The second perspective on special educational needs involves considering the source of origin. Some systems contribute more than other systems to the existence and maintenance of certain special educational needs (Donald *et al.*, 1997: 70-71). One system external to the individual that is the origin of many BLP and forms the context of much need for educational support is the economic system, including the condition of poverty (Donald *et al.*, 1997: 71, 150-152). Donald *et al.* (1997: 144) presented a cycle of poverty (refer to Figure 2.2) that shows the interactive influences of the various systems on one another, whilst maintaining the condition of poverty and the potential for BLP.

Figure 2.2 The negative cycle of poverty, health and educational support requirements (Donald *et al.*, 1997: 144)



The Quality Education for All Report (Department of Education, 1997: 12-15) mentioned the following socio-economic BLP: lack of access to basic services, poverty and underdevelopment, and factors which place learners at risk, such as abuse, substance abuse, teenage pregnancies, political violence, high levels of mobility because of urbanisation and evictions, unsafe schools because of violence and crime, a lack of provision of basic amenities at schools, and natural disasters like floods and the HIV/AIDS pandemic.

Too often, however, such socio-economic factors are considered 'less obvious' and are 'assumed to be normal' and thus somehow deemed acceptable. Mamlin and Harris (1998: 395) noted:

"a child travelling in a speeding car that hits a brick wall, resulting in brain injury or paralysis, is clearly recognized as entitled to services for the resulting disability. For how long, at what 'speed', and with how little support can a child 'travel' in poverty ...before sustaining harm to their [sic] physical, psychological, or cognitive development significant enough to be considered a disability?"

Another system that forms the context of many needs for special educational support, is the education system itself. Poor teaching, inadequate resources or specific educational policies and practices (such as learning through a second language) can cause learners to require educational support and thereby act as BLP (Donald et al., 1997: 71, 157-160; Smith, 1998a: 162). The Quality Education for All Report and the EWP 6 (Department of Education, 1997: 16-19; 2001: 7, 19) expanded the list of BLP which exist within the education system to include the following: an inflexible curriculum which includes incorrect style and pace of teaching, inappropriate lesson content, inadequate classroom management and organisation, insufficient materials and equipment, and inflexible and inappropriate assessment processes; language and communication problems which include second language learners, the absence of sign language for learners who are deaf and the general absence of augmentative and alternative communication (AAC) strategies for learners who are non-speaking because of the severity of their impairment; inaccessible and unsafely built environments which include inaccessibility of buildings for wheelchair users and lack of safety for learners who are deaf and blind; inappropriate and inadequate provision of support services which include unequal distribution of services, lack of support, inappropriate support (when focusing on the learner instead of the system where the barrier is located) and lack of access to individualised intervention to address BLP; lack of enabling and protective legislation and policy which include inflexible policy regarding age limits, legislation which fails to protect from discrimination and legislation which fails to provide for minimum standards which accommodate diversity; lack of parental recognition and involvement; lack of human resource development strategies which include lack of ongoing in-service training of educators which often leads to insecurity, uncertainty, low self-esteem and lack of innovative practices in the classroom; and negative attitudes to and stereotyping of difference. A number of BLP in the education system have been addressed through recent policy documents.

# (4) <u>Conclusion</u>

Permanent BLP in the learner or in the systems should be addressed through enabling mechanisms and processes (Department of Education, 1997: 12), for example hearing devices or reform respectively. Sometimes BLP are temporary in nature (also see Ainscow, 1998 in 2.4.1). Learner needs should be monitored and met by all systems in an attempt to prevent the harmful effect of both permanent and temporary BLP (based on Department of Education, 1997: 12).

## 2.5 UNDERSTANDING IMPAIRMENT

## 2.5.1 Impairment

It is necessary to distinguish between the terms *impairment* and *disability*. Although the two terms essentially refer to the same situation(s), the nuances associated with each portray subtle differences in their understanding. *Disability*, such as physical, sensory, neurological and mental disability, generally refers to conditions that have some clear intrinsic, physically identifiable basis (Department of Education, 1997: 18; Donald *et al.*, 1997: 72). Although the Quality Education for All Report acknowledged disabilities as explained above, the Report stressed that most learners with disabilities required educational support because of barriers in the learning environment or social context that prevented effective learning from taking place (Department of Education, 1997: 18; Donald *et al.*, 1997: 72). The requirement is that, regardless of so-called internally located problems, learners with disabilities should not experience barriers to their learning and participation, because the education system should adapt to meet their needs.

Disability tends automatically to be interpreted against the frame of ability, in other words, ability and disability are seen as opposites of each other: a person is either able, or disabled; a person has the ability, for instance, to hear, or a person has a hearing disability and therefore cannot hear. One implication of contrasting disability with ability is that it sides with a needs-based approach that focuses on the deficiencies and limitations of persons and not on their strengths, capacities and abilities. Another disadvantage is that the term disability locates the origin of the disability solely in the individual and denies the possibility that other systems might be involved in the condition. Further, disability does not imply any differences in the degree of severity. Some people may experience their barrier in respect of hearing to be greater than others', but the term hearing disability is applied to all cases.

Although the term *impairment* acknowledges an intrinsic challenge, it is less disabling than the term *disability*. *Impairment* does not conjure up the opposing images of being able and not being able in the way that *disability* does, although care must still be taken not to associate impairment with limitations and deficiencies (refer also to Watson, 1999a: 2). As the term *impairment* does not focus on dis-ability, the term allows recognition of origins other than the individual system for the impairment. Also, *impairment* recognises various interpretations of the degree of severity of the impairment. In extreme cases, impairment can progress to become a disability. In such cases, learners with impairment are disabled by the systemic context to the extent that they are no longer able. In the words of Yoshinaga-Itano (in Johnson, 2003a): "Deafness is a sensory difference. It only becomes a disability when the system fails."

The use of the term *impairment* reminds of the social perspective on impairment, or disability, as used colloquially. From the social perspective the main issue of disability is not the sensory, physical or neurological impairment, but the social implications thereof. Impairment affects interaction with people, primarily not through its disenabling effect, but through the attitudes and reactions of the people to impairment (Biklen, 2000: 337; Chimedza, 2001: 122). Impairment may prevent learners from mastering social skills and acquiring knowledge at an expected rate and in an accepted form. The difference in the social and natural development leads to social deprivation as a result of society's response to the impairment. The social deprivation which learners with impairments experience can negatively affect their entire developmental progress. The social interaction, or the lack thereof, therefore has a disabling effect, leading to impairment becoming a disability (Biklen, 2000: 340; Chimedza, 2001: 124, 126; Clark, Dyson & Millward, 1998: 158-159; Gindis, 1995: 159-160; Slee, 2001:175). According to Vygotsky, disability is not subjectively perceived as disability until it is brought into the social context (Gindis, 1995:159). It is through the perceptions of people that impairment is viewed as disability. Vygotsky's approach to learners with impairment was to search for strengths, and not to pinpoint or dwell on dysfunctions (Gindis, 1995:164). This focus links with the tenets of the asset-based approach.

The implication of Vygotsky's viewpoint is that if educators cease to look at impairment as disability, but see strengths, and promote healthy social interaction, then disability, like beauty, will only be in the eye of some beholders. Viewpoints are often reflected in proverbs used by the people, as will be explained in 2.5.2.

One could be of the opinion that neither *impairment* nor *disability* does justification to the value of human dignity, because the possibilities of limitations and in-ability are too prevalent

in both terms. Disability may merely be a different way of being. Experiencing an in-ability does not imply that there are no (other) abilities, for indeed, people experiencing impairment develop and utilise different abilities than people without impairment. It may be more appropriate and accurate to coin a term *dif-ability* (*different ability*) instead of the more commonly used, but derogatory, term *disability*.

## 2.5.2 General African perspectives on impairment

Within the South African context it is necessary to take into consideration the perspectives of various cultures and language groups on impairment and on the ensuing requirements for educational support. The language usage of a group, including aspects such as choice of words and proverbs, reveals much about the perspective of that group on impairment. Devlieger (1999: 439, 440, 449-451), for example, examined a sample of 55 African proverbs for their meanings of impairment. The proverbs were collected from the Luba and Songye in Zaire, from the Shona and Ndebele in Zimbabwe, from the Chewa in Malawi, from the Wolof in Senegal, from the Swahili in Tanzania and from the Luvale, Nyanja and Chitonga in Zambia.

In his analysis, Devlieger (1999: 441, 442, 447) found evidence of acceptance and respect for impairment. He deduced that a normative principle underlies many proverbs in the different languages in the sense that they strongly warn against laughing at persons with an impairment since laughing invites unfortunate events such as impairment to happen: "Laugh at a deformed person and you will bear a deformed child". He also found proverbs referring to the person with the impairment as a source of integrity, or as someone with unexpected capacity or as a source of family connectedness. Some proverbs give credit to persons with a physical impairment as being clever in finding solutions for activities that would seem difficult or impossible: "A deformed person is clever, he supports himself against a wall when dancing" (Devlieger, 1999: 443). Other proverbs mean to raise hope and to encourage: "God has not killed you, He has something for you", "Where there is a deformed person, there is someone who might have died but did not" and "Better disabled than dead" (Devlieger, 1999: 443).

