CHAPTER 1

INTRODUCTION

1.1 Background to The Study

This study seeks to develop an assessment model for identifying students with learning disabilities (LDs) in Primary Schools in Zimbabwe. An attempt is made to examine current practices in assessing students with LDs with the view to accurately document, analyse, categorise and come up with areas of best practices. These areas of best practice are the ones which will be combined to give rise to the proposed new assessment model. According to Mpofu and Nyanungo (1998) the current assessment practices are Western adoptions without any significant local input. This study enables us to form a basis for any future plans in the area of assessment. The study ends up by providing a possible assessment model.

The advent of independence in 1980 brought in an influx of many students who had been affected by the war into the education system. The amalgamation of the education system resulted in the need to balance resources between educating all the children and rebuilding the educational infrastructures which had been damaged during the war. Mntungwana-Hadebe (1990) writes that all children including those with learning disabilities who had not managed to get an education for a long period found themselves in the school system again. Automatic promotion from grade one to grade seven became the order of the day due to the large numbers. The African schools were under resourced, classes were
large and a lot of teachers were untrained. Most of the students could not read or
do basic mathematics skills. Failure at the grade seven tests was very high.

When solving any problem, a proper identification of those in need should be
made. This is in line with the Nziramasanga Commission of inquiry into
Education and Training (1999) which places identification of disabilities as the
basis for intervention. The remedial programme in Zimbabwe is such a
programme which should be based on the proper identification of its recipients.
Failure to do this may produce psychological trauma to both the child and the
parents (Asim, Kaln, Idaka and Bassey, 2011). Resulting in resources being used
to teach wrongly identified children.

Historically the area of assessing children with LDs for placement into remedial
classes was available before independence. But this was only for the white,
coloured and Asian children in the then Rhodesia. There was no special education
policy for the African children who were in townships or rural areas (Mpofu,
Kasayira, Mhaka, Chireshe and Maunganidze, 2007). A basic education was felt
to be adequate for them. As is known the provision of such an education demands
both human and material resources.

Dorsey (1975) says that the colonial government spent more resources on a white
child than an African child. The human resources in the form of specialised
teachers, who were able to teach these children, and material resources in the
form of tests, specialised books, apparatus and games to be used during the
intervention. These resources could only be supplied to the white, coloured and
Asian education sectors (Dube 1980). The African sector was so large and mainly affected by the war, teachers were not specialised and funding was minimal (Smith, 1978). The focus of the education was mainly on preparing the bulk of the Africans for manual work with a minority being for teaching, nursing and police work to be carried out among their African population.

Education Development Unit (E.D.U.) (Primary) in a report in 1980 titled “Fifty years of English Language Teaching” concluded that remedial reading was regarded as an extramural activity. Dube (1980) in a study entitled “Educational System in Colonial Zimbabwe” equates the education system then to South Africa’s apartheid system. Thus African education at both primary and secondary level was linked to the development of semi skilled personnel which was to be supplied to the industries for that category of labourers. In summary African education was poorly funded, lacked teachers and had bottle necks which made it difficult for children with learning disabilities to progress.

The issue of learning disabilities arises when students fail to read and write as indicated by Tanyongana’s (1984) analysis of the grade 7 examination results which revealed that 9 percent and 10 percent of the children who wrote the tests needed English and mathematics remediation. It is not clear how they managed to arrive at this figure. However the results indicated that about 20 percent of children go through their education without any identification until it is too late to remedy their problems. This resulted in the government introducing remedial education, to the African schools. This is now a subject of this study due to the gaps which have been found in the practice. The remedial programme was
introduced in 1982 and institutionalised in 1987 but up to date only a third of the primary schools are carrying out the programme (Chief Education Officer (CEO) Minute No. 12 of 1987). This was because it did not take into account what was being done then and before in the African section. The teachers were not trained in the foreign model with its unfamiliar tests which were suitable for the former group “A” schools. These were élite schools which catered for white children only before independence. Lastly the programme focused on the grade 4 children yet teachers felt that it should focus on all grades especially the grade seven children who were preparing for their final tests as shown by the Appendix to C.E.O. Circular Minute No. 14 of 1982.

The main observation made is that there is no clear assessment model for identifying children with learning disabilities in Zimbabwe (Nziramasanga Commission, 1999; Mpofu, 1999). Current provision of learning disabilities, the attitudes towards it, legislation and the way forward clearly shows that there are mixed preferences when it comes to assessing and teaching students with learning disabilities.

The identification of these children is difficult because as Gearheart (1986) and Willis (2007) point out a variety of models and theories are considered at the primary school level. The epistemology, which guides the assessment and provision for LDs, is mainly American and British in nature and experts are differing on the best way of assessing children in LDs (Chamberlin 2005).
Chamberlin (ibid) points out that experts differ on the best way to assess children’s learning disabilities. Some are arguing for a holistic model that aims to identify low performing children early and the others argued for a cognitive assessment approach. This would use a battery of diverse psychological, educational, behavioural tests to assess LDs. This shows that the assessment model being used to identify children at the Primary School level in Zimbabwe is faced with resistance from the schools. Mainly because this model has failed to take off in over two thirds of the schools in Zimbabwe (CEO Minute No 12 of 1987). Unlike the American scenario (Chamberlain, 2005) there is no current debate going on in Zimbabwe on the best possible model to be used.

In response to CEO Minute No 12 of 1987 the Ministry of Education, Sport, Arts and Culture (MoESAC) put in place through the department of Schools Psychological Services and Special Needs Education (SPS and SNE) a system of identifying all the primary school children as soon as they attain grade four (Mutepfa, Mpofu and Chataika, 2007). Using adopted foreign tests in Mathematics and English a discrepancy method was used to screen grade four students (Tambara, 2001). Three groups of children were identified; those children who performed on average or even above average in both tests; those who perform below the average in both tests and those who performed below the average in one test and above average in the other. Turnbull, Turnbull, Shank, Smith, and Leal (2002) and Gearheart (1986) show that the last group is the one, which shows a clear discrepancy in performance thus indicating that they have learning disabilities (LDs). However the experience in the Zimbabwean situation presented interesting reactions from teachers who in many instances disputed the
screening results claiming that most of the LD labelled children was not in that category.

Such a situation has created problems of interpretation between the professionals and the teachers or practitioners in the primary schools. Both are beginning to dispute the relevance of the assessment model being followed and also the validity of the instruments being used.

1.2 Theoretical Framework

Two theoretical frameworks guide this study. These are the mechanistic model and the holistic constructivist model. The mechanistic reductionist model or paradigm has been influential in the clarification of learning disabilities in the western world (Poplin, 1988b in Reid, Hresko and Swanson, 1991).

The mechanistic reductionist model focuses on the psychological, behavioural and cognitive aspects of a person, assessing parts of a whole. By studying these fragments the whole is assumed to be understood more clearly. Studies have shown that a lot of assessment in the LDs field is mechanistic in nature (Pumfrey, 1986). Batteries of tests which are given to children identify children’s deficits in order to remedy them.

The holistic constructivist model (Poplin, 1988b in Reid et al., 1991) emphasizes the assessment of all the child’s aspects at the same time concentrating on their strengths rather their deficits. Holistic constructivist models believe that learners...
have a personal social construction of meaning which is propelled by a person’s values and interests. Assessment therefore should be a documentation of these expressions of learning originating from multiple authentic learning situations. The whole language approach is one example of a holistic constructivist model which has been resuscitated in the United States of America (Barron 1990).

There are other pertinent issues which affect how a model is used for identifying children with LDs. The epistemology guiding the tests being used plays an important part in recognising the student’s background. Do tests in the model reflect the students’ culture? Mpofu and Oakland (2010) point out that assessment tests should take into consideration the culture and environment of the test taker. The type of tests used will affect how children are selected.

1.3 Rationale for The Study

This study is coming in to identify ways in which children with learning disabilities can be correctly identified for remediation. The practice of remediation in Zimbabwe has gone for long without an evaluation of what is actually happening. Government through the School Psychological Services has committed millions of dollars to training teachers and SPS staff in learning disabilities, sourcing materials and supervising the programme in both public and private primary schools (CEO Minute No. 12 of 1987). Since 1982 children across the country have been assessed and given interventions by these teachers. On the other hand parents of children who are having learning difficulties at school have paid teachers to provide extra lessons to their children. This is an indication that teachers and parents have no confidence in the assessment and the
intervention emanating from such practices. This is worsened by lack of documentation which would provide new and untrained teachers with assessment and remediation guidelines.

This study will also come up with a detailed documentation of what is currently happening in selected schools. Such documentation will help us to establish the types of assessment models which are being used to identify children with LDs. It will also help to gauge the strengths and weaknesses of current practices and select those which can be included in the assessment model for identifying children. It is my hope that this study will also help in streamlining assessment instruments and strategies which are suitable for African children.

The use of a case study provided baseline information on learning disabilities in Zimbabwe. Assessment is the basis of any intervention programme, without proper identification of children using appropriate tests there is no credible remedial education and development of children’s learning capacities. This study will contribute knowledge on the Zimbabwean situation which stands out as one of the few countries in Africa with a programme for children with learning disabilities (Mpofu, et al 2007). This is a crucial stage of that debate since its goal is to find out what is currently happening in the various institutions, which offer assessment and teaching to primary school children in Zimbabwe with a view of coming up with an assessment model for identifying students with learning disabilities in Primary Schools.
I benefited from this study by gaining more knowledge on the area of LDs. This experience using a qualitative design allowed me to gain insights into how the area of LDs is unfolding in an African environment. The literature shows that a lot of assessment for identification purposes is taking place in the Western World (Smith et al. 2003, European Agency for Development in Special Needs Education 2005, Chamberlain 2008). It also shows that tests make up the basis of these assessments, mainly focusing on language, reading and mathematics. What is significant is that there is insufficient knowledge on the situation in Zimbabwe and what informs it.

Mpofu (2001) points out that the lack of documentation of African practices has resulted in the dominance of Western ideas through the importation of their assessment tools and models. It is possible that a lot may be happening in Zimbabwe which may be of benefit to the teaching of children with LDs but has escaped the attention of researchers. This study therefore is significant in the sense that it starts an empirical examination of current practice with the aim of revealing what is currently happening in the identification of children with LDs as the basis of any authentic remedial programme or support programme. The literature and the policy circulars have shown that the current remedial programme was based on a foreign model which has never been evaluated (Mpofu, 1999; Kaputa and Ndoro, 2000; Tambara, 2001). A lot has happened in the field of LDs since 1981 when it was spread to all schools, without an adjustment to the circular. The results of this study will be sent to the Ministry of Education, Sport, Arts and Culture for policy improvement and review of the
The remedial programme which is no longer popular in most schools as revealed by CEO minute No. 12 of 1987 (MoESAC).

The successful implementation of remedial education is to a large extent dependent on a clear assessment model for identifying children with LDs. It is on this premises that I undertook to establish the different identification models being carried out in the Harare Metropolitan Province primary schools. It was not the aim of this study to construct new tests but to recommend an assessment model for identifying children teachers can use with the aim of providing effective intervention remedial programmes in Zimbabwe were no child is left behind. Adjustments to the current instruments were also recommended to practitioners as part of the road map to follow when they want to assess children.

The results from the case study yielded detailed thick descriptions of current practice. It will thus fill up this gap with information which will both act as a basis for any researchers who want to carry out successful remediation programmes which incorporate African epistemologies, an important aspect which has been ignored by western oriented researchers and practitioners.

Lastly the research addressed the requirement of the Millennium Development Goal (MDG) number 2 which advocates for the provision of basic education to all children by the year 2015 (Millennium Development Goals Status Report, 2010). The constructed assessment model ensures that no child is left behind as they get an authentic education in an inclusive educational environment.
1.4 Statement of The Problem

In Zimbabwe a lot of children are failing their grade seven tests due to disparities in their English, Shona and Mathematics subjects. Such children have learning disabilities. The Ministry of Education, Sport, Arts and Culture’s evaluation of grade seven results show that pass rates are going down due to poor performance (Millennium Development Goals Status Report, 2010). The trends from 2000 up to 2012 show a constant decline in grade seven pupils’ performance. Despite the presence of the SPS and SNE and the institutionalisation of the remedial programme through CEO minute number 12 of 1987 a significant number of children continue to fail throughout the school system (Technical Committee of the Education for All Campaign in Zimbabwe, 2005). Blame has been placed on inadequate resources. Research has shown that the teacher factor is the most significant in this scenario. Such teachers should be able to assess children so as to improve their all round performance. This can only be remedied by proper identification so that they can get proper interventions.

Omari (1977) says the problem often encountered in African countries is lack of appropriate screening and assessment tests depicting local environment and cultural realities. Addressing children with LDs’ problems at the school level by first identifying them properly using the proposed assessment model and providing appropriate teaching programmes will equip them with adequate learning skills which will prepare them for examinations and the world of work.

Assessment is the base for all interventions and if it is inappropriate it is reflected in the inadequacies of the tests and the inappropriateness of programmes to
produce the desired results. What then is the assessment model for identifying children with LDs at the primary school level in Zimbabwe? How can it be constructed?

1.5 **Aim of The Study**

The study aimed to establish an assessment model for the identification of children with learning disabilities in primary schools in Zimbabwe by soliciting teachers’ opinions towards current assessment models, tests used and intervention.

1.6 **Objectives of The Study**

The study was guided by the following objectives:

1.6.1 To find the assessment models being used by schools to identify children and why they use them.

1.6.2 To determine the effectiveness of the tests being used and identify challenges encountered and how they resolve them.

1.6.3 To identify tests with aspects of African epistemologies with a view of incorporating them into the assessment model.

1.6.4 To construct an African assessment model.

1.7 **Research Questions**

These questions were used in the study:

1.7.1 What assessment models do teachers use to identify children with learning disabilities and why do they use them?
1.7.2 How effective are these tests and what challenges have schools encountered when using them in their models?

1.7.3 What African assessment epistemologies are reflected in these tests?

1.7.4 How can an assessment model with relevant tests be constructed?

1.8 **Assumptions of The Study**

The study made a number of assumptions based on what was currently taking place. First it assumed that all schools have some form of assessment model they are carrying out to identify children with LDs. These assessment models comprise of both formal and informal tests and they are varied between schools.

The second assumption was that schools have documents in the form of tests, test results, reports, evaluations and minutes of meetings which should yield valuable information on the assessment models they are following. Such records would reveal the tests and interventions which are used and this should ascertain the strengths and weaknesses of the models. This helped to create an assessment model for the children with learning disabilities.

1.9 **Delimitation of The Study**

This study was an investigation and examination of current assessment models which are being used to identify children with learning disabilities so that they can be provided with an educational intervention. It therefore focused on schools, teachers and the children they teach. It targeted the stages they take as they assess the children, the tests they use and their relevance to identifying children. It must be pointed out that these practices are the ones which were the centre of the study.
The emphasis was on identifying children for intervention. To understand this context fully, service providers were involved to find out their role in the development and sustenance of these assessment models.

The study was not on creating new tests for identifying children with LDs. They are already numerous formal and informal tests that have been used to select children in other countries which we can look at (McLoughlin and Lewis, 1986; Cosford, 1990). What this study did was to identify those instruments which have been used successfully and recommend them for inclusion in the model. Tests which have potential but have a Western bias were also examined for possible inclusion in the recommendations.

This was a qualitative research which used a case study approach (Yin, 1994). It focused on the Harare Metropolitan Province which includes the town of Chitungwiza specifically its primary schools.

1.10 Limitations of The Study

The main limitation was that some heads of schools refused to take part in the study by changing appointment dates until I had to move on to the next school which had not been initial selected. This lengthened the data collection process resulting in use of more resources. The case study generated a large amount of data which needed to be managed so as to generate the themes. This was overwhelming and consumed a lot of time and energy. It is mentioned that case studies are difficult to generalise to other settings. However, Flick (2006, 2009) and Cohen and Manion (1989) do point out that such findings can be generalised
to similar situations. Specifically, Flick (2009) says that it is possible to theoretically generalise the findings to cases which are similar to the one under study. Harare Metropolitan Province is similar to the other major cities of Zimbabwe therefore the findings can be generalised to those settings.

The identified assessment models from different schools revealed both positive and negative attributes despite their localities. They were more negative areas which obscured the positive ones and the process of isolating them may have resulted in the omission of some best practices in a few schools.

1.11 Significance of The Study

The study contributes to the literature on learning disabilities in Zimbabwe. The findings of this research are a vital base for the development of models on identifying children with LDs and developing interventions for children. Teachers need information on what they should do when identifying children with LDs. Heads and teachers at one school indicated that their identification of children was not effective as they did not know if they were following the proper procedures despite having a circular requiring them to provide remediation. These findings fill up this gap as it documents and disseminates what schools have been doing. The information on tests and how they can be made more effective provides a basis for further research.

The findings highlight the importance of an assessment model. The model helps in the streamlining of the provision for children with LDs so as to improve their academic performance in all subjects. Although children differ in their needs it is
important that teachers request for an assessment model should be fulfilled. The model is not prescriptive but helps teachers to plan their identification effectively. Halliwell and Williams (1992) show that proper identification of children with learning disabilities is the basis of any good intervention programme. Incorrect identification results in harm to the child in the form of emotional trauma or psychological damage. The proposed assessment model will help teachers identify children accurately as Vargo and Young (2011) propose.

The need for an assessment model will contribute to the development of viable interventions for children with LDs. Currently there is a cross section of various models whose effectiveness has not been tested. I acknowledge that even the suggested model will need to be evaluated in due course. If learners are not properly identified there is the likelihood that they will continue to have poor subject passes at the grade seven level.

MoESAC acknowledges that the poor pass rate at the grade seven level characterised by a failure in one subject and a pass in the others is a result of lack of poor tuition in those subjects (CEO Minute No. 12 of 1987). The proper identification of those children and the concurrent teaching to realign the children’s performance will address this anomaly. The development of an assessment model is quite significant because it becomes the school’s dashboard on the performance of their school.
Research Methodology and Design Used

A qualitative research complemented with quantitative elements was conducted (Miles and Huberman, 1994). It used a case study design of the Harare Metropolitan Province which includes the town of Chitungwiza. It focussed on finding the assessment models which were currently being used and how teachers were going about it in the remedial programmes in the primary schools. The selection of a case study enabled me to understand assessment as fully as possible realising that this was the first study being carried out in the area in Zimbabwe.

The sites used for data collection where government and private primary schools focusing on the 221 primary schools in Harare and Chitungwiza, all the 7 districts, the provincial education office and MoESAC head office. Purposive sampling was used to select the schools participants and the informants (Oliver 2006). Schofield (2006) describes it as a method whereby whoever is available and willing takes part in the study as long as they fulfil the required attributes. This was both expedient and less costly. A total of 92 teachers; who included English, Mathematics and Shona remedial teachers and classroom teachers were the main participants of the study. Focus was on their assessment activities as they selected and taught primary school children in the different primary schools in the urban and peri urban schools of the Harare Metropolitan Province.

Verification of the data from the participants of the study was achieved through interviews with the informant who included; 2 Directors of Education, 4 District Education Officers, 1 Principal Educational Psychologists, 2 Educational Psychologists, 1 Principal Remedial Tutor, 5 Remedial Tutors and 22 School
Heads. These verified the data collected from the teachers. Document analysis completed the triangulation through analysis of records, tests and reports. This enabled the identification of the actual tests and strategies being used.

The case study used three phases to collect data. Phase one was the distribution of a questionnaire to the 221 primary schools to get baseline information on the schools which had remedial programmes. The second phase involved interviewing the teachers and their heads that had been selected to take part in the study because they had a viable remedial programme. The verification was also carried out during this phase.

Phase three involved the analysis of interviewed teachers and heads’ documents used for identifying children in their schools. The following instruments were used in each phase; questionnaires (phase 1), semi structured interviews (phase 2), and document analysis (phase 3). This was in line with Cohen and Manion (1989) and Yin (1994) who say that the case study focus on the characteristics of an individual unit to probe deeply and analyse the phenomena with the intention to generalize to the wider population to which it belongs. The above created an enormous amount of data.

The data was first analysed using global analysis, which was an overview of the thematic range of the data which was to be analysed (Flick, 2009). This enabled the use of Rudestam and Newton’s (2001) 7 steps to thematic data analysis and interpretation. The 7 steps involved reviewing, recording and cleaning up the statements to organise them into categories and themes.
1.13 **Ethical Considerations**

Issues of confidentiality and anonymity were assured in the questionnaires and interviews carried out with the participants. To gain access into the different sites consent was sought from the responsible authority and the Ministry of Education, Sport, Arts and Culture’s Secretary through letters and meetings (see appendix VIII). Every effort was made not to harm any individual or institution by abiding to laid down ethical considerations. This entailed not using stigmatising language or hate speech.

All ethical considerations concerning informed consent, debriefing and publication of results were adhered to in the questionnaires, interviews, document analysis and the report publication.

1.14 **Organisation of The Study**

The study was organized into six chapters. These chapters are thematic in the sense that they indicate what is being covered. The chapters are in this order:

Chapter 1 : Introduction
Chapter 2 : Theoretical framework or Literature Review
Chapter 3 : Methodology
Chapter 4 : Results Interpretation, Analysis and Presentation
Chapter 5 : Findings and discussion
Chapter 6 : Conclusions and recommendations
Definition of Special Terms and Expressions

The following definitions of special terms and expressions were used:

**Assessment**: Systematic process of gathering educational relevant information to make a decision about the provision of special services.

**Epistemology**: Knowledge, its nature and forms and how it can be acquired and communicated to other human beings.

**Learning Disabilities**: Poor achievement in school indicated by a discrepancy between ability and achievement with the presence of normal intelligence, motor ability, sensory ability and emotional adjustment.

**Model**: A representation of a phenomenon, device or structure. This is synonymous with a plan or an analogy.

**Remedial Children**: These are those students who exhibit learning disabilities.

**Remedial Programme**: The intervention which is offered to children with learning disabilities.

**Test**: A collection of tasks that are used to enable the systematic observation and recording of behaviours selected to represent important educational aims.

**Testing**: The eliciting of responses from students to questions posed under structured conditions.
Chapter Summary

This chapter focused on the aims, objectives and research questions of the study. Descriptions were made of the assumptions, theoretical framework, ethical issues, and organization of the study.
CHAPTER 2

REVIEW OF RELATED LITERATURE

2.1 Introduction

The category of learning disabilities is the fastest growing Special Needs area in the world (Burkhardt, 2004; Torgersen, 1998; Okumbe, 2005). According to Torgesen (1998) it is the largest category of disability being catered for in Special Education in the developed world. Abosi (2007) concurs that the category of learning disabilities is also causing concern in schools in Africa with as much as 8% of children having learning disabilities in each classroom. In Zimbabwe learning disabilities began receiving attention in 1982 after the country’s independence was attained through the remedial programme. Remedial education has been directed by the Department of the Schools Psychological Services and Special Needs Education (SPS & SNE) (CEO Minute No. 12 of 1987).

Also attention has come from parents who have observed their children’s poor end of term reports resulting in their demand for extra lessons from teachers or anybody who can help the child improve their grades. I became interested in Learning Disabilities when I joined the SPS & SNE in the early 1980’s. Then I was a Special Duties Officer (SDO) based at the Regional Office responsible for remedial education. Although I had done courses in backward readers, my experience in the classroom had focused on children with learning difficulties of many forms. In this literature review I want to provide a theoretical and conceptual framework which will cover my experience, prior theory and research,
pilot studies and thought experiments (Maxwell, 2005). Maxwell (ibid) advices that putting together a conceptual framework from these sources is a unique process for each study which should show each researcher’s individuality. In such a qualitative study it is important that this approach formulates the problem understudy.

The literature review will take the following format; Theoretical and Conceptual framework; Learning disability; Theories of Learning Disabilities; Assessment models Tests and Strategies and their effectiveness; Challenges for an African Assessment Model; constructing an assessment model; Gaps in the literature and the summary.

I will begin by looking at the theoretical framework of learning Disabilities.

2.2 **Theoretical Framework of Learning Disabilities**

This study is based on two broad theoretical frameworks on assessment of learning disabilities. The practices of assessment and its linking interventions and evaluations do not occur in a vacuum but are theory driven. A theory is a set of hypothesis related by logical or mathematical arguments to explain a wide variety of phenomena in general terms. A hypothesis would be an assumption or a guess made to explain a phenomena or a happening. In this case our phenomena are learning disabilities.

The two theories which explain assessments in LDs are mechanistic reductionist thought and the holistic constructivist thought (Poplin, 1988b in Reid et al., 1991).
The same theories have influenced our thinking on the constructions of science and science philosophy. In the first theory Poplin (ibid) says that the mechanistic or reduction assumption is that every entity can be reduced to different parts which when put together make up the entity under study. Thus a person can be identified as different parts for example a hand, a leg, or a head. Each of those is a unit on its own which can be fixed if it malfunctions. Thus in assessment the child or person under study is seen as constituting a number of parts which can then be taken apart and checked for deficiencies. This is further complicated by the fact that there are about four major theories which base their assessments on the mechanistic paradigm; these are the medical model (1950s), Psychology and process model (1960s), the behavioural model (1970s) and the Cognitive or learning strategies model (1980s) (Poplin 1988). I will dwell on them in this chapter in an attempt to explain the phenomena of LDs.

The second theory which underpins this study is the holistic constructivist paradigm (Poplin, 1988b in Reid et al., 1991). This thought has been in the background because preferred the positivist approach because of its quantitative attributes which seemed to provide plausible results. The need for explanations for phenomenon has resulted in some of its proponents like Piaget make it emerge as an alternative way of viewing human thinking in general and specifically learning disabilities. Holistic principles and their implication reveal to us an understanding of learning and not learning in the form of purpose or motivation, self regulation and self organization and relations with symbols and persons for real life meanings. Holistic assumptions or principles focus on reality, progress and the organization or system (Heshusius, 1991).
Holistic constructivist thought views reality as dependant on our construction of our environment and situation. Thus fact cannot be separated from value. Learning is viewed as the personal-social construction of meaning which occurs on many levels. Reality is viewed as holistic and the whole is more than and different from the sum of the parts (Heshusius, 1991). Learning starts from the whole to the parts and back to the whole at a higher level of complexity. Lastly reality is orderly and complex.

When conducting holistic assessment understanding the interdependency of relations is central within self and others. Holistic assessment views progress as occurring through dynamic and non-linear interrelationships and is non-deterministic. Thus progress occurs in zigzags. New knowledge is expressed in many varied ways. The organism is always active; goal directed, self organizing and self-regulating. Errors are ways of making meaning. The organism is always exchanging information with others.

The two theories are different in the sense that the mechanistic theory dwells on examining parts of the whole organism and assumes that a deficient in that part can indicate problems in the whole. Constructivist thought differs as it focuses on the whole as opposed to parts of the whole. It assumes that a deficiency occurs if a whole does not function as a whole.

It is from these two diametrically varied theories that this literature review on assessment models and their strategies is presented. I now want to present in depth the various facets of the assessment models first discussed with a view to
illuminating the actual practices occurring in Zimbabwe and internationally. This will help to show how an assessment model for identifying children with LDs can be constructed. I begin the next section by explaining learning disabilities and their background.

2.3 The Context of Learning Disabilities

Ever since I joined the SPS & SNE department in 1985 there has been a lack of a clear explanation of learning disabilities in the Zimbabwe Remedial Programme. What I observed in remedial assessment was the concentration on individual aspects of a child’s learning. For example remedial teachers were taught ways in which they could teach reading and mathematics to children who had so called “remedial problems”. Task analysis, phonics and fundamentals of mathematics were taught. Teachers were provided with the process of teaching but without the underlining theoretical framework of the programme. Sixteen years later, I left the department without having grasped the main theoretical aspects of LDs. The reason why this occurred was two fold. First none of us who became Remedial tutors had received proper training in the area and secondly the programme started from the top down to the grassroots.

The Educational Psychologists and Remedial Specialists who introduced the remedial programme in Zimbabwe did not explain and document what exactly was involved and its rationale. Instead it was seen as a programme for all children experiencing learning difficulties in the urban and rural areas. When you look at other African countries like Botswana, Namibia, Zambia, and Tanzania you
notice that it is a category which is not addressed in most school systems (Abosi, 2007; Edulink, 2007).

According to Hardman, Drew and Egan (1999) Learning disabilities were officially named in 1963 by Samuel Kirk, an American advocate, authority and special educator, as a response to parents who had children who were exhibiting these characteristics which did not fit into any known disabilities categories. Their historical roots go back to the early 1800s where they were classified as dysfunctions of the brain observed in disorders of spoken language. Investigations of the disorders of written language specifically on visual perceptual disorders were done in the nineteenth century in the USA. Since that time interest has grown to include any person who has apparently normal learning ability but cannot learn using the normal educational methods (Turnbull, et al., 2003; Vargo and Young, 2011).

Parents were at the forefront in making the term ‘learning disability’ a label for the children. This has also resulted in the development of numerous definitions of learning disabilities. Arrival at these definitions was not outright. It went through three phases; namely the foundation phase; the transitional phase; and final recognition as a category.

During the foundation phase which straddled the period 1802 to 1946 it concentrated on disorders of spoken language and written language (Gearheart 1986). The transitional phase saw a shift from language to disorders of perceptual and motor processes ranging from the period 1947 to 1964. It is
during the 1960s that it was recognised with an umbrella definition by the National Advisory Committee on Handicapped Children (NACHC). Mpofu (1999) equate this recognition with the social movement for human rights. In his write up he points out that the field of LDs was socially constructed rather than scientifically established. This was due to socio- political concerns that were obtaining in the USA during the sixties namely the civil rights movement and the cold war. This position is in resonance to the affirmation that parents were at the foremost of the creation of the LD label.

Thus Mpofu (ibid) asserts that LDs have developed as more of a service foundation than a science foundation due to the following reasons. The LD category was meant to provide some structure for children with educational needs of average ability who had problems in academic achievement who would not be grouped together with those with Intellectual Impairment who were seen to be getting an inferior curriculum. I have observed this phenomenon even in Zimbabwe where parents are very wary that their children are not placed in Mental Retardation units since this tends to permanently classify their child as a lost cause.

