

CHAPTER ONE
INTRODUCTION TO THE STUDY

1.1 PROBLEM STATEMENT

As the South African educational system operationalizes the values of dignity, equality and freedom, as enshrined within the Constitution of South Africa (Republic of South Africa, 1996), and moves away from segregated policies based on race and disability, the practices, structures and philosophies contained both within the Constitution and the Education White Paper 6: Building an Inclusive Education and Training System (National Department of Education, 2001) permeate current thinking. The theoretical framework, assumptions, practices and tools have been replaced by a more ethical system, which is in line with current international trends.

Change, however, occurs slowly and mindsets need time to alter in order to embrace transformation. Because the Department of Education (DoE) recognizes this, a twenty-year time frame has been developed by which time the system of inclusive education should be comprehensively implemented. For this transformation process to take place it is imperative that the conceptual framework is put into operation. This is particularly important in the field of assessment where the Education White Paper 6: Building an Inclusive Education and Training System (National Department of Education, 2001) states that all learners must be assessed within the same curriculum and framework. Watered-down and/or alternative curricula are no longer permitted as they act as a causal agent for further discrimination against individuals with moderate to severe disabilities. This discrimination, in turn, leads to the maintenance of marginalization of this particular cohort.

The transformational process, however, is a major challenge for teachers who may have children in their classes who have neither sufficient spoken language nor constructive motor responses at their disposal to engage equally in the assessment

process alongside their typically developing peer group. To minimize the risk of discriminating against the child who may be one of the emerging population of South African individuals who use augmentative and alternative communication (AAC) as a means of expressive communication, it is necessary to devise appropriate and valid assessment procedures. AAC is an instructional approach that can facilitate students with little or no functional speech (LNFS) towards optimally reaching their potential (Lloyd, Fuller & Arvidson, 1997). It has further been defined as the supplementation or replacement of natural speech and/or writing using aided (e.g. graphic line drawings) and/or unaided (e.g. gestures) symbols to enhance the communicative skills of persons with severe communication difficulties (Lloyd et al., 1997).

Appropriate assessment procedures can be achieved through the use of assessment accommodations. Assessment accommodations refer to the manner in which the assessment is changed in either its administration by the tester or the way in which the testee responds to the questions posed. These accommodations are used to compensate for the discrepancy between the learners' output, which may be linked to the nature of the disability and not to the level of cognitive skill or other construct being tested (Thurlow, Elliott & Ysseldyke, 2003; Wagner, 1994).

While some alternate response modes have been investigated for the population of individuals who experience severe disabilities, such as direct selection versus scanning (Arvidson, 2000), and answering "Yes" or "No" as opposed to pointing to the correct picture (Wagner, 1994); using eye-gaze as a mode of response by the testee has thus far neither been tested nor validated. Here, the respondent uses eye-gaze as a means of direct selection to indicate from an array of items, the item of choice, in other words the answer to the question posed. For the tester to accurately determine to which item the testee is referring (without the use of either auditory scanning or partner assisted scanning), it is necessary to make use of an E-tran (Eye - gaze transfer board). Typically, this is a rectangular sheet of Perspex or Plexiglass out of which a central square hole has been cut to facilitate both good eye contact between the tester and the testee, as well as a clear view of the direction in which the

eye of the testee is moving to indicate the selection of an answer (Goossens' & Crain, 1987). The correct answers as well as the distracters are placed in an appropriate configuration, which best meets the physical needs and abilities of the individual who is being assessed.

However, this mode of response had to be field-tested in order to ascertain whether the test results remained a valid and indeed, an accurate transfer of the knowledge from the testee to the tester. Contaminating factors which would either advantage or disadvantage the testee in relation to his peer group needed to be explored and/or ruled out.

Because of the relatively low cost of the implementation of this tool as a means of assessment as well as the relative simplicity in its administration, it was felt that it would provide an excellent means of ensuring that even the most physically disabled of the children with severe disabilities and who have LNFS, from urban, peri-urban, rural to deep rural schools, could be included within the assessment and accountability systems of any South African school in which they are present.

This study assessed the first two levels of phonological awareness described by Adams (1990), namely rhyme recognition and the identification of the sameness of firstly, the initial and secondly, the final sounds within uni-syllabic words. The response mode was both a spoken "Yes" and "No" and non-spoken "Yes" or "No" via eye-gaze using an E-tran. The two response modes were then compared for consistency. The order in which the items were presented to each child was altered so that the study controlled for order effect. The purpose was to establish the accuracy and consistency between the spoken and non-spoken response mode, in a test of phonological awareness in order to explore the validity of the response modes.

In light of the overwhelming evidence that the relationship between phonological awareness and reading ability is a robust one (Adams, 1990), it appears reasonable to identify the strengths and weaknesses of phonological awareness in Grade One

children with LNFS, so that they may be afforded the opportunity of receiving appropriate educational intervention. An investigation of this nature will provide educators with an answer to the question of whether the use of eye-gaze as a response mode is a valid alternative to the spoken Yes/No response mode when assessing children who are unable to use spoken language as a means of expressive communication.