However, Devlieger (1999: 446) also found evidence in proverbs for acceptance of the limitations associated with impairment, for example "A blind person should not lead a walk". Such a perspective can have far-reaching consequences for the education of learners with impairments. The issue is a matter of deciding whether to accept these limitations, or to

assist the learner with the impairment to compensate for the limitations, or to make adaptations to the education of the learner in order to ensure quality education for all.

Finally, Devlieger (1999: 446) found evidence of proverbs advising restraint from interacting with, helping or associating with people with an impairment: "You who walk with a deformed person, will also be deformed". Chimedza (2001: 123) similarly concluded that " ... .the marginalization of persons with disabilities in sub-Saharan African societies is suggested by the wide spread use of derogatory words ..." Once again these views have serious implications for education. The way in which people, and educators and learners specifically, view impairment, will determine their attitude and behaviour towards learners with impairment in the education system.

## 2.6 UNDERSTANDING HEARING IMPAIRMENT

## 2.6.1 Prevalence

As with many other countries and other impairments, the prevalence data of people with HI in South Africa are contradictory and inadequate. In the recent census, 383 408 people with HI (0.94%) were counted out of a possible 40 583 573 inhabitants of South Africa (SignGenius, n.d.: on-line doc.). According to statistics of the Deaf Federation of South Africa (DEAFSA), however, there are presently 1 500 000 people with HI in South Africa (SignGenius, n.d.: on-line doc.). The reasons for the underrecording are, amongst other things, that parents do not report their children as being hearing impaired, and that a large number of people with HI never filled in a census form (Department of Education, 2001: 14; SignGenius, n.d.: on-line doc.). The number of children of school-going age with HI seems to be unknown, although SignGenius (n.d.: on-line doc.) reported that each of the 42 schools for the Deaf in South Africa has a waiting list larger than their current learner enrolment.

## 2.6.2 Classification of HI

DEAFSA (n.d.: on-line doc.) distinguished between two groups of people with HI: people who are hard of hearing who have minimum to moderate hearing loss and whose primary communication is the spoken language, with or without the benefit of a hearing aid; and deaf people, who in turn can be divided into two groups depending on the time the hearing loss occurred – people with prelingual or congenital deafness and people with post lingual deafness, also called *deafened* people. People with prelingual or congenital deafness were

born Deaf<sup>2</sup> or became Deaf before the acquisition of language, have moderately severe to profound hearing loss, belong to the Deaf culture and use Sign Language as the prime mode of communication. People with post lingual deafness, or deafened people, have moderately severe to profound hearing loss after the acquisition of a spoken language, and rely upon the visual sense for additional information (DEAFSA, n.d.: on-line doc.; Smith, 1998b: 201).

Other sources classify HI according to the severity of the hearing loss and the anatomical location of the hearing loss. The severity of hearing loss is determined by intensity (degree of loss in respect of volume) and frequency (range of loss in respect of pitch). Usually, the scale of human hearing includes intensities from 0 to 130 decibels. Sounds lower than 1 decibel are usually not heard and sounds louder than 130 decibels are painful (Kapp, 1991b: 333; Smith, 1998b: 201, 204). HI can be classified as a slight, mild, moderate, severe or profound hearing loss, depending on the loss as indicated by decibels (Smith, 1998b: 202-203; Watson, 1999a: 3). The implications for learning of each of these hearing losses are discussed in 2.6.4. The frequency or pitch of sounds that impact on the ability to understand speech lies between 500 and 2000 Hz (Smith, 1998b: 203). Hearing loss below and above these frequencies will have less impact on the functioning of a learner in a classroom.

Three types of HI are usually identified when considering the anatomical location of the hearing loss: conductive, sensorineural and mixed hearing loss. *Conductive hearing loss* is attributed to the breakdown in conduction of sound from the ear canal, through the middle ear to the inner ear. Malformation or absence of the outer structure of the ear, blockage in the ear canal because of objects lodged in the canal or excessive wax build-up, and/or a closed ear canal can cause conductive hearing loss. The tympanic membrane, between the ear canal and the middle ear, which does not vibrate sufficiently because of tears or immobility, will also cause conductive hearing loss. In the middle ear, conditions that lessen the ability of the ossicles (hammer, anvil and stirrup) to vibrate, such as infection, will reduce the amount of sound conducted to the inner ear. Early medical or surgical treatment can correct conductive hearing losses. If left untreated, a permanent hearing loss may result (Donald *et al.*, 1997: 258-259; Kapp, 1991b: 336-337; Smith, 1998b: 204; Watson, 1999a: 4; Watson, 1999b: 8-9).

When the inner ear, cochlea and/or the auditory nerve in the inner ear has not developed adequately, has been damaged or is deteriorating, *sensorineural hearing loss* will occur. Damage or destruction of the receptors in the inner ear responsible for certain frequencies,

<sup>&</sup>lt;sup>2</sup> DEAFSA insisted in their document that Deafness related to prelingual or congenital deafness be spelt with an upper case letter *D* (DEAFSA, n.d.: on-line doc.).

will lead to hearing loss in the particular frequencies. Sensorineural hearing loss usually starts with hearing loss of the higher frequencies, before gradually progressing to the lower frequencies. Learners with sensorineural hearing loss will struggle to understand compound sounds, especially when low and high frequency sounds are combined. Sensorineural hearing losses may be complete or partial (Donald *et al.*, 1997:258; Kapp, 1991b: 337-338; Sitth, 1998b: 204; Watson, 1999a: 4).

A *mixed hearing loss* occurs when conductive and sensorineural hearing loss take place simultaneously (Kapp, 1991b: 339; Smith, 1998b: 204). A fourth type of hearing loss, *central hearing loss*, does not relate to the causes of conductive or sensorineural loss. With central hearing loss, there is a disturbance in the cerebral cortex itself which hinders the perception, organisation and meaningful interpretation of sound (Kapp, 1991b: 338).

The hearing loss may affect only one ear or both ears, and is then further described as *unilateral* or *bilateral* respectively. In good listening conditions, the effects of unilateral hearing loss are much less noteworthy than the effects of bilateral hearing loss (Watson, 1999a: 4).

Information in respect of the degree of hearing loss, the range of hearing loss and the specific part/s of the ear not functioning properly can provide a good indication of the type of support that is required by the learner to participate more fully in learning.

## 2.6.3 Causes of HI

HI is caused by genetic and/or environmental factors. Genes cause most sensorineural hearing losses, although some conductive hearing losses occur when genetic influences cause malformation in the ossicles in the middle ear (Smith, 1998b: 207-208; Watson, 1999a: 4). Premature birth; viral infections such as rubella, infectious meningitis, encephalitis, mumps and influenza; blood incompatibility when a woman with Rh negative blood is carrying a foetus with Rh positive blood; blockage in the ear canal; ototis media when fluid builds up in the middle ear; bacterial infections such as syphilis; and other diverse factors in the environment such as certain drugs, otosclerosis, concussion, accidents, birth complications, neonatal jaundice and exposure to excessive noise levels can also contribute to hearing losses (Donald *et al.*, 1997: 259; English, 1995: 122; Kapp, 1991b: 338-343; Smith, 1998b: 208; Watson, 1999a: 4). Many of the causes of HI can be prevented through dissemination of knowledge, and much of the influence of environmental factors contributing to HI can be managed through medical care, thereby preventing permanent hearing loss.

# 2.6.4 The effect of HI on learning and consequent requirements for educational support in the classroom

The following factors can affect the learning of learners with HI: age when loss occurred; cause of HI; severity of hearing loss; time of detection; a constant or progressive hearing loss; type of intervention, stimulation and treatment; support and assistance of family; experience of hearing loss; presence of additional impairment/s; general health condition; socio-economic circumstances, and individual personality differences (DEAFSA, n.d.: on-line doc.; Kapp, 1991b: 331, 350, 360; Smith, 1998b: 210). The functioning of learners with HI will determine the communication method the learner will prefer, the education method which will be best suited to the requirements of the learner, the assistive devices the learner will need and be able to afford, the career the learner will eventually be able to follow, the socialisation within society, and the learner's acceptance of and adjustment to the HI (DEAFSA, n.d.: on-line doc.; Smith, 1998b: 201). The learner with HI will probably encounter barriers in most areas of personal, social and academic development (Smith, 1998b: 198).

In school the process of reading and writing begins when spoken language is associated with written symbols. Learners with HI are likely to struggle with this process (Smith, 1998b: 198) as they will encounter a barrier(s) in acquiring spoken language and will require support to overcome or compensate for the barriers. Additionally, many learners with HI have a delay in their language development which makes the acquisition of new communicative skills and information difficult (Donald *et al.*, 1997: 258; Powers, 1999: 25-26).