In the USA the government wanted to avoid the risk of being sued by parents and guardians. There was a belief that psycho-educational tests were being used to segregate some children especially those from black communities (Sattler, 1989). It was in the 1960s when the cultural fairness of standardized psycho educational tests, which used to classify learning potential, was being challenged in United
States courts (Sattler 1985, Mpofu 1999, National Alliance of Black School Educators (NABSE) 2002).

One reason for the development of LDs was to reduce pressure on teachers who were overwhelmed by these children with LDs despite having given them enough material resources. I am aware that a similar cry has been raised by teachers in Zimbabwe to the same effect. Whilst on one hand teachers claim that they can handle children with learning difficulties in their classes, they also claim failure to do so due to large classes and under funding. This dilemma, from my experience, emanates from two sources; first failure to clearly identify who exactly should be helped in the classroom and secondly teacher preparation. Improving both of the above can help the teacher to clearly identify who the child with LDs is and what type of provision they can create for them.

Another reason was the decline of educational standards in the USA in the 1960s (Sattler, 1995). This resulted in the passing of legislation to improve standards especially the specific learning disabilities Act (PL19-230). It was meant to promote the US Bill of rights of the Handicapped of 1975 (PL94-142). This showed that Americans including blacks recognized education as a basic right and the provision of it to those with LDs would go a long way in addressing their human rights.

Despite the above rhetoric on the LDs all educationists accept that many children experience difficulties in learning (Dockrell and McShane, 1995). Vargo and Young (2011) say the difficulty can range from being specific, for example when
a child has reading problems, or general as occurs when a child is slow in all areas. In Britain children with specific learning difficulties are classified as those with particular difficulties only such as reading difficulties (Dockrell and McShane, 1995). This is an equivalent term to the United States of America label of a learning disability (Tambara, 2001).

Other authors like Cruickshank in Hardman, et al (1999) claim that all children can have a learning disability. Thus a child with Intellectual Impairment can have a learning disability at a given moment which would need to be addressed. In Zimbabwe the definition of children with learning disabilities has been crowded by a lack of a home grown description of what the category is. As observed from Tambara’s (2001) paper, educationists have tended to borrow from whichever source is in current vogue. Zindi (1997) says that after the American PL94 – 142 and the British Warnock Report of 1978, most of the African countries which were British colonies adopted the recommendations made by these Western countries. Analysis shows that USA definitions despite their numerous guises have dominated attempts to clarify what LDs are (Burkhardt, 2004).

Deisinger (2004) says the USA public Law PL101-476 defines a learning disability as a disorder in one or more basic psychological processes involved in understanding or in using spoken or written language. This disorder may manifest itself in an imperfect ability to listen, think, speak, read and write and spell or to do mathematical calculations. The federal definition further on includes perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia and developmental aphasias (Kaputa and Ndoro, 2001, Okumbe, 2005). We need to
note that the definition clearly excludes learning problems that are primarily the result of visual, hearing or motor disabilities, mental retardation, and environmental, cultural or economic disadvantage.

Sattler (1992) mentions that a later specific definition by the National Joint Committee for Learning Disabilities (NJCLD) says that 'learning disabilities' is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning or mathematical abilities. These disorders are intrinsic to the individual and are presumed to be due to central nervous system dysfunction and may occur across a person’s life span (Turnbull, et al 2002).

Central to the definitions above is the fact that LDs are specific in nature and highlight the need for a discrepancy between the student’s potential and achievement. This is because the definitions try to pinpoint exactly where the problem is. However Dockrell and McShane (1995) see it differently as they point out that the distinction between Specific Learning Difficulties (SLD) or LDs and general learning difficulties or mental retardation is not as straightforward as it might seem. This is because children said to have LDs “often experience difficulties with more than one type of subject matter without necessarily experiencing difficulties with all subject matters” (pg 4). In Zimbabwe children with learning disabilities or remedial children are defined ‘as the pupil of average and above average ability who is at least two years behind in a subject’ (CEO Minute No 12 of 1987).
The problem which has confronted Special Educationists in Zimbabwe is that although the remedial programme has been in existence since 1982, little documentation has shown its nature and benefits. On the contrary the remedial programme has seen a drastic decline and shift towards parent initiated extra lessons. Meanwhile parents are paying teachers to teach their children outside ordinary teaching hours. Both professional and ethical issues are at stake here. I started thinking of what could be done to address the issue of teaching such children in an African context. Questions like how are these children with LDs defined in an African context came to mind. A paramount question was which different assessment models were being used to identify these children.

In 1982 when the LDs provision was extended to the Africans what LDs models of assessment were in use? Is it possible that the remedial programme is targeting the wrong students due to deficiencies in the identification models in use? Zimbabwe literature and the practice in schools need to be examined to come up with an assessment model depicting an African epistemology which would then guide this category.

2.4 **Context of the Assessment of Children with LDs**

Assessment practices are the cornerstone of any learning encounter. A shared definition among professionals ensures a shared vision of what it entails. Therefore a definition provides a firm ground for the study. McLoughlin and Lewis (1986:3) define educational assessment of children with disabilities as the “systematic process of gathering educationally relevant information to make legal and instructional decisions about the provision of special services”. They further
point out that this information relates to the everyday concerns of the classroom. They sum up by saying it focuses mainly on the areas of learning in schools as well as any factor affecting school achievement.

Salvia and Ysseldyke (1991) and Lin and Gronlund (1995) also mention that although educational assessment, testing and diagnosis are related they are not synonymous. According to Salvia and Ysseldyke (1991) educational assessment is the process collecting information for the purpose of verifying problems and making decisions about the provision of special services. Mpofu (1991) says testing involves performing tasks presented as problems that call for a solution. This includes the ability to follow instructions. McLoughlin and Lewis (1986) mention that diagnosis is a medical term which refers to the effort to establish an illness and describe an appropriate treatment. Testing which elicits responses to structured or unstructured questions is only one approach used in the assessment of children with LDs.

Swanson (1991) agrees with this when he says although one traditionally thinks of assessment in terms of test administration, scoring and interpretation it is important to understand how the concept of assessment is separate from testing practice. Swanson, (1991); Dockrell & McShane, (1995) refuse to give a precise definition of assessment but provide its aim as discerning individual characteristics that are important for establishing individual intervention programs. In the next section I focus on the different LDs models and how they view assessment. My purpose is to show their link with the assessment models which are used to identify students with LDs in different settings. This will enable
us to identify the sources of the tests and strategies that will be presented in the assessment models that will be examined.

2.5 **Assessment of Learning Disabilities**

Whether contrived or not Learning Disabilities as a category of education has a wide scientific base which continues to receive attention by educationists and psychologists (Burkhardt, 2004; Okumbe, 2005). Proper assessment of this category requires us to know exactly what the theoretical root of this phenomenon is. Such knowledge would equip us with enough models tests and strategies to really identify what the children with learning difficulties would be experiencing and thus be able to provide an appropriate intervention. There are numerous theories and models of LDs currently in use but for this study the following will be examined: the perceptual motor theory, the information processing theory, the cognitive models, behavioural theory, the ecological model, the medical model and the holistic paradigm.

The prevalence of so many theories already poses a problem since they cover different areas which have been identified to indicate the main areas which show children’s development and the likely places problems may arise. These theories help in describing, explaining and predicting phenomenon. Mpofu, (1999) points out that theory also help in the development of instruments to assess and provide a framework for interpreting the results. But their prevalence poses a problem in that this may also result in a proliferation of assessment practices which may consume most of the time without providing a clear intervention programme. This was the case when I was at SPS & SNE; a lot of the time was spent testing using a
variety of instruments whose theoretical base was not known. The following theories and models have their roots in the Western countries, a dominance which needs to be addressed by studies in African environments.

2.5.1 **Assessment in the Perceptual Motor Theory**

The perceptual motor theory view perceptual disturbances or abnormalities which may be a result of brain injury or dysfunction as the major cause of learning disabilities (Gearheart, 1986; Mpofu, 1999; Hardman, et al., 1999). The perceptual motor learning theory consists of the following linked components: sensory input which has sensory channels which are constantly receiving information, where impulses are transmitted to the brain and translated into patterns of neural impulses; integration, where associative areas of the context integrate the information, output, which is generated in the motor area of the brain and sends messages to the muscles; muscular response. These linked components lead to the development of essential motor bases of learning. There is constant feedback between the last stage and the sensory input. A break down in this process results in Learning Disabilities. Examples of the effects are dyslexia, hyperactivity with severe reading disability or other learning difficulties which create academic and social difficulties.

Assessment of LDs in this theory would be to use tests which can identify a breakdown in the process, thus diagnosing the brain dysfunction. Therefore a major goal of the assessment is to isolate any modality strengths that can be used to plan intervention. Mpofu (1999:153) points out that "process tests that are used
to diagnose deficits are often of questionable clinical significance and are not useful in constructing Individual Educational Programs (IEPs).

2.5.2 Assessment in the Information Processing Theory

Hardman, et al. (1999) and Sattler (1992) say the Information Processing Theory is among the more commonly accepted educational models. According to the theory, Information Processing includes attention (Scanning, focusing, sustaining focus, shifting focus) perception (discriminating, coordinating, recognizing, sequence) and memory (storing stimuli and rehearsing it), cognition (recognizing meanings, identifying meanings, associating meanings and inferring meanings) encoding (recalling, organizing and monitoring). It assumes that children with LDs have deficits in any one or several of these processes. Mercer (1983) describes it as a theory which focuses on the types of information people acquire, how they acquire, process and use the information they get. Information processing can be divided into two major components; performance and knowledge.

Deficits in either or both cause learning disabilities. Mpofu (1999) points out that assessment in information processing theories measures the underlying problem solving strategies through three aspects of task performance namely duration, difficulty and success in completing the task. The goal of assessment according to Halliwell and Williams (1992) is therefore, to ascertain the level of information processing an individual is capable of. Other writers talk of measuring and determining the level of automatisation of the skills (Willis, 2007). The assumption is that able learners go through the different components of
information processing automatically, but children with learning disabilities have automatisation failures in processing information.

A major criticism of this theory is that it reduces complex processes to their simple components for the purposes of instruction (Reid, 1991). There is concern that such fragmentation of complex processes like reading and writing can impede learning since there is a focus on parts of the sentence rather than reading the whole sentence or passage for comprehension.

2.5.3 Assessment in the Cognitive Models

The cognitive theory as explained by Cooney (1991) in Reid, et al. (1991) represents the most explicit information of a comprehensive cognitive theory of learning. It is based on the assumption of a unitary cognitive system. The Adaptive Control of Thought (ACT) theory explains that there is a common cognitive system for higher level processing, called metacognition. This theory is not domain specific. Its emphasis is on working declarative and production memory and how a breakdown in them can produce a Learning disability. Cooney (ibid) summaries its advantages as its ability to explain the structure of the learner’s knowledge, the manner in which knowledge is acquired and refined and the manner in which the learner regulates the use of knowledge. These are clearly relevant to the diagnosis of learning disabilities. Assessment is based on the identification of missing, weak or erroneous knowledge structures in the declarative and production memory system. The methods used to evaluate the structure of the learner’s knowledge in cognitive models have not been standardized.
2.5.4 **Assessment in Behavioural Models**

The behavioural model remains very popular with remedial specialists (Reid, 1990). Gearheart (1986) says that its underlying principle is that human behaviour is made up of a variety of responses that may be observed and related to other observable events. A major area of the behaviour model is operant conditioning, whereby the learner actively operates on the environment and responds to the results. Thus responses that are reinforced by environmental contingencies are more likely to be repeated. Children who have learning disabilities are likely to be victims of impoverished socio-economic backgrounds which have failed to reward their responses; or poor teaching or invalid assessment tests which are not in tandem with the curriculum (Willis, 2007). The emphasis of assessment is on tasks which the child is failing so as to establish the child’s strengths and weaknesses. Focusing on the child’s weaknesses an Individual Educational Programme (IEP) can be planned. There is also a high probability that some learning disabilities are caused by poor teaching methods which means that assessment should also focus on the teacher factor.

Although behaviourism currently dominates educational practices its major criticism is that it is too simplistic to explain all learning disabilities. It focuses on the way information is presented to the learner but does not explain how the learner should go about learning. Hresko and Parmer (1991) say that there is a continuing movement away from behaviourism.
2.5.5 Assessment in the Medical Model

Medicine has historically played exploratory and pioneering roles in the assessment and treatment of learning disabilities. Sattler (1992) outlines the various medical assessment methods which have been used to identify children with LDs. The main focus has been on the area of hyperactivity which has been seen to be quite predominating in most children experiencing Learning difficulties. Hresko and Parmer, (1991:18) points out that “the medical perspective views learning disabilities as a function of neurological, neurobiological, genetic or hormonal dysfunction relating to the biological functioning of the brain”. The field has focused on oral and written language characteristics of individuals specifically in the area of aphasia beginning from the 1800s. Work on brain lesions by Duyere in 1925 resulted in later work by other medical scientists which established a tentative association between hyperactivity and minimal brain damage. Further studies were spent on such terms as central nervous system dysfunction, minimal brain damage, minimal brain injury and minimal brain dysfunction. Currently the search has included biochemical disorders, maturational lag, and genetic disorders.

Another area which has received attention is the influence of food in the development of learning disabilities. The role of sugar, vitamins, minerals and food additives has been well documented in the literature (Pumpfrey and Reason 1991). Sugar deficiencies have been documented as causing hypoglycaemia which is characterized by pathologic drowsiness. Such children always want to sleep even when they are carrying out their most interesting activity.
Inadequate combination of vitamins in the body may result in hyperactivity and perceptual changes in learning and performance which leads to LDs. Careful treatment with large doses of vitamins over years can reduce the problems although the student needs intervention which combines counselling and teaching.

Visual problems have also been linked to LDs as reported by Pumfrey and Reason (1991). For some reason certain children although not short or long sighted exhibit unusual performances in academic work related to their vision. The use of specially tinted lenses may help to correct their anomaly.

Recent emphasis is now in the area of acquired cerebral trauma. Such people who have overt head injuries often exhibit characteristics of people with learning disabilities. In most cases assessment is usually done medically with sometimes medical treatment but at the end educational assessment and intervention remain the treatment of choice.

2.5.6 **Assessment in Ecological Models**

Bronfenbrenner (1979), Baine (1988) and Reid (1991) mention that ecological models or approaches emphasize the study of the organism within its environment. Ecologists like Bronfenbrenner (1979), describe human behaviour in detail in a four level model representing the external physical and social environment of the child. As Reid (1985:21) points out, “The ecological approach [takes] the environment seriously focusing on cognition in ordinary settings”. Its emphasis is that if concepts are to be studied then one begins with an analysis of everyday concepts, to study perception one begins with visual control of action in
clustered environments, to study memory one begins with the kind of things people ordinarily remember. Such an approach forces us to look at variables that occur over time.

A breakdown in the ecological set up results in learning disabilities although these are not viewed as deficits but as different ways of learning. Focus is therefore on the child’s strengths to improve the child’s all round performance. This implies a concern with cognitive development and cognitive change due to age and acquisition of skills in the environment.

Ecological models embrace what has popularly become to be known as the holistic paradigm. Emphasis in assessment is on the performance of the child in all the aspects of learning in all environments. Reid (1991) accepts that this model has had its share of controversies emanating from its emphasis on naturalistic settings which are costly in respective to time and labour.

The ecological model should be viewed through a comparison of the mechanistic–reductionist beliefs of the current field of learning disabilities which see assessments as fragments on a continuum based on what they share, despite their theoretical differences. A holistic perspective is therefore not an addition to this current paradigm but a radical shift to a new way of thinking. Thus a holistic assessor views the student as a whole made up of personal and environmental attributes. Discarding the view that acknowledges that learning and knowing have neurological, behavioural and information processing facets to them. According
to this theory these do not cause learning difficulties but that LDs are a component of a person’s experiences and life circumstances (Heshusius, 1991).

Holistic paradigm does not dispute the successes of the existing models in assessing children with LDs but points out that they exclude the child’s attributes which are responsible for authentic learning and generalization. Holistic educators call assessment the act of documenting authentic learning outcomes. This is a shift from the mechanistic validating of data or evidence which usually accompanies assessment in most schools.

2.5.7 **Summary of Assessment in the Various Models**

The main theoretical frameworks of Learning Disabilities which are shaping the assessment of LDs have been described. There are others which have been deliberately left out because they are being pushed out to the peripheral of LDs rhetoric due to their archaic nature. Medical perspectives although old still play a major part in formulating how children with LDs are identified and sometimes even occupy a large potion of the intervention. I have also briefly touched on general assessment attributes of each theory. This is an area I intend to focus on in the next section since it is the centre of this study. The intention up to this point was to show that each of the theories has contributed to the assessment of LDs. This section has also shown that there are as many assessment models for the identification of LDs as they are theories. Such a scenario is bound to cause problems in identifying which student exactly has LDs.
Reid (1991) points out that there has been clear evidence that the above assessment models have influenced research in assessment and instructional design. However their impact has not been felt due to the lack of a specific model on LDs to follow. Mpofu’s (1999) attempt to explain the Zimbabwean experience has shown that these theories have been adopted without any research as to their relevance or suitability. The lack of a specific assessment model for children with LDs was also observed in other African countries case studies for example the Uwezo.net assessment project in East Africa. The Uwezo (2010, 2011) initiative called ‘Are our children learning: numeracy and literacy across East Africa’ is a regional assessment of primary school children’s performance in numeracy and literacy in Kenya, Tanzania and Uganda. The survey used western type tests in Maths and English and KiSwahili. The results show the dismal numeracy and literacy skills across the three countries with Kenya having the better results. The study questions the approaches being used. This has relevance for Zimbabwe as we try to construct a suitable assessment model.

Reid (1991) points out that the cognitive and the ecological or holistic (whole language) theories are exerting more authority on the direction the field of LDs is taking. What theory is exerting authority in Zimbabwe in the identification of children with LDs? What tests are being used and how effective are they in identifying LDs? This study attempts to throw light on these critical questions.

2.6 Assessment Models and Strategies for Identifying LDs

The previous discussion has provided a scenario of the main theoretical framework of LDs guiding the assessment and intervention programmes for
children with LDs. What I will do in this section is to look at the specific assessment models and the tests and strategies being used to identify children with learning disabilities. I will also discuss their effectiveness.

A model is a representation or structure of how something is constituted. It comprises of the distinct steps, stages or period of development. The model is also a standard to be imitated. A standard is an accepted or approved example of something against which others are judged or measured. Therefore assessment models should be viewed as both structures and standards for identifying children with learning disabilities. This section will cover the conceptual framework of assessment models; screening and referral models either for groups or individuals; discrepancy models; holistic assessment and the current situation in Zimbabwe.

2.6.1 Conceptual Framework of Assessment Models

Generally assessment models have the same conceptual framework as shown in Gearheart’s (1986) framework for assessment in Figure 2.1.

![Assessment, Identification and Educational Placement](image)

Figure 2.1: Assessment, Identification and Educational Intervention
Source: Gearheart (1986)
Figure 2.1 shows the position of assessment when initiating educational programs for students with LDs. The three important steps are assessment, identification and planning educational intervention. Assessment procedures should be implemented while gathering various types of information necessary for identification. Assessment comprises the referral, screening and the determination of the learning disability. Placement IEP development and intervention follow after the identification. In this conceptual framework assessment is either ongoing or formative and at the end of each intervention or summative. This scenario runs through most of the models we will examine and discuss.

Lin and Gronlund (1995) see assessment as a process by which information is collected for a specific purpose. Salvia and Ysseldyke (1991) say it is a process which should guide decision-making about a child by identifying a profile of strengths and needs. It should take into consideration the cognitive components of learning difficulties as well as the learning environment.

The process of assessment is linked to models of learning which I will link to the identification of children’s learning disabilities. In order to identify this child with LDs, as shown in Figure 2.1, we have to carry out some form of assessment no matter what type of LD model we subscribe to. Dockrell and McShane (1995) give three steps to be followed, which are; identifying the existence of a problem, evaluating the nature of that problem and making a diagnosis.
2.6.2 Referral Models

Logsdon (2012) points out that referral models play a key role in bringing such children to the attention of service providers. Researchers are in agreement that identifying the existence of a problem is not always straightforward. This is due to the need to make a judgment on the child’s performance in comparison to their peers. Children present learning problems in different ways; by falling behind in class work, through misbehaviour and so forth. Teachers and parents are mainly at the forefront in noticing that something is not right with a child. Thus the initial step may be to refer a child to a specialist.

The two stage assessment method below by Torgersen (2000b) is used to identify preschoolers and first graders who need to be referred. The following steps are used:

1. Teacher checks for use of outcome measures associated with processing deficits, for example, relationships between letters and sounds
2. Teacher provides years of instruction
3. Those who fail are considered with LDs and referred

Referrals are the most common source of information needed to identify children with LDs (Logsdon, 2012). Asim et al., (2004) in a study of classroom teachers’ assessment competencies in Nigeria concluded that the process need to be thorough in case a wrong label may be attached to a child resulting in damage for life. Adamson (1979; 26) suggests the following essential indices of suspicion which suggest referral. Teachers, parents and practicing clinicians should be
suspicious of the presence of specific Learning Disability if children or teenagers show difficulty in one or more of the following areas:

- **Perception.** Visual function, visual motor or eye hand coordination difficulties.
- **Conceptualisation.** Problems in abstract reasoning reading comprehension and inferential thinking.
- **Language.** Language development and problems in sequencing, preservation, syntax and written expression.
- **Memory.** Variation in immediate and remote auditory visual and associated recall.
- **Impulse control.** Dysinhibition, hyperactivity, hyper kinesis and low frustration tolerance with labile or explosive emotionality.
- **Feeling’s of inadequacy (hurt pride).** Poor self-concept low esteem, negative body image.
- **Task avoidant behaviour.** Avoidance of learning tasks which are difficult and subject to exposure failure. More off task behaviour e.g. taking too long sharpening a pencil etc.
- **Two or more neurological soft spots.** Coordination problems (poor gross and fine motor manipulation skills). Choreiform movements (abrupt, short muscle jerks when outstretchning hand), mirror movements, difficulty in crossing the midline, difficulty drawing figures in space, Tandem Rhomberg (difficulty in the heel-toe walking), Crawling pattern (immature homolateral or mature contralateral), Sensory modality problems (Tactile agnosia, inability to recognize letters or numbers written on the palm), Occasional momentary (Seconds) loss of consciousness (petit mal symptoms), Strabismus (turning in or out of eyes when tired) and Isolated academic deficits (Poor word recognition, maths difficulties).

The list as noted is drawn from all the three theories of LDs.
Prereferral models help in bringing child experiencing difficult to the fore by involving the school, parents and the entire community. The prereferral intervention model is an American model which is used to check children who should be referred (NABSE, 2002). The model helps to keep the child in the general classroom by creating teams to support the child in the classroom. The classroom teacher keeps detailed documentation which is used when referring the child. The prereferral intervention model assumes that ineffective teaching and biased attitudes are the ones which create LDs

2.6.3 Screening Model

Salvia and Ysseldyke (1991) note that screening is considered to be the first formal step done prior to the identification in many schools and is usually initiated by administrators. The idea is to ensure that no child with learning problems is left behind. This agrees with Gearheart (1986) and Dockrell and McShane (1995) who specify that screening using tests of entire grades in grade 1 to 3 is effective because it leads to the discovery of children with developing problems. They can then be helped before they fall too far behind and before they develop deep seated negative attitudes about school and their lack of success. It is also common in medicine where children are screened to identify specific problems so that more intensive tests can be carried out (Thorburn, 1991).

Halliwell and Williams (1992) describes the Pathway system which is used by the Surrey local authority in the United Kingdom (UK) to screen children with learning disabilities.
The model has the following steps which the whole school follows:

Level 1: Acquire up to date information, prepare for a formal meeting with the parent of the child

Level 2: Obtain a comprehensive record of the parent meeting, work with the parent in planning, teach child and record observations, decide next move

Level 3: Liaise with colleagues and outside support, decide on the type of assessment required, decide on next move.

Individual screening may be carried out on children who are observed to be at risk as they display certain negative characteristics. In some cases an assessment is usually sought by a parent or teacher after they have noted difficulties and since parent or teacher observations vary in their sensitivity and tolerance to problems screening may be done as an entry point for the actual testing. Although screening helps to identify children who lack particular skills or set of skills this is inadequate because screening is not always accurate in predicting performance at a later date (Lindsay and Wedell 1982, Cockrell and McShane 1995). Screening may also fail to identify children who may later exhibit problems. Referral after screening may lead to no identification of problems or erroneous labelling. That is why classroom assessment seems to present a better method of identifying children at risk.

2.6.4 Classroom Intervention Models

The classroom intervention model by Willis (2007) is used to identify children with suspected LDs. Willis (2007) state that classroom intervention model
emanates from the person who spends most of their time with the student who is facing learning problems. More specific guidelines are given in the classroom intervention model by Jander and Bornemann (1979:461) who remark that teachers and other school personnel should thoroughly check the following before a referral:

**General Behaviour Characteristics**

- The child appears physically neglected, appears abused either mentally or physically.
- The child demands his or her own way in most situations cannot defend himself or herself in most situations.
- The child has absence or contract with peers or adults.
- The child is overly friendly and depends on adults.
- The child acts like a grown up (unrealistic independence).
- The child cannot accept any delay or gratification of needs.
- The child is listless, low energy and enjoys nothing.
- The child reacts to any stress with temper tantrums.
- The child reacts to any stress withdrawing.

**Cognitive and Skill Characteristics**

- Child is awkward or clumsy in comparison to children of a similar age.
- Speech for communication is not developed for age group
- Understanding of ideas or instruction is not developed in the line with age group.
- Poor development of initiative curiosity, interest and motivation.
Studies have shown that classroom teachers important in the identification of children with LDs during the intervention period (Willis, 2007). What are questionable are their discrimination properties in identifying children with LDs for placement in remedial programmes. In Africa where teachers are faced by large classes with a small number of psychologists to do the identification one wonders how significant teachers’ assessments are in the proper identification of children with LDs given the lack of trained teachers in most communities. In Zimbabwe about 10 000 teachers were needed for the year 2010. How relevant are classroom methods in identifying children with LD when qualified teachers are short supply? The shortage of qualified teachers in Zimbabwe would curtail the identification of children with LDs.

2.6.5 Classroom Diagnosis Model

Ainscow (2004) concludes that the classroom conditions provide insights on how children with learning problems can be helped. Informal on the spot diagnosis is carried out when a child is noticed to be having difficulties in the classroom. The adjustments the teacher makes during and after the lesson will determine the direction of the assessment. Figure 2.2 shows Wilson and Cleland’s (1985) procedures for classroom diagnosis.
Figure 2.2:  **Steps in Classroom Diagnosis**

Wilson and Cleland (1985) suggest a more formal diagnosis in their classroom diagnosis model if a child continues to fail in the classroom. The teacher will try to identify the child’s problem through observation, testing, observation and instruction adjustments.

Sometimes the nature of the child’s difficult may require the teacher to carry out a teaching experiment to determine the existence or non-existence of an LD. Under such a situation a test teach model by Vaughn, Linan-Thompson and Hichman (2003) is used. Criterion referenced tests may be used to gauge the level at which the teaching may begin. The teacher on the other hand will have to carefully choose their tasks to ensure that the teaching experiment yields valid results. Careful incorporation is made of the task, the child’s cognitive processing as depicted by their behaviours and the environment (classroom and social factors). The practitioner will be able to identify the actual learning disability of the child but will not be able to generalize the conclusion to other tasks and contexts. This model when combined with the clinical identification provides promise for the continuous assessment of children with LDs.

The referral from the classroom to the clinical identification is usually processed through the Head teacher or principal to the remedial specialists, educational psychologists or other experts.
2.6.6 Clinical Assessment Models

Deisinger (2004), Kavale, (2001) and Sattler (1992) say that four types of discrepancy models are used to identify LDs. These are: deviation from the grade level, expectancy formulas, simple standard score differences and regression based differences.

Deviation from the grade level is determined as the student’s performance below 2 years. A student whose achievement level is below 2 years their age may be suspected to have a learning disability.

Another model uses what are called expectancy formulas to determine the child’s condition. Expectancy formulas calculate the child’s expected grade from the child’s mental age and chronological age. If a minus difference occurs then the student might have an LD.

The standard score differences is a discrepancy between tests of intellectual ability and academic achievement. The difference between these two may indicate an LD.

The last model is based on regression based differences. A regression formula is used to calculate the difference between actual and predicted achievement. A difference of between 1.5 and 2 indicates a significant discrepancy denoting a learning disability.
In the United States of America (USA) assessment to identify the child’s learning disability which occurs after the screening step is guided by state regulations (PL94-142) and involves the administration of certain psychological tests (Sattler, 1992). Sattler (ibid) and NABSE (2002) states that the regulations demand that tests should be used in the child’s natural language, should have been developed and validated for the purpose for which they are being used; given by a trained administrator who follows test instructions carefully; using various tests to determine the child’s needs and done by a team of professionals not a single person. Other important requirements are that parents’ permission must be obtained before initiating assessment; they must be invited to participate in the assessment and the development of the Individual Education Programme (IEP) (NABSE, 2002). Even their permission should be sought when placing the child.

In order to meet the requirements of the above regulations that the child should not be mentally retarded the Wechsler intelligence or the Stanford Binet or another test of intelligence is administered. The tests must be administered by a registered psychologist. Achievement tests should be administered by the same people to verify results obtained during screening.

It is standard practice to also administer visual and auditory acuity tests to ensure that the learning difficulty is not sensory in nature (Cosford, 1990). The tests commonly used for Identification are intelligence tests for establishing the child’s intelligence quotient and its level. Tests usually test subsections of cognitive and cultural attributes for example the Wechsler is accurate in determining a full-
scale IQ, a performance IQ and a verbal IQ. It also can determine those who have been culturally or educationally deprived.