The results of this study will make a considerable contribution to the field of education, because many children with LNFS are taught basic literacy skills via the sight method only. This is because it is erroneously thought that the teaching and development of phonological and phonemic awareness attempts to build upon the children's weaknesses and not their strengths. Appropriate literacy teaching beginning in the Reception Year or Grade Naught, as well as from Grade One, is imperative for children with LNFS as reading is so vital for the improvement of their quality of life (Beukelman, 1991).

1.2 DEFINITION OF TERMS

The following frequently used terms require clarification.

1.2.1 Alternate Assessment

Alternate assessment refers to assessments which are provided to children who are unable to meaningfully participate in the regular assessment procedures alongside their typically developing peers, despite having the opportunity of receiving test accommodations. These children frequently have different instructional goals, even though they are working towards the same content standards (Thurlow et al., 2003).

1.2.2 Augmentative and Alternative Communication

Augmentative and alternative communication is the “supplementation or replacement of natural speech and/or writing using aided or unaided symbols in order to enhance the communication skills of persons with little or no functional speech” (Lloyd et al., 1997, p.524).

1.2.3 Eye-gaze Transfer Board (E-tran)

A communication board consisting of a rectangular sheet of Perspex or Plexiglass out of which a central square hole has been cut for the purpose of facilitating both good eye contact between the tester and the testee, as well as a clear view of the direction in which the eye of the testee is moving to indicate the selection of an answer (Goossens’ & Crain, 1987).

1.2.4 Little or No Functional Speech

This study refers to the term “little or no functional speech” as the state of spoken competence of an individual who is able to speak less than fifteen intelligible words (Burd, Hammes, Bornhoeft & Fisher, 1988).

1.2.5 Phonological Awareness

Phonological awareness is the term used to describe the metalinguistic skill whereby an individual has an explicit awareness of the phonological units within words. Further, it is also described as the ability of the individual to manipulate the phonological units within words – especially the phonemes (the smallest units of sounds) represented in an alphabetic orthography (Blachman, 1991; Blischak, 1994).

1.2.6 Test Accommodations

Test accommodations refer to the manner in which tests are altered in either the administration of the test for the testee or the manner in which the testee responds to the items presented (Elliott, Kratochwill & Schulte, 1998).

1.2.7 Test Modifications

Test modifications are considered to be changes to the content of the test administered, which, by the very nature of the changes, leads to a change in what the test measures (Elliott, McKevitt & Kettler, 2002).

1.2.8 Test Validity

The validity of a measuring instrument is the degree to which the instrument measures what it claims to measure (Leedy & Omrod, 2001).

1.3 OUTLINE OF CHAPTERS

Chapter One provides the problem statement as well as the motivation for the study. A definition of key terms, abbreviations used within the text and an outline of the chapters is supplied.

Chapter Two examines the problems experienced by educators in the assessment of children with severe disabilities and in particular those who have LNFS. The issues of test accommodations as well as the validity of these test accommodations for this population group are explored. The relationship between the development of good literacy skills in both typically developing children and their peer group with LNFS and who use AAC strategies to express themselves is examined. Furthermore, it looks at the role of phonological or phonemic awareness and its assessment in relation to

literacy development, as well as the difficulties that often occur in emergent readers. This then leads to the identification of alternate response modes, namely spoken and non-spoken, to assess phonological awareness in children with LNFS.

Chapter Three describes the methodology of the study. This includes a description of the aims, sub-aims, research design, pilot study, the schools, children, materials and equipment used in the study, the data collection procedures and finally the data analysis and statistical procedures employed.

Chapter Four describes and discusses the results in relation to the aims of the study. A comparison between the two groups as well as between the individuals themselves is described and compared.

Chapter Five provides a summary of the results obtained in the study. A critical evaluation of the study is presented, followed by the strengths and weaknesses of the study and finally recommendations for future research.

1.4 ABBREVIATIONS

AAC	Augmentative and Alternative Communication
DoE	Department of Education
EFL	English First Language
ESL	English Second Language
E-tran	Eye-gaze Transfer Board
GRS	Graphic Representational System or Set
LNFS	Little or No Functional Speech
TOPA	Test of Phonological Awareness (Torgesen & Bryant, 1994)
MRS	Manual Representational System or Set
PALS	Phonological Awareness Literacy Screening (Invernizzi, Meier, Swank & Juel, 1999 – 2000).
SD	Standard Deviation

1.5 SUMMARY

This chapter provides the rationale for the study, highlighting the current situation with regard to test accommodations and the need to validate alternate response modes for children who are unable to respond orally. The chapter concludes with a definition of key terms, abbreviations used within the text, as well as an outline of the chapters that follow.