Learners with HI can be supported in the classroom through assistive devices, by accommodative classroom procedures and with concessions in respect of assessment. Assistive devices are equipment or adaptations that are required to access the curriculum and participate in learning. When learning is forced to take place without the necessary assistive devices, learners with HI often experience disharmonious learning, followed by learning breakdown. Assistive devices for learners with HI can be hearing aids, frequency modulators worn by the educators which transmit their voices directly to the learners, or cochlear implants (Smith 1998b: 209). Different learners with HI need different assistive devices to participate in learning on an equal basis (Hoskins, 1995: 34), based on consideration of the factors that affect the learning of learners with HI mentioned above.

Educators must be aware of the possibilities and the limitations of assistive devices. A hearing aid, for example, merely amplifies sound, sometimes in a contorted way, and does

not restore 'normal' hearing the way spectacles usually restore sight. Hearing aids often amplify *all* sounds, including unwanted and distracting sounds such as classroom noise, children talking, chairs scraping and pencils dropping (Kapp, 1991b: 375; Powers, 1999: 19-20; Smith, 1998b: 210-211); therefore, classroom conversation is often difficult to follow as all sounds, not only the voice of the speaker, are amplified. Loud sounds, or high-pitched sounds may become too loud and painful, and cause irritation and headaches (Kapp, 1991b: 375). Hearing aids work well when the speaker is within two meters of the learner wearing the hearing aid and facing the learner, and both are in a quiet area (Powers, 1999: 19-20; Smith, 1998b: 211).

Some educators are concerned that learners will use the assistive devices as crutches. In answer to the issue, Hoskins (1995: 35) said: "If we had a pile of crutches available ... my guess is that the only people who would use them would be the people who need them." Although this statement may be true in the literal sense of the word, some learners do tend to rely on crutches in a figurative sense. It is easier to use a pocket calculator than to understand and learn the multiplication tables. It is easier to ask someone's assistance than to look up a word in the dictionary. Learners who experience true difficulties must be assisted in a proper way, but learners who rely on devices because of laziness, insecurity et cetera, must be taught to optimise their real potential. Learners must be sure they cannot walk before they use the crutches. Learned helplessness must be recognised as a potentially disabling phenomenon.

Accommodative classroom procedures centre on supporting optimal hearing and reliance on visual cues such as articulation, facial expressions and hand gestures to augment hearing (Donald *et al.*, 1997: 271; English, 1995: 49). Firstly, preferential seating (Kapp, 1991b: 357) for learners with HI includes seating in the front of the class, but to the side, so that the learner with HI can scan everybody speaking (Johnson, 2003b). Often hearing can be supported if the learner sits with the better ear towards the educator (Smith, 1998b: 211). Secondly, educators can make accommodations in respect of their voice and speech: important words can be emphasised and words can be enunciated clearly (Smith, 1998b: 217). Thirdly, class peers can be of assistance to the learner with HI by checking whether instructions have been understood (Smith, 1998b: 218). Fourthly, classroom acoustics can be improved by limiting noises, such as noise from fans, air conditioners and the playground; improving the reverberation by covering hard surfaces, such as floors with carpets and windows with curtains; and limiting the distance between the educator and the learner with HI (English, 1995: 153; Powers, 1999: 19-20). Fifthly, general cues to support learners with HI include a gentle touch on the arm or shoulder of the learner with HI to obtain attention;

checking the facial expression of the learner with HI to be sure contact has been made before speaking; pointing at or touching a person or object being spoken about; and writing page numbers, homework assignments, announcements and new vocabulary on the board. Learners with HI often acknowledge that they have understood work, even though they have not. By asking them to repeat the work or instructions in their own words, misconceptions can be prevented. Older learners with HI can familiarise themselves with new work and words by reading through the work at home prior to the lesson. Learners with HI tend to tire more quickly because of the exertion to process auditory intake (English, 1995:49; Smith, 1998b: 217).

Comprehension increases significantly when the learner can watch the educator's face to speechread. Speech reading depends on the knowledge of the grammar and the vocabulary of the language spoken, demands great concentration and can be tiring over a long time. The educator can do the following, additionally to what has been mentioned above, to enhance speech reading: face the learner with HI as much as possible, limit roaming about the classroom when teaching, arrange the seating so that the learner with HI can see the face of the educator during instruction, speak clearly at a normal pace and volume without exaggerating mouth movements, keep hands away from the face while talking and the mouth uncovered, be in adequate light so that the mouth can be seen, be careful of standing against a window to prevent glare in the eyes of the learner with HI, speak in phrases, rephrase rather than repeat, use an overhead projector and not a chalkboard to facilitate face-to-face communication, do not expect a learner to speechread beyond 2 ½ to 3 meters. It is difficult for learners with HI to look at sources of visual information, such as maps and overhead transparencies, while simultaneously speech reading; therefore, by waiting with speaking until after the learners have looked, learners with HI will still have the opportunity to speechread. Dictation poses a similar problem: learners with hearing can write as they listen; learners with HI cannot write and speechread simultaneously. Class discussions are also difficult to follow for learners with HI. As learners with HI cannot hear well, they cannot locate the speaker to speechread, and therefore cannot follow the class discussion. A procedure to support learners with HI during class discussion would include identifying the speaker; repeating answers, questions and comments from other learners; ensuring little background noise; withdrawal to a quiet area; and controlling the pace of the discussion (Carter, 1998: 5; Donald et al., 1997: 271; English, 1995: 49; Powers, 1999: 22-23; Smith, 1998b: 213-214; 218).

The degree of hearing loss may also give an indication of appropriate forms of support. Learners with *minimal* or *borderline* hearing loss usually have hearing losses of between 16

and 25 decibels. Even with a hearing loss of 15 decibels, learners can miss up to 10% of the instructions or conversation when the educator is further than a meter away or the class is noisy (English, 1995: 22).

Learners with a *slight* hearing loss usually have hearing losses of between 27 and 40 decibels. They may struggle to hear faint or distant speech. They can benefit from favourable class seating, hearing aids and speech therapy to contribute to speech development and correct faulty speech patterns that may have developed (English, 1995: 22; Smith, 1998b: 202).

Learners with a *mild* hearing loss usually have hearing losses of between 41 and 55 decibels. They may struggle to hear conversation unless the conversation is less than two metres away and face to face. It is estimated that learners with mild hearing loss may miss as much as 50% of classroom discussions if accommodations are not made, and a 55 decibel loss can cause the learner to miss up to 100% of speech information. They can benefit from amplification that hearing aids provide and speech therapy for speech development, maintenance and articulation problems (English, 1995: 22; Smith, 1998b: 202).

Learners with a *moderate* hearing loss usually have hearing losses of between 56 and 70 decibels. They may struggle to understand conversation unless it is loud. They will struggle with group work and one-on-one verbal conversation in school situations. Usually they also struggle to develop and maintain language skills. Some learners can benefit from a resource educator, hearing aids, auditory training, speech reading instruction and speech services (English, 1995: 23; Smith, 1998b: 202).

Learners with a *severe* hearing loss usually have hearing losses between 71 and 90 decibels. They may only hear loud voices if the noises occur very near the ear. They may also struggle to hear speech sounds adequately or accurately, even with amplification by hearing aids. They can benefit from special services (English, 1995: 23; Smith, 1998b: 202).

Learners with a *profound* hearing loss usually have hearing losses of 91 decibels or above. They usually are aware only of vibrations, but may hear some very loud sounds. Class seating becomes of the utmost importance, as they generally rely on vision as the primary source of communication. They can benefit from extensive special services to develop language skills and alternative forms of communication (English, 1995: 23; Smith, 1998b: 203).

Learners with HI can be supported in the classroom with *concessions in respect of assessment*. For some learners with HI it might be more appropriate to demonstrate their acquired knowledge and skills by using non-speaking modes of assessment (Hoskins, 1995: 96, 104). A discussion paper on criteria for allowing alternative methods of assessing learners who require educational support shed some light on this complex and controversial topic (GDE, 2000a: 5-9). The aim is to enable "equitable assessment and examinations through developing assessment and examination concessionary measures for learners with special education needs [sic]" (GDE, 2000a: 1).

The GDE has official documentation as to the general principles that can be applied if accommodations are to be implemented fairly during assessment procedures (GDE, 2000a: 1-5). Firstly, learners who need concessions to participate equally in assessments should be identified early to prevent unnecessary failure because of inappropriate assessment and examination. Concessions should not only be made at exit points. Secondly, the granting of concessions should never compromise the quality of the assessment and examination and no learner should ever be given an unfair advantage. Thirdly, the decision to grant concessions should be an educational decision based on recent and appropriate medical reports and significant educational reports. Fourthly, in order to ensure the just implementation of concessions, a uniform procedure must be followed. The procedure will probably include records to be kept at the school of the history of the applicant reflecting BLP and educational support needs; the history of concessions granted; relevant and recent reports from the principal, present educators and other professionals such as medical doctors, psychiatrists, psychologists and therapists; and reports from the education support service. Fifthly, emergency concessions should be limited to real emergencies, such as a broken arm.