A confirmation of a normal to above average IQ may not confirm the existence of an LD, a significant discrepancy between potential to learn and actual level of functioning is required (Hardman et al., 1999; Lewis and McLoughlin, 1986; Sattler, 1992). There is need to measure the child’s academic functioning. The issue of a discrepancy method for identifying the children with LDs in Zimbabwe has been a problematic one.

Another area is to do with how much mean discrepancy should be considered suitable for an LD to be identified. School assessment teams tend to set identification cut off points which tend to vary from between school. The child who may be considered learning disabled at one school might not be viewed as that in the neighbouring school due to the less discriminating discrepancy level they may have set.

2.6.7 **The Group Assessment model**

The group assessment model involves testing of all cohorts of children with similar characteristics by using batteries of tests. The batteries of tests test the various academic or skill areas, language, visual or auditory discrimination, memory and other areas. The group assessment model uses tests from all the LD theoretical frameworks. Some of the tests maybe suitable for children raised in a Standard English speaking environment like the Peabody Picture Vocabulary Test-Revised.
Its strength lies in the type of assessment tools which are used by the assessors. Sattler (1992) states that in group assessment the Wide range Achievement Test (WRAT) is one such test which can be used by teachers, remedial specialists and educational psychologists to provide a quick indication of a child’s approximate academic level. It provides scores in reading, spelling and arithmetic. The scores can be indicated in terms of grade equivalent, a standard score or percentile. One does not necessary have to be a psychologist to administer the WRAT. It is generally agreed that the WRAT is both convenient and sufficient to provide information for identification purposes. In some districts the same standardized achievement tests that are used with the ordinary school population are also used to identify the students. However because these are group measures which use means of the scores children with LDs tend to get low scores rendering them an ineffective procedure (Gearheart 1986).

This is an area which has a lot of variance in practice resulting in more educators opting for single measures. Although others like Whiting and Ford (2012) and Sattler (1992) argue that decisions should not be based on one test or score because of the high probability of failure due to extraneous variables.

The objective of the group tests is to ensure comprehensive appropriate testing which involves various professionals and parents in all the steps. Ysseldyke (1983) points out that although this is happening there is room for improvement because of the following reasons which were noted in one study that:

- Many parents are not active and informed participants in team decision making
• About 80% of directors of Special Education held pre-meeting conferences to determine what to tell parents.

• Regular classroom teachers were not asked for their inputs in meeting to consider the assessment results.

• It was the referral statement which determined the final decision of identifying a child. Once a child was referred they usually ended up being placed in a special education programme.

Despite this, Ysseldyke (1983) advocates the broadening of assessment techniques, and improving the ability and confidence of all educators so that they participate fully in team meetings. Parents must be afforded their right in the identification process.

2.6.8 The Cognitive Assessment Model

This model can be used as a group or individual procedure. Dockrell and McShane’s (1995) cognitive assessment model is for the identification of children with learning disabilities. The assessment model as shown in Table 2.1 consists of six stages. Of interest to the study are stages 1 to 3 which dwell on the actual identification of learning difficulties. Dockrell and McShane (ibid) indicate that there are three parts to the framework for understanding learning difficulties; the task, the child and the environment. Understanding the three has a contribution to the understanding and treatment of learning difficulties. The children’s cognitive abilities need to be assessed so as to determine the difficulty they maybe experiencing. This is only achieved through understanding the tasks the child will be operating in for example language reading or mathematics.
Table 2.1: Stages in Assessment and Intervention of a Learning Difficulty

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Stage 1</td>
<td>Decide to seek assessment</td>
</tr>
<tr>
<td>* Stage 2</td>
<td>Assess to provide profile of strengths and needs</td>
</tr>
<tr>
<td>* Stage 3</td>
<td>Set Aims and objectives</td>
</tr>
<tr>
<td>* Stage 4</td>
<td>Design and implement intervention programme</td>
</tr>
<tr>
<td>* Stage 5</td>
<td>Assess effects of intervention programme</td>
</tr>
<tr>
<td>* Stage 6</td>
<td>Discontinue intervention or set further aims and objectives</td>
</tr>
</tbody>
</table>

Source: Dockrell and McShane (1995)

The child might have general or specific learning difficulties. But as you are aware, all this occurs in an environment which might be supportive or hostile. Research has shown that children with learning difficulties are more likely to be dependent on their environment than those without (Dockrell and McShane 1995). Learning difficulties occur for various reasons which may be inherent cognitive difficulty that may make language skills difficult or environmental problems that may be unrelated to the child’s cognitive abilities. Tasks that are too difficulty may result in repeated failure resulting in learning difficulties.

Dockrell and McShane (1995) and Solity and Bull (1987) say the use of task analysis helps us to understand the demands the task is placing on the child. By reducing the task into its small components, we are able to determine the extent to which the child can carry out the tasks. "In this way we attempt to identify as
precisely as possible the exact nature of the difficulty” assert Cockrell and McShane (1995:11). We can then compare our child with normally developing children although this could pose problems in group similarities. Despite the above this would allow us to identify the child’s specific learning difficulty with a measure of certainty. The practitioner during assessment must deal with the situation as it presents itself and must conduct assessment and intervention within the constraints of available resources.

Cockrell and McShane (1995) explain that at stage 2 in Table 2.1, a full formal evaluation is done of the child. This involves the use of standardized tests and criterion referenced tests is recommended which results in the construction of the child’s strengths and needs. By doing this the evaluation process is trying to detect whether a learning difficulty actually exists, what it is, why it has occurred and how similar it is to other children’s problems. In Britain if the child has problems in cognitive domains but has specific problems in academic attainment, they are classified as having a specific learning Difficulty. These are the children who have a learning disability and are the focus of this study.

2.6.9 **Curriculum Based Assessment**

Curriculum based assessment is an alternative approach to assessment and takes its starting point in the child’s classroom. Unlike the classroom diagnosis which focuses on reading only its emphasis is the curriculum using task analysis, direct instruction and precision teaching. Ainscow (2007), Fuchs, Fuchs and Spreece (2002) Solity and Bull (1987) point out that curriculum based assessment (CBA)
assess the suitability of the classroom environment and the child’s interaction with it. Blankenship and Lilly (1981:81) define it as;

the practice of obtaining direct and frequent measures of a student’s performance on a series of sequentially arranged objectives derived from the curriculum used in the classroom (page 81).

Curriculum based assessment starts by defining a series of tasks which are sequentially presented and expressed in the form of behavioural objectives. This clearly shows that it is based in the behavioural model. The tasks indicate what the pupil must do in observable terms, the conditions under which activities are performed and criteria for successful performance. Teacher made criterion referenced tests (CRTs) are used to determine what the child can and cannot do. Placement probing helps in reaching the final decision where the child should be placed. CBA assumes that proper teaching using, direct instruction and precision teaching helps to alleviate children’s learning difficulties.

British studies have shown that schools which employ CBA strategies experience low numbers of children with LDs (Solity and Bull, 1987). Any child who does not improve their performance under such an environment will be referred to an educational psychologist or a remedial specialist for further assessment and intervention. Teachers in such classes make informed decisions on the nature of the children’s disabilities because they will have assessed them through teaching (Ray bound, 1984; Pearson and Tweddle, 1984).

Curriculum based assessment is a method I have used as teacher to identify those children who needed extra attention. In Zimbabwe many teachers fail to meet the
needs of those who are struggling at the bottom of the class. Most teachers are able to tell the children who need help but are at a loss on the strategies to use with them. CBA would be suitable in an African classroom where resources are few.

2.6.10 **Nominations for Remedial Lessons**

Nominations can be used to identify gifted children with LDs. Maunganidze and Nyamuyakura-Shoniwa (2001) say that parent nominations can be used by parents to refer their children into programmes. The nominations are in the form of questionnaires which ask about the child’s interests and achievements. These are susceptible to parental biases.

Behaviour checklists are used by teachers to nominate children whom they suspect to be gifted but may have LDs. These consist of six categories on intellectual ability, academic performance, creative thinking, leadership characteristics sporting ability and artistic abilities. The checklist is usually helpful in identifying children who are gifted but have LDs who are difficult to identify using other strategies.

Poor screening tools omit some children with LDs from the remedial education or support learning for learning disabled students in Zimbabwe, has resulted in teachers abandoning the remedial programme and many parents turning to private tutorial programmes. Could it be that these parents believe that their children can benefit from such programmes? How accurate are teachers and parents in their
nominations. What aspects from these nominations can be included in the assessment model to identifying children with LDs at the Primary School?

2.6.11 Holistic Assessment Models

Holistic assessment, although cognitive in nature needs to be dealt with separately. The holistic paradigm constitutes a move away from mechanistic explanation of our understanding of what counts as real and how we may know it (Heshusius 1991). A paradigm is a worldview, a way of seeing or a set of ‘ultimate benchmarks’ by which we think, feel and act but which we may not be aware of. The assessment models we just discussed are based on mechanistic reductionist way of ‘thinking about thinking’ about the phenomena of interest (Heshusius 1991). Other holistic terms are “emergent” “alternative”, “new” and holistic- constructivist.”

Holistic assessment attributes learning disabilities to characteristics of the very organism itself which in this case is the learner in a particular context. Evidence of Holistic assessment models is seen in the whole language. Here assessment is nondeterministic. In this case the child (whole) reorganizes them self through self-organization and self- regulations. Results of transformation cannot be predicted or controlled from knowledge of the initial condition. The child (whole) cannot be explained by knowledge of parts. The learner (student) expresses his or her new knowledge in many varied but equally valid ways which may well include novel and unpredictable ways.
Assessment therefore consists of documenting expressions of learning from multiple (potentially unlimited numbers) authentic learning situations. Errors are no longer viewed as negative behaviours to be avoided. Many so called errors are now seen as not only innately rational, but as valid and valuable steps in learning. This notion also highlights the importance of practice without adult imposed criticisms or correction. Scala (1993) points out that central to this practice or involvement is listening, speaking reading and writing. Children are involved in all curriculum areas and get authentic learning. Holistic assessment is naturalistic in nature. It is characterised by a lot of “kid watching”, or child observation on and off task in different settings whose results are used to guide children’s learning. Teachers and parents are involved in recording children’s behaviours.

Specific activities include the analysis of children’s writing. Children are encouraged to write stories in journals and these are analysed for different variations. Teachers and children try to make sense of these stories and corrections are made in a non-threatening manner. Spelling stages are ascertained and help provided whenever possible.

Miscue analysis is an assessment of a child’s reading. This is usually targeted at the beginning readers especially those who would be facing reading failure. An example is Marie Clay’s Reading Recovery a programme developed in Canada meant to reduce the need for remediation and Special education classifications (Clay, 1992; Montebruno 1994). Although reading Recovery does not replace the child’s classroom program it provides something extra for children who are not experiencing success in a good classroom programme. A running record, a type of
miscue analysis of a book introduced to the child, is kept by the teacher. The running record is the most powerful assessment tool in Reading Recovery as it is carefully analysed to make inferences about the child’s growth in the use of strategies (Montebruno 1994).

Reading Recovery assessment assumes that all children can learn to read well. Reading Recovery has its own controversy since research is conflicting on its success rate and provision (Renata, 1999). It also requires a year’s training for a teacher to be qualified to use it in their school.

Portfolio assessment is another strategy employed in whole language (Gillis, 1993). Students put all their work into a file which is then assessed through a parent child conference with the teacher. The conference is rehearsed in class by the children before they present it to their parent on a selected day. During the conference the student gets an opportunity to report his or her progress, displaying and explaining their work to their parents. Accountability and responsibility are built into the self-assessment process as students are asked to focus on their strengths and to give their own perspective on areas they are trying to improve claims Gillis (1993).

Parents ask questions on the presentation and a positive and interested reaction can bolster confidence and contribute to the comfort of the student during interview. Although teachers are meant to be in the background during the conference it is normal for them to intervene and change the direction of the interview and strengthen the child’s position in the case of a hostile parent or
guardian. Gillis (1993) concludes that student led conferences provide constructive and affirming experiences for the students. The approach is inclusive and consultative, granting the student an active and meaningful role in assessing and interpreting his or her learning.

Holistic assessors spend their time “kid watching” or making observations. This does not mean that in holistic assessment there is no need for data but that the emphasis is on documentation of authentic learning. This is a record of what the child is doing, alone and with peers and the teacher. A record is also made of what the child is perceived to be thinking and feeling about what they are doing and accomplishing. All this should be authentic. These are real indicators of real reading, real writing and meaningful learning for all purposes. Documentation of authentic learning outcomes recognises and notes the dynamic processes of the child’s “actual engagement in thought, feeling and behaviour” (Heshusius 1991:453). This is also echoed by Peters (2001) who advocated for the documentation of the real experiences of the children with LDs. Assessment should also reflect the child’s social engagements for example areas in which the child can achieve with some assistance.

In summary holistic assessment is a documentation of children’s thoughts of what they read dialogues with their peers, on texts read, and their total experiences. This reveals the different ways in which the child is learning enabling everybody to help the child find alternative ways of learning.
2.6.12 **Effectiveness of Tests and Strategies in the Models**

Burkhardt (2004) assert that assessment models for identifying children use test and other strategies to develop intervention programmes. Wrong identification results in social and psychological harm to the child purported to be having learning disabilities. This can be avoided by ensuring that the tests being used are effective. Tests and strategies need to be both valid and reliable. Validity is the extent to which the test is serving its purpose. Swanson (1991) summarises the validity constructs as: content (adequacy of the items); construct (underlying theory); congruent (relationship of the test to an earlier test); concurrent (relationship of the test to a current measure); predictor (relationship to a point in time). Content validity is the most critical since it focuses on the aspects of the curriculum the child should have been exposed to.

NABSE (2002) and Sattler (1992) confirm that tests need to be culturally fit; as much as possible they must reflect the child’s culture, age and morality. The use of a language the children are familiar with will guarantee correct identification (Sattler, 1985).

Because assessment is a process of hypothesis testing it never follows one simple pattern. A wide variety of assessment devices are used either alone in combination to assist such as criterion-referenced tests, observational procedures or teaching experiments. This ensures that all aspects of a child’s experiences are viewed from different angles in order not to miss any problems.
Norm referenced tests provide information about where an individual lies in terms of their ability. Thus a child is placed on a continuum where they are compared to their peers in terms of the product of their learning. A child may then be the first, second or last in their performance. These tests do not tell much on the child’s strengths and needs nor do they reveal the processes involved in a child to arrive at their attainment level.

Ysseldyke and Thurlow (1984) in Cockrell & McShane (1995) declare that this is the norm in most special education assessment. It is clear that their characteristics render them useless in helping classroom practitioners identify what the actual LD is and how it has evolved. The validity and reliability of any tests used should be appropriate. Reliability and validity are not always considered by clinicians says Cockrell and McShane (1995).

Ysseldyke (1979) in a survey of Learning Disabilities programmes in the USA found out that averagely 11 different assessment instruments were used to collect data; the range was 3 to 39 instruments. Of these only 25 per cent were adequate in terms of validity, reliability and standardization. This clearly shows that identification of learning disabilities in the surveyed programmes may have been null and void.

Criterion referenced tests assess the skills required to complete a task or a set of tasks. These are set according to their level of difficulty. The tasks could be the curriculum simply broken down into units with a representative item from each unit. The items the child gets right indicate their strengths and the ones they get
wrong indicate their needs. To ensure effectiveness such a test can also be normed so that a position can be demarcated for the child. Such tests allow for a conceptual analysis of the errors a child may be making. Criterion referenced tests because of their nature need careful planning and construction of the tasks. This results in batteries of tests which will be focused on particular skills or areas. Validity and reliability of each of these tests must be correct so that the child will progress to the next developmental stage. It must be noted that validity and reliability of such tests is usually not available (Salvia and Ysseldyke 1985).

### 2.6.13 Current Situation in Zimbabwe

This situation is not uncommon in other countries which are still at the early stage of trying to provide for sensory disabilities (Thorburn, 1990; Peters, 2004). Botswana, Namibia, Zambia, Kenya and South Africa have similar problems in identifying children with LDs because of their shared colonial legacy (Abosi, 2007; Edulink, 2011; European Agency for development in Special Needs, 2005).

In Tanzania, Mbise and Kysela (1990) report on their development of appropriate screening and assessment instrument in order to provide for the needs of children with learning disabilities. Kisanji (1985) pointed out that an estimated one percent of children with disabilities in 13 Eastern and Southern African countries of which Tanzania is one, were being educated. Abosi (2007) says that the increase of children with LDs in African schools is becoming alarming. Despite this, those who are in the school system find the environment unfriendly resulting in truants, absenteeism, dropping out and school failure. (Mbise, Omari and Mahenge, 1983). Mbise and Kysela (1990) evolved a screening and assessment instrument
in Tanzania that would improve the quality of education for those in the school and at home.

In Zimbabwe 20% of any given population have learning disabilities. This is not different from the British situation 18% have learning disabilities according to Gipps et al. (1987). Because children with LDs have average to above average intelligence some teachers in Zimbabwe have an impression that they can handle them in their classes. The Learning Disabilities category is an area where children can be helped effectively and efficiently provided the right environment is created. Evidence points out to the need for an assessment model which can clearly identify the type of children with LDs and probably provide teachers with enough evidence that they will be doing the right thing as they identify the children. Our beginning point is to find out what is currently happening and then identify the benchmarks for constructing a new assessment model for identifying children with LDs in Zimbabwe.

In my experience as a Remedial tutor I administered a lot of tests to children whom we suspected to have learning disabilities. What I noticed is that a lot of the tests we used tended to be either British in origin, for example Kent Reading test or American in origin such as the WRAT. Under which theoretical realm did they fall under? But for us to understand this we therefore need to find out what models guide assessment in those countries. In Zimbabwe the identification of children’s learning disabilities has not been clearly explained by experts (Mpofu, 1999, Tambara, 2001, Mutepfu, Mpofu and Chataika, 2007).
Mpofu (1999) gives the rationale and an outline of the SPS and SNE identification process. He says that the class teacher is the one who determines if a child is average or above average in intelligence. He points out those locally produced tests have been used in the identification of the children with LDs. However, he does not mention by whom and when. This is clearly an area which needs to be confirmed by research because the determination of intelligence worldwide is done by a qualified educational psychologist. This scenario confirms that some of the identified children may not have LDS.

Tambara (2001) defines the use of the discrepancy model used to identify children but does not provide how teachers identify the children with LDs. His article shows the American reliance of the Zimbabwean remedial programme. However, he acknowledges that the remedial process succeeds with proper diagnosis and the determination of the nature of the LD.

Mutepfà, Mpofu and Chataika’s (2007) description of the identification in schools that classroom teachers are involved in the identification of children may need verification. The last writers are silent on the type of instruments that are used in the identification of children with LDs.

The Zimbabwe CEO minute No. 12 of 1987 called the ‘Institutionalisation of the Remedial Programme’ does not give clear guidelines on how the identification of the children with disabilities should be done. It only defines the pupil to be ‘of average ability who is at least two years behind in a subject to catch up.’ The rationale is that ‘there are still large numbers of pupils who cannot read and
calculate well at the grade 7 level’ No guideline are given on how this should be achieved except that the SPS and SNE will provide the staff development. Focus is on grade 4 mathematics and reading instead of the grade 7 level mentioned in the C.E.O. circular.

The remedial programme as stipulated by CEO minute No. 12 of 1987 faced numerous problems, these being lack of trained teachers, large classes since teachers who took them also looked after a full class without any incentives, lack of provision for the teaching and learning materials lack of a proper supervision culture, since heads and teachers in charge (TICs) did not know what to look for. Any supervision reports made did not go into the teachers promotion file. Above all it faced negative attitudes from administrators who faced challenges in supervising it. Attitudes played a big role in either promoting the programme or destroying it. By the time I left SPS and SNE in 2000 the remedial programme was almost nonexistent in most of the schools.

As a senior tutor I was fascinated by the origins of remedial education. As I looked at the definitions of LDs and the identification procedures we have been using all along I have come to realize that these have no local basis. None of these terms and even the programme itself has a link to the educational base of education in Zimbabwe. This is because when the programme was started there was no acknowledgement of what was happening in the former African schools in terms of helping student who had learning difficulties. During that time all poor performers were grouped together and taught in a similar manner. Those with children with LDs quickly caught up or even surpassed the rest of the class. The
difference with the current situation was that teachers did not know those different
terms to be used and their implications for intervention. This was the environment
in 1982 when government circular simply commanded that a programme be
started for primary schools in Zimbabwe. There were no trained teachers for the
programme and no clear manner of identifying the children. This may be the
source of the problem, that the remedial programme was not a home grown
programme.

Even Mpofu’s (1999) article on LDs in Zimbabwe points to this anomaly. He
talks of the socio political developments in America which gave rise to the
programme and how Zimbabwe adopted the model based on the American theory
of learning disabilities. Even Abosi (2007) writes that a similar situation prevails
in Botswana where children with LDs are not adequately catered for by classroom
teachers. What gave rise to this phenomenon in Zimbabwe? What models did we
copy from and what was the rationale?

2.7 African Epistemologies in The Tests

I particularly isolated this area for discussion because although it is within the
realm of test effectiveness it helps to focus us on how we can construct
appropriate tests for our African environments. Epistemology is concerned with
the theory of knowledge. Knowing which is derived from knowing is made up of
concepts and criteria peculiar to a culture. My focus is on African epistemology,
those aspects the Nziramasanga Commission (1999:9) calls ‘the best of our
heritage and history.’ The issue of appropriate epistemologies for African
education has taken centre stage in our Africans quest for an African identity (Kaputa, 2011; Higgis, 2006; Nyamnjoh, 2004).

Epistemology as stated by Wong (2008) is the branch of philosophy that examines the nature of knowledge and the processes we use to acquire it and value it. The nature of knowledge and its processes in an African epistemology according to Nyamnjoh, (2004) would involve the real and the unreal, the physical and the metaphysical, the visible and the invisible of our being. An appropriate African epistemology means something which is right or suitable for certain activities. In our case the assessment model for identifying children with LDs.

Nyamnjoh (2004: 178) claims the Western epistemology has survived because ‘it suits the purpose of the agents of Westernisation than because of its relevance to understanding African situations’. If education is to be meaningful in its mandate to develop African countries then the curriculum must reflect its vision and aspirations for the future; who are its children. It is proper that the assessment models, their tests and strategies should either be home grown or adapted to suit local conditions.

Mpofu and Nyanungo (1998) concur that Zimbabwean educational psychologists, advocate for this thrust in test development citing colonial education as one factor which caused the adoption of Western assessment constructions. Mpofu and Nyanungo (ibid) proffer the reasons that the behaviours depicted in the tests are different from the culturally accepted ones and the competences solicited are not suitable to African communities. Woolman (2001: 31) writes that ‘Western
schooling strived to eliminate students through failure on tests whilst traditional [African] education strives to include children in their community.’

Foreign formal assessment tests and strategies have been at the cornerstone of most identification strategies for children with LDs in all African countries including Zimbabwe. In America assessment for identifying disabilities has historically been clocked with controversy because most of the children identified for special education placement have been black (NABSE, 2002). The issue of language is central to assessment practices. Sattler (1985) points out those tests should be administered in the student’s language. Sattler (1992) advocates for the use of culture fair tests with multicultural students. Mpofu (1991) and Sattler (1989) cite court cases were parents have advocated for the removal of the segregatory nature of the tests used in the assessment.

Greaney and Kellaghan (2008) write in their report on assessing national achievement levels in education that in South Africa indigenous students had language difficulties because tests did not take into consideration South African English. Are such issues also prevalent in Zimbabwe? In Zimbabwe English is the media of instruction although not all children are proficient in it. This is bound to create learning difficulties in these children who may later be identified as having LDs. With the advent of independence how relevant has been formal testing to African children who form the bulk of the recipients of the remedial programme. How has the importation of foreign tests impacted on the identification of these children? How have these been made relevant to the assessment of children with LDs? How sure are we that they are identifying the children with LDs? What
relevance do they have on the constructed assessment model for children with LDs? Can we brand all foreign tests as irrelevant to our model in this global village?

British and American epistemologies inform the assessment processes of the identification of LD children in Zimbabwe. Although Mpofu (1999) says that local tests are used he acknowledges that Zimbabwean tests are foreign (Mpofu and Nyanungo, 1998). How much indigenous content is evident in the tests and strategies used to identify children and how relevant is it to the Zimbabwean situation. The curriculum given to children is the basis of the assessment of children. The assessment instruments should be a reflection of the existing curriculum if they are to provide accurate and relevant results. Interventions based on such results are focused and help to develop children with a meaningful education which is relevant to their development.

Woolman (2001) in a paper titled 'Educational reconstruction and Post Colonial curriculum development: A comparative study of four African countries' Recommends that schools should study and preserve indigenous cultures, languages and arts. These issues Woolman (ibid) mentions are the epistemologies which should be incorporated in the assessment practices. It is with this position in mind that this study sort to establish the proper ingredients for the instruments which will be used in the proposed assessment model.
2.8 Challenges Encountered

In this study the identification of children with Learning Disabilities is the main focus. We are confronted with five issues which need to be interrogated. These issues affect the way LDs are assessed. We therefore need to examine how they mould assessment models with the view of constructing our own. These are the construct and definition of Learning Disabilities, the role of policy, issues of inclusion and institutionalisation and resources. I will discuss them in that order.

2.8.1 Construct and Definition of Learning Disabilities

The construct of Learning Disabilities underpins our knowledge of LDs and thus helps to ascertain if this category exists in the African horizons. The construct of LDs can be understood from a broad understanding of what Africans see as a disability. In the African culture disabilities are seen as ranging from being positive to being negative. Gwitimah and Sibanda, (2000) cite Ethiopia were people with disabilities are revered more than those without disabilities. Disability and its negative nature are viewed as a calamity, an oddity which has its existence emanating from some evil source. For example Ncube (1985) says that in Zimbabwe parents and relatives sometimes see a disability as a curse or a punishment from the gods. Because of its nature it should be removed from society. It contaminates the tribe or family. Identification of the disability is based on physical differences between the child and his or her peers. Their behavioural differences form the basis for identification.

The importing of the western construct of disability as a deficit in a person has been central to the development of the learning disabilities. Some authorities view
the learning disabilities category as a foreign construction since it emerged after the introduction of reading, writing and mathematics (Peters, 2001). Others like Zindi (1997) see it as mimicry of colonial disability epistemologies. Learning disabilities is an invisible disability which needs sophisticated assessment methods (Gwimah and Sibanda, 2000).

The African experience of learning disabilities renders it invisible due to the cooperative nature of our traditional education system. People who are viewed as learning disabled in the western culture when placed in an African environment do not encounter similar problems as their counterparts. Whilst in the Western world it is important to be able to read and write and conform to the societal norm this is not the case in some African rural environments. As Werner (1988) points out a child who has learning difficulties but is physically strong may not be restricted in the village when milking cows but may be very restricted in a city or in school.

But the situation has changed now since African children in both urban and rural environments are now required to read and write and experiencing similar demands as their western counterparts. The transition from traditional education to ‘modern’ western settings or environments and particularly the competencies and abilities expected by society has exposed these children with LDs. In this case the environmental conditions demand a different treatment. In order to accurately come up with an assessment model for identifying children with LDs we must find out how Africans have in the past viewed LDs.
Another important issue which should take centre stage in this study is the issue of definitions of learning disabilities. It is only possible to identify children if we are able to accurately identify what they are exhibiting. Peresuh (1999:13) writes that traditional education focussed on ‘helping the learner form habits, dispositions, and develop abilities to search for truth, grasp it, enjoy it and use it.’ This education was humanistic because everybody had an equal membership. Definitions of learning disability were irrelevant because of the nature of the societal membership which did into focus on deficiencies. The introduction of Western education had a negative influence on traditional African education (Peresuh, 1999). It looked down on this. Failure to define LDs in an African context will render the whole exercise of identifying children hollow and a mere copy cat of western conceptions and horizons. Chimedza (2000) explained that in Zimbabwe disability is viewed as inherent in the individual. This is contrary to the society’s view as it determined the person through its beliefs and values (Chimedza ibid). What was the rationale for adopting western definitions of LDs in Zimbabwe if at all we did? What was the justification for the selected tests?

The basis of the adoption of a Western definition has not been fully interrogated by research. The introduction of reading and writing has placed demands on the students arising from societal expectations. The adoption of Western constructs is linked to the colonial link we had with Britain and the United States of America. What definition should be used for Africans in Africa who are facing learning difficulties? Do they need similar tests in their communities?
2.8.2 **Policy**

What role has policy played in the selection and identification of children with LDs? In South Africa (SA) the EADSNE (2005) reports that authorities through the Consultative paper on assessment are beginning to question the validity of many tests prescribed by the provincial departments of education. This policy will guide the direction of the identification of students with disabilities in SA. They are recommending that only tests that have proven useful in identifying LDs should become part of the identification process in South Africa.

In Zimbabwe the Nziramasanga Commission (1999) observed that there was no specific policy on Special Education provision. Instead special education is provided for through Ministry circulars. Chataika, Mckenzie, Swart and Lyner – Cleophas (2012) pointed out that gaps existed between intention and the actual practise. Choruma (2007) notes this lack of policy has resulted in fragmentation and lack of coordination of special education programmes in Zimbabwe. What is the effect of policy or lack of it on the actual implementation of the current models especially the use of tests in Zimbabwe? A critical look at circular CEO Minute No12 of 1987 on LDs shows that it is silent on what should be done by schools in order to identify the children. Another observation is that it is long overdue considered that it was promulgated in 1987. The situation has changed significantly in the school system. The introduction of information and communication technologies (ICTs) has changed the education landscape to the extent that new ways of assessment must be ushered in.
School policies are critical in the implementation of national policy. They are a reflection of the national policy. The lack of a clear policy on disability is reflected in the school system. A study by Muuya (2002) on Heads of primary schools on ‘The aim of special education schools and units in Kenya’ found out that there was a gap between policy and actual provision at school level. Schools have policies which they use to guide their various activities. Currently their effect on the identification of children with LDs is not known. In the USA policies have been effective in promoting the identification of children with LDs, since they have stipulated the types of tests to be used. What also needs noting is that advocacy has been used to promote LDs policy formation. But can policy denote what should be included in the model?

2.8.3 Inclusion versus Institutionalisation

In Zimbabwe remedial programme was institutionalised in 1987 (CEONo12 of 1987). This meant that all schools were required to identify children with LDs and offer them remedial education. By institutionalising it the government clearly indicated that its intention was to segregate children with LDs in a group so that they can get intensive teaching. This is contrary to inclusive education which advocates for the teaching of all children in the ordinary classroom. The United Nations Convention on the rights of People with Disabilities (UNCRPD) elaborates the rights of persons with disabilities (PWDs) and set out a code of implementation. In article 24 on education the UNCRPD (2012) stipulates that ‘state parts shall ensure an inclusive education at all levels’ (page 29). The Salamanca Framework for Action (1994) also states that the fundamental principle of an inclusive school is its ability to enable all children to learn together.
whenever possible regardless of their differences or difficulties (Peters, 2004). Goodwin (1997) asserts that assessment and inclusion are naturally connected and insists that assessment should occur in the classroom instead of a separate environment. Ainscow (2004) concurs with this as he says learning alone is disadvantageous because we learn with other people.

The circular CEO minute No. 12 of 1987 is still in place and contradicts the government’s thrust towards the promotion of inclusive education as it promotes the segregation of children with LDs. The developed assessment model for identifying children with LDs should be sensitive to this new position despite the fact that inclusion in Zimbabwe has not been fully embraced. We need to take heed of Chireshe’s (2011) recommendation that MoESAC should put in place a binding inclusive education policy.

2.8.4 Resources

The issue of resources is the cornerstone of any identification model. Resources are mainly in two forms; human and material. The National Report on the Status of Education in Zimbabwe presented at the 48th session of UNESCO International Conference on Education (2008) highlights the challenges facing Zimbabwe as; funding, shortage of books, problem of an irrelevant curriculum and need for curriculum reform. The report identifies resources in the form of classroom and especially qualified teachers as a major player in implementing educational programmes. This is also applicable to special education where the need for resources is felt more critically. Peresuh (2000) pointed out that the training of teachers does not include disability which makes it difficult for teachers to
provide for the students with LDs in their classrooms. There is need to introduce special needs education in all teachers colleges.

This situation is not unique to Zimbabwe as Beriun, Tesera, and Desta (2006) in a study of Primary schools in Ethiopia found that the problem of quality of teaching is related to class size resources and teacher qualifications. The issue of who does what with what type of expertise definitely must determine the type of tests which are crafted into the model. We need to find out from those who are currently doing the assessment what they have and how effective they view this in the process of identifying children with LDs.

The second issue of material resources comprise of the instruments to be used. Formal tests are expensive and are usually produced in the Western world. The area of psychometrics in Africa and specifically in Zimbabwe is the domain of psychologists as indicated by Mpofu and Nyanungo’s (1998) article. But the issue of teachers’ capacity to produce home brewed instruments also needs interrogation. We have to know if any tests being used are local and ascertain the relevance of the foreign ones. Maybe our assessment model may not even need to use any foreign originated tests at all.

2.9 Constructing an Assessment Models

The determinations of what type of models are in place and their relevance needs attention. The literature review has shown that two theoretical frameworks currently form the basis of assessment models in the western world. These are the
mechanistic and the holistic constructivist theories. Their epistemological foundations are Western. The mechanistic based models form the largest group and historically have been influential in the development of identification strategies for children with LDs. With all the challenges identified above is it possible to come up with a model for the identification of children with LDs? Even up to now the Americans and the British are battling with ways of properly identifying LDs (Chamberlin, 2005; Gipps, Gross and Goldstein, 1987).

A similarity in assessment models can be drawn between the American and Zimbabwean situations. In the USA assessment instruments have been used to segregate and suppress African American children in order to present a picture of minority group children as susceptible to LDs and other intellectual problems (Sattler, 1992). Lessons can be learnt from Kellaghan and Greany (2001) who advise that when constructing a model one should consider the curriculum area, the forms of assessment, the quality of assessments and the target population. Another view would be to ask if we need a model at all. Is the development of a model consistent with the development of educational epistemologies in Africa, or in the whole world? What is the relevance of a model in the education of children? One criticism which was made by the Regional Director for Education in Harare in 1993, when addressing visitors was that Zimbabwe tends to adopt many models from the western world without evaluating them (Bowora, personal communication, 1993).
2.10 Gaps in The Literature

This literature review has clearly shown a number of gaps in the literature. First there is no literature on the assessment models for the identification of LDs in Zimbabwe. An analysis of literature in general shows that there are assessment models from the USA and UK being used to identify children with LDs. But when we focus on the Zimbabwe situation there is insignificant empirical evidence on the existence of different models for identifying children with LDs. Mutepfa et al., (2007) and Tambara’s, (2001) writings show that the assessment and education of children with LDs is going on Zimbabwe, but it is not specific on whether this is appropriate or not.

Mpofu (1999) and Tambara (2001) draw parallels with the American scenario. They allude to the position that the Zimbabwean identification process through the use of a discrepancy model is a copy of the American model. This is fraught with controversy since it is problematic to confirm that the identified child has LDs. Peters (2001) as she interrogates her perceptions of the LDs field even goes further to conclude that the label of LDs is not an appropriate one. Is it possible that the identification of these children has followed an ambiguous model? A deficit model which lays blame and stigmatises the recipients as it defines and identifies them. Such studies are needed on the Zimbabwean scenario. The Zimbabwean Institutionalised Remedial programme has never been evaluated since its inception in 1981.

The American and British literature clearly stipulates the historical development of different models of LDs and how these are being used to identify children with
LDs in USA and UK. The Zimbabwean situation has no study which describes in detail what is being done to identify children with LDs. Such an omission by our academics has created a situation where Zimbabwe ends up adopting any method that is in vogue. But the question is how do we know which models are in use and what effect they have? It is the brief of this study to document in detail what is being done in the area of LDs highlighting successes and failures from the point of view of the practitioners and the recipients. Such documentation is crucial if we are to come up with an assessment model for the identification of children with LDs. Practitioners will have a vantage point from which they can determine the defection of both assessment and intervention models for African children.

Questions have been raised of what should be included in an assessment model. There is need therefore to scrutinise current practice and identify and tests aspects which are practical. Which tests and aspects need to be placed in the model and which ones need to be discarded is an important dilemma which needs the focus of a study of this nature. This study therefore needs to find out what types of processes are going on and what they have put to identify children with LDs.

We need also to find out when identification starts. Is it starting at home? Is it embedded in the teaching practices occurring in the classroom? Is it an ad hoc aspect of teaching? All these questions should lead us to the construction of an assessment model.

Lastly the literature consulted has not provided a definite model to follow. When one examines the different models they are presented in a linear historical format.
Can we deduce from this presentation that assessment models are hierarchical, starting with a basic model graduating to a more complicated model. Is it that there is no need for a single model but that each model has its own benefits and disadvantages. Practitioners can select models to suit specific environments and individual children. It is true that children are different and exhibit more differences if they have a learning disability.

Children’s learning though their differences make it easier, most of the times to teach them. But when problems occur these are unique differences and need to be addressed using an IEP to reduce, or extinguish them. Can we assume that the above occurs when children are being assessed? Wilson and Cleland (1988) talk of an Individual Assessment Programme (IAP) for each child. We should ascertain if schools are identifying children by addressing their individual learning difficulties through IAPs. Detailed analysis of these should reveal their efficiencies and deficiencies to be included in the constructed assessment model.

2.11 Chapter Summary

This literature has shown that there are significant gaps in the knowledge on learning disabilities in general and specifically on the assessment models of identifying children with LDs in Zimbabwe. Such studies clearly show that the theoretical frameworks for the assessment of LDs are either mechanistic reductionist or holistic constructivist. The former concentrates on assessment of various components of the performance of the child with LDs and the latter focuses on the whole child’s performance. An examination of the literature has shown that four models make up the mechanistic conceptual framework namely,
perceptual, medical, information processing and cognitive models. The holistic
model, a constructivist paradigm although old is gaining prominence.

The efficiency and effectiveness of the mechanistic models have been tested over
and over with mixed results. Identification of children with LDs is the cornerstone
of any remedial programme. Wrong identification of children results in wrong
diagnosis and irreparable damage to children since they end up carrying a life
long label of disability. It is therefore important that practitioners use models
which are as close to perfection as possible. This scenario creates a dilemma for
African education systems that are in the habit of wholesale adoption of western
assessment models. First the literature shows that the western world has reached
the cross roads on what method to use and secondly that African assessment
models are non-existent due to lack of research and documentation, a situation

The use of a qualitative research paradigm, in combination with other methods to
gather as much data as possible using a case study, is relevant in such a situation
where documentation is scanty. This enables the creation of a thick description of
the prevailing activities. In the next chapter I am going to explain, justify and
describe the methodology.
CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter a detailed exposition of the research design and methods used is proffered. I discuss the rationale for using qualitative and quantitative methods. There is no “cook book” for doing research as Maxwell (2005) points out since decisions about the research methods depend on the specific context and issues one is studying. In this study the phenomena I was studying required that a structured approach be followed. This is in keeping with Miles and Huberman (1994) who point out that when one is new to qualitative studies and wants to better understand phenomena within a familiar culture then pre-structuring your methods reduces the amount of data one has to deal with. Focus therefore is on how I used triangulation or mixed methods in the research design.

I describe the qualitative and quantitative data-gathering strategies that were used in the research phases. These were interviews and document analysis to collect most of the data. I also describe the data analysis and presentation strategies I employed which followed a similar trend. Ethical issues are also described.

3.2 Research Paradigm

I used a mixed methodology paradigm with continuous field research, collecting qualitative data (Flick, 2009). Johnson and Onwueghuzi (2004) and Flick (2009) argue that this is pragmatic as it provides the researcher the opportunity to take
best elements from each in a complementary not competitive manner. According to Baxter and Jack (2008) a qualitative research paradigm is based on a constructivist philosophical view which says that reality is subjective thus the world exists but different people construct it in very different ways. In this context organizations are viewed as invented social reality; discovering how different people interpret the world in which they live. We are able to construct a more realistic picture of what is occurring and what is driving it to exist that way.

This is contrary to a positivist viewpoint which views the world as guided by laws or law like generalizations. In this aspect positivism is less successful when it comes to “the study of human behaviour where the immeasurable complexity of human nature and the elusive and intangible quality of social phenomena contrasts strikingly with the order and regularity of the natural world” (Cohen and Manion 1989, page 12). Baxter and Jack (2008) agree that it allows the participants to tell their story.

For this study the need to hear the participants’ story is more apparent in the area of learning disabilities at the classroom level where the problems of learning and human interaction provide the positivistic researcher with major challenges. I found a constructivist approach specifically a case study more appropriate for the study of assessment at the school level. Hancock (1998) says a case study advocates for the study of direct experience taken at face value; behaviour being determined by the phenomena of experience. It allowed me to answer the questions; what, why and how? (Hancock, 1998).
In our search for the truth we are concerned with our environment and how it presents phenomenon to our senses that is through our experiences, reasoning and research (Flick, (2009); Wamahia and Karugu, (1995); Cohen and Marion (1989). It is clear that the above phenomenons are complementary and overlapping. Social Sciences have thus two faces; one where it is traditional depending on authorities and individual experiences and the other where it emphasizes how people differ from inanimate natural phenomena.

Three assumptions explain social reality in Social Sciences (Cohen and Manion, 1989). The first is the ontological view or paradigm which views social reality as having an independent existence which is not dependent on the knower. The second is the epistemological paradigm which is concerned with the bases of knowledge. The third which is human nature is concerned with the relationship between human beings and their environment. This study was based on aspects from the last two assumptions. It was guided by an approach which views the world as a softer, personal and man-created kind.

However the use of elements of the quantitative paradigm initially was pragmatic because as Bryman (1992) argues it can be used to support qualitative research by analysing structural features of the phenomenon.

3.3 Research Design

The case study design was used. This case study was a combination of Miles and Huberman’s (1994) research design on the integration of qualitative and quantitative research. The survey was used to establish the structures of the
phenomenon and qualitative data was collected in the field on the processual issues and subjective viewpoints of participants. The research design is illustrated in Table 3.1 which shows its three phases.

Table 3.1: The Research Design: Phases of the Case Study

<table>
<thead>
<tr>
<th>Field Testing</th>
<th></th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>Data Collection</td>
<td>Analyse instruments for technical aspects, and focus to the study</td>
</tr>
<tr>
<td>2 D Phil candidates</td>
<td>Questionnaire</td>
<td></td>
</tr>
<tr>
<td>1 lecturer</td>
<td>Interview schedule</td>
<td></td>
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<tr>
<td>2 Remedial Tutors Teachers</td>
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</tbody>
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<table>
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<tr>
<th>Phase 1 Baseline Survey</th>
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</thead>
<tbody>
<tr>
<td>Participants</td>
<td>Data Collection</td>
<td>Data Analysis</td>
</tr>
<tr>
<td>220 Primary school Heads</td>
<td>Questionnaire</td>
<td>Quantitative Descriptions of the school remedial programmes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 2 Main Study</th>
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</thead>
<tbody>
<tr>
<td>Participants</td>
<td>Data Collection</td>
<td>Data Analysis</td>
</tr>
<tr>
<td>92 Teachers (27 Primary schools)</td>
<td>Semi structured interview schedules</td>
<td>Qualitative Global analysis Thematic coding</td>
</tr>
<tr>
<td>37 Experts/ Informants</td>
<td>Semi structured interview schedules</td>
<td>Quantitative Global analysis Thematic coding</td>
</tr>
</tbody>
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<tr>
<th>Phase 3 Document Analysis</th>
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<tbody>
<tr>
<td>Participants</td>
<td>Data Collection</td>
<td>Data Analysis</td>
</tr>
<tr>
<td>92 Teachers</td>
<td>Document analysis checklist</td>
<td>Global analysis</td>
</tr>
</tbody>
</table>

A case study of the Harare Metropolitan Province which included the town of Chitungwiza was used. It focused on the assessment models being used in the remedial programmes in its primary schools. The selection of a case study design enabled me to understand assessment as fully as possible realising that this may be probably the first study being carried out in this area in Zimbabwe. Baxter and
Jack (2008) and McMillan and Schumacher (1989) support this approach as they point out that the purpose is to understand the phenomena as it occurs naturally in non-contrived situations where there is no manipulation of conditions or experience. This allowed me to be in close collaboration with the teachers as they told their stories. An abstract search revealed little evidence of any study having been carried out on this topic in the country. Therefore I decided that a full description of this phenomenon was needed to develop a solid basis of knowledge for use in policy formulation and in future research and practice.

3.4 Research Process

The following sites were used to collect data; the government primary schools, and private schools focusing on the primary school children in Harare Metropolitan Province which includes the town of Chitungwiza. Other sites were MoESAC head office, Harare Education Provincial and district offices.

Descriptive and explanatory strategies were employed to get in depth knowledge of the phenomena of assessment. This is a characteristic of the case study design as Yin (1994) says it can be explanatory, exploratory or descriptive. The research wheel of recursive steps that were repeated over time (Rudestam and Newton 2001) started with interviews which resulted in a demarcation of the conceptual framework. The next step was the generation of specific research questions followed by the data collection, which led to another round of empirical interviews, creation of more research questions and data collection resulting in the final generalisation. Data was collected in each unit until data saturation; the point where participants repeat the same information as their predecessor (Flick, 2009).
Triangulation was done to enhance the validity of the case study and allow generalisation (Gall, et al., 1989). Flick (2009) describes triangulation as the combination of different methods in dealing with a phenomenon. Data triangulation refers to the use of different data sources as was done in this study. Flick (ibid) points out that triangulation is useful in a case study because it allows the collection of data from different sources. It can use both qualitative and quantitative strategies.

Johnson and Onwuegbuzi (2004) affirm that quantitative and qualitative researches are important and useful because both empirical observations address research questions. Yin (1994) agrees that triangulation increases construct validity of the results. It was achieved through soliciting information from Directors of Education, Education Officers, Educational Psychologists, Remedial Tutors and School Heads. These verified the data collected from the teachers. Document analysis completed the triangulation through analysis of records, tests and reports. This enabled the identification of the actual tests and strategies being used.

The advantage of the case study is that it allowed the development of thick descriptions of the phenomenon, which helped in comparing assessment models. Although issues of high levels of labour intensiveness were a major disadvantage this was handled with the use a proper work plan and sticking to targets. I also carried out subjectivity audits to counteract any strong negative or positive feelings, which may have tainted the findings. Subjectivity audits are the
mechanisms I put in place to gauge researcher bias by constantly cross checking the data with selected participants and informants. This alerted me to negative cases I may have omitted and I quickly rectified the situation.

3.4.1 Geographical Location

The Harare Metropolitan Province is the capital city of Zimbabwe. The province includes the Town of Chitungwiza which has the second largest population to the capital city, Harare; making it the biggest province of the country’s ten provinces. Harare Metropolitan province is divided into 7 districts. Harare Metropolitan has a population of 2,800,000 people. Harare is an independent city equivalent to a province. It is the education centre of Zimbabwe. As the seat of government it resolves the problems found within the country, and is the place where most of its activities are being implemented (New world encyclopaedia, 2012).

I selected this province because it happens to be the largest and also the seat of government therefore it represents all the sectors of the population of Zimbabwe and its programmes which are first implemented here because of their proximity to the head office of the Ministry of Education, Sport, Arts and Culture (MoESAC). The MoESAC is able to disseminate, supervise and evaluate government policy and programmes. I assumed that all schools in this province complied with all ministry requirements including implementing the remedial programme.
3.4.2 Population

The use of a case study implied that the whole population of the 221 primary schools in Harare Metropolitan province which included the town of Chitungwiza was liable to be selected into the study (Schofield 2006). These schools consisted of heads, remedial teachers, classroom teachers and school children including those who had been identified as having learning disabilities. They were a total of 5792 teachers in the province. These were identified at each phase of the study as it progressed in line with the nature of qualitative research. These are presented in chapter 4 as part of the results. The population was bound to the institutions making it manageable to identify, interview and observe them. Key informants from the Ministry of Education Sport, Arts and Culture; specifically The Schools Psychological Services (MoESAC) and Special Needs Education and the Harare Metropolitan Regional Office were included in the population.

3.4.3 Sample and Sampling Techniques

Purposive sampling was used to identify the participants in the field as the research progressed (Oliver 2006). Schofield (2006) describes it as a method whereby whoever is available and willing takes part in the study. This is both expedient and less costly. Purposeful sampling was selected because it enabled me to identify, knowledgeable people from the MoESAC head office, Schools Psychological Services, school heads, remedial teachers, classroom teachers, from government schools, private schools and colleges offering remedial services for children with learning disabilities in Harare and Chitungwiza. These participants were typical of the person who would be able to discuss the conditions prevailing in their schools pertaining to the assessment of children with LDs. The study used
the following sites; MoESAC head office and the Harare Province office, all 7 district offices, and 172 government primary schools and private schools focusing on the primary school children in Harare Metropolitan province.

Maximum variation sampling was used to represent the members of the sample described above (Hoepfl, 1997). Maximum variation sampling involved selecting which were as different as possible to capture the range of the differences of the units of the case. An initial questionnaire was sent to all the 221 primary schools so that they could provide the background data of the participants and sites. These were then sorted to determine those who should be included in the sample using the presence of a remedial programme at the school. Participants were selected at the chosen school using their experience or lack of it in assessing and teaching children with learning disabilities, heading a school with such children and working in an institution which provides or does not provide assessment services. The categories and actual number of the informants was determined at this stage by the availability of the participants. Data was collected to the point of saturation one of the characteristic of qualitative research.

3.5 Data Collection Instruments and Procedures

The case study used questionnaires, interviews, and document analysis to collect data. Flick (2009) says in the case study the researcher focuses on the characteristics of an individual unit to probe deeply and analyse the phenomena with the intention to generalise to the wider population to which it belongs. The questionnaires provided baseline information on the schools in the case study. The
questionnaire solicited information on; type of school, the type of remedial programme at the school and if they assess children (Appendix I).

Semi structured interviews were held with teachers and heads to cross check questionnaire responses to enhance reliability of data collected (Appendix II III, IV). These were interview schedules which had a section for background information and another one with open ended questions which gave me and the interviewee opportunities to discuss the topic in depth (Hancock, 1998).

The document analysis checklist was used to cross check documents used or generated during the course of the assessments and interventions. This had sections for policy, institutional records, tests and children work (Appendix V).

The chronicle of access to the schools followed the following process in line with Neale, Thapa and Boyce (2006) guidelines for collecting data in a case study:

**Planning**

I planned the administration of the case study. This involved talking to various personnel in the MoESAC to get advice on how to get access into the sites. The instruments development and field testing was planned during this period.

**Getting Letters of Introduction**

A letter of introduction was obtained from the Zimbabwe Open University (ZOU) Higher Degrees Directorate and submitted to the Ministry of Education Sport and Culture (see Appendix VII).
Gaining Access to the Ministry of Education, Arts, Sport and Culture

Written permission to do research in the Harare Metropolitan province including the town of Chitungwiza primary schools was obtained from Head Office (see appendix VIII and XI). The letter authorised the regional offices to give me access to the primary schools. The letter required that the findings be availed to the Ministry after the completion of the research.

Gaining Access to Harare Provincial Office, SPS & SNE Head Office

I saw the Director of the SPS and SNE Head Office and obtained written permission to carry out the study in all the regions (see appendix IX and X). I was allowed to work with the remedial tutors in the regions after making arrangements with the Principal Educational Psychologist (PEP) in the region.

I went to Harare region and met with the PEP for Harare Metropolitan Education Province. It was agreed that I work with the Principal Remedial Tutor (PRT) for Harare Metropolitan province. This province has seven districts each with a Remedial tutor based in the district. These were the key informants identified to provide information during the data collection. They helped in the distribution of questionnaires during phase one.

Visits to Schools with District Remedial Tutors

District Remedial Tutors (DRTs) gave feedback on the administration of the questionnaire and submitted all the questionnaires for analysis. This took three months to complete. The findings helped to identify the different types of schools to be used in the research. The interview schedules and the document analysis checklist were made during this time. The document analysis checklist was used
to identify and describe the documents the participants used during their remedial programmes. Arrangements for interviews were made during this meeting. I identified the schools I was going to visit and interviewed the selected teachers and their Heads. Teachers were the main participants of the study so they were interviewed first. Heads were interviewed as key informants in the schools.

The next set of interviews, which took six months to conduct, were carried out at the district level with the remedial tutors and their District Education Officers (DEOs) as key informants. The following were interviewed at the Province respectively: PRT, PEP, and Provincial Education Director (PED). Interviews carried out at Head Office included the Director SPS and SNE and the Principal Director Quality Assurance. The total duration of the data collection was from 2011 to 2012.

The questionnaire was initially used to survey the likely informants to be included in the main survey (see appendix I). It solicited their experience, sex, assessment activities and their qualification, general and specific to special needs education.

This was followed by face-to-face interviews with teachers on the following key questions which were in the interview schedule;

- How do they define Children with LDs?
- What do they understand by assessment?
- What tests have been used on children with learning disabilities?
- What are the strengths and weaknesses of these tests and strategies?
- How do they identify the children with LDs?
• What African epistemologies (local contents) are reflected in the tests?
• What aspects should be included in the assessment model for primary school children?
• Why should these aspects be included?

Heads and other informants were also asked questions on policy, definitions and administration issues. All participants consented to the interviews by accepting the conditions on the consent form (see consent form in Appendix V)

As part of the triangulation documents were analysed using a document analysis checklist, to check on what has been done up to date in the area of assessment for children with learning disabilities in the Ministry of Education and the other institutions. The document analysis checklist looked at the following: existing policy documents, institutional records and reports, tests, tests results and comments, children’s work, and other relevant material.

This case study used multiple techniques as part of triangulation to collect data in the form of questionnaires, interviews and document analysis. Nyawaranda (2008) and Flick (2009) points out that the use of triangulation enhances validity and reliability of the findings.

3.6 Data Presentation, Analysis and Interpretation Procedures

Most of the analysis was done concurrently with the data collection process. The use of multiple data collection methods was used to enhance validity and reliability of the findings. The data was analysed using global analysis (Legewie,
1994 in Flick, 2009), thematic coding by Rudestam and Newton (2001) and Flick (2009) using these steps to data analysis and interpretation:

- Review of all relevant statements
- Recording all relevant statements
- Removing all redundant statements and remaining with key meaningful categories of the experience
- Organising the categories into themes
- Merging the themes into a description of the textures and augment with quotations from the texts
- Constructing a description of the structure of the assessment models and practices
- Creating a textual – structural description of the assessment models.

A summary sheet and a document survey form were used to streamline the data. The contact summary sheet was for the interviews and the document survey form for the document analysis. The above was done during the interview and document analysis phases so as to keep a careful track of the progress of the research.

3.7 Triangulation, Validity and Reliability Issues

The issue of credibility is central to qualitative research. Flick (2009) says that it is problematic to use validity and reliability terms in qualitative research due to the nature of the data they produce. In Qualitative designs one is dealing with words as the unit of expression. Quantitative research designs deal with numbers which can be manipulated to determine validity or reliability. In this study credibility or trustworthiness was established in ways namely through field testing
and triangulation. The questionnaire and the interview schedules were given to experts in qualitative designs to determine their quality.

The experts made their observations which were then incorporated into the instruments. The instruments were also field tested in selected schools from two districts. The teachers’ responses enabled me to change some of the items. During the data gathering stage I had continuous feedback from the SPS and SNE personnel and some Doctor of Philosophy candidates from the Zimbabwe Open University (ZOU) on the relevance of the items. This resulted in my developing two other slightly different instruments; one for the heads and another for the informants.

Triangulation consisted of different data gathering instruments. The use of the survey provided information which I used to confirm the correctness of the information which was provided by the teachers. Therefore I was able to establish that although some schools indicated on their questionnaire response that they had a programme a visit to the school proved that this was not the situation on the ground. I observed that Heads thought the questionnaire was not going to be followed up so they indicated information which showed as if they were complying with the authorities.

The adherence to the research procedures enabled the confirmation of the existence and authenticity of the documents. I was wary that these may not be genuine documents and at times especially the classroom records this proved to be the case in some schools. The use of informants enabled the verification of the
data gathered. The Heads confirmed if what their teachers said was true. Most heads corroborated what their teachers had said. Remedial tutors DEOs and EPs were used to verify the information. This process ensured the validity and the reliability of the data gathered.

3.8 Ethical Issues

In chapter one I briefly described the ethical issues under consideration. Research ethics have become an area of greater concern in recent years with the need for ethical approval before the research is carried out (Abbot and Sapsford (2006). I followed the principles of research ethics one of which is that during the entire research duration I should conduct myself professionally and respect all those I interview (Dench, Iphofem and Huws, 2004). As indicated in section 3.5 permission for carrying out the study was solicited from the Ministry of Education Sport and Culture, Schools Psychological Services and the individual institutions concerned (See the Appendix for the letters of permission).

The instruments used clearly pointed out that confidentiality and anonymity of the participants would be respected. The ethical considerations concerning informed consent, debriefing and publication of results were adhered to in the questionnaires, interviews and during document analysis to ensure credible results (see appendices I to IV). A consent form for the interviews was adapted from Neale, Thapa and Boyce (2006), (See appendix VI). Participation therefore was voluntary and decisions to take part were on the basis of informed consent (see Appendix VI).
A decision in line with ZOU regulations was made to dispose all raw data after it has been collated and analysed. Aggregate data used in the study would be kept for a minimum of five years.

3.9 Field Testing

The instruments as shown in Figure 3.1 were analysed by experts who were a Doctor of Philosophy candidates from University of Zimbabwe and a University of KwaZulu-Natal and 2 lecturers from Zimbabwe Open University and field tested with 1 informant and teachers in four schools from two districts. The questionnaire and the interview schedules were checked for clarity, relevance, consistency and bias. According to Babbie (1983) these aspects ensure the effectiveness of the questions and statements. Throughout the data collection stages the instruments were constantly checked by me and cross checked with the participants and the informants to ensure that they were soliciting the proper responses. The experts and lecturers advised that two separate interview schedules be used for the participants and the informants.

3.10 Chapter Summary

This chapter presented the methodology of the study. The qualitative research paradigm was identified as the best method to use when gathering data on the phenomena of assessment. This was complemented by selected elements of the quantitative paradigm. The case studies of various institutions which are using assessment to identify children and the participants were selected using purposeful sampling techniques. The use of three instruments to collect data was seen to be more appropriate as it ensured the validity and reliability of the
findings. These were namely the questionnaire, semi structured interviews and a document analysis checklist.

Document analysis was used to collect data on the phenomena. Field notes and memos were also used to capture as much information as possible. Triangulation involving the use a questionnaire, semi structured interviews and a document analysis checklist which enabled the validation of the collected data. Matthew (2005) points out that triangulation are not necessarily free from validity threats due to bias which may be in all the methods. In order to counter this I identified potential sources of errors or bias and compared the data to other existing data for consistency. In the next chapter I present the detailed research results.
CHAPTER 4

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents the data from the field, an analysis using qualitative strategies is employed and lastly an interpretation is made of the meanings of the data. Basic statistics were used to illuminate some of the results. Flick (2009) says this is necessary in a case study as part of triangulation. The intention is to answer the research questions posed, to come up with the assessment model for identifying children with learning disabilities who are in the primary school in the Harare Metropolitan Province and ultimately those in similar situations in Zimbabwe.