Certain factors must be considered to select an appropriate form of concession (GDE, 2000a: 5): the nature and onset of the requirement for educational support or BLP, the nature of the content to be assessed, the type of assessment the educator has in mind, the usual way the learner does his/her work, and information of previous consultations and/or concessions.

There are guidelines governing the practice of concessions to ensure their fair implementation. Learners who are deaf and lack adequate reading skills and/or have incomprehensible speech may make use of a scribe (amanuensis) and do assessments orally *via* the scribe. The assessments may take place in a suitable separate room, and not in the examination room among the other learners. Trained educators, trained scribes and/or

sign language interpreters may assist the learners, as long as they remain neutral and impartial. The scribe and the learner each receive a copy of the question paper. The scribe uses Sign Language to communicate the question and writes down the learner's signed answer verbatim. During external examinations a continuous cassette recording can be made and kept until after the results are known. When a learner applies for amanuensis, an application for extra time can also be made (Burns, 1998: 89, 207; GDE, 2000a; Powers, 1999: 28). In a USA study which determined the amount of extra time learners with impairments required to complete the Stanford Achievement Test (SAT), learners with HI needed 95 minutes extra time on 150 minutes of test taking using regular print. The study did not take into account the severity, onset and type of hearing loss and the author warned that different learners with HI might need different amounts of extra time before they could compete fairly with other learners (Burns, 1998: 207).

#### 2.6.5 Conclusion

Bearing in mind the different statistics available regarding HI in South Africa, HI is an often-overlooked reality in South African schools. Learners resident in poor socio-economic areas with the compounding influence of poverty and lack of access to medical services are especially prone to the causes of HI, without sufficient medical or educational support resources to prevent, overcome or deal with the barriers of HI. The role that educators can play in supporting learners with HI becomes central in resource-deprived areas. Although the many requirements for educational support by learners with HI may seem to focus on deficits, the requirements do not focus on eliminating the hearing loss, but on optimally using the available hearing ability and supporting the learners to participate more fully. Learners with HI "should be seen in terms of their strengths, in their ability to access the curriculum through a different modality and even language from other pupils, rather than simply deficient in their ability to hear." (Gregory, 1999: 41)

## 2.7 DIFFERENT VIEWPOINTS ON AN EFFECTIVE LEARNING ENVIRONMENT

#### 2.7.1 Orientation

There are different opinions as to what constitutes an effective learning environment for a learner with an impairment, depending on the quantity and quality of learner participation, facilitation and learning focused upon. Over the years, there have been several 'models' of the effective learning environment, including exclusion, segregation, mainstreaming, integration and inclusion. Different types of schools exemplify the different models of an

effective learning environment and all have proven to be an effective learning environment for some learners. It might be that some of the school contexts in the study relate to these models. Given the context of education in South Africa, a question stemming from this study would be, which learning environment(s) would be most effective for most learners with impairments in South Africa?

## 2.7.2 Exclusion and segregation

# (1) <u>Orientation</u>

Exclusion as an educational practice occurs when learners are removed from a place or community, such as taking certain learners out of a regular school and placing them in a specialised school. Segregation is the enforced separation of groups of learners within a school, such as having special and regular classes in one school. Exclusion and segregation represent different viewpoints of creating an effective learning environment, but they share underlying values.

# (2) <u>Values underpinning exclusion and segregation</u>

Exclusion and segregation recognise diversity, but are based on the value of homogeneity. According to these models, homogeneity of abilities within a school (or class) can create more effective, comfortable and appropriate teaching situations. Learners who are too different from the regular group and the perceived homogeneity of the school are believed to need special education (Skrtic, 1991: 152). In such an approach to diversity, diversity can easily be regarded as deviancy (Kugelmass, 2001: 48). Emanuelsson (1998: 99) judged rather scathingly that by excluding and segregating learners who have special educational needs, the needs of the system are considered and not the needs of the learner.

Identification of learners to be excluded or segregated is based on identification of deficits in the learners' abilities, or backlogs in their skills acquisition (Clough & Corbett, 2000:12; Emanuelsson, 1998: 97; Muthukrishna & Schoeman, 2000: 317). The deficits or backlogs are identified in relation to what is perceived as *normal*. The general features of most other learners become the norm.

## (3) Rationale of exclusion and segregation

Most regular schools in South Africa declare themselves to be unable to address the different needs of some learners and prevent learning breakdown (Department of Education, 1997:25). The rationale of removing learners with needs that "cannot" be addressed in regular schools and grouping learners with similar deficits and backlogs together, is that

more effective, comfortable and appropriate teaching situations can be effected, with specially trained educators to deal with the needs of the excluded and/or segregated learners. Often educators in regular schools express that they feel overwhelmed by the demands of different needs on their teaching strategies, lack knowledge of the accommodations they are expected to make, have no or limited support structures to turn to, are concerned about time and curriculum constraints, experience assessment problems, are afraid of possible disruption of the learning of other learners, and feel that the progress of the other learners could be compromised (Engelbrecht, Swart & Eloff, 2001: 256, 258; Galloway, 1989:85; Swart, Engelbrecht, Eloff & Pettipher, 2002:183-185; Smith, 1998b: 313-314).

## (4) <u>Consequences of exclusion and segregation</u>

Good special schools and classrooms are able to offer good learning programmes with the educational support required by the learners: accommodations to access the curriculum, assistive devices, and specialised educator competence (Department of Education, 1997: 25). Since the learners to be excluded or segregated are identified on the grounds of deficits in their abilities, or backlogs in their skills, their tuition often tends to focus on compensating for or eliminating these. In following the medical-deficit approach to support (Department of Education, 1997: 25), the achievements of the learner with impairments are compared with those of other learners and the aim is to help him or her to perform like the other regular learners.

The opposite can also happen. Often learners with impairments in special schools or classes do not feel increasingly *normal*, but tend increasingly to feel the differences between themselves and other learners. Hence, their self-concepts can be influenced negatively. Learners in excluded or segregated educational settings are often denied the opportunity to learn the social skills needed to interact appropriately with their peers in the regular educational setting. Children often have to leave their families when still very young, to stay in a school hostel far away in order to receive specialised support. Rural and disadvantaged areas typically lack special schools and support services. Nor are the learners in excluded and segregated educational settings necessarily exposed to the general curriculum, which makes moving back into the general education system very difficult and restricts career opportunities (Department of Education, 1997: 25; Fisher, Roach & Frey, 2002: 65; Hoskins, 1995: 23). Persson (1998: 115) suggested that the result of placement in a segregated or excluded setting is mostly a widening of the gap between special and regular education.

## (5) <u>In conclusion</u>

Prior to 1994 in South Africa, special schools for white learners with impairments were very well resourced. Only a few schools for black learners with impairment existed and these were routinely under resourced (Human Sciences Research Council, 1987: 69-74, 80-81; Muthukrishna & Schoeman, 2000: 316). Recent statistics indicated that of the possible 400000 learners with impairment, only 64 200 learners were accommodated in 380 special schools (Department of Education, 2001: 9). If special schools were to be provided for the learners with impairments not supported in the education system, it was calculated that in excess of 1600 special schools would have to be built, staffed and supported. Therefore, considering other models of effective learning environments for learners with impairments is an issue of ideology as well as efficacy. Although special schools perform an important role for many learners, additional options of supporting all learners will have to be found so that the "process through which the learner, educator and professional support services populations become representative of the South African population, is accelerated." (Department of Education, 2001: 9).

# 2.7.3 Mainstreaming and integration

## (1) <u>Orientation</u>

Mainstreaming and integration are two further viewpoints on creating an effective learning environment. These could be regarded as the educational practices currently followed in most regular schools in South Africa, albeit often by default rather than decision. Mainstreaming is an educational practice that gives all learners equal access to the school: learners who experience impairment are admitted along with all others, but few or no measures are taken to support them in their learning. Integration as an educational practice also gives all learners equal access to the school and, additionally, helps learners who experience impairment to adapt to the requirements of the education system to participate on a more equal basis. Inclusion, to be discussed in 2.7.4, also gives all learners equal access to the school, but then adapts the education system to accommodate all learners to participate optimally in the learning.

## (2) Values underpinning mainstreaming and integration

The viewpoints share underpinning values, such as accepting diversity and equality, although the extent to which the values are applied, differs. Another value is democracy (Daniels & Garner, 1999: 1; Emanuelsson, 1998: 95). In a democratic educational setting learners are viewed and accepted as equals to participate in all experiences offered by the school. Because of the nature of some barriers, some learners, however, are unable to

participate fully unless special support is provided. It can be questioned whether acceptance as equals has really taken place, or whether a different class membership system operates for some learners, when they merely have free access to the school without the necessary support or when support is focused on their meeting the demands of the school. Although equality does much to repair the damage wrought by diversity seen as deviancy, equality still does not ensure full participation in all experiences offered by the school.

## (3) Historical course

Learners in special education settings such as exclusive special schools and segregated special classes, do not always share the same curriculum as learners in regular education settings. Mainstreaming and integration of learners with impairments started when educators placed such learners in regular education settings so that they could benefit from exposure to the regular curriculum and social interactions (Hoskins, 1995: 23). The preconditions for placement in general education settings, however, included that the learners had to demonstrate that they could fit into the regular class (Biklen, 2000: 341, 344) and education system with its fixed curriculum and standards. The education system was not required to change or adapt and often the placement was only for a portion of the day (Hoskins, 1995: 24).

#### (4) Consequences of mainstreaming and integration

In many schools in South Africa, the ethos of accepting learners with impairments but not supporting them, has led to many learners being unconditionally accepted, but simultaneously also being dumped in a school which is unable, unwilling or unaware of learners' needs to offer opportunities and/or accommodations to enable full participation and to facilitate progress of the learners. These learners attend school, but often do not keep up with class friends. The ever-widening gap between them and the rest of the class, and the experiences of failure often contribute to a dwindling academic self-concept.

In other schools, in an attempt to help learners who experience impairment to adapt to an integrative education system, they are sometimes placed in pull-out programmes or self-contained programmes for part of the school day and/or receive special services such as speech, physical and occupational therapy. In pull-out programmes, learners who experience impairment spend less than 50% of the day outside the general classroom in a specialist classroom. In self-contained programmes, learners who experience impairment spend more than 50% of the day in a specialist setting, and join the general classroom for a small part of the day (Fisher, Roach & Frey, 2002:66; Keefe & Davis, 1998: 55). Often programmes devised to assist learners in an integrated classroom to adapt, are actually

counter-productive in causing learners to be labelled by peers and educators, thus resulting in a segregating classification system of learners (Persson, 1998: 114). Some authors criticise pull-out programmes because of their apparent fragmentation, overlapping and lack of coordination of curriculum content (Fisher, Roach & Frey, 2002:66).

## (5) In conclusion

Despite compulsory education in South Africa since 1996 (RSA, 1996b: section 3(1)), many learners with impairments, and without, have so far remained outside the education system. Where learners with impairments were enrolled in regular schools, the schools were often ill equipped and under-resourced to provide the support required, leading to learning breakdown and perpetuation of the stereotypical perception that learners with impairments are unable to cope in regular schools and should receive separate specialised education (Department of Education, 1997: 24-26).

## 2.7.4 Inclusion

## (1) <u>Orientation</u>

The problem of providing effective learning environments for all learners, with and without impairments, in the South African education system, led to various inquiries, reports and new policies. The inclusive education policy is a solution proposed and accepted after years of deliberation in an attempt to provide effective learning environments for all learners. *Full-service schools* is the term used in the policy documents to refer to public schools following the inclusive education policy. According to the policy, *full-service schools* would receive resources to meet the needs of all the learners in the school. This section aims to deal with the concept of inclusion as understood by many educators and academics locally and internationally, the values underpinning inclusive education, research supporting inclusive education, the South African rationale for a policy of inclusive education and opposing viewpoints to inclusive education. The implementation of the South African inclusive education policy is addressed in 2.8, where South African legislation and policy documents to create effective learning environments come under scrutiny.

## (2) The concept

In the South African context, the EWP 6 (Department of Education, 2001: 16) stated that inclusive education and training was about acknowledging that all children and youth could learn, and that all children and youth needed support in their learning; that it was about making education structures, systems and learning methodologies able to meet the needs of all the learners and that it acknowledged and respected all differences in learners; that it was

broader than formal schooling and included learning in the home and community, and formal and informal learning; that it was about changing attitudes, behaviours, methodologies, curricula and learning environments to meet the needs of all learners; and that it was about maximising the participation of all learners in the culture and curriculum of the school, and uncovering and minimising the BLP.

The concept of inclusive education and training as put forward by the South African Department of Education is encompassing and thus exceedingly broad. All children and youth are included as being in need of forms of special support. To realise this view of inclusive education as an effective learning environment, sufficient support for all learners will have to be made available. True to the nature of inclusive education, it is acknowledged that education structures, systems and learning methodologies should be changed to meet the needs of all the learners. This is unlike the models of mainstreaming and integration, where the learners are required to make the desired adaptations to the education structures, systems and learning methodologies (Donald et al., 1997: 20). All differences in learners are acknowledged and respected, seemingly irrespective of school placement. education is considered broader than formal schooling and includes communities and informal learning. The notion of participation in the culture and curriculum of the school is made explicit. Many of the descriptors of inclusive education and training will require extensive advocacy, reform, goal setting, training and research to realise. Implementing inclusive education seems to involve changing both attitudes and behaviours and developing new skills. It appears as if inclusive education and training might be regarded by some not only as the solution to the South African education problems, but also as a way to address many social problems. The question arises whether inclusive education is not overrated and being considered as a panacea for South African problems.

Sailor (Kochhar *et al.*, 2000: 7) proposed six requirements of inclusive education to consider when including learners who experience BLP. First, placement of learners is to be in schools close to home, whereby learners are educated in their community schools, thereby providing opportunities for social inclusion in the community as well. Second, each school and each class contains the same proportion of learners who experience barriers to their learning and participation as that which is found in the community. Third, a zero-reject philosophy is upheld, such that every school serves all the learners in its district. Fourth, age- and grade-appropriate placements are to be made. Fifth, cooperative learning and peer instruction will be implemented and, sixth, learning support will take place in an integrated environment. The educators and all the learners in the classroom share the resources available for learning support.

As with the South African policy, Sailor's description of inclusive education goes beyond application in education only, to include the community as well. Sailor assumed that all schools would have the resources to include all learners and meet their educational requirements, and disregarded the rights of parents and learners in deciding where to attend school.

In a study (Keefe & Davis, 1998: 58-61), participants in an American week seminar on inclusive education were asked to write down what they understood in the concept *inclusion*. The researchers sorted their definitions into eight categories: all learners belong together; placing learners with impairments in general education classrooms; inclusion in the classroom and the community; the least restrictive environment; support and services in the regular classroom; age-appropriate participation; choice of participation in activities; and the same as mainstreaming.

Most responses fell in the first three categories, indicating a global view of *inclusion*, as all learners belonging together in the classroom and in the community. Some participants underscored the importance of placement with support. Only a few participants thought inclusive education and mainstreaming to be synonymous, indicating that the majority of participants understood inclusive education to entail more than mere mainstreaming (Keefe & Davis, 1998: 61-62). It is noteworthy that participants with less background of inclusive education focused on inclusive education as a set of actions that an educator has to perform in a regular classroom. The participants with more training in inclusive education focused on inclusive education as an attitude or belief system (Keefe & Davis, 1998:61). One should consider whether action and attitude are isolated concepts, or whether attitude reflects a deeper understanding of the actions to be implemented.

According to Ainscow (1998), inclusive education is an approach to the development of schools, in response to the diversity of all the learners who attend. Although it is often thought that inclusive education focuses exclusively on learners with impairments, inclusive education actually alters the philosophy for educating all learners (Salend, 1999: on-line doc.). Inclusive education must therefore strive to meet the requirements of all of the diverse learners who attend the school, not only learners who experience BLP.

Some proponents of inclusive education distinguish between *full* and *partial* inclusion. In *full inclusion*, learners who experience BLP receive all their education in the inclusive classroom setting. In *partial inclusion*, learners who experience BLP receive education in the inclusive

classroom setting only for part of the day while the rest of the day is spent in other programmes. Although this practice seems similar to that of integration, the difference is that with inclusive education, whether full or partial, the attitude is that each learner has membership in the classroom and will be supported, but will also be expected to contribute (Lipsky & Gartner, 1999:13; Watson, 1999a: 2). Even though some learners attend speech, occupational and/or physical therapy sessions, academic support or enrichment, they are still considered as full members of the class (Bélanger, 2000: 235; Keefe & Davis, 1998: 56-58), and the educator and other learners are still required to make the necessary accommodations for them to learn and participate optimally. *Partial inclusion* is similar to the concept *optimal inclusion* used by Smith (1998b: 18) when referring to the most satisfactory type and level of inclusion for each individual learner.

Inclusive education is a concept, but it is defined by means of context. This means that inclusive education is implemented differently in different contexts, implying that different conceptions of inclusive education indeed exist (Dyson, 2003; Keefe & Davis, 1998: 58).

## (3) <u>Values underpinning inclusive education</u>

Equity as a principle is related to democracy, and can be explained as treating individuals fairly in respect of their diverse needs, rather than necessarily treating all individuals the same. Inclusive education can then be described as 'equitable education', in which adaptations are made to meet the requirements of all the learners (Hoskins, 1995: 35; Hutchinson & Martin, 1999).