This case study was carried out when the ministry had already put in place a policy CEO Minute No. 12 of 1987 which stipulated that all primary schools should implement a remedial programme for all grade 4 pupils. The SPS and SNE provided training on assessment and the intervention programmes for children with LDs. From 1981 up to date, schools have implemented this programme without any formal evaluation being carried out. The data presented here reflect what is actually happening in the schools citing the different assessment and intervention models being implemented in the 221 schools in Harare Metropolitan area. The study reveals the practices which are available in the schools; it also indicates the nature of the assessment instruments which are being used in the

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schools and the teachers’ views on their effectiveness in identifying children and also linking up with the intervention programmes for specific subjects.

These data are presented in the order of the research questions. It is my intention to provide in depth descriptions of what is happening in some instances in relation to some selected literature to illuminate the result. I conclude the chapter by giving a summary of the results and their implication for the development of an assessment model for identifying children with learning disabilities which is linked to meaningful interventions. The results show that despite the presence of a policy driven assessment model, schools have adopted, adapted or developed their own models which they are using to improve children’s academic and social performance. These identification versions are:

1. Clinical mean discrepancy identification
2. In class identification
3. Whole school screening
4. Clinical age discrepancy identification
5. Nominations

This study therefore explored and described what was happening in schools. This is in line with what Kohn (1997) advocates, that case study methodology’s purpose is to explore, describe and explain the phenomenon understudy.

The results also indicate that the reason for schools to identify and teach children has been due to the following: the high failure rate of children in the school system and the subsequent pressure from parents in an environment where the SPS and SNE model has failed to provide meaningful remedial education. This
will be explained fully in the presentation, analysis and interpretation which follow.

4.2 **A Description of The Case**

4.2.1 **Overview**

This study was divided into three phases each one dealing with procedures for data collection. Phase one was focused on collecting baseline information on school remedial programmes through a questionnaire to the head. I had to carry this baseline survey in the schools as shown in chapter 3 to find out what really was happening in the schools in terms of remedial education. This information enabled me to identify the schools in which to conduct interviews in phase two of the research. The documents checked in phase three helped to confirm what the schools were doing. This section starts with a full description of the case which is Harare Metropolitan Province of the Ministry of Education, Sport, Arts and Culture and the results of the baseline survey.

According to the Provincial Education Director’s first Term report of 2012, Harare Metropolitan Province has 221 primary schools in seven districts as shown in Table 4.1. The case has seven districts each consisting of schools which are classified as government, uniformed services, council, trust, farm, church and satellite. These are found in low density, high density, and peri-urban areas. In this study the districts and schools have been given numbers to ensure confidentiality. The report shows that they are 138,304 boys and 136,483 girls translating to a total of 274,787 pupils in the province. The baseline survey was sent to all of these schools by hand. The survey results show that out of the 221
primary schools, about 80 percent (172) of the schools responded to the survey. There was need to find out what assessment models they were using to identify the children with LDs.

4.2.2 The Schools Remedial programmes

All the 172 schools indicated that they had a remedial programme. Convenient sampling was used to select schools which I perceived to have different types of remediation. My assumption was that all schools in that category would exhibit best practices. However, interviews with specific schools revealed a different position. It appears schools felt that they needed to show compliance by indicating on the questionnaire that they had a programme. This was due to fear of reprisals from ministry officials since the remedial programme is a policy requirement.

The schools in the high density areas claimed that their remedial assessment models were prescribed by the SPS and SNE department. However, this was not always correct upon scrutiny. Most of the government schools may have adjusted the assessment procedures to the schools shortcomings. Trust and government schools in some low-density areas tended to have their own assessment models for identifying children with learning disabilities. These were different from those offered by the SPS and SNE. This scenario provided a wide variety of models which indicated the need for further analysis.
4.2.3 The Assessment Models

The survey revealed that schools are aware that they must carry out remedial programmes. Schools were equally aware that such programmes should start with an assessment of the children so as to identify those with learning disabilities. Table 4.1 shows the different types of remedial programmes present in the schools. A significant percentage of schools in all the seven districts indicated that they had a school based remedial programme. The survey results show that the 172 schools’ remedial programmes can be grouped into five types, an indication that their assessment models for identifying children with learning disabilities may be different.
Table 4.1: Types of Remediation Programs in Harare Metropolitan Province, Zimbabwe.

<table>
<thead>
<tr>
<th>District</th>
<th>Schools</th>
<th>Inclusion</th>
<th>Clinical Remediation</th>
<th>Classroom Remediation</th>
<th>Remedial class/dep</th>
<th>Extra lessons</th>
<th>Special Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>27</td>
<td>18</td>
<td>23</td>
<td>20</td>
<td>-</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>18</td>
<td>3</td>
<td>18</td>
<td>14</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>17</td>
<td>16</td>
<td>18</td>
<td>5</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>24</td>
<td>23</td>
<td>20</td>
<td>22</td>
<td>0</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>27</td>
<td>24</td>
<td>26</td>
<td>26</td>
<td>3</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>24</td>
<td>19</td>
<td>15</td>
<td>15</td>
<td>5</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>7</td>
<td>31</td>
<td>20</td>
<td>22</td>
<td>22</td>
<td>4</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>172 (78%)</td>
<td>124</td>
<td>140</td>
<td>137</td>
<td>18</td>
<td>32</td>
<td>61</td>
</tr>
</tbody>
</table>

Baseline Survey Data (2012) n=172

The survey provided enough evidence to allow me to identify schools for in-depth interviews. The open-ended section of the questionnaire further unveiled the differences on the focus of the remedial programmes as shown in Table 4.2.
Table 4.2: Phase One: Open ended Responses by Schools to the Types of Remediation

<table>
<thead>
<tr>
<th>Item</th>
<th>Types of Remediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Grade based model</td>
</tr>
<tr>
<td>2.</td>
<td>School based model 1</td>
</tr>
<tr>
<td>3.</td>
<td>Classroom based model 1</td>
</tr>
<tr>
<td>4.</td>
<td>Extra lessons in the school: Grade 7</td>
</tr>
<tr>
<td>5.</td>
<td>Extra lessons outside the school.</td>
</tr>
<tr>
<td>6.</td>
<td>Psychological assessment by psychologists</td>
</tr>
<tr>
<td>7.</td>
<td>Assessment by other professionals</td>
</tr>
<tr>
<td>8.</td>
<td>Coaching classes</td>
</tr>
</tbody>
</table>

Upon reflection I wondered how teachers were identifying children for these varied remedial programmes. If schools were carrying out these programmes then why were children getting low grades in the grade seven tests as shown by the ZIMSEC analysis of the 2011 tests. This indicated an average pass rate of 57% in the single subjects alone. The Education Coordination and Development Department (2010) in its analysis report of the grade 7 results of the same year noted a pass rate of 24.99%, an insignificant increase from the previous year. They concluded that the pass rate indicated some decline and stagnation in children’s performance.

One possible reason for continued poor performance was that the schools may not really be carrying out any remedial programme. This is confirmed by the PED's termly report of 2012 which showed that very few schools were doing any clinical remediation. The report shows only 29 children being identified in the
mainstream, 94 being identified and placed in a special school. This translates to a total of 123 children with LDs having been identified in 2012 first term, in a province with an enrolment of 274,787 children. If we are to follow the SPS and SNE estimation of 20% of the primary school population having learning disabilities then we should have at least 800 children having been identified for the remedial programme focusing on the grade 4 level only. These are children who because they are intelligent only pass one or two of the grade seven tests. Potentially these 800 children if catered for should be able to pass the grade seven results; raising the province and Zimbabwe’s pass rate significantly. In a discussion with the Principal Director in the Ministry of Education, Arts, Sport and Culture (MoESAC) he revealed that a significant number of children in both the primary and secondary schools had serious reading problems which were a concern to the ministry. Reading is a subject a lot of children with LDs have difficulties with.

If schools claim they have programmes then why do they fail to improve the children with LDs’ pass rate in the other subjects they are struggling with? Why is the provincial term report of the identified numbers of students with LDs so low when 800 children were likely to be identified? Why are some children being left behind? Could it be that schools are doing something which is not targeting the proper beneficiaries of the remedial intervention? What exactly are they doing in these programmes? This enabled the collection of data on those identification units in this single case to ascertain what identification was going on with the view of coming up with an assessment model for identifying children with LDs.
I now present results of interviews which were carried out with teachers who were the main participants of the study and the practitioners in the schools. Specifically I wanted to know how they were identifying children with learning disabilities. What steps were they following? Their responses were cross checked against information from their Heads, Remedial tutors and staff form the Regional Office and Head Office. Their responses were triangulated with responses from their Heads, remedial tutors, educational psychologists and directors from SPS and SNE, District Education Officers from the seven regions, the Provincial Education Director and The Principal Directors from Head Office. The document analysis augmented their responses. The analysis of this qualitative data used two strategies namely global analysis (Legewie, 1994 in Flick, 2009) to identify suitable interview data and thematic coding (Flick, 2009) to come up with the different themes of the assessment model steps or stages under consideration. These results are presented in the order of the objectives and research questions to enable me to identify the crucial aspects of each model.

4.2.4 Biographical Data of the Teachers

All the 92 teachers in the seven districts were trained teachers with educational qualifications ranging from certificates to masters degrees with only 6 having diplomas and degrees in special education. Table 4.3 shows all the participants of the interviews. These had District Remedial Tutors (DRTs) who enabled me to have access to the schools, by accompanying and introducing me to the Heads, teachers, District Education Officers (DEOs). This enabled the creation of a school ethos which was conducive for the interviews without hostility towards me. The Principal Remedial Tutor who is in charge of the province accompanied
me to districts 1, 2 and 3. The DRTs for these districts had recently resigned from the SPS and SNE. Table 4.3 shows all the teachers, DRTs and DEOs in the 7 districts.

Table 4.3: Research Participants and Informants from all the Seven Districts

<table>
<thead>
<tr>
<th>District</th>
<th>Teachers</th>
<th>Heads</th>
<th>Remedial Tutors</th>
<th>District Education Offices</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>4</td>
<td>17</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>5</td>
<td>16</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>6</td>
<td>15</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>7</td>
<td>11</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>22</td>
<td>5</td>
<td>4</td>
<td>123</td>
</tr>
</tbody>
</table>

Interview Data (2012), n=123
The experts and informants in Table 4.4 were used to cross check data from participants and informants from the schools. The research consisted of a total of 130 participants.
Table 4.4: Experts and Informants from Harare Provincial Office and MoESAC Head Office, Zimbabwe.

<table>
<thead>
<tr>
<th>Station</th>
<th>Principal Remedial Tutor</th>
<th>Educational Psychologist</th>
<th>Principal Educational Psychologist</th>
<th>Provincial Education Director</th>
<th>Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harare Met. Province</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Head Office SPS &amp; SNE</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Head Office Research</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
<td><strong>1</strong></td>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

Interview Data (2012), n=7

Table 4.5 shows that 92 teachers were interviewed in the study. Out of the 172 primary schools which responded to the phase one questionnaire, 27 primary schools were selected and their teachers and heads interviewed.
Table 4.5: Research Participants: All the Teachers Interviewed from the Seven Districts

<table>
<thead>
<tr>
<th>District</th>
<th>Schools</th>
<th>English Remedial Teachers</th>
<th>Mathematics Remedial Teachers</th>
<th>Shona Remedial Teachers</th>
<th>Classroom Teachers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>24</td>
<td>22</td>
<td>20</td>
<td>26</td>
<td>92</td>
</tr>
</tbody>
</table>

Interview Data (2012), n=92

Figure 4.2: Distribution of the Primary Schools and All the Teachers Interviewed in the Seven Districts
Figure 4.1 displays the distribution of the different categories of teachers and their primary schools. The display shows the trend of the data collection which started from district 1 and ended in district 7. The initial interviews were held with fewer participants and increased until data saturation was reached in district 4.

4.3 Assessment Models Used by Teachers to Identify Children with Learning Disabilities

The main research question posed was “How are teachers identifying children with learning disabilities so as to improve their academic performance?” This question is crucial because it focuses on the first stage of any remedial intervention programme. A wrong identification will entail a wrong placement which inadvertently leads to a distorted individual educational programme which does not benefit the children. Ultimately the child will not be able to transfer meaningfully this learning to their classroom and test situation. Such children may not pass or may end up obtaining poor grades.

The global analysis of the interviews carried out in 27 primary schools reveals that five themes depicting each model are in existence in the Harare Metropolitan province. Table 4.6 shows the assessment models and their representation in the seven districts. This finding confirms the questionnaire results although the words describing the models slightly differ. What is of essence is that schools have confirmed that they have something worthy of examination. This data was also confirmed by the DRTs who pointed out that almost all the government schools were implementing the SPS and SNE prescribed clinical discrepancy identification model sometimes called ‘the selection procedure.’
Table 4.6: Identified Assessment Models in Harare Metropolitan Province

<table>
<thead>
<tr>
<th>Remedial Type</th>
<th>Theme/Model</th>
<th>District</th>
<th>Schools</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical</td>
<td>Clinical mean discrepancy identification</td>
<td>All</td>
<td>23</td>
<td>85</td>
</tr>
<tr>
<td>Classroom</td>
<td>In class identification</td>
<td>All</td>
<td>27</td>
<td>100</td>
</tr>
<tr>
<td>Whole School</td>
<td>Whole school screening</td>
<td>6, 7</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Remedial class</td>
<td>Clinical age discrepancy identification</td>
<td>6, 7</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Extra lessons</td>
<td>Nominations</td>
<td>All</td>
<td>19</td>
<td>70</td>
</tr>
</tbody>
</table>

n= 27 Schools

The mixture of different models in the schools shows that there is no clear policy giving them the direction to follow. For the Clinical remedial type the 23 schools where all the schools, except the Trust or private primary schools. This is due to the fact that there are easily accessed by education authorities who inform the government directives. The whole school and the remedial classes are found in the Trust schools because they need resources to run them. The parents at these schools are affluent and so manage to adequately fund them. There are differences between private and government schools when it comes to the assessment of children with LDs. The private schools do not follow the SPS SNE circulars. This confirms what the Nziramasanga Commission of 1999 said that schools have different ways in which they help children and each one thinks that their programme is better than the others. Although SPS and SNE is supposed to provide a system to follow; it is failing due to lack of resources (Technical Committee of the Education for All Campaign in Zimbabwe, 2005).
4.3.1 Steps Teachers Take to Identify Children with Learning Disabilities and How They Carry Them Out.

Further analysis using thematic coding of the data identified the categories of each model. Each category represents a step and how it is carried out in each theme or model. I have grouped them because they were similar trends in schools carrying out similar models with slight variations. Therefore it is important that we treat each district or school differently when it comes to these variations.

The assessment models and their themes will be dealt with focusing on what was actually happening during the duration of the interviews.

**Clinical Mean Discrepancy Identification Model**

Interviews with 26 English and 22 mathematics remedial teachers, a total of 46 remedial teachers, revealed that the clinical mean discrepancy identification model supported by SPS and SNE was the model of choice by 85% (23) schools interviewed except the four Trust schools. These two subjects are combined because the English and mathematics remedial teachers are supposed to select student together as depicted by the teacher who said:

*Find the mean of the grade, mathematics and English because they go hand in hand.*

It may be possible that the schools are carrying it out due to the following reasons. The first one was that it was prescribed by a government department through a government circular CEO minute number 12 of 1987. Therefore schools are required by the government to implement it. However, this same circular does not mention details on how this should be done leaving it open to schools to interpret
it in any manner. This may also explain why there are so many identification models in the schools.

Secondly there was an SPS and SNE support team of remedial tutors who were responsible for providing tests, training teachers and monitoring its implementation in all schools. Since 1981 attainment tests have been prepared for remediation for screening and identifying those children who needed remedial teaching and primary schools were supposed to understand and use the attainment tests according to specifications.

Lastly this programme had been in existence for a long period even before independence therefore a lot of teachers had gone through the various staff development programmes which were carried out to equip them with the necessary skills to identify and teach remedial children. Table 4.7 shows the steps which the 23 schools are following. These steps have been transferred to teachers through staff developments and handouts in the districts and provinces as mentioned by DRTs and DEOs. It is therefore important that the tests and procedures should be consistent. Each step consists of certain requirements which should be followed.
Table 4.7: Clinical Mean Discrepancy Identification Model and the Identification Steps followed.

<table>
<thead>
<tr>
<th>Remedial Type</th>
<th>Theme/Model</th>
<th>Steps followed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Remediation</td>
<td>Clinical mean discrepancy</td>
<td>1. Give attainment tests to all grade 4s.</td>
</tr>
<tr>
<td></td>
<td>identification</td>
<td>2. Mark, compute and find the mean.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Compare test means for English and math.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Admit into the programme those with above average in one subject and below in the other.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. For Shona use the provided specifications</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Take the first 10 and leave the others.</td>
</tr>
</tbody>
</table>

In step 2 teachers computed the mean of the two subjects under consideration and then compared the two means to identify the student with LDs. The study assumption was that all schools doing this procedure would be uniform in this procedure. The steps show that this model is a discrepancy model using the mean of two subjects.

Five out of the twenty-four English remedial teachers used the proposed SPS and SNE identification model according to the SPS and SNE specifications. The rest adapted it to suit their environment. Seven mathematics teachers also used the proposed model using the identified steps. This indicates that only 26% of the teachers from 12 schools are following the prescribed guidelines on identification.

The remaining 74% from the remaining 15 schools have adapted the model as shown by these variations shown by the following statements:

- *Use the test cut off point not class average*

- *In most case children selected for the remedial programme are those who would have performed slightly below the mean.*

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• Chart and take the mediocre from the chart
• Identify children below half performance
• Internal arrangement some children were taken for one subject proceed to the other

There were three variations to this approach; few schools used the mean and identified children after a long time; some used the mean of the test to identify the children; others selected with the help of their DRTs. The former group spent so much time selecting that by the time they began teaching the children their class teachers were no longer interested in the program. When asked the strength of this model one teacher pointed out that:

It shows the child’s area of need.

The themes are derived from all the teachers. The child is identified on the basis of two tests submitted by the SPS and SNE and may be identified for the one below the grade mean. These are the English Attainment 4 test and the Mathematics Attainment 4 test (see appendix XIV). In the first place all children are given an equal opportunity to attempt the tests. The administration of the tests requires that adequate tests be reproduced for each pupil.

When I went out into the schools I thought that I would see teachers using this model without any problems. I was surprised by the amount of problems they faced as they carried out the testing. One of them was failure to understand the whole assessment process. In step 2 children are given two attainment tests to answer. The assumption is that the test items are representative of the children’s
school syllabus. Teachers felt that these tests were not representative of what the children will have learnt in their preceding grades. One teacher said:

*The depth of material used is too difficult for a child coming from Grade 3. May be the work may cover grade 3 work only. You cannot say a child has a difficulty in an uncovered concept for example Mathematics.*

The statement indicated that the test items being given to children at the grade 4 level were focusing on concepts children will have not covered yet at that level. This resulted in a very low grade mean. They even proceeded and mentioned that:

*It leaves out some pupils who need remediation because the mean may be too low.*

The response by teachers in each district is similar throughout the seven districts. In response to “What type of tests there were using?” Teachers said that they were attainment tests.

Table 4.8 shows the attainment tests the remedial teachers used to select the children.

**Table 4.8: Attainment Tests Used For Identifying Children in Step 2 of the Clinical Mean Discrepancy Identification Model**

<table>
<thead>
<tr>
<th>Test</th>
<th>Target Population</th>
<th>Presence in the Syllabus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Attainment 4 Test</td>
<td>Grade 4</td>
<td>Grade 4;</td>
</tr>
<tr>
<td>Shona Attainment test 4</td>
<td>Grade 4</td>
<td>Grade 4 except zvirahwe</td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attainment 4 test</td>
<td>Grade 4</td>
<td>Grade 4; Grade3 except long division and Multiplication</td>
</tr>
</tbody>
</table>
These tests are perceived to be too hard for the children as mentioned by remedial teachers from school 12 in district 2. The teacher mentioned the Shona Attainment test (see appendix XIII), the difficulty level and the process of interpreting the norms using a scale. In the first instance the teachers think some test items have no relationship with what the child will have learnt. The statement below supports this observation:

*The depth of the material was too difficult for the level of children.*

*Work should cover the grade three syllabus.*

There was need therefore to verify the position. I compared the test items against the primary school syllabus to ascertain the validity of this claim using the Primary English Syllabus grade 4 (1989) and the Primary Shona Syllabus Grades 1 - 7 (1989). Table 4.8 shows the test item on the left as compared to the syllabus items on the right. This above comparison shows that for the English and mathematics tests the teachers are correct in their observation. The MDG (2010) status report commented that the education sector was using outdated syllabi which were not responsive to the countries’ needs. This shows that most of the children being selected are being given tests which are too hard for them because they will not have been introduced to the concepts in the first place. One remedial teacher said:

*A child will not concentrate on the test yet he or she is above average, at the first selection you start with the children who are intelligent leaving pupils who need help.*

I can deduce that most of the people who are being identified as having learning disabilities, teachers perceive them as if they do not need it at all. They are usually at the top of the class since they manage to get correct these new items. It
is possible that this assessment model has been focusing on the wrong children leaving the proper beneficiaries without any intervention.

The selection procedure comparing test means is called a discrepancy comparison. The interviews carried out with the teachers show that most teachers have not grasped what this means when selecting the children. When asked the steps they take to select the children, teachers were vague in their answers. This was predominating in District 1. The following statements in Table 4.9 indicate those who are aware and those who are not aware of what should be done.

Table 4.9: Remedial Teachers Awareness of the Mean Discrepancy Comparison used in Identification of LDs

<table>
<thead>
<tr>
<th>Those who are aware</th>
<th>Those who are not aware</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Take students who have scored above the mean in one subject and below the mean in the other</td>
<td></td>
</tr>
<tr>
<td>• Select a child who is above the mean in maths and below the mean in English.</td>
<td></td>
</tr>
<tr>
<td>• Make a schedule for below average in maths and above in English.</td>
<td></td>
</tr>
<tr>
<td>• Selection using scores and elimination</td>
<td></td>
</tr>
<tr>
<td>• Find those who have passed</td>
<td></td>
</tr>
<tr>
<td>• Children with marks below the average are selected for remediation</td>
<td></td>
</tr>
<tr>
<td>• Selecting average learners</td>
<td></td>
</tr>
</tbody>
</table>

The Shona remedial teachers said that:

We interpret the table of norms using a scale.

It is obvious not all teachers understand what is required of them. It is as if there are fulfilling a requirement of the policy. The aspect of comparing means can be understood by someone who has a background in psychometrics. Cosford (1990)
points out that the discrepancy model should compare the child’s mental age (MA) or intelligence quotient (IQ) with the achievement age calculated as the reading age (RA) or spelling age (SA).

The SPS and SNE prescribed model assumes that a comparison of two achievements can indicate above average intelligence if a child fails and passes one of the two. This may not be correct because they are children who fail both but may have an above average IQ. One teacher had this dilemma of a child whom they felt should be included in the programme despite performing below the average in both tests.

A few students are included those with problems are excluded.

Without a proper psychological assessment by an educational psychologist a teacher cannot guarantee that the identified child needs remedial help. There is therefore a need to construct an assessment model which addresses the issues raised here.

The steps of making and scoring the test, computing the total of the scores and then calculating the mean through dividing the total with the number of cases is not easy to most of the teachers interviewed. Most of them are not aware that the mean of the class performance indicates the mid point at which the child will have passed if they are below the group mean. They need to further compare the two means of the English scores and the Mathematics scores. Children who perform above the mean in one and below in the other are placed in the programme in the
subject they failed. The teachers then should place them in a group of ten and those who cannot be placed are then included on the waiting list.

Schools with large numbers of children in the grade four streams had problems in calculating the mean and coming up with the children. These schools ended up having a lot of children being identified. This produced teaching challenges because for the need to appoint more teachers in schools where teachers were few and classes were already too large. Due to this anomaly teachers tended to use the midpoint of the attainment test as a cut-off point. So if a child got a score of 9 in the Mathematics attainment test then they would be placed in the remedial programme because they would have performed one point below the mean. A performance between two points above and 2 points below the mean would place the child in the remedial category.

This aspect of comparing the means renders the whole identification exercise problematic. Sattler (1992) commenting on the USA situation concludes that establishing if a child has an LD is not a simple task. It is therefore difficult to ascertain with all confidence that the children who are placed in the programme are proper remedial children given the teachers’ lack of expertise in test interpretation. I want to propose that this aspect of comparing means should be revised so that teachers are given a less cumbersome way of arriving at the type of children who need to be placed in a programme. One teacher complained that:

*Some children have learning disabilities in all subjects but seem normal in intelligence.*

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This may be due to the fact that the teachers will have failed to properly compute the discrepancy between the different subject’s means.

The problems mentioned can be summarised as lack of knowledge on interpretation by teachers. This category was therefore full of errors in identifying children. This is shown by comments by teachers and heads showing the behaviour of children who may have been wrongly placed as shown by the following comments:

*Pupils do not accept that they have learning disabilities so they run away from remedial classes; some play truancy.*

*Some students nominated from special classes may not be genuine due to disadvantages which began in infant classes.*

Although this is the case such children may benefit from this focus on their problem and may exit the programme early.

The teaching of reading in the two languages especially English is a major cause for concern in the Ministry of Education, Arts, Sports and Culture as confirmed by one of the Education Directors in the Planning department. During this study the Ministry was carrying out a pilot study in one of the Provinces with the aim of improving reading at the primary school level. This study highlights the central role reading plays in the education of children, since it affects learning across the curriculum. It is therefore important that remedial programmes of any kind should censure that realistic identification of children with reading problems is done properly without prejudicing the child. The problems highlighted here and further discussed with teachers depict tests which do not focus on the child’s problem.
The interview results for English indicated that attainment tests, these are tests which indicate the child’s level of performance, are difficult because they do not cover the child’s curriculum or syllabus. This is the course of study in a subject given at a school. Such a course would include a list of courses and activities to be covered in a certain period. This would also depict local content and its epistemology. If we take the English attainment tests being used to identify children; participants felt that these have been in existence for two long without having any changes on them and this has placed them out of touch with the reality in the school system. This was confirmed by authorities in the SPS AND SNE department.

Teachers singled out Mathematics as focusing on concepts which have not yet been covered by the students.

Not effective because some concepts will not have been covered

Teachers also mentioned that the arrangement of the items although starting with basic concepts did not provide with enough items at the grade 3 or early grade 4.

The children do not benefit because some topics were left out in grade 3.
The division problems are difficult as students are not familiar with long division though it is in the curriculum.

This would not be an ideal time to administer a test of that nature. The Shona attainment test provides teachers with problems of interpretation to come up with the child who deserved to be in the remedial programme. The results show that only nine out of the twenty Shona remedial teachers interviewed are using the
proposed SPS and SNE identification model. The remaining eleven have adapted it in the following manner:

- A child who passed other subjects and failed Shona was taken.
- Cut off point too high, need to go below to 35% - 75%.
- Choose those who are close to the mean and select them.
- Select work with other teachers; take children who get 16 – 25.

One teacher pointed out that the depth of the material was too difficult and some of the items were not in the syllabus for example the test had too many sections and at the end the teacher is expected to select children obtaining 40% to 90%; taking those with 90% first. How would the teacher ascertain the child’s level of performance, so as to begin intervention? This test acts both as an attainment test and diagnostic test which makes it difficult to ascertain the children’s weakness and strengths since the ideas are too few to observe a pattern of areas.

Both English and Shona remedial teachers said that the focus of the English and Shona attainment tests on the written aspects of the languages do not encourage the ability to read orally. They claim that oral reading as part of assessment helps the teacher identify children’s weakness providing a window to the child’s thinking processes in language. Teachers felt that inclusion of an oral reading comportment would be helpful in compiling the child’s individual education plan or programme.

In terms of this model of identification, I have shown that teachers and heads although they are claiming that it is being carried out, two heads and one teacher pointed out that there was little happening on the ground because the model was heavily affected by negative attitudes. One head said:
Clinical remediation (is) not being done to the expectation of the community. It is done so that if the supervisor came to the school they find something. There is nothing on the ground but simply paperwork. Kids are given papers to read for the sake of the supervisor. You never see a lesson.

The following are what schools have done to improve their identification. Table 4.10 shows the teachers who have been staff developed on the identification of children. All remedial teachers from Trust schools which are the ones using the whole school approach or have remedial classes or departments have gone for staff development with different organizations like The Remedial Teachers Association (REMTA), and SPS and SNE.

Table 4.10: Teachers and Heads Staff Developed in Assessment of Children with LDs

<table>
<thead>
<tr>
<th>Participants</th>
<th>No. Trained</th>
<th>% Trained</th>
<th>No. Untrained</th>
<th>% Untrained</th>
<th>Total</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Remedial Teachers</td>
<td>18</td>
<td>75</td>
<td>6</td>
<td>25</td>
<td>24</td>
<td>100</td>
</tr>
<tr>
<td>Math Remedial Teachers</td>
<td>16</td>
<td>73</td>
<td>6</td>
<td>27</td>
<td>22</td>
<td>100</td>
</tr>
<tr>
<td>Shona Remedial Teachers</td>
<td>9</td>
<td>45</td>
<td>11</td>
<td>55</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Classroom Teachers</td>
<td>6</td>
<td>23</td>
<td>20</td>
<td>77</td>
<td>26</td>
<td>100</td>
</tr>
<tr>
<td>Heads</td>
<td>12</td>
<td>55</td>
<td>10</td>
<td>45</td>
<td>22</td>
<td>100</td>
</tr>
</tbody>
</table>

Interview Data (2012), n=92

As indicated by Table 4.10 more English remedial teachers have been staff developed and the least developed are classroom teachers. Staff development has specifically focused on testing. Despite this remedial tutors still observe that some
teachers tend to mix up attainment tests and diagnostic tests. The former is for selecting children and the latter for use to identify children’s weaknesses and strengths so as to embark on the teaching.