Inclusive education is also based on beliefs regarding the right of access of all learners to the curriculum, that is full participation. The description of inclusive education in the South African EWP 6 (Department of Education, 2001) as well as the Keefe and Davis study (1998) include learner participation. If learners are not enabled to access the content of the curriculum as well as all assessment tasks and questions, then true inclusive education is not taking place. Biklen (2000: 348) concluded that learners with impairments recognise barriers to their participation as discriminatory.

It was said that integration and mainstreaming are based on recognition of diversity. Differences in highly valued human characteristics and qualities, such as intelligence or the ability to spell correctly, are often devalued and viewed as deviancies, deficits or abnormalities (Ainscow, 1998; Emanuelsson, 1998:96). Where mainstreaming and integration recognise diversity and differences with the aim to eliminate these, inclusive education actually *celebrates diversity* (Keefe & Davis, 1998: 57; Lipsky & Gartner, 1999:17;

Muthukrishna, Farman & Sader, 2000:92). All learners are acknowledged as unique, and the school must be developed in ways that can take advantage of the diversity and differences, which can then be recognised as opportunities for learning rather than as problems to be fixed (Ainscow, 1998). Diversity becomes an asset to the inclusive school and classroom. Everyone belongs and is accepted (Emanuelsson, 1998: 104; Keefe & Davis, 1998: 57). "Normality in groups is characterised by diversity." (Emanuelsson, 1998: 96).

In contrast to the approach of remediation in mainstreaming and integration which complies with the deficit-model, the process of learning support as found in inclusive education complies with the asset-based approach to educational support requirements and BLP. The principle of learning support acknowledges and focuses on the strengths of the learner and strives to support the learner to be the best he/she can be, without comparison with other learners.

# (4) Research supporting inclusive education

Research findings vary on the impact of inclusive education on learners who experience BLP (Salend, 1999: on-line doc.). Differences in results are probably related to different assumptions about inclusive education, different inclusive practices and different research methods. Kochhar *et al.* (2000: 37-40) provided extensive lists of benefits and consequences of inclusive education.

# (a) Academic consequences

Inclusive education has been found to improve academic performance. In an American national study on inclusive education, school districts reported that placement in inclusion programmes led to academic gains for learners who experience BLP. Academic gains were measured in terms of improved performance on standardised tests, mastery of goals designed to assist learners with educational support requirements, grades, on task behaviour and motivation to learn (National Centre for Educational Restructuring and Inclusion, 1995 in Salend, 1999: on-line doc.).

Learners with learning impairments in an inclusion programme showed significantly greater gains in reading than their peers in segregated resource rooms, although no significant differences between the two groups were noted in terms of their mathematical progress. A significantly greater number of learners with mild learning difficulties in inclusive classrooms progressed in reading at a rate that paralleled their grade level peers without impairments, than did learners with mild learning impairments in segregated resource rooms (Salend, 1999: on-line doc.). For learners with severe learning impairments in inclusive or segregated

resource settings no significant differences in the reading or mathematics progress were found (Waldron & McLeskey, 1998 and Shinn, Powell, Good & Baker, 1997 in Salend, 1999: on-line doc.).

Marston (Salend, 1999: on-line doc.) found that learners with impairments who received support in the inclusive classroom supplemented by services in the resource room in a collaborative effort between the classroom educator and the special needs educator, had made significantly greater gains in their reading performance than learners who received support in either the inclusive classroom or the pull-out programme. The findings seem to confirm the importance of consistent support for learners who experience BLP.

In the American national study on inclusive education mentioned previously, the school districts also noted that placement in an inclusion programme resulted in fewer incomplete assignments, more positive interaction with peers, and improved attitudes toward school and learning (Salend, 1999: on-line doc.). Inclusive education appears to improve the ability to keep up with the everyday pace and conventions of instruction and to provide opportunities to utilise learning support in the regular education environment.

# (b) Social consequences

In two separate studies (Fryxell & Kennedy, 1995 and Kennedy, Shukla & Fryxell, 1997 in Salend, 1999: on-line doc.), improved sociability was found for learners with severe impairments in inclusive classrooms: learners with severe impairments educated in inclusive classrooms had more social contacts and richer friendship networks that included peers without impairments, provided and received more social support than their peers who were educated in self-contained classrooms, and had more lasting social relationships with learners without impairments.

In an inclusive classroom, learners who experience BLP are more likely to follow the model of the appropriate social behaviour of peers (Daniel & King, 1997: 68; Hoskins, 1995: 26). Inclusive education appears to facilitate more appropriate social behaviour and real life skills because of higher expectations in the inclusive class and the imitation of peers (Daniel & King, 1997: 68; Donald *et al.*, 1997: 239; Down Syndrome South Africa (DSSA), 1999: 5). Inclusive education has been observed to heighten enjoyment of social interaction in the larger classes and offer a wider circle of support, including the social support of classmates without impairments.

## (c) Consequences for educators and schools

Some educators feel that they benefit by working in inclusive classrooms, by recognising how individual differences influence the learning of all learners, and not only of those experiencing the more obvious BLP. This recognition increases their use of instructional modifications (Smith, 1998a: 163). The typical claims are that inclusive education improves the ability of educators to adapt to different styles of learning and facilitation; promotes alternative assessment strategies; increases tolerance for differences; provides educators with knowledge about how to apply specialised educational strategies to learners who are not impaired, but need extra support; provides joint orientation and training to general and special educators; reinforces a holistic view of the learner; stimulates sharing of resources among schools; and promotes collaboration among schools (Department of Education, 2001: 18, 20, 49; Engelbrecht, Swart & Eloff, 2001: 258).

## (d) Consequences for parents of learners who experience BLP

Inclusive education can provide parents with a broader support network, can involve parents as equal partners in the educational planning process, can make parents feel less isolated from the rest of the community (DSSA, 1999: 5), and can provide the child with neighbourhood schooling (Donald *et al.*, 1997: 239).

#### (e) Consequences concerning the attitudes of learners experiencing BLP

Learners experiencing BLP have specific concerns about inclusive education as well. Some learners with learning impairments mentioned anxiety about the academic and recreational activities they were missing when pulled out of their classrooms, although they felt the special education setting to be supportive, enjoyable and a quiet learning environment in which they could receive the academic assistance and extra help which they felt they needed (Padeliadu & Zigmond, 1996 in Salend, 1999: on-line doc.).

Some learners with learning impairments felt embarrassed when they had to leave their classroom for specialised learning support. They felt they had to fabricate stories to justify to their friends why they were leaving the classroom. They also felt themselves the targets of name-calling and were concerned about completing work assigned while they had been pulled out of their classrooms (Albinger, 1995 in Salend, 1999: on-line doc.). For a learner who requires educational support, catching up with work missed might prove too difficult a task.

In a similar study, sixth and seventh grade learners with learning impairments expressed feelings of anger and frustration associated with being isolated from classmates in a special

education setting. They felt victimised because of physical attacks, name-calling and ridicule from class members and educators, and they felt misunderstood, betrayed, unappreciated and oppressed by educators and class and family members (Rein & Button, 1995 in Salend, 1999: on-line doc.).

Guteman (1995, in Salend, 1999: on-line doc.) interviewed secondary school learners who had been placed in a self-contained classroom. They expressed concern about their status and the loss of friends, and felt stigmatised and personally deficient. They perceived the education in the self-contained classroom as low-level, unrelated to their lives, repetitive, unchallenging and ineffective. They, however, also had negative perceptions of inclusive education, based on previous negative experiences of being included.

## (f) Consequences for learners without impairments

It is important not to forget that inclusive education may also have an effect on the learners who do not experience specific BLP and who, therefore, do not have educational support requirements in the traditional sense of the word. In an inclusive classroom, learners who do not 'qualify' for special education services, but who do experience subtle barriers to their learning and participation, are accommodated in the classroom, on the grounds that basic instructional modifications are made to suit every learner in the class. By selecting only a few learners as qualifying for 'special' learning support, there is an emphasis on raising achievements for some learners (those selected) at the expense of others (those who barely do not qualify for special education services) (Ainscow, 1998; Hoskins, 1995: 24).

In one study quoted by Salend (1999: on-line doc.), placement in an inclusive classroom did not seem to interfere with the academic performance of learners without educational support requirements in respect of the amount of instructional time allocated and engaged, the rate of interruptions to the planned activities, and the learners' achievement test scores and report cards. On the contrary, the researchers found that the mathematics and reading performance of learners without impairments in the inclusive classroom was significantly better than that of their peers in traditional classrooms.

Some learners who do not experience BLP, however, do have concerns about being in an inclusive classroom. They are concerned about communication difficulties with some of the learners, as well as physical and behavioural characteristics of some of the learners who experience BLP (Salend, 1999: on-line doc.). In another study quoted by Salend (1999: on-line doc.), on the other hand, older learners without impairments showed willingness to form friendships with their peer learners with severe impairments and believed that inclusive

education facilitated the development of such friendships. Strategies for promoting friendships were suggested, such as using co-operative grouping arrangements, sharing information about impairments, and initiating social activities that promote interactions amongst all the learners (Salend, 1999: on-line doc.).

Furthermore, learners at an inclusion-based school showed an increase in acceptance, understanding and tolerance of individual differences, whereas learners at a non-inclusive school were more likely to engage in stereotyping, and to have negative perceptions of diversity and learners with impairments (Donald *et al.*, 1997: 239; DSSA, 1999: 5; Hoskins, 1995: 26; Salend, 1999: on-line doc.). Learners also learn to deal effectively with learners with different abilities, backgrounds and experiences – life skills necessary for the workplace (Hoskins, 1995: 26). Inclusive education facilitates the learning of more realistic and accurate views of learners with impairments (DSSA, 1999: 5).

## (g) Outcomes for communities

Inclusive education is said to teach communities to appreciate diversity (DSSA, 1999:5) and to "unburden society" by producing learners with impairment who have developed their full potential and can make contributions to society (DSSA, 1999: 5).

#### (5) South African rationale for inclusive education

At least two reasons are considered for the implementation of inclusive education policy in South Africa. Firstly, besides the leading role of the political system, the interaction among the economic, social and education systems and subsystems in South Africa created the need for a change in the education system from the perspective of efficacy. The South African education system was not able to serve all learners. Some learners requiring special educational support did not receive any schooling, for example learners who could not reach specialised schools because of lack of transport or long waiting lists, but were not attending a regular school either. The number of learners requiring educational support far exceeded the available specialised facilities. Limited funding made it impossible to extend provision of dual education services for learners who experience BLP, and those learners who do not. Because of the increase in the population and the inability of the economic system to provide adequate resources to everyone, poverty and the conditions associated with poverty, have furthermore led to an increased number of learners requiring special educational support on account of both their disadvantaged circumstances and a higher prevalence of impairments.

Secondly, after 1994, the quality of education for all learners needed to be addressed (2.7.2 (5) and 2.7.3 (5) dealt with some of the reasons why the *status quo* was unacceptable). In

South Africa, the rationale is twofold for inclusive education based on an improved quality of education: an improved quality of education through inclusive education can be to the benefit of more learners, which in turn can benefit the whole country.

## (6) Opposing viewpoints

Several complaints have been noted against practicing inclusive education (Daniel & King, 1997: 68-69; Keefe & Davis, 1998: 56; Snyder, 1999: on-line doc.). Firstly, arguments go that teaching as if 'one size fits all' ignores the individual needs of learners experiencing BLP. Many learners experiencing BLP are best served in non-inclusive settings, and were removed from regular education classrooms in the first place because they were not well served there. Educators in regular education may lack the skills for the appropriate support and assistance to adequately meet the diverse needs of all the learners. With the additional demands of teaching learners who are experiencing BLP, the needs of low, average and high potential learners are often neglected. Secondly, in an attempt to adapt classes to accommodate all learners, learners not requiring special educational support may experience boredom, whereas learners with educational support requirements may experience frustration in trying to keep up. As a result, achievement test scores may decline, and the educators will be held responsible. Thirdly, learners requiring medical care, such as the changing of catheters, or interventions, such as the handling of disruptive and uncontrollable behaviour, may negatively affect the class in both academic and social respects. Fourthly, inclusive education is perceived to be primarily concerned with the socialisation of learners who are experiencing BLP, and not with their academic achievement. Fifthly, inclusive education is viewed as simply a way of reducing the costs of special education programmes. Lastly, inclusive education is suspected of actually limiting the choices of parents and learners.

#### 2.7.5 Conclusion

The orientation on effective learning environments in 2.7.1. concluded that, given the context of education in South Africa, the question remains as to which learning environment(s) would be most effective for most (if not all) learners in South Africa. Exclusion, segregation, mainstreaming, integration and inclusion are different models by which to create an effective learning environment. Each model has its advocates and critics. Many learners throughout the world have been taught in each of these learning environments and many learners can laud the school context they were in. The aim here is not to pronounce one model as superior to the others, but to achieve some understanding through the study of the influence

of two of the models, exclusion and inclusion, on the ASC of learners with HI. The EWP 6 that promoted inclusive education and training stated

"a wider spread of educational support services will be created in line with what learners with disabilities [sic] require. This means that learners who require low-intensive support will receive this in ordinary [regular] schools and those requiring moderate support will receive this in full-service schools. Learners who require high-intensive educational support will continue to receive such support in special schools." (Department of Education, 2001: 15).

From the EWP 6 it appears as if inclusive education and training is not about promoting full-service inclusion schools as the only effective learning environment. With the aim of supporting all learners to full participation according to their educational needs, it appears as if at least regular, full-service and special school models have a place in South African education. The (most) effective learning environment(s) for learners with HI, however, still has to be established. The investigation of the ASC of learners with HI in special and full-service schools is an attempt to determine where the educational needs of learners with HI optimally can be met.

# 2.8 SOUTH AFRICAN LEGISLATION AND POLICY DOCUMENTS TO CREATE EFFECTIVE LEARNING ENVIRONMENTS

#### 2.8.1 Orientation

The bio-ecological perspective connects the learner to all the systems and subsystems with which the learner is involved. Changes in the education system can achieve effective learning environments and optimally influence all the other systems connected to it. This section deals with the Constitution of the Republic of South Africa and policies related to education and its component parts that assume that their implementation will contribute to the creation of effective learning environments.

#### 2.8.2 Constitution of the Republic of South Africa, 1996

The Constitution of the Republic of South Africa starts by presenting the values on which South Africa is built (RSA, 1996a: section 1 (a-d)):

- (a) "Human dignity, the achievement of equality and the advancement of human rights and freedoms.
- (b) Non-racialism and non-sexism.
- (c) Supremacy of the constitution and the rule of law.

(d) Universal adult suffrage, a national common voters roll, regular elections and a multi-party system of democratic government, to ensure accountability, responsiveness and openness."

Not only are the values crucial to understand the Constitution, they are also echoed in all the ensuing policies, including the EWP 6, regarding the education of learners who experience BLP. The values stated in (a), namely human dignity, the achievement of equality and the advancement of human rights and freedoms, as elaborated in the Bill of Rights in the Constitution (RSA, 1996a: sections 7 to 39), have special relevance.

According to the Bill of Rights, every person has an inherent *dignity* and the right to have his or her dignity respected and protected (RSA, 1996a: section 10), also in educational situations. The Bill of Rights certainly does not recognise differences in worth amongst learners with differences in abilities. For example, learners with HI may have unclear speech, such as nasal speech or a monotone. Such differences in speech may never cause educators or learners to disrespect the dignity of a learner with HI by being impatient, failing to involve him/her in discussions, or even mocking him/her.

Equality is a condition of two or more people being the same (equal) or being treated the same (equally), regarding all comparable characteristics. Equality in education refers mostly to structural issues, such as equal access to and equal distribution of resources (Donald *et al.*, 1997: 30).

According to the Bill of Rights, everyone is the same before the law and has the right to the same protection and benefit of the law (RSA, 1996a: section 9 (1)). Section 9 further states:

"Equality includes the full and equal enjoyment of all rights and freedoms. To promote the achievement of equality, legislative and other measures designed to protect or advance persons, or categories of persons, disadvantaged by unfair discrimination may be taken" (RSA, 1996a: section 9 (2); also refer to Department of Education, 1997: 41).

Indirect unfair discrimination can easily occur in schools and one of the groups at risk is certainly learners with impairments. Two aspects of avoidance of unfair discrimination regarding learners with impairments relate to the admission policy and the provision of assistive devices and special learning support. According to the South African Schools Act (SASA), a public school must admit learners and serve their educational requirements without unfairly discriminating in any way (RSA, 1996b: section 5 (1)). The National

Education Policy Act - Admission policy for ordinary public schools (RSA, 1998a: section 22 - 25) encourages schools to make their facilities accessible as far as practically possible to learners who require support, and also to make provision for arrangements if a school cannot provide the necessary learning support for such learners: the principal of the school is required to refer the application for admission to the head of the education department, who will arrange for consultation and assessment with the parents, educators and other support personnel concerned, before the learner may be admitted to another school.

According to the National Education Policy Act – Age requirements for admission to an ordinary public school, the age requirements for learners with special education needs [sic] who are admitted to ordinary (regular) public schools are the same as for other learners in ordinary (regular) public schools (RSA, 1998b: section 6). The age norm per grade is the grade number plus 6. For example, the age of a learner in Grade One should be 1+6=7 years; the age of a learner in Grade Nine should be 9+6=15 years (RSA, 1998b: section 3). Only the head of an education department may exempt a learner entirely, partially or conditionally from compulsory attendance if it is in the best interest of the learner (RSA, 1996b: section 4 (1)). There is little guidance, however, as to what are the "best interests" of a learner to be excluded from a learning environment (Department of Education, 1997:45).