**In Class Identification Model**

Classroom based identification was the next preferred model. There were 26 classroom teachers who were interviewed. The teachers mentioned that they focus on all the children in the classroom. The teachers seemed to be divided in their clarification of what they actually do when assessing children within their classroom. Forty two percent (11) classroom teachers used teacher made tests and observations during teaching whilst 58 % (15) classroom teachers only used observation during teaching to identify children with learning problems.

Table 4.11: **In Class Identification Model and the Identification Steps Followed**

<table>
<thead>
<tr>
<th>Remedial Type</th>
<th>Theme/Model</th>
<th>Steps followed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom</td>
<td>In class identification</td>
<td>• Teacher observation in class discussion and written exercises for error analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Reading activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Records and anecdotal notes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Class, school, cluster tests</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Parent concerns Identification is through patterns of errors in daily work</td>
</tr>
</tbody>
</table>

This model was carried out parallel to the clinical remediation. Table 4.11 displays its steps. This was collaborated by the heads questionnaire results in phase one which showed that almost all the schools were implementing a classroom based model. The Education Coordination Department (2010) of the
MoESAC says that teachers are expected to do continuous or formative assessment in the classrooms. How then were they identifying the children? The results show two categories of assessments. One based on classroom tests and another based on continuous assessment especially in reading. Eleven classroom teachers all came from districts 4, 5 and 6 and pointed out that they used both teaching and tests to identify children with learning disabilities. They said:

*Give an assessment test on a particular concept starting with a concept at a time e.g. fractions using sets, real objects. Use weekly tests, fortnightly tests, compare with other classes. Basically use error analysis during teaching and written work. Spot whilst teaching. By giving children a general test. At grade level set for all children, after test record and identify by subject, math, English and Shona*

The teachers focussed on ongoing testing. Ongoing tests meant those tests which were given at the end of a lesson and at the end of week. For those at the end of the lesson the teacher would fill in statements, answer “why” questions or answer questions from the class textbook. An analysis of the items would indicate the child’s reading problems rendering them suitable for remediation. Classroom identification is based on teacher made tests. There are based on what the teacher would have taught. In some schools grade teachers made monthly tests which were given across the grades. Children who scored badly were then included in the classroom remedial group. These results would be augmented by classroom records on reading. In mathematics checklists of concepts mastered would be used to cross check children’s performance on the grade tests. Teachers claimed that this type of identification comprised of around 90% of the children falling into the remedial group.
A further instrument teachers used in all districts were cluster level tests. These were used to assess children’s performance. They were usually administered to children at the end of second and third term. Children’s performances were compared to children from other schools that were in the cluster of schools. A cluster is a group of schools which have a close proximity in a locality. Such schools set up test committees which compiled tests to be administered in their schools. These were representative items taken from the syllabus and what the teachers would have taught in each grade. It gave a school an opportunity to benchmark the performance of the children against other neighbouring schools; but most importantly, it provided vital information on children’s areas of strengths and weaknesses. This enables schools to focus their teaching on the children’s areas of needs. Teachers’ statements indicate that teachers prefer this type of model. This is because of time and the inclusivity of the child as depicted in the following statement:

I would rather have classroom remediation because clinical remediation needs time. In the classroom a teacher can create time. The children also remain within the class.

Despite the above preference, teachers’ ability to test children is still at the basic level. The results show that teachers test items are in the format of filling in statement, and to a lesser extent asking “wh” questions, especially the “what” type. Teachers’ competencies in test development as shown by their qualifications earlier on are inadequate. For those who are trained in special needs, there have not been staff developed in test development. Research has shown that test development is a crucial aspect of assessing children for special programmes (Asim, et al., 2011; Chireshe, 2011; Owoyele and Kareem, 2011). It is important that teachers are equipped with ways in which they can identify children in their
classrooms. Such teachers will feel confident to identify, teach and refer struggling children with learning disabilities to specialists.

The remaining fifteen teachers use teaching to identify the children with disabilities as shown by their responses:

- Whole week teaching; pick those who need help; give another exercise and further identify the actual problem of the child.
- Include writing as part of the problem
- Random picking in the class; identify those with problems through daily exercises, error analysis
- Oral lessons ask individuals to check through error analysis.
- After teaching, mark and see those who can be helped

This shows that teachers are using curriculum based assessment to identify and teach children in their classrooms. This situation shows that teachers are helping children with educational problems not necessarily those with learning disabilities. It is possible that those with LDs are imbedded in the classroom groups. The identification going on the class is in compliance for the requirements of inclusive education. Children with LDs who are identified in this manner may not feel self conscious of their deficiencies and therefore either are taking refuge in their obscurity or taking advantage of peer tutoring. However, the former position maybe prevalent. Classroom identification is the first step in meeting the needs of the child; therefore all the teachers who carry it out are helping prepare the child for any further steps that may be needed to improve their grades. It caters for early identification which is recommended in many studies to enable the child to get early intervention (Nziramasanga Commission, 1999; Technical Committee of the Education for all (EFA) campaign in Zimbabwe, 2005). It was observed that most schools tend to see the process of identifying learning
disabilities and diagnostic testing and teaching as two separate processes. This is far from the accepted as shown by Willis (2007) who pointed out that identification should occur during teaching.

Classroom based assessment in the form of curriculum based assessment is crucial if teachers are going to identify the different categories of children with learning difficulties in the classroom. This approach benefits all the children in the classroom because as the teacher children with LDs the strategies used also benefit the other children who may also be struggling. In-service training for classroom teachers has not been done at all. Most classroom teachers have not benefited from any in-service training on how they can identify children with LDs and teach them in their classroom. Only six out of the twenty six classroom teacher were staff developed in assessing children. Remedial teachers, special class teachers and resource unit teachers have been the focus of special needs education training mainly from the SPS and SNE department.

There is a disparity between the classroom teachers and remedial teachers in terms of staff development with the benefit tipped in favour of the latter group. Teachers acknowledge those children with learning disabilities and those with global learning problems, who used to be called ‘slow learners’ are present in the classroom. Thus staff development would reduce the challenge of teaching the children and refer those who need further help to specialists in the school or outside the school. Such an approach would ensure that no child is left behind.
It was gratifying to see that some schools were trying hard to do the identification with a lot of innovation. The innovations are worth noting because they have helped the same schools to come up with a model which allows the teachers to be creative with little resources. These were taken from one trust school teacher:

- Improve time management on English reading
- Have classroom libraries
- Parents always helping
- Consultation days once per term
- Conducting workshops on selecting children and providing teachers with literature on remediation
- Holiday staff INSET
- Divide time so that children feel welcome in all areas.

The last statement shows that remedial children’s identification should not only focus on academic subjects only but look at other aspects of the curriculum. Some of them maybe talented in non academic areas like art, sport and music. In one trust school occupational therapists and school coaches helped children with LDs who were experts in non academic areas.

**Whole School Class Teacher Identification**

Three schools have embarked on whole school class teacher identification using grade teacher made and standardized tests, and teacher observations and error analysis. Districts 5, 6 and 7 have schools which have embarked on this programme. Table 4.12 shows the interviewed five teachers and their schools.
Table 4.12:  Schools Embarking on Whole School Programmes

<table>
<thead>
<tr>
<th>District</th>
<th>Schools</th>
<th>Teachers</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>1</td>
<td>1</td>
<td>Reading programme</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>3</td>
<td>Reading &amp; Math</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>2</td>
<td>Reading &amp; Math</td>
</tr>
</tbody>
</table>

Interview Data (2012) n=6

All the seven teachers in these schools had long experiences in teaching remedial classes with one having 45 years of service.

Table 4.13 shows this model and the steps that were followed.

Table 4.13:  Whole School Identification Model and the Identification Steps Followed.

<table>
<thead>
<tr>
<th>Remedial Type</th>
<th>Theme/Model</th>
<th>Steps followed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole school</td>
<td>Whole school</td>
<td>• Whole school testing involving grades 2 to 7 with formal tests and school tests twice a year</td>
</tr>
<tr>
<td></td>
<td>identification</td>
<td>• Test all newcomers for placement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Identification Committee compares reading age (RA), spelling age (SA), and school tests performance to identify children with LDs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Intervention occurs in class, pullout group and remedial classes</td>
</tr>
</tbody>
</table>

Teachers with special education qualifications and experience teach the remedial classes created for the students with LDs who will have been identified from the school exercise. This finding is similar to a study by Asim, et al, (2011) who
observed that private school teachers in Nigeria were more competent in assessment than their counterparts in public schools.

The teachers at one school using a whole school model mentioned that they use these tests for identification:

- Schonell
- Holborn
- Graded word reading list

The teachers pointed out that their emphasis is on literacy.

*Thrust on literacy. By end of 7 years [child must] read and understand or function meaningfully in country.*

They said that this will prepare students for the high school because as they said,

*Children struggle when they get to high school because they are none readers.*

Schools have in such cases have invited the district remedial tutors and educational psychologists to do the assessment. This is a short-term solution because it develops a dependency syndrome in the schools and teachers. Teachers who perceive that they are overburdened tend to relegate their responsibilities to the outsiders. Such a scenario depicts a negative attitude towards the children with learning disabilities. With the advent of inclusive education schools should take ownership of their programmes of course with specialist aid whenever they request it.

In whole school identification teachers have improvised material for use wherever possible. Improvisation has occurred at two levels. The first improvisation occurred during the testing to identify the children with LDs. Here teacher
structured questions have been used. The Head of the Remedial Department at a Trust school said:

   Groups are working; observe, examine, [this] plays a big role in selecting children. Use progress checks every two weeks; use 6 weekly tests, send to parents.

Teachers at the same Trust school mentioned that their school has identification, test or subject committees responsible for the assessments. One teacher confirmed this by saying:

   The academic department is responsible for identification. An identification committee consisting of remedial and class teachers and the head carry out the identification.

A positive situation which is occurring in schools is the development of subject committees which set up banks of tests. This may indicate that the staff development sessions at schools and those conducted by SPS and SNE are bearing fruits.

The second improvisation has occurred at the diagnostic testing and teaching stage. Teachers have developed their own material to proceed with the teaching. The two schools with remedial departments have bought commercially made materials to help with the diagnosis. Diagnosis is part of the process of identifying children as it confirms if the choice made was correct. Teachers said that the process of identifying learning disabilities and diagnostic tests and teaching are one continuous process involving the whole school.

- School has whole school approach
- A holistic approach of the total child
- Caters to children’s needs- this is individual teaching in a group situation
Identifying children is not an exact science. It is possible that during identification the child might be placed in the remedial programme although they may not warrant it. Further diagnoses during teaching fulfil two objectives; to confirm that the child has been correctly placed; and to identify the level of difficulties the child has so as to ascertain the beginning point for teaching.

One school head said that they invite private educational psychologists and occupational therapist to do the identification.

*Formal testing is done by educational psychologists.*

It is clear that these schools have handed over the running of such programmes to private individuals. These individuals tend to be expensive and do not transfer their expertise to the teachers. What tests do they use? How do they ascertain that the children should be placed in a remedial programme? How do they come up with the children’s IEPs? Who does the evaluation? How do schools ascertain the impact of the child’s progress in the examinations?

The involvement of parents in Trust or private schools is central to the above programme because they pay the costs for the service. The interview sessions with teachers revealed how schools prepared for the process of identification and the intervention programme by also involving parents. The preparations are done through meetings with teachers to put in place the materials and also agree on timelines. Parents are informed by letters and sometimes consultations are held on the aims and possible outcomes of the identification process. At the school level, the teachers counselled children so that they can accept the programme because
the clinical remediation involves the screening of the children. It is important that teachers who have children who will undergo the screening should be supportive of it. Where heads and SPS and SNE personnel have carried out awareness programmes for the teachers, there has been less resistance to the programme. Teachers pointed out that they work together with parents so that they encourage their pupils to take part in the programme. Counselling children and their parents is usually done after the identification has been done.

Two DRTs pointed out that they have also carried out whole school reading programmes to improve children’s reading levels in districts 4 and 7. Most of the children in the school are English second language learners and therefore have a higher probability of struggling in it. One head pointed that in the instances where English is being tested some children responded in their mother tongue. Some teachers end up reading the tests to the children to enable them to answer it. This is an indication that a lot of these children are non-readers. Despite teachers doing this the children will still have difficulties in understanding what will have been read to them. It is important that in the initial grades the activity of reading for the children should be discouraged.

Some schools have observed this difficulty and embarked on reading programmes. The single school in the low density residential area in district 5 was also carrying their whole school reading programme in tandem with the prescribed SPS and SNE model. Their plans to start reading programmes show the need to include oral reading in the identification of children with learning disabilities. Schools especially in the low density areas which are mainly private
have made reading a priority in their identification of LDs remedial classes for reading and purchasing local supplementary readers with relevant reading ages. A teacher in district 6 says:

*Each class has supplementary books with their Reading ages.*

**Clinical Age Discrepancy Identification Model**

The two Trust schools in the affluent areas of districts 6 and 7 have remedial departments which identify children with LDs using the clinical age discrepancy identification model. The responses came from the five remedial teachers and the head of one of the schools. One head of a Trust school mentioned that the development of the remedial department was brought about after it was realised that teachers did not have the expertise to assess and plan Individual Education Plans (IEPs) for the children with disabilities currently enrolled in their schools. The school heads created these departments with the help of the parents. Not many schools can afford these departments. They consist of assessors who carry out the assessment. The heads mentioned that they have psychologists and occupational therapists that are trained to assess children with learning problems. The teachers pointed out that focus is on reading.

Table 4.14 shows the steps they carry out to identify and teach children with special needs. Such departments or centres focus on all the children experiencing learning difficulties. Children with LDs benefit from the remedial classes that are created for them. Specialist or experienced teachers are employed to teach in such classes; these teachers have many years of teaching experience. They pointed out that patience and love for the children with special needs helps them to improve.
Table 4.14: Clinical age discrepancy identification Model and the Identification Steps Followed

<table>
<thead>
<tr>
<th>Remedial Type</th>
<th>Theme/Model</th>
<th>Steps followed</th>
</tr>
</thead>
</table>
| Remedial and assessment Departments | Clinical age discrepancy identification | • Class teacher identifies potential children  
• Refers to the Remedial department  
• Screening done through tests  
• Educational Psychologist does formal assessment  
• Intervention carried on in the remedial department and continues in the student’s classroom by class teacher and remedial teacher |

The categories in Table 4.15 indicate how assessments are carried out in these departments. One school starts with a whole screening of the whole school and those children who are identified to be at risk are referred to the department. The head of one of the remedial departments said:

*New comers are given diagnostic tests by deputy head in the academic side. Whole school screening to determine the Reading Age (RA) and Spelling Age (SA) of the children. Those with achievement age below 6 units to their chronological age are referred.*

The head of one of the remedial departments said that the aim is to assess children with LDs allowing class teachers to focus on the rest of the children. She revealed that teachers and children are referred to the department for testing. Tests currently used are Western in origin and tend to focus on reading ages and spelling ages and these are:

*Schonell, Burt, Grade based tests (teacher made attainment tests).*
One school has a department mainly for the identification of dyslexia in children which they have identified as a major cause of reading problems in their community. The teacher in charge at the department said that they use these assessment instruments:

- Dyslexia screening test
- Wide Reading Assessment Test (WRAT)
- Waddington test (Australia)
- Holbon numeracy test

These are standardised ensuring that the children’s responses are valid and reliable. She said they are only used within three months of each other to ensure validity. Parents and children usually value these assessments because children were given commercial tests which have high face validity.

It is correct that such departments offer children assessment but this is not on the screening scale. The idea of screening at this level is not ideal since the assessor is usually handling a heterogeneous group of children coming from the different grades. One head said that few parents can afford the assessment which occurs outside the school. Therefore, it is not all the children with LDs who can benefit from the programmes. Most children even if they can afford the testing may not get an opportunity to be in the programme because of the large numbers. At the moment when the study was being carried out a lot of parents were clamouring for remedial education for their children. Thus it may occur that a lot of beneficiaries are not getting the provision despite paying for the department through school fees where it would be imbedded. Assessment at such centres covers all the children not only those with LDs.
Extra Lessons in or Outside the School

An analysis of results in Table 4.1 in section 4.2 indicates those schools which are subscribing to one or both or all the assessment models as shown by the data from the questionnaire. Table 4.1 data was cross checked with data from the interviews with teachers and the informants from the provincial office. The results show that 35% (32) of the interviewed teachers from 70% (19) of the schools were carrying out extra lessons. Only two of the interviewed heads confirmed this. District 4 teachers’ responses showed that they had the highest number of extra lessons going on. This is a high density area with a large number of under resourced teachers and poor neighbourhoods.

Classroom teachers conducted more extra lessons than the remedial teachers. I view extra lessons as part and parcel of remediation. The results from the phase one questionnaire showed 32 schools out of the 172 claimed that they had no extra lessons going and of these only five schools claimed that they had extra lessons for the grade 7 classes. The heads and teachers and DRTs pointed out that these were carried out during holidays after the Ministry of Education, Sport Arts and Culture (MoESAC) has given them written authority to teach the children. This was contrary to what was in the local press, which pointed out that extra lessons were now prevalent and were being conducted by teachers outside the schools (Herald, Saturday 5, 2002). The scope of this study is to find out how children are identified in the different remediation models. Extra lessons are a form of remediation so there is need to establish how children were being identified in them. Heads were non-committal on this aspect.
Extra lessons are a response to the unsolved learning problems children face in the classroom section. The lack of credible remedial programmes in the schools both at primary and secondary level may have given it an unwarranted relevance since I believe that if schools cater for all children in the classroom they would be no room for the existence of extra lessons occurring outside the school premises and children would not endure endless and meaningless lessons which may not be transferable to the classroom and examination setting. Table 4.15 shows the teachers who indicated that they do extra lessons.

Table 4.15: Remedial Teachers and Classroom teachers who conduct Extra Lessons

<table>
<thead>
<tr>
<th>Language</th>
<th>Remedial Teachers</th>
<th>Classroom Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>6(24)</td>
<td>10(26)</td>
</tr>
<tr>
<td>Math</td>
<td>9(22)</td>
<td></td>
</tr>
<tr>
<td>Shona</td>
<td>5(20)</td>
<td></td>
</tr>
</tbody>
</table>

Interview Data (2012), n=30

I looked at extra lessons with the aim of ensuring that children benefit from it within the school premises and time. Those in brackets are the totals for each group of teachers. Classroom teachers seem to be the ones conducting more extra lessons than any other group. The teachers focused on their own classroom students and also children from their communities.

Table 4.16: Nominations Model and Identification Steps Followed.

<table>
<thead>
<tr>
<th>Remedial Type</th>
<th>Theme/Model</th>
<th>Steps followed</th>
</tr>
</thead>
</table>
| Extra lessons | Nominations | • Parent teacher meeting  
|               |             | • School report and exercise books  
|               |             | • Teach according to perceived difficulties  
|               |             | • Feedback to parent only  
|               |             | • No transfer to classroom  

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Interviews with the five teachers out of the 30 revealed that extra lessons going on in schools were an extension of classroom remediation. Table 4.16 show the nomination model which emanated from the extra lessons. They did not focus on a particular grade. These statements from them show the varying targets of their extra lessons:

- Prefers to focus on reading in both Shona and English.
- Takes all grades.
- Take children from own class who stay in the locality.

The teachers pointed out that there was no formal identification since they were targeting all the children despite their abilities. But they used the following nominations:

- Used no criteria but depended on the parent’s observations.
- There was a parent or members of the church or even a community member who referred.
- Parents from other schools requested.

One teacher from the low density area said this on the identification:

I don’t take any child; I focus on those who have the potential to improve their reading. I avoid non-readers because they do not have specific difficulties and are bound to struggle in the programme without any success.

However, few teachers agreed that they were carrying out or have carried out extra lessons at their homes with children who were experiencing learning difficulties. One teacher pointed out that they had since stopped the teaching because some of the parents were not paying for services rendered. Another stopped because the authorities warned her. The referral of the children who join the programmes is not clear but one can deduce that the arrangements occur during consultation interviews or privately.
A consultation interview on the child facing learning problems usually takes place between the teacher and the parent. Parents or guardians refer children to those teachers who do the lessons. The teacher highlights the child’s gaps in their learning and advises the parent on what should be done at home. It is at this juncture when the parent asks if he or she can take the child for extra lesson for an agreed fee. The teaching usually occurs at the teacher’s or parent’s home. Although some teachers have been seen carrying out these lessons in the school premises.

4.4 **Effectiveness of Attainment Tests and Challenges Schools have Encountered when using Them in their Models**

*Effectives of Attainment Tests in Clinical Identification*

In this section, I focus on specific issues concerning the effectiveness of the tests which are used in these assessment models. I start with the clinical mean discrepancy identification model which is linked to the SPS and SNE clinical remedial programme. The effectiveness of any given test is determined by a number of factors. The teachers’ responses on the effectiveness of the tests indicate that they have been involved in these activities for a long time as shown by their knowledge of tests and their effectiveness.

The results show that 68% (15) of the mathematics remedial teachers felt that their tests were effective. This was followed by 65% (13) of the Shona remedial teachers; the least with 54% (13) were the English remedial teachers. The issue of test effectiveness is central to identifying children. The responses are captured in Table 4.17 which shows the themes and their categories.
Tables 4.17: Test Effectiveness: Categories

<table>
<thead>
<tr>
<th>Theme and Sub Theme</th>
<th>Categories used to Measure Effectiveness of the Attainment Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical identification; Test Effectiveness</td>
<td>Test Content and Format</td>
</tr>
<tr>
<td></td>
<td>Test Administration</td>
</tr>
<tr>
<td></td>
<td>Test Interpretation</td>
</tr>
<tr>
<td></td>
<td>Test link to Intervention</td>
</tr>
</tbody>
</table>

The category test content and format were identified by the teachers as central to identification. Test Format means the layout of the test, the instructions and the font size. The format of the test must take into consideration the age of the children. The teachers felt that some of the content and formats were suitable in this way:

For English:
- English test is user friendly
- The test is effective
- Tests are of their level most pupils did well.

For mathematics:
- Tests are quite effective but pupils fail because they are weak
- Effective but the division problems are difficult
- These tests compare well with the syllabus.
- They were not suitable in this way:

For English:
- The tests were too difficult – words used were too difficult especially test D
- The work should cover grade 3 work only; you cannot say a child has difficulty in an uncovered area.
- Test D sentences too long for early grades 3 and 4
- It is not effective for the child; this is not daily language
- The test is not suitable; it should test children on how to read.

For Mathematics:
- The question paper display confuses children
- Words are unfamiliar
The attainment test in math is not effective it only has mechanical problems and no story sums.

Not effective because only the first nine sums are covered in the syllabus.

Document analysis of the tests showed that some of the test format and font size needed to be adjusted to suit the age of the children. For example the Mathematics Attainment 4 test had the following attributes. The font was too small. Children at the beginning of grade 4 or end of grade 3 are barely out of the infants’ grades. Such children’s fine motor skills especially hand and eye coordination is beginning to reach maturity. It is important that the font size of the test should be size 14 so that visual discrimination is improved. The PRT, DRTs and two Educational psychologists felt that the attainment tests being used for identification were old and needed adapting or the development of new ones. An analysis of the attainment tests administered showed that these were usually done in children’s exercise books which they took home with them. This exposure has invalidated the attainment tests being used in the schools.

The Shona teachers felt that the Shona test was effective in the following ways:

It reflects the syllabus.
They are suitable for the grade level.
Relevant at the level although majority fall below the levels mainly because they cannot read.

The teachers felt that it was not effective in the following responses:

Depth of material too difficult for the ability level of children, work should cover grade three syllabus.
Teachers had a dilemma of teaching children who already know what they are doing.
Focuses was only on the multiple choice.
Shona teachers felt that the Shona attainment test contains too many items to be included at the grade 4 level (see Appendix IV). An analysis of the test shows that the four Subtests are too many and difficult according to the teachers interviewed. The Subtests are introduced by instructions explaining the way the paper should be answered. Although they point out that there is an example indicating how to answer, an analysis of the actual paper shows that no example has been done for them. Teachers pointed out such test papers prove difficult for the children to complete.

Teachers felt that the layout of the Shona test is rather cramped. There are too many items squeezed onto one page. The children with writing difficulties would find it difficult to place the answers on the allocated places. This would make it difficult for the teachers to identify if the child’s answer was the correct one. One teacher ended up reading the test to the child. This was confirmed by the head in the questionnaire who pointed out that:

*Some children fail to interpret questions in diagnostic tests so the teacher ends up reading for them.*

The administration of tests affects the test’s effectiveness. They were mixed views on the administration of the tests. Teachers saw the administration in this way:

- **Invigilation was done by administration**
- **Teachers are informed that children are in the programme**
- **Classroom teachers’ administration is problematic**
- **Students copy each other during exam and wrong candidates are selected**
- **One off test is not adequate because it may be given on a bad day for a child.**

The interviews on administration showed that they were two modes of test administration as shown by the above comments. In some schools the
administration of the tests was done by the grade teachers. The classroom teachers were supposed to know the children and therefore were able to keep discipline as the children wrote. But in other instances administration was done by the remedial teachers who marked and carried out the identification. It seems duplicating test papers for the children were not a challenge to the interviewed schools. After the writing and selection the remedial teachers had meetings to inform the class teachers. There was no involvement of parents in the selection or the consultation.

The administration of tests is crucial if a test has to be valid and reliable. If the administration does not follow set guidelines then the results which will come out will be distorted since they will produce the wrong children. The clinical identification was flaunted with administration bungles and they were mainly due to lack of training in identification procedures in the teachers. Only nine out of the twenty Shona remedial teachers; eighteen out of twenty four English remedial teachers; sixteen out of twenty two math remedial teachers were trained in assessment. This is the duty of the SPS and SNE to capacitate teachers on the procedures to be followed. One teacher requested the following in order to improve administering the tests:

We need more workshops so as to have proper knowledge on LDs and their assessment.

Interpretation of the tests is a major theme in identification because this is the time assessors or teachers confirm whether the child has a problem warranting placing in the remedial programme. The responses show that 26% (12 English and math remedial teachers) are following the mean discrepancy prescribed by SPS and SNE. The interpretation of the results hinges on a proper discrepancy
between performance and the child’s intelligence based on the means of the two tests. The remaining 74% have adapted the model to suit their circumstances as shown by the following statements:

*The child who is placed in the remedial programme should have performed slightly above in the mean of the test and slightly below the mean of the test. This should be in the range between +2 to -2 from the mean.*

This appears to be prevalent in districts 4 and 5 which also have the lowest number of trained remedial teachers. This is a departure from the SPS and SNE procedures which advocate a variance between two subjects namely mathematics and English. The literature also shows that certain discrepancy models have a high discrimination rate when identifying children like the regression based differences (Deisinger, 2004). The issue of interpretation seems to link up with the district remedial tutors expertise. Only two out of the five DRTs had a degree in Special Needs Education. Only the PRT had undergone staff development in assessment of children with LDs. This is so because all the remedial teachers refer to the training they would have undergone from the district tutors.

Maybe there is a need to relook at how teachers can identify children. The Shona identification procedure may shed light on how teachers can identify the children because it is normed. The test scores are converted into percentages and a range allocated as the cut-off point, which is 40% to 90%. This selection but gives room for the teachers to make local decisions. Despite this, only nine out of the twenty Shona remedial teachers were trained and five of them were felt that the test norms were appropriate and effective. The rest have identified those performing at
the bottom range of the range. Although this was the case one teacher complained that the test skipped children who deserved the provision:

*The child who already knows is selected leaving those who should be in the programme.*

At some schools children were even begging to be included in the programme. The results show that the effectiveness of the test in terms of interpretation is not significant. Teachers are not confident that the selected children are the proper beneficiaries of the programme.

The effectiveness of the tests in the model was assessed for their ability to link results to the intervention. The objective of identifying children is to place them in an intervention programme. The intervention programme will ultimately translate into the classroom setting. Eventually the child should be able to transfer the learning gained in the school, and national test. The clinical remediation’s purpose therefore is to improve the child’s performance at the grade seven levels. How then are teachers linking the tests results to the intervention? The interview results point out that the identification process and the intervention which consists of diagnostic testing and teaching are usually treated as separate entities as shown by this teacher’s response:

*There is need to work with the class teacher and then select those who would end up being tested.*

The identification of the aspect of the assessment model in the schools focuses on revealing who the children are. Diagnostic testing and teaching focuses on what the children’s strengths and weaknesses are. This aspect is an omission of the essence of identification. The identification of children is really hypothesis
postulating that the child may have specific learning disabilities in the identified subject. Diagnostic testing and teaching should confirm or reject the hypothesis.

This failure to link these test results and the intervention is supported by the failure by the teachers to interpret the results. This can be linked to the teachers and heads expertise. They have no special education qualifications and most of them have not been staff developed in identifying children with LDs. The assessment model existing in the schools is a clear departure from the SPS and SNE which in itself is different from the ones cited in the literature.

The results from the schools show that a large number of schools (63%) want to implement a clinical remedial programme as required by the Ministry of Education Sports Arts and Culture. Although this was the case they were carrying out the programme albeit with a number of challenges. In an environment where the remedial programme has virtually lost its attraction, why were schools still implementing it?

The study shows that some of the models being implemented in the school are not following the prescribed steps suggested by the SPS and SNE. The assessment models vary in the way teachers implement them. It is clear that the intention of these schools is to have a programme existing in compliance with the circular CEO minute No. 12 of 1987 by remedial teachers who are not trained in identifying children.

These tests should be appropriate to the student. The private schools have shown that these can be used effectively if augmented with the class teachers’ input as
mentioned previously. I observed that the clinical identification tests being used in the SPS and SNE prescribed remedial programmes have been in use for a long time without a proper feedback. But an issue of concern was that there are being used without restrictions in the schools. Therefore it is not strange to find them being used as written work in most of the classes especially the ones around grade 4. These tests must be reviewed and appropriately adjusted if there are to produce any meaningful results in the constructed assessment model. However the tests' use enables the schools to ascertain the presence of a learning disability.