According to the Bill of Rights, "equality includes the full and equal enjoyment of all rights and freedoms" (RSA, 1996a: section 9 (2)). Some learners can only have the same, full enjoyment as other learners with the use of assistive devices. For example, some learners with HI can only access the oral learning content and assessments if they may use hearing aids. Equality in the face of diversity logically leads to the term equity which refers to treating learners fairly, rather than treating them the same. It is fair to give learners with HI the same opportunity to access learning content by providing hearing aids and all forms of support necessary for enhanced communication. It is unfair to expect them to show mastery of the learning content if they cannot access the content.

Everyone has the *human right* to a basic education (RSA, 1996a: section 29 1(a)), meaning that everyone is entitled to and may claim education up to the basic level of adult basic education. 'Everyone' excludes no one. It includes all learners, also learners with HI.

The head of an education department and the principal must take into account the rights and wishes of the parents of a learner with special education needs, when they consider placement of such a learner (RSA, 1996b: section 5 (6)). Hereby parents are given a choice

in the placement of their children, and their rights and wishes can overrule the admission policy of any governing body of a school (Department of Education, 1997:44; DSSA, 1999:6).

The SASA makes the provision of support services mandatory (Department of Education, 1997: 44; DSSA, 1999: 7). The Member of the Executive Council responsible for education in each province, must provide education for learners with special education needs at regular public schools, where reasonably practicable (RSA, 1996b: section 12 (4)); provide relevant educational support services for such learners (RSA, 1996b: section 12 (4)); and take all reasonable measures to ensure that the physical facilities at public schools are accessible to disabled persons [sic] (RSA, 1996b: section 12 (5)).

By stating in Section 5 that no learner may be denied admission to any ordinary (regular) school on any grounds, the SASA took the first step towards a single inclusive education system for South Africa (Department of Education, 1997: 44). In Section 12, the clause 'where reasonably practicable', however, still shifted the responsibility for provision of education onto the learner. Alternative wording suggested in the Quality Education for All Report was 'unless it cannot be made practicable' or 'unless this would constitute an unjustifiable hardship' (Department of Education, 1997: 44-45).

An issue that illustrates the consideration of practicability, concerns the language of learning and teaching. Everyone has the right to receive education in the official language or languages of his/her choice in public schools where that education is reasonably practicable (RSA, 1996a: section 29 (2); also refer to Department of Education, 1997: 42). It may be argued that some learners with severe HI cannot benefit from attending public schools because they cannot communicate fluently in any one of the 11 national languages used in the school. Section 6 (4) of the SASA (RSA, 1996b) makes provision for the use of a recognised Sign Language as an official language for learning purposes at a public school.

"All citizens are equally entitled to the rights, privileges and benefits of citizenship, and equally subject to the duties and responsibilities of citizenship" (RSA, 1996a: section 3 2(a & b)). If all learners are expected to fulfil their duties and responsibilities as citizens, all learners are expected to be prepared for the duties and responsibilities. Learners with HI are not considered lesser citizens than other learners; therefore they have the same duties and responsibilities, and are entitled to the same rights, privileges and benefits of citizenship.

#### 2.8.3 Quality Education for All, 1997

The Quality Education for All Report is arguably the single most important report that changed the face of education in South Africa. The Report (Department of Education, 1997:i, 1) contained the results and proposals of a joint investigation by the National Commission on Special Needs in Education and Training (NCSNET) and the National Committee for Education Support Services (NCESS) into the challenge to (re)create an entire education system to recognise and address the diverse needs of the entire learner population, and to minimise, remove and prevent barriers to learning and development. Subsequent legislation and policy development, such as the EWP 6, followed up on the recommendations, principles and terminology contained in the report. The vision of the investigation was:

"an education and training system that promotes education for all, and fosters the development of inclusive and supportive centres of learning that enable all learners to participate actively in the education process, so that they can develop and extend their potential and participate as equal members of society" (Department of Education, 1997: 53).

In order to realise the above-mentioned vision, the Quality Education for All Report contained recommendations and strategies for the transformation of all aspects of the education system; the development of an integrated system of education; the provision of a range of schools for all learners; the infusion of 'special needs and support services' within the system; the development of a barrier-free physical environment at all schools; the pursuit of a holistic approach to institutional development; the development of a flexible curriculum to ensure access for all learners; the promotion of the rights and responsibilities of the parents, educators and learners; the provision of effective development programmes for educators, support personnel and other relevant human resources; the fosterage of holistic and integrated support provision; the development of a community-based support system; and the development of funding strategies that ensure redress, sustainability and access to education for all learners (Department of Education, 1997: i-ii, 54-68).

#### 2.8.4 Tirisano document, 2000

The Department of Education published a Corporate Plan for January 2000 – December 2004 to outline who they are, what their core business is, how they go about fulfilling their mandate, what values underpin their work, and what they have been tasked to do by the Minister in the next five years (Department of Education, 2000a). The underlying policy

elements of the Tirisano<sup>3</sup> Document were access, success, quality, equity and redress (Department of Education, 2000c).

The Corporate Plan was supported by an Implementation Plan for Tirisano and individual performance agreements (Department of Education, 2000a; Department of Education, 2000c). The Minister had identified nine priorities which would enable the development of an education and training system to benefit South Africa (Department of Education, 2000c). The nine priorities had been organised into five core programme areas, of which one addressed school effectiveness and educator professionalism (Department of Education, 2000c). Priorities were that the schools became centres of community life, that conditions of physical degradation in South African schools were terminated, that the professional quality of the teaching force was developed, and that the success of active learning through outcomes-based education was ensured (Department of Education, 2000c). One project wanted all schools to meet the minimum physical and infrastructural requirements necessary to establish and support a conducive learning and teaching environment for all the learners, including those who experience BLP (Department of Education, 2000c). Another project aimed to improve budgeting for learner support materials and infrastructure development (Department of Education, 2000c).

Achieving the changes as envisioned in this document, will be a long and slow process. Although many of the changes are embedded in laws and policies, the willing participation, engagement, commitment, questioning and learning by all the individuals involved are prerequisites for the successful implementation of the intended changes (Department of Education, 2000c; Donald *et al.*, 1997: 17).

2.8.5 Education White Paper 6. Special Needs Education: Building an inclusive education and training system, 2001

The Department of Education's understanding of inclusive education was discussed in 2.7.4 (2). The Education White Paper 6 (EWP 6) further outlines the vision for an inclusive education and training system on a national, provincial, district and school level. By following the guidelines and proposals in the EWP 6, inclusive schools can be established. The major steps of the implementation plan regarding special, regular and full-service schools and spanning 20 years are described below.

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<sup>&</sup>lt;sup>3</sup> Tirisano means 'let us work together'.

The *immediate to short-term steps*, for which three years were allocated, include completing the audit of special schools and implementing a programme to improve efficiency and quality; designating, planning and implementing the conversion of 30 special schools to special schools/resource centres in 30 designated school districts; designating, planning and implementing the conversion of 30 primary school to full-service schools in the same 30 districts as the special schools; and designating, planning and implementing the district support teams in the same 30 districts as the special and full-service schools (Department of Education, 2001: 42-43).

The *medium-term steps*, for which five years were allocated, include expanding the number of special schools/resource centres, full-service schools and district support teams created through the immediate to short-term steps in line with lessons learnt and available resources (Department of Education, 2001: 43).

The *long-term steps*, for which twelve years were allocated, include expanding provision to reach the target of 380 special schools/resource centres, 500 full-service schools and colleges and district support teams, and the 280 000 out-of-school children and youth (Department of Education, 2001: 43).

#### 2.9 CONCLUSION

With the introduction of the bio-ecological perspective and the asset-based approach as a framework for interpretation of the findings of this research, the tone was set for a systemic understanding of the challenges that learners with impairments and their educators experience in schools. Different models to provide effective learning environments to deal with the challenges were considered, and the South African solution to provide effective learning environments for all its learners was looked at. In the past, learners with HI received special educational support in special schools. The current solution is to include learners with HI in full-service inclusion schools. The realities of providing equitable education and support to learners with HI to access the education opportunities are often overlooked in the efforts to implement inclusive education and participation policy within the time frame proposed in the EWP 6. The delayed implementation of the immediate to short-term steps, as proposed in the EWP 6, might not only be significant in portraying the capabilities and willingness, or lack thereof, of the education system to change, but might also give research such as this study the opportunity to inform future inclusive education policy implementation.

The study will be using the academic self-concept of learners with HI to investigate the effectiveness of two different learning environments. The academic self-concept as conceptualised for the study follows in Chapter 3, and the research design to investigate the effectiveness of the learning environments is explained in Chapter 4.