Effectiveness of Assessment Tests in Class Identification

The questionnaire and the interviews revealed that two assessment models have been identified as existing in government schools in the Harare Metropolitan Province; these are clinical remediation in and classroom remediation. Both co-exist in most schools without any links to each other. How effective are the identification processes in classroom remediation? The classroom teacher’s interviews show that a combination of teacher made tests and teaching what is called curriculum based assessment (Solity and Bull, 1987) or observations during teaching alone are the main instruments that are used by teachers to identify and also teach the children. The responses show that 42% (11) of the classroom teachers use the former model and 58% (15) the latter. The teachers said that in the former model children are given teacher made tests weekly, monthly and also termly. The class teachers either compile these individually or test committees do the construction. These are drawn from what will have been taught or from the syllabus section pertaining to the area the teacher will have covered in the classroom.
In some districts cluster committees of teachers drawn from neighbouring schools construct the tests. The setting of the classroom tests is a very important aspect of teaching since it feeds into remediation of children. Teachers pointed out that their identification of children’s problems occurs in three; the teaching, writing and marking stages. Identification occurs during the teaching stage. Teachers said that during the face to face oral teaching encounter children exhibit problems in the form of failure to respond or by giving incorrect responses. During the writing period the children would show their problems in the written work. During marking the teacher may notice patterns of errors. This is called error analysis. The teacher would proceed to remedy these errors through what are called ‘Corrections.’ One teacher labelled it as ‘Spot remediation.’

Wilson and Cleland (1985) point out that spot remediation is a crucial aspect of good teaching since it helps to eliminate or correct mistakes before they become errors or miscues. Errors or miscues occur without the awareness of the person doing them. If these are not eliminated they usually recur in the weekly tests.

The teachers informed me that weekly tests are meant to identify concepts children would have failed to learn. These tests also highlight deficiencies in the teaching process. For example this teacher said:

*I mark and record the test. Then I work out the pass rate and if the pass rate is around 80% then the child has understood the concept but if it is below 50% the test is redone to verify the results.*

The retake may be due to doubts on the teaching method which may be ineffective. The teacher will have to reteach the concept or concepts. Remediation
takes place for those children with consistent patterns of errors in the concept. It is important that teachers correctly pinpoint the effectiveness of these procedures.

Teachers were not sure of the effectiveness of their identification process. This is because only six out of the twenty-six teachers have been trained in assessment. The presence of a variety of children with varying degrees of abilities created difficulties of identifying the child with learning disabilities. One teacher confirmed with this statement:

Tests do not cater for the diversity of all students.

Therefore it was possible that a child with other problems may end up being identified as learning disabled. However, teachers felt that their way of identifying and teaching children in the classroom was superior to the clinical remediation model. The paraphrased statements indicate the effectiveness of the in class identification:

Based on classroom work most of them are effective. Three quarters of the class get the work done.
Tests are linked to grades and level and these are used to determine the level in which the child is and how the individual can be helped.

In one school in one low density suburb there was acrimony between the classroom teachers and the remedial teachers, whereby the former felt that the latter were taking away valuable time during the time they were doing their clinical remediation. The classroom teachers showed no appreciation of the role of the remedial teachers. Both the class teachers and remedial teachers were of the opinion that the clinical aspects of remediation can be emerged into the classroom and be carried out in that setting. On reflection this may have occurred because of
the way the local teachers in their classroom were carrying out the identification. Teachers felt that the process of recording children’s progress using reading records provided them with a more realistic identification than the clinical one. The classroom remedial programmes in most schools focused on English reading which was used as an important indicator of the abilities of the children. In the infant grades the ability to write and read words was important for the child’s development. The child’s ability to do these at an early grade showed that the child would perform well in future grades.

However, the situation for the indigenous subjects especially Shona was gloomy. Both the schools and the parents viewed Shona as not important for the child’s future learning. The teachers in one school in District 7, which is a low density suburb pointed out that most parents felt that Shona was not a requirement for admission into high school and tertiary education therefore did not bother to encourage their children to pass it at any level. Such negative attitudes cause their children to develop negative attitudes towards indigenous languages. In a Shona test situation such children tend to perform badly.

The interviews held in the schools in the seven districts showed that classroom teachers in the schools were not focusing on indigenous languages as shown in the following statement.

*Remedial Shona was not taught due to negative attitudes. The school had a remedial teacher for Shona at the beginning of the year. Parents think children won’t use Shona anywhere. Parents are in denial stage with their children. Some children do not accept and do not need Shona lessons.*
Even the teachers’ records did not reflect any Shona reading activities or performance criteria like the whole school English reading ages I saw in one school.

Upon asking the teacher why they had detailed reading age for the whole school they pointed out that it was a requirement of the high schools the children wished to join that they should obtain a certain reading age if they are to be admitted. This colonial hangover on reading ages obtained from such tests as Burt and Schonell have resulted in the suppression of indigenous languages. Most of these English reading tests have not been adjusted over the years to incorporate any local content. Newer versions may be targeting modern innovations in education.

The computer age has made many adjustments to the way we get knowledge and also words pertaining to their use. The practices in schools should acknowledge those innovations as mentioned by Hennessy, Harrison and Wamakote, (2010) in a study of teacher factors as influences of use of Information communication technology (ICT) in Sub-Saharan Africa.

Classroom identification is in most cases ineffective in the sense that it does not specifically focus on remedial children or children with learning disabilities. In most cases the identification is on the spot. Teachers claim that they observe how the children behave in the teaching situation and the error patterns they make in their exercise books. From these teachers then develop group education plans which are taught when the teacher has time. Such a way of testing is prone to the teachers’ interests. It is possible that the teacher may focus on particular children.
to the detriment of those who genuinely need help. The Deputy head of one school in the district pointed out that in most of classroom programmes teachers tend to identify children with global learning difficulties; the so called slow learners. This group of children does not need remedial help since their problems are global and cannot be addressed in the classroom setting without the teacher getting in class support from SPS and SNE personnel.

The teacher made tests may be ineffective to a large extent because teachers are not trained in test construction as shown by the few who use them. An analysis of the teachers qualifications including those of heads during the interviews show that most teachers have neither college nor university training in special needs education or have undergone workshops in assessment or in special needs education. This shows that most teachers do not have the ability to construct tests. Therefore the teacher made tests either at the class grade or cluster level is not treated for teacher biases. I noted that even when I was a remedial tutor in SPS and SNE expertise in psychometrics in both remedial tutors and psychologists was deficient. Ultimately the SPS and SNE had to rely and still rely on imported standardized tests. In the case of teachers these tests are used to determine the performance of the children in relation to other children.

Another issue is that most teachers do not use the tests to identify children who need remediation because they are usually not sure of what they want the test to do apart from ranking children. Teachers end up relying on the error analysis they do during the oral teaching and marking. Despite this there is one aspect which makes classroom identification a unique feature in the schools and that is its
location and the role of the class teachers. In inclusive setting the classroom is the best place for the child to be taught in. It is this setting that the child is fully understood by his or her teacher and also peers. The classroom teacher’s response to the effectiveness of the classroom identification was that they have an awareness of what each pupil in their class is capable of doing.

One teacher who had been with his class for three years pointed out that he had developed an insight into each child’s profile and could through intuition determine what each child was capable of. This is an attribute a person who spends just thirty minutes with a child is not capable of having. During that one off period the child may not be feeling well and may perform badly but the class teacher may clearly ascertain the best time to administer a pen and paper test. It is important that special educators acknowledge that testing has both quantitative and qualitative attributes. One teacher said:

*The test is ok but it has its weaknesses. So we need to talk to teachers to use both qualitative and quantitative aspects during and after the elimination.*

Quantitative attributes have to do with tests scores and what they mean to both the tester and the testee. However scores may not provide the correct picture of the child’s performance. Qualitative attributes denote the descriptions of the circumstances surrounding the test event. These are the time, the environment, and the personality traits of the child which give a full profile of the child. The class teacher is the custodian of this information. The dilemma which faces schools carrying out both programmes is that either of the two resides in separate places. The quantitative attributes reside in the clinical identification and the qualitative attributes are unique to the classroom setting. In all schools these are
operating on separate sides without any input in each; rendering both identification models ineffective. In order to counteract this, some schools have created remedial departments which cater for referred children from the classrooms.

**Effectiveness in whole school age discrepancy screening and Remedial Departments**

The participants felt that most commercial tests being used in schools including the ones coming from SPS and SNE were old and depicted issues which were invalid in their host countries. They said:

*Some of the reading tests are not effective for example Schonell because they are not locally based.*

*Improve the selection tests.*

Despite this, teachers were not able to pinpoint what was old and thus needed replacement. One head said that the English used felt foreign. Although these foreign tests are being used in Zimbabwe some of them have lost their relevance. First they do not represent the host countries’ syllabus. One wonders what type of educational values they will be addressing. The issue of children writing such tests to fulfil the requirements of a foreign examination board is an indictment on our education system which is being praised by the UNESCO because of its high literacy levels. Of course some researchers have disputed this citing that UNESCO based its research on findings from an old research which did not take into consideration the economic and political effects of the country. This study was written when the country had protracted economic and political problems. Basing the identification of children with LDs on such tests although it is
unsuitable due to both ethical and moral reasons tends to alienate the student as it creates a mismatch between the natural syllabus and the schools emphasize.

Some parents believe that quality education is guaranteed by the payment of large sums of money. This may be further from the truth. Although I agree that money does make a difference, the commitment of everyone involved in the identification and intervention of children with disabilities, as observed in the Trust schools interviewed, was a prerequisite to a viable remedial programme. The use of commercial tests has a long history in the education of children. In the case of remedial departments literature shows that assessors used standardized tests to select children. These tests are technically correct because they meet the psychometric attributes of a good test. Such tests should be valid and reliable and are accompanied by instructions with norms. These norms prescribe the criteria for success, what they mean and some instances may also prescribe an intervention.

Interviews and test analysis in these departments revealed that such tests were being used. However, they needed expertise in interpretation where the school did not have such expertise it engaged the services of private educational psychologists to do the identification and evaluation. These tests are different from the ones being used by other schools following the clinical identification. Their effectiveness was measured by performance of the children especially in terms of improvements in their reading and spelling ages. The heads responses to the questionnaire indicated that their emphasis was on reading. This is a critical area which has been identified by the MOESC for improvement by all schools.
One of the Education Directors in an interview pointed out that the MOESC in partnership with SPS and SNE was carrying out a reading programme in Manicaland Province. This experience followed a model which emphasized testing for identification of reading problems using standardized tests by the SPS and SNE and intervention by the classroom teacher. The Director SPS and SNE gave the details of the experiment. They used standardized tests which were similar to those in the Remedial departments and to guarantee that the correct children were selected. Such children then underwent intense diagnostic teaching by their classroom teachers. Such teachers were motivated through a well-planned staff development on assessment and intervention strategies. The Education Director and the Director SPS and SNE concluded that the programme was bearing fruits in that students who were in form four and had reading ages of grade five were gaining their reading ages to levels commensurate with their higher forms.

The attitudes of teachers in the remedial departments were very positive as depicted by the following:

Teachers have interest, love, and incentives to teach the children.
Children are always eager to come to the class for remediation.

This also may be due to two issues; first teachers do not have to worry about testing the children. This is done for them by experts in the form of educational psychologists who carryout intensive analysis of the scores using scientifically proven ways. Secondly their schools provide them with incentives. During the year 2008 when the economic turn down was at its worst teachers faced very low
salaries which could not sustain families. This resulted in some of them leaving for greener pastures. The few who remained were left with very large classes of between 50 to 60 pupils. This is a situation which still prevails at the time of this research. Such teachers tend to be demotivated with the large demands being made onto teachers. It is not surprising that a lot of programmes are being carried out in the schools extra to the academic teaching and learning.

Teachers are expected to do HIV and AIDS programmes, sports and music and physical education, tree growing activities, take part in national day commemorations and above that any other duties the school may bestow on them. Teachers’ morale at this juncture is very low. A person in such a situation is expected to carry out remedial teaching both in class and outside the classroom. Working with children with disabilities requires teacher commitment and perseverance. The nature of teaching all disabilities requires an accepting and patient disposition in the care giver or teacher. People with disabilities tend to be sensitive to rough and negative attitudes when they come from their benefactors. The resultant behaviour is that of withdrawal and non committal to any provision. Children with learning disabilities are not different and will indicate their displeasure by running away from programmes or refusing to acknowledge that they have a learning problem. The heads indicate the severity of the lack of interest in the remedial programme.

Therefore the lack of uptake of the provision of identifying children tends to be problematic if the DRTs who supervise and administer the identification do not have the means to help the teachers. The remedial tutors who are currently
running the districts indicated that they also need resources in the form of transport and funds for staff development to help teachers identify children.

The teachers in the remedial departments felt that the following attributes accrue when identifying children with learning disabilities:

*It affords teachers at the school an opportunity to work with professionals whose skills enable them to teach children in the class. This relief affords teachers more time to teach instead of perpetually testing the children without any intervention because they lack interpretation skills.*

Primary school teachers are trained to teach a variety of children and this is vital if one is to include children with LDs. The other factor is the emphasis of reading in many schools especially in the low-density areas. Reading is an indicator of the level of education in a country. When I was young in the sixties and seventies one way parents used to ascertain if their child was capable of reading was to ask them to read a newspaper.

However, the creation of a remedial department in most schools is not possible. These require money and human resources; to build and employ teachers with the required expertise. In order to address their deficiency in identification some schools have resorted to inviting District Remedial tutors (DRTs) and educational psychologists to do their identification. This approach has resulted in some schools failing to embark on the intervention because the DRTs are very few on the ground only one per district of about thirty primary schools. This approach is tantamount to the school saying they cannot do the programme.
An identification of this nature creates a dependency syndrome in schools and is a contrary to the philosophy of inclusive education which advocates for the education of children in their home, schools among their peers. Even if DRTs do the identification there is no guarantee that the programme will be sustained. This is because the remedial programme has been depicted as a one-off occurrence. It is not correct to assume that once the children are there everything will fall in place. Some children may not be correct placements, due to the nature of the tests, their disposition that day or the teachers’ shortcomings. So a person who would have initially done the identification locally is able to follow up any mistakes immediately unlike the outsider who would need to travel, missing the much needed on the spot opportunity to help the child.

**Challenges Encountered During Identification**

But more crucial to this is the issue of definitions. Definitions are meanings people give to words or situations which occur in society. Two words are crucial to the identification of children with learning disabilities. If African professionals do not have a shared perception of these, then it is possible that they may be talking of different situations or occurrences even different to the Western definitions.

A shared definition of “Learning Disabilities” and “Assessment” is crucial to the identification and teaching of children with learning disabilities. It is possible that when we mention children with learning disabilities others who are responsible for their provision may have a different perception of them. Equally the same should be mentioned for assessment. Using the global analysis of the interview
data from the participants I was able to pinpoint how these terms have had an impact on the identification and provision for children with learning disabilities.

**Responses on Definition of Learning Disabilities**

The analysis brings out two definitions on learning disabilities from the teachers. First teachers define children with learning disabilities as those who perform below the average in any subject. Secondly, some children are defined as those who miss out some language concepts as reading and language. Clearly this shows that teachers are in agreement that those children have some specific problem in their learning. But when asked for the alternative names they give to the children they label them as slow learners or late matures. This is contrary to how the students are defined in CEO minute No. 12 of 1987.

The literature is slightly at variance with these two definitions (Deisinger, 2004; Hardman, Drew and Egan, 1999). Kirk (1989) and the National Joint Commission (1991) place the issue of intelligence as central to the definition of children with learning disabilities. The teachers clearly have varying definitions and this will have an impact on how they identify the children. The participants’ knowledge of the definition was at these levels: 25% (6) English remedial teachers; 40% (9) math remedial teachers; 35% (7) Shona remedial teachers; 15% (4) classroom teachers knew the definition.

One observation made which also affected the identification was the different meanings attached to learning disabilities by some classroom teachers. To some of them any children who have problems with school work had a learning
disability. Here are paraphrases of some of the definitions from the teachers in Figure 4.3:

- Children who have normal or above normal learning capacity but have a below average performance in either spoken or written language or maths.
- Children performing slightly below average in math, English, Shona.
- Children with challenges in certain areas where they are different from others.
- Child has difficulties in certain areas e.g. hearing, visual, mastering concepts.

Figure 4.3: Teachers' Definitions of LDs

Three out of the twenty-two heads had a slight knowledge of the definition. The bulk of the heads about 87% (19) did not with one defining as:

*Children with learning challenges e.g. mentally or physically challenged.*

This shows that there is a disparity in meanings between Heads of schools and their teachers which may result in poor identification of the children and in differentiating the type of intervention programme the child should be placed in.

*Responses on Definition of Assessment*

The second aspect in helping us to understand the schools identification model was the meaning they attached to the actual process of assessment. How did teachers define assessment? The responses show that 58% (14) English remedial teachers; 77% (17) math remedial teachers; 25% (5) Shona remedial teachers and 50% (13) classroom teachers defined assessment properly. The lowest were the
Shona teachers. Slightly less than half of the heads at 45% (10) were able to define assessment correctly. The global analysis shows that teachers across the board saw assessment as a number of processes. One teacher saw it this way:

*I see assessment as a way of studying the student in the classroom*

In this instance the teacher viewed herself as someone who is studying the children’s below average performance. This hopefully would result in the child being identified as learning disabled.

**Policy as a Beginning Point**

The issue of policy although it is not the focus of this study is central in the implementation of any assessment policy. The responses show that only 25% that is 25 out of the 92 remedial teachers knew about the policy. The school heads at 59% (13 out of 22) knew the policy for children with LDs. Teachers’ knowledge of policy is shown by this response from a teacher from a high-density school in district 4:

*The school policy stresses classroom remediation by all the teachers by keeping records*

Policy must be viewed from a macro and micro level. The macro level dwells on the global and the national level of policy in terms of implementing education to children with disabilities and in this case those with learning disabilities. At the micro level emphasis is on policy developed at the school level which then cascades into the classroom. The policy at the macro level will initiate the development and implementation of programmes in a country and are replicated at the school and classroom level. I therefore wanted to find out if there indeed
existed policy on implementation of remedial programme and if this was articulated to the school level.

There exists a mixed perception at both the national level and the school level. At the national level there was an awareness of circular CEO Minute No.12 of 1987 on the institutionalisation of the remedial programme by the heads and DRTs. However at the school level this circular was either barely known or completely unknown depending on the school location. Trust schools had no idea of it or preferred to ignore it and follow their own school policies. The rest of the schools tended to have a vague idea of the policy. This was the situation at the school level were heads tended to comply with the policy by asking teachers to have the necessary files available for the authorities. In such instances timetables were available.

The assessment of the children would be done in such a way that they would be selected, registers and time tables set up but with no requisite teaching. A cross check with DRTs and DEOs proved this to be the norm rather than the exception. Lack of policy awareness was more pronounced in all teachers rather than in the Heads, DRTs, and Educational Psychologists. What then has policy done to influence the identification of children with learning disabilities in schools?

The results show that there is awareness at both the national and community level for the need to help children who are struggling in the school system. This is shown by statements made by teachers and heads. There is however obscurity on how the assessment can be done and this is the focus of this study. The results
which I have presented analysed here clearly highlights the disparity in the assessment models prevailing in the different schools in the province. This lack of clarity on the policy has resulted in some schools sometimes abandoning the whole programme and asking class teachers to follow their own initiatives in helping children with learning disabilities. In such an instance concerned parents have opted for extra lessons for their children either outside the school or in parallel classes being run by the classroom teachers.

**Inclusion versus Institutionalisation**

The questionnaire results in Table 4.1 section 4.2 show that all the 172 schools which responded were providing inclusive education. The PEP for the SPS and SNE Harare province pointed out that selected number of schools were on the Leonard Cheshire Inclusive Education project. I visited two of the schools on this project in districts 1 and 2. My interviews with the remedial tutors in these schools revealed that none of the children with physical disabilities were included in the remedial programmes. The discussion with the head of this school shows that the school has children with physical disabilities in some classrooms who are not in the remedial programme.

The issue of inclusion is linked to the quest for the best place to place the child with disabilities. The location of the remedial in the classroom is in line with the ideals of inclusive education. Teachers say that:

*The class teacher should identify children with learning disabilities; his or her general performance and then refer them to a specialist if there is need. Teachers who have been with the child must be consulted.*
The results show that teachers are not benefiting from the institutionalisation of the remedial programme and feel that the children can be best served in the classroom.

**Resources**

Resources are central to any programme and the remedial programme is no exception. The responses from the teachers are shown in these statements:

- All tests must be local or class, school or cluster based
- Time factor is limited to cover all the children
- Learning aids are crucial should be available
- Teachers are not staff developed
- There are no supervisors or moderators
- Classes are big
- Environment not suitable for testing children

Heads confirmed this situation especially the need for staff development and localized literature to be used by the teachers when identifying and teaching children with LDs and other difficulties. This shows that schools are not benefiting from the current provision.

4.5 **African Epistemologies That can be Incorporated into These Tests?**

**African Knowledge Systems**

There is a growing demand for the acknowledgement and inclusion of indigenous knowledge system in African education systems (Kaputa 2011). South Africa as Higgs (2010) writes is one place where an African Renaissance in education has taken root. Zimbabwe should not be an exception and therefore this study also
aimed to find out how much local content was included in the test that were being used to identify children with disabilities in the Harare Metropolitan Province.

The evidence which came out showed the varied nature of the province. The seven districts which comprise the region had varying race representation as shown by the different schools. The former group B schools which were mainly in African high-density urban areas had different responses as compared to the formerly white low-density urban areas whose majority schools were also private or “trust” schools as they are also known. The responses show that eleven out of the twenty-four English remedial teachers felt that the English tests did not depict the children’s environments; seven avoided answering the question. Six out of the seven teachers from the Trust schools with remedial departments felt that the tests they used were appropriate for their environments.

Nine out of the twenty Shona remedial teachers felt it was not a depiction of the children’s circumstance; three were non-committal. Thirteen mathematics remedial teachers felt that the mathematics attainment test did not show any African examples since it had mechanical sums only. The following themes were created from the data. The following themes were in response to the question: “How much local content is in the tests being used?” The findings showed that there is little awareness of African epistemologies in most of the respondents. The statements of the teachers are in Figure 4.4.
Figure 4.4: Teachers Responses on African Epistemologies in the Tests

**Culture**

The purpose of assessment is to identify the type of knowledge the children or the learner has learnt. This content consists of local and world knowledge depicting the child’s culture and any relevant schema the child brings to the teaching and learning encounter. The teachers felt that the content of the test was difficult for the children especially those in high density and peri-urban areas. The content was difficult at two levels; first in terms of representation from their syllabus and secondly in terms of their world knowledge. They questioned the representation of African epistemologies within the English tests. This was confirmed by Heads responses on the open-ended questionnaire.

The above tended to affect the children’s performance and at times some teachers ended up making adjustments to the test items. This affected the validity and reliability of the instruments being used. One head from district 4 said:

*Teacher improvising material for use where possible*
Foreign content tends to be outside the children’s schema and ends up distorting the children’s performance. Despite the child knowing the answer this is rendered irrelevant by the use of foreign words and practices. Some constructions in the English tests were obscure or depicted alien cultures to the children. For example one head in a high density school said:

*The English test asks about cars to grade 3 or 4 children who have no idea of how a car works. Most of their parents do not even own one. Children are not familiar with the English used in the test.*

The literature on indigenous knowledge systems shows that there is need to acknowledge the role of indigenous knowledge in the education of children (Nziramasanga, 1999). This is pertinent at the assessment stage because that is when we determine what has been learnt or not learnt. Teachers declare that for a test to be effective it has to focus on the child’s culture or on issues that are globally accepted.

The four Trust schools and seven government schools in low density areas did not see any problems with the cultural representation which were in the tests. However, respondents in the sixteen high density, peri urban, and farm areas noted that children had problems with the English comprehension section D which most children are not familiar with the English language used. An analysis of the English tests clearly shows that Test CI and Test D do not address multicultural aspects (see appendix XII). For example Test CI item 3 says “Daddy works everyday (except, next and at) on Sunday.”

Clearly this may not be correct in three ways. First most children in Zimbabwe do not call their fathers “daddy.” Some say “Father” therefore a child who is not
familiar with this term may have problems in attempting the question and may even skip it. Secondly not all people rest on a Sunday. In the Zimbabwean culture there are religious groups who rest on a Friday, or a Saturday. In the African context some have their rest days or ‘chisi’ in Shona on a Wednesday. Tests must represent their cultural aspects if there are to be relevant.

Lastly the issue of working and resting on Sunday may be wrong to some people. Currently eighty percent of the Zimbabwe working population is self employed and the rest are formally employed. In such a population not all people will rest on a Sunday.

The issue of culture raises the need for the creation of culture fair tests. Thus the tests should reflect what is happening in the society. Tests in the Trust schools and one school in the low-density area were western oriented. One school was using tests which were imported from the United Kingdom which depicted the British culture.

**Syllabus Representation**

The syllabus reflects the type of knowledge the country would like to impart to its children. In an African setting the assumption is that a nation would thus focus on the vital aspects of its traditions and culture in the form of their philosophy, religion, art and values as represented in the syllabuses. How much of these were covered in the tests. Teachers feel that the language tests did not reflect aspects of the syllabus children have learnt. It did not show the links between itself and the syllabus. For example in the Shona test, it was difficult to ascertain the sources of
the different subsections which were too numerous to mention. The ‘Zvirahwe’ subset is not in the syllabus for this group of children.

The tests being used in identifying children for remediation received varied responses of approval from teachers. The responses clearly show that teachers are not conversant with these tests. The teachers may not also know what is expected of them they tend to respond in any manner. The District remedial tutors who are the experts in this area also tended to be mixed in their identification of local indigenous knowledge systems in the tests. This also may be attributed to the type knowledge and skills they have concerning psychometrics. An analysis of their qualifications indicates that out of the seven only one has a degree in special education. The educational psychologists confirmed that they are not satisfied with the types of tests being used in the remedial programme also.

However, most respondents agreed that the test items reflected some aspects of local content. An in-depth analysis of this aspect showed that the teachers had not made a comparison of these aspects. I noticed that almost all of them tended to think back on their experiences. It was clear that a lot of teachers had not read the syllabus but made assumptions from their background. Despite this it is not correct that the test did not reflect the syllabus.

For the English and the Mathematics tests the issue was that the tests did not cover most of the work done at grade three. Thus you noted that sums one and two were the only ones done at that level and the test covered grade four onwards. This was a period they had not yet covered since they were only starting grade
four. That was why almost all the children failed all the fractions, multiplication and division sums.

4.6 **Synopsis of Results on the Identified Assessment Models in Primary Schools**

The study followed a constructivist philosophy; in the sense that it was focusing on best practices to be used when constructing the assessment model. All negative aspects were seen as learning curves, meaning that they were treated as lessons on how to avoid certain pitfalls in future.

The study found out identification models which were being followed by schools. The models were clinical mean discrepancy identification, in class identification whole school screening, clinical age discrepancy identification and nominations. The five generic models were prevalent in the schools’ remedial programmes. They were in the clinical remedial programme; classroom remedial programme and the whole school remedial programme. Individual identification was evident in all the programmes although predominantly in the clinical remedial programme in the form of extra lessons special classes.

Clinical identification was by far the largest form of assessment in the high density, peri urban the former group ‘A’ government schools. This was because it was part of policy requirement as enunciated by CEO Minute number 12 of 1987 that all schools should identify children at the grade four for the purpose of remedying their learning disabilities. Their policy’s aim was to reduce the grade seven failure rate at that time. The policy has been ineffective in improving the grade 7 pass rate for children with LDs hence the carrying out of this study.
Classroom remediation has always been the ambit of the teacher for obvious reasons. First the teacher is the one who ensures that the child gets adequate teaching and that the child performs well.

The teacher is the first one to observe children who are struggling with their learning. Secondly the teacher is the face of the school; meeting parents, guardians and other members of the community. Their failures and successes in teaching children are highlighted in the community compared to any other member who is outside the classroom. The ability of the class teacher to quickly identify children’s learning difficulties and then remedy them is the most crucial in a child’s learning experience. Many adults never forget the teachers who helped them when they were struggling.

Clinical identification as outlined in the SPS and SNE model followed a number of steps which were supposed to be followed by the schools. The schools modified some of the steps in relation to their various circumstances. Therefore a number of mutations have occurred to the model giving rise to new models which are being followed by the individual schools. These were assessment models which tried to follow the discrepancy model. Schools with small enrolment of one or two streams followed the SPS and SNE model the letter. But they faced a challenge of many children who were considered to be the best in their classes being identified into the programme.

The study revealed that the schools which were carrying out the SPS and SNE remedial programme faced the following hindrances to the programme. The
identification was relying on old instruments which were more than 20 years old in the subjects. These had passed their shelf life and needed to be revamped. The tests were not focusing on what the child had learnt for example the maths items number 17, 18, 19 and 20 on division were tested although grade three children had never met them. In Shona the test items tended to focus on issues which had no link to remedy. Therefore if a child failed riddles teachers had problems trying to identify what was needed.

Another finding was that the identification model was seen as a one-off event. Once teachers had identified the children with LDs they did not see its link to the child’s classroom. Children were then assessed and identified without the input of the classroom teacher, parents or other authorities. These were informed of the child who had been identified. Models which involved class teachers in identifying by asking them to provide further information in the form of class work, class test results and other anecdotal reports produced better results. The remedial department was linked to the classes and this showed that the identification was a continuous process from the classroom to the clinical identification and back to the classroom setting. This is line with inclusive principles which place the classroom environment as the best place for all children. Although schools had mentioned that they are practicing inclusive education this was not seen at all the schools visited. Children with physical disabilities were the ones seen in some schools although they were not part of those with learning disabilities.
Classroom remediation in schools had an amorphous look. It seemed teachers carried it out whenever they spotted children's problems. The identification of children with LDs being carried out in school was both ad hoc and with no definite direction. Teachers used any method at their disposal and the most common being the child's performance in the oral lesson. Error analysis in children’s written work was used and at times did not clearly show the pattern of children’s work. Despite schools using weekly test, fortnightly and monthly tests the results were seldom used because teachers viewed them as not helpful in a learning situation. This is not correct because in those schools where they were used they produced a rich source of information on the child’s overall performance in the different concepts.

In some schools the patterns of failures in reading scores and in the test were used to identify children who needed help. One shortcoming of the classroom remediation was that it tended to group together all children with varying learning problems who may not have LDs. Three distinct groups of children emerge in a classroom situation. Those who are bright and may experience failure once in a while, those who are average and those who are performing below the average, comprising non readers, non numerates and those with poor handwriting. With such a plethora of children with needs the teacher is at a loss to identify the ones who need to be remedied.

In response to the above some schools embarked on whole school reading programmes. Such programmes if done well are showing promising results. The whole school reading model helps all children in the school. It is during this
process teachers get an opportunity to identify children’s reading levels, non
readers, those reading at the literal and independent lives. Some schools have
gone to the extent of identifying children’s reading and spelling so that they can
gauge the children’s growth.

These whole school reading programmes thrive on whole language principles
which use local content in the form of reading matter. Such programmes provide
children with LDs early identification which translates into early intervention.

Schools with resources created a remedial department where children were
referred by teachers and then assessed by experts. These were staffed with
qualified remedial teachers who made use of educational psychologists and
experts from outside. They did not use the SPS and SNE tests.

However the tests which are used in the clinical mean discrepancy model are old
and out of touch with the curriculum. Those being used in Trust schools are
mostly foreign. This is where SPS and SNE and University Special Needs
Departments can provide expertise in the development of appropriate tests for
screening, identifying and diagnosing children’s learning disabilities.

4.7 Construction of an Assessment Model

The development of this model follows a constructivist approach. In line with this
I therefore collated all the ideas which came from the remedial and classroom
teachers who are the main participants of this study, the experts who were the
district remedial tutors, their principal and the educational psychologists and the
administrators form the District Education Offices, Provincial Education Director and Principal Director. This section therefore starts by reporting on what the above participants feel would be the best way to identify children with learning disabilities. I will then give the best ways which match the identified themes from the assessment models which I have discussed in previous sections. I end up by taking these matched sections from each assessment model to construct the assessment model for the identification of LDs.

In the interviews, participants mentioned what they felt was the best way to identify children with LDs. These were collated district by district and relate to a specific model wherever possible. The models which are being followed are the clinical discrepancy identification model, in class identification model and the whole school identification model and the clinical discrepancy using reading ages. These were evident in all of the districts. I therefore collate all the categories from each theme or model.

The themes were: Classroom or School Administration, Identification using tests, collaboration with others, links with intervention and Awareness. Table 4.18 shows the categories of the different themes.
The first theme administration highlights the effect of outside issues on the actual identification. Teachers and schools believe that the administration of the tests and the handlings of any aspects to do with the identification of children with LDs are a major catalyst to the process of identification. Three out of four Trust schools were screening children for reading difficulties through the use of tests like Burt, Schonell and the graded word reading list. These tests focus on the various aspects of the reading process for example word attack skills and comprehension. Burt and Schonell tests and focus on oral reading to determine a reading age. Such screening provided the teachers with children’s reading ages...
which they then used to ascertain the beginning point for teaching. Such information was fed up into the classroom teaching. Teachers suggest that such information should also go into the clinical identification for learning disabilities. In class observation teaching and weekly, fortnightly and monthly tests should be part and parcel of the assessment model.

The second theme, identification focuses on the actual testing of the child outside his or her classroom. The tests that are currently in use need improvement in terms of syllabus representation and format. Syllabus representation should clearly show the level of local content in the tests. This means that cultural aspects should be included in the tests. In most cases teachers were not sure of what African knowledge systems could be included in the tests. Schools who had remedial departments tended to prefer external tests which had foreign representation as compared to the ones being distributed by SPS and SNE. The latter were old and maybe out of circulation in their former countries.

A teacher in one of the districts said that:

_The process of testing is fine except that the maths test does not address the items in the syllabus._

The teacher sees the strength of clinical identification as its propensity to focus on the child’s errors. The teachers see it providing teachers the ability to focus on the errors rather than the child. Because of the large classes very few of the teachers have the time to spend time analysing the children’s problems. A test would help in ensuring that the identification is professionally carried out.
The remedial programme in the school as seen in some schools should be a process which begins in the classroom to the clinical identification and back to the classroom where the child belongs. The class teachers who take part in recommending suitable candidates tend to appreciate and observe improvement in the children. Where the class teacher has not been involved they tend to feel alienated and this results in a tug of war between the teachers.

Shona identification tends to experience more acceptances where parents are also involved. The parents feel that Shona or indigenous languages are not important when applying for places in higher education or even in employment. This is further from the correct position. In an African context the knowledge of indigenous languages enables people to communicate effectively whether in school or at the work place. It is important that African people realize that the use of second language in education has placed the African inhabitants to second class citizens who do everything in a borrowed tongue. Countries like Japan, Germany and recently China that have done well in science technology and industry use their mother tongue in education. The attitude towards reading remediation in indigenous languages should change. Teachers and parents must be involved.

Teachers see linking the identification with the intervention programme as to be important if the child is to gain from the programme. Cases were teachers did not use the findings from the identification viewed the diagnostic testing and teaching as meaningless. One Head said:

*The down side of the remedial intervention is that teachers spend most of their time testing and very little time teaching. By then children will be in grade 5 and may feel that they do not need the remediation.*
One teacher uses the attainment test to identify the specific concepts children failed. She said that “she identified sums and then proceeded to create her own sums representing the failed concepts.” This creates a link between the identification and the diagnostic testing and teaching. Meaningful diagnostic teaching must start from identified concepts in the identification process. The mechanistic model being used in most schools is hierarchical in nature. For example addition is followed by subtraction, then multiplication and lastly division. These first two fundamental concepts provide a foundation to the last two; namely multiplication which is repeated addition and division which involves subtraction. By using the identification results the teacher is guided to the diagnostic testing entry. Therefore a child who would have passed addition and subtraction sums in that diagnostic testing would have to begin at the simple multiplication stage. The proposed model therefore should then show the link between the two entities.

The results showed that many teachers felt that classroom teachers, administrators are not aware of what learning disabilities are. When asked what learning disabilities are many teachers could not define them. Some thought these were problems in certain subjects which children were failing. One teacher pointed out that these children fail basic concepts and needed help. Asked about those who were in special classes they pointed out that those had better performance than those with learning disabilities.

The interview results also showed that participants held different definitions of learning disabilities. This failure to define the child is an indicator of the reasons
why there are arguments between classroom teachers, administrators and remedial teachers on the exact child who should benefit from the programme. The remedial teachers and those classroom teachers who have attended workshops on assessment of children with LDs have a correct definition of these children. Such teachers should take part in raising awareness in the school and their community of what LDs are and how assessment is conducted.

Awareness programmes should also spread to parents and the children who will have been identified. I observed that in schools where parents are fully aware of the relevance of the remedial programme they are the ones who end up nominating their children for the programme. I think it is a failure of schools in meeting this demand that parents are ending up enticing the classroom teachers to do private remedial classes. These private extra lessons will only end if schools fulfil their mission statements of meeting the needs of all the children within their school system. It is an indictment on the education system if it allows illegal parallel schools to run alongside with its programmes. Eventually the illegal schools will take over resulting in anarchy. Already there is evidence that these illegal extra lessons do not transfer to the child’s classroom performance. The fact that the grade seven pass rates is not changing significantly when there is a plethora of extra lessons is evidence enough and also a reminder to schools to start providing remedial lessons as part of children’s education rights (The UN Convention on the rights of Person with Disabilities, 2012).

This provision is within the tenets of inclusive education. One way of meeting this is to ensure that the community is fully aware of the presence of remedial
education in their schools and that they have a right to demand the assessment of their children in order to provide them with proper and meaningful education. The MoESAC has the mandate to fulfil that goal but if communities do not come forward and make their demands and needs known they will be letting their children down. Schools are already overloaded with competing demands from various sectors therefore the onus is on the communities to ensure that they fulfil their constitutional mandates to teach all children so as to meet their needs within their classrooms.

4.7.1 The Proposed Assessment Model for Identifying Children with Learning Disabilities in Primary Schools

The proposed assessment model for the identification of children with LDs in primary schools in Zimbabwe is displayed in Figure 4.5.

The proposed assessment mode for identifying children with learning is a collage of good practices observed in the schools that are carrying out programmes for children with LDs. The themes indicate steps taken from the current clinical identification, the different configurations, various classroom models extra lessons and the whole school reading programme. Figure 4.1 shows the model as it should be seen from an inclusive perspective.
The assessment model is a process which starts from the classroom and involves all concerned parties. This is not a prescriptive model; it should be adapted by primary schools to meet local needs. The themes which evolved from the data on the best way to identify children with LDs revealed that the proposed assessment model should be a process which begins in the classroom continuing to the clinical settings with the intention of assessing accurately the student’s performance. This model would involve all classes rather than focusing on one grade only. The whole school or classroom assessment model for the identification of children with LDs is the proposed assessment model for identifying children with learning disabilities in primary schools in Zimbabwe.
In the first step the whole school or classroom assessment model for identifying LDs, focuses on the school, classroom and on each child so as to provide schools with an opportunity to have a wide view of each child’s performance affording them the opportunity to get help.

In the second step the results show that during testing teacher made tests, observations and error analysis reports and teacher anecdotal reports must become part and parcel of the identification process. A school based test committee comprising the remedial teachers and the classroom teachers must discuss the above and agree which children must be included in the programme. The DRT and DEO should be part of this committee. It is possible that some children might not meet the criteria but after this crucial discussion may end up being placed in the programme.

Participants felt that the main resources were in the form of appropriate tests. It is important to have adequate tests like I noticed being done at one private school. The issue of foreign tests is not a negative aspect as long as these instruments are adjusted to suite local needs. The SPS and SNE department should play an important role of assessing, teaching and supervising both in-class and clinical remedial programmes in all schools without fear or favour. However most of the remedial tutors lack expertise in the area of testing and test development and need ongoing staff development.

In the third step the IEP is constructed and intervention in the form of diagnostic teaching ensues. This is to confirm the status of the identified child. The child
ultimately should go back to the classroom for intervention and further identification of problems. Teachers pointed out that they must be able to make use of the remedial specialists or teachers based at their school and those from the SPS and SNE department as they continue to assess and teach the child in the classroom. This is done through teacher conferences and inclass team teaching.

In the fourth step participants felt that collaboration with the class teacher and parents and other specialists during the identification stage and afterwards provided an opportunity for all concerned to have a say on what child to include in the remedial class. A major complaint from the participants has been that there seems to be a separation between the classroom activities and the clinical remedial programme.

In step five results show the category of staff development and awareness as important. Awareness issues may appear detached from the process of identification but play a crucial role in creating conducive environments for the assessment. Awareness is positively linked to staff development of remedial teachers. Staff development should focus on teachers, heads and parents if it is to be meaningful. In the schools where knowledgeable both in class and clinical remediation thrived. This practice also was extended to all the grades. Other class teachers were able to identify and teach their children with the knowledge they had acquired from the staff development. In the instances where teachers were not staff developed parents resisted the incorporation of their children into the remedial programme. Informed and knowledgeable parents are
in a position to demand services and avoid extra lessons because they know that such services are offered in their schools freely.

The whole school assessment model for identifying children with LDs in Figure 4.5 is cyclic as it links all its activities in a process which begins and ends in the classroom.

4.8 Chapter Summary

This study was specifically to find out how schools were using assessment models to identify children with LDs. If children are improperly identified they will end up being given the wrong intervention resulting in damage to the children and wasting their valuable time. The study found out five models of identifying children in the different schools which were visited and interviewed. Schools with good intentions were also trying to fulfil the demands of the policies on remediation from the MoESAC. The findings clearly indicate both good practices and distorted practices. Good practices were characterised by positive school ethos and an insatiable need to learn by all teachers and their heads.

There is no best way of identifying children. This is because what used to be the norm in the past is slowly giving way to new ways of identifying and helping children with LDs. Bad practices were characterised by overt attempts to please authorities rather than meeting the needs of the children. In most cases assessments and intervention record books were kept to show authorities. In such schools there was no evidence that any single lesson has been done. It is said that such activities do more harm than good to the image of the remedial programme
and those who try to implement the programmes with good intentions. It is important to realise that this programme was set up using tax payers’ money and thus we should be accountable to them.

The study categorically established that the teachers value the programme of teaching children with LDs wherever they are. The seven units which made up the case had almost similar representations in terms of schools apart from two which had many private schools. They were all using different identification models. It is important to observe that regardless of the different models each had positive attributes which were incorporated into the new assessment model discussed at the end of the chapter.
CHAPTER 5

FINDINGS AND DISCUSSION

5.1 Introduction

In this chapter I focus on the findings and discuss them in the light of the literature review. These findings emanate from the major research question which asked what assessment models were being used to identify children with learning disabilities in Zimbabwe. A case study of the Harare Metropolitan Education Province was undertaken to find out the current situation.

The discussion of the findings will focus on comparing these models to come up with the components of the assessment model for identifying children with LDs. In this section I will also discuss the significance of these findings in relation to the current provision for children with learning disabilities and indeed any other vulnerable children. I am also to highlight the significance of these findings for policy and practice. Conclusions will be made culminating in the setting of the proposed assessment model for identifying children with learning disabilities. Recommendations will be drawn from these conclusions and a summary will end the chapter.

5.2 Thesis Summary

This study was on constructing an assessment model for identifying children with Learning Disabilities. In the opening chapter the rationale for this study was given. Despite the Government having a clinical remedial programme which was
supported by a policy, children with LDs were still failing at the grade seven level. In the various grades children’s performance was also below average especially in English, Shona and Mathematics. Many parents were now enrolling their children into extra lessons which were being done outside the classroom. By 1987 about one third of the schools were doing the SPS and SNE prescribed remedial programme and the current position in 2012 was not known since no evaluation of the programme had been done ever since its inception.

The best way to see how the programme could be improved was to come up with what was currently happening in schools and then formulate an assessment model. The position whereby schools are currently doing the programme and children are still failing specific subjects indicated that the current method was not targeting the correct children. Another factor was that the model which was being followed was introduced in the 1980s to identify children but no evaluation of its effectiveness was carried out. It was a combination of British and American models which had been introduced without established empirical evidence.

The main research question was ‘What assessment models do teachers use to identify children with learning disabilities and why do they use them?’ The question solicited for responses on the assessment identification models in schools. I decided to find out the main models being used in the schools instead of just focusing on evaluating the government model. This approach would help to identify the best practices occurring in all primary schools including private schools or peri-urban schools.
Best practices would help me to pick aspects which would fit on a general assessment model for identifying children with LDs. The assessment model constructed would relate to any school since aspects of their practice would be imbedded into it. My intention was to create an assessment model in which any school could follow with minimum disruptions to children’s learning activities in an inclusive setting.

The clinical remedial programme’s theoretical basis was mechanistic reductionist. Components of knowledge or concepts were broken down and placed on instruments. These were in English, Shona or Mathematics. Children were asked to answer these and on their basis were identified as having learning disabilities or not. There is literature from the on the development of these tests (Pumfrey, 1986). Their validity and reliability levels are computed. Norms were set for specific populations. Most of these tests are Western in orientation depicting their culture and tradition.

The identification of the child follows a subject mean discrepancy model. In a discrepancy model the child with learning disabilities is defined as one who has an average to above average intelligence quotient (IQ) and low attainment in academic subjects. The assumption in this model is that the IQ can be ascertained with the help of educational psychologists. Children are identified and their subject deficiencies revealed by achievement tests. There are few studies in an African situation in that area.
There is little research in Zimbabwe on learning disabilities. The little there is only documents what is happening on the ground (Tambara, 2001). In order to get as much information as possible a case study of the largest province in terms of student population was done. It was grounded in an anti positivist philosophy. This was to enable me to gather as much data as possible from all sources. This qualitative case study used triangulation to confirm and argument the data which was collected from the seven districts which comprised Harare Metropolitan Education Province. The participants were remedial teachers and classroom teachers from the seven districts.

Triangulation consisted of an open questionnaire, in depth semi-structured interviews and document analysis. The document analysis provided further information on what the teachers were actually doing although I was aware that it was limited in confirming if the practices were correct. However it provided a holistic picture of what was happening in each district. The study was conducted in three phases. Phase one consisted of baseline survey of all the 220 Primary Schools using an open ended questionnaire. The results showed the schools which were doing the remedial programme and the types being followed.

It was necessary to carry out this survey because there was no collected information on the remedial programme. Using the baseline survey results I purposely identified schools for in depth interviews in phase two to find out how they were identifying children for the remedial programme. This purposive sampling helped me to identify a minimum of three schools per district. These were depicting three different models as per their responses. In the case that the
schools did not provide adequate data more schools were selected up to the data saturation level. I asked that by the sixth school data saturation would have been reached. Phase 3 was document analysis to augment the interviews.

Data analysis used global analysis and thematic coding. For the questionnaire descriptive statistics in the form of frequency counts was used. This was only used in phase one to enable me to identify the schools for the in depth interviews and document analysis. Information from informants like remedial tutors, education officers and other experts was used to triangulate data collected from the teachers. All ethical considerations were met.

The findings in chapter 4 were a product of the in depth interviews and the confirmation from the experts. The themes and categories came from the seven districts since each district composed of a mixture of government and private schools. In the next section I highlight the findings and discuss them with related literature.

In this section I present the key findings of this study and then discuss each one in turn. The key findings were in the following areas:

- Models for identifying children in the different schools.
- The types of tests they were using.
- The challenges met when identifying children
- African Epistemologies in the tests
- Constructing an Assessment Model.
5.3 **Models for Identifying Children with LDs in the Different Schools**

The study identified five models for identifying children which were being used in schools. These were clinical mean discrepancy identification, in class identification whole school screening, clinical age discrepancy identification and nominations.

The clinical identification used a mean discrepancy model to identify children in English and Mathematics. All schools were aware of clinical identification and were carrying it out. This was mainly in the government and peri-urban schools. However some of these models differed from the SPS and SNE model in that they did not follow the steps in it. The SPS and SNE identification model stipulates two approaches a discrepancy model for mathematics and English and a category model for Shona.

The clinical mean identification discrepancy model by the schools focused on the computation of a mean from the two subjects; English and Mathematics. Those children who score on both means are identified as needing remediation. This identification is a departure from the government which stipulates that children scoring above average and below average in the other should be taken for teaching. The approach being used by schools results in all achieving children being taken for remediation. The literature does not use the midpoint of the test but advocates the determination of the child’s IQ by using standardized tests (Deisinger, 2004; Sattler, 1992, 1985). Here a correct determination of the child is made.
It is clear that this identification model in schools and from SPS is ineffective in identifying children who need help. Because the model is not in line with C.E.O. minute number 12 of 1987, which stipulates that the child should be at least two years behind in a subject. The circular model is similar to Kavale’s (2001) deviation from grade level discrepancy model. The SPS and SNE differs in that it is the simple standard score difference model (Deisinger, 2004) which only focuses on a difference between the subjects.

The use of the mean discrepancy is not the preferred way in the USA (Deisinger, 2004). This selection procedure as it is popularly known has been modified by schools to suit their needs. This ranges from the use of the group means to the midpoint of the test. The teachers revealed that they were not aware of the relevance of this comparison and therefore resorted to any means of selecting the children. Most teachers were not sure if the selected children were the correct ones. In any assessment there are margins of errors which we need to contend with but this can be problematic if the margin is not known and secondly if the tests being used have been invalidated by over exposure. This means that some identified students may not have specific learning disabilities.

The result has been a tug of war between classroom teachers and remedial teachers. Although teachers appreciate their children being taken out of their large classes as Gipps et al. (1987) says of British teachers, their Zimbabwean counterparts believe this should be for those children who can benefit. Taking those who are already doing well is a disruption to their teaching.
The latter model of using the mean discrepancy has been effective in the schools with low enrolments although the effectiveness has been questionable. To counteract this schools have involved classroom teachers in the identification procedure. These teachers provided extra information which helped in building a whole picture of the child. Classroom record, tests and even exercises helped classroom and remedial teachers identify deserving children. This in agreement with Wilson and Cleland (1989) who point out the use of selection teams in the assessment of children helps to identify deserving children. Logsdon (2012) agrees that parents also make up this team and in some cases nominate the child.

The study identified the main weaknesses of the discrepancy model as its reliance on a single test. The single test clearly cannot pin point all the children who need help. The one shot nature of the test renders it ineffective because not all the children may have a good disposition on that day. This is confirmed by a number of studies like NABSE (2002) and Sattler (1992). Teachers recommended a number of tests to be given whose average would be used in the identification of the child. This would then be buttressed by the classroom teacher’s recommendation.

A positive attribute of the remedial programme in the schools since its inception in the eighties is that it has raised peoples’ awareness on the plight of children with learning disabilities. The challenge of extra lessons is an indication that parents acknowledge that remediation does improve children’s performance. The study reveals that teachers were carrying out the extra lessons during their off time. This was due to pressure from parents in the community. The paradox of
this is that most parents have negative attitudes towards the placement of their children into the remedial programme because they have misconstrued it with the special classes and units which deal with children with moderate and severe mental retardation. Once the same provision is renamed extra lessons they flock to it hoping that any child who is taught there will improve. This may be incorrect because only children with learning disabilities or specific learning difficulties benefit if correctly identified and taught.

Extra lessons are best taught in the school in inclusive settings where the child is able to transfer what they learn into the classroom situation. This is in agreement with Kellaghan and Greaney (2001: 83) who say ‘classroom assessment’s object is to facilitate learning’. If children are assessed and taught outside their classroom without the input of their teacher then no meaningful learning will occur.

The issue of transfer of learning is central to any learning encounter which occurs outside the classroom. Correct identification and ensuring transfer of learning are the cornerstones of clinical remediation. One cannot do without the other. If incorrect identification is carried out then the wrong placement is done and any learning done in that context cannot be transferred to the classroom. That is why most extra lessons do not help children in the classroom situation. Extra lessons will reduce in members when schools start to provide meaningful remedial programmes which are premised on the proposed assessment model for identifying children with learning disabilities.
5.4 Effectiveness of The Tests and Challenges

The effectiveness of a test rests in its representation of the local content as shown in the syllabus. The Mathematics test and the English test part D were difficult for the children. Certain sections of these tests were grade four materials and yet the children were being tested at the beginning of grade four. Most children failed to gather high scores because they did not know the concepts, others where able to get a reasonable score and some of them ended up being identified for the remedial programme. Poor identification is panacea for failure at any level as seen in the children’s failure at the end of year or at the grade seven levels with a disparity in the subjects. Teachers were worried by the validity the tests. Issues of inadequate test content and administration were significant causes of poor tests. Although Walsh and Betz (1985) do not agree with this observation on administration there is need to improve test administration since all tests have standard administration guidelines, an aspect the identification tests did not have. The test should have standard guidelines attached to them.

One cause for concern linked to the above discussion was the nature of the tests being used in the schools. The tests being used in the public schools were too old and out of sync with the curriculum. These tests had been constructed in the nineteen eighties and were in need for reviews. It is clear that identifying children with archaic instruments results in faulty placement. One is not sure if the child is benefiting or not. This was exacerbated by the use of two instruments in one procedure.
Linn and Gronlund (1995) and Whiting and Ford (2012) affirm that no single test or procedure can assess the vast array of learning outcomes in a school. Berihun, et al. (2006) agrees with the use of more than one instrument because it improves the credibility of the results especially in environments where the tests are old and out of touch with the curriculum. It is important that the identification process make use of more than one test so that the teachers can ascertain that the child who is being selected is the correct one.

Some schools are already aware of this and are changing their assessment practices. A positive attribute of the clinical assessment which showed this was the use of the teachers’ record and recommendation on the child under consideration. Although this is also prone to the classroom teacher bias it reduces the margin of error when you compare with the use of the single test. The buying of modern instruments and using them in combination with local observation was another step in the right direction. There is need to purchase culture fair tests as advocated by Linn and Gronlund (1995).

Clinical identification using age discrepancy was conducted in remedial departments observed in private schools. This identification model was a process of identification which started with screening in the classroom and was continued in the remedial group with the final identification by a full time remedial teacher being helped by an educational psychologist. This identification model relied on a holistic approach which looked at the student as a member of a group who needed help in the classroom.
The teachers, remedial teachers and the other experts saw the child’s disabilities globally. As a team they found ways of identifying the child’s needs with a major focus on what he or she is capable of doing. This model is not different from the government model because it also thrives on testing. This approach is approved by authorities although it is both expensive and labour intensive. Clearly it is affective as it identifies the child who needs the intervention. Its link with intervention is very high because the class teacher is involved throughout the process.

Classroom identification model was identified as the most prevalent in classroom remediation. Studies have shown that this is the first recognition a child who is experiencing problems gets in the school system (Willis, 2007).

Wilson and Cleland (1989) provide a framework for classroom identification which is linked to clinical identification outside the classroom. All participants and informants agreed that the use of classroom identification promotes inclusion. Incidentally the questionnaire findings show almost all the school heads indicating that their schools were practicing inclusive education in their schools. Despite these two unique observations were made in these findings on classroom remediation. I found out that in the government schools classroom identification and clinical identification were taken as separate models. In these schools classroom teachers viewed themselves as carrying out a separate model which had no relationship to clinical identification. Thus when a child was identified for remediation they tended to distance themselves from the programme and did not show any interest in what was going on. This is similar to Gipps et al’s (1987)
finding in the UK were teachers preferred children with LDs to be taught separately than in their classrooms.

However this was a different picture in the private schools whereby classroom screening tended to feed into the clinical identification. Inclusion starts in the community but is crystallized in the classroom which is a microcosm of the society. Therefore classrooms are duty bound to promote the development of inclusive settings by being examples of positive inclusive education. Providing classroom remediation which is linked to institutionalised setting is the first step in the development of a viable inclusive remedial programme. Studies by indicate those inclusive bases are found in the classroom (Bronfenbrenner, 1979; Baine, 1988; Reid, 1991).

Identification in the classroom is characterized by oral lessons and written activities. It is during oral lessons that teachers are able to spot children who are struggling. The other method was child observation which involved interviews and error analysis. Teachers asked children how they were performing some of their work. This exposed the children’s idiosyncrasy coupled with error analysis of the child’s pattern of error. Observations are seen in many studies as the most basic way of identifying children with learning disabilities. Studies on children with learning disabilities (Wilson and Cleland, 1985) recommend error analysis as an important way of identifying the child’s performance especially in Mathematics.
Whole language practitioners like Scala (1993) are in agreement with unobtrusive ways of assessing children. In a naturalistic setting children open up and reveal their errors. This non threatening environment allows the teacher to accurately identify or screen children who have harming difficulties.

The use of observing children during oral lessons as a means of identifying children with learning disabilities was the most common in the government schools. This is prone to teacher bias since some teachers may focus on specific children without seeing other children’s problems. This is not effective and may result in the teachers also focusing on the lowest performing children in their classrooms. Some teachers perceive children who are doing well as immune to learning difficulties. Sometimes they even believe that their problems are easily remedied in the class. This is shown by how they define children with learning disabilities as slow learners. This confirms observations by Omari (1983) and Okumbe (2005) that they are few children with LDs identified in Africa.

Slow learners in Zimbabwe are those children who experience learning difficulties in almost every concept and subject. We can deduce that classroom teachers have challenges in differentiating children with learning disabilities. To them all children in the class may at a given time need remedial help resulting in some of them perpetually remaining in the remedial group. This position is contrary to the literature which stipulates that these children may have specific problems despite having an average to above average intelligence (Hardman et al, 1999). Classroom identification should therefore focus on that group of children the rest of the children fall into different types. For example those who are always...
struggling may need a gradual introduction of concepts from its basic aspects increasing to the complex ones.

Correct inclass identification should be holistic. By holistic I mean that it should encompass the use of a number of strategies, observations, error analysis and the use of inclass and school tests. In holistic classrooms children are always in the spotlight. The alley of tests just mentioned affords the teacher to come up with an informed position so that they are able to create an effective individual education plan. Researchers (Solity and Bull, 1987; Fuchs, Fuchs and Spreece, 2002; Ainscow, 2007) agreed that this approach is curriculum based assessment which allows that teacher to stay focused on the child’s needs. Teacher made tests were not used by most teachers because they did not have the expertise in interpreting them.

The types of tests schools are making are not suitable for identifying children with learning disabilities. Most of them are summative, used to ascertain the child’s position in the class or grade. Summative tests are normative in nature. McLoughlin and Lewis (1989) say that they provide information on the child’s performance at the end of a course or study. Thus already the tests give you an opportunity to rank children. It does not provide the taker’s strengths and weaknesses.

Classroom teachers should be using formative assessment. Formative assessment identifies children’s weaknesses and strengths and provides guidelines for intervention. As teachers use this method they get a picture of the child’s
performance. Summative assessment at the end of this teaching will provide the teacher with an all round picture of the child since they will also use findings from both the formative and summative assessment. Such classroom assessment provides a link between inclass identification and clinical identification.

Best practices were observed in schools were the classroom teachers worked together with the remedial tutors to identify suitable candidates for remedial intervention. This is similar to Ysseldyke’s (1983) finding, who advocates for the use of a multidisciplinary team which consists of the class teachers, remedial Teachers, tutors, educational psychologists, administrators and parents in the identification and the development of the Individual Education Plan. This study found out that educational psychologists in the government schools were not part of the multidisciplinary team. It was only in the remedial departments based in the private schools were educational psychologists were involved. The former may be due to the scarcity of educational psychologists and the latter may be due to the attractive remuneration in private practice for the few experienced psychologists in Zimbabwe.

The major weakness of inclass identification was teacher expertise in defining the child with learning disabilities in their class, lack of expertise in test assessment and negative attitudes form the children, their parents and the administrators. It was evident that most schools do not know what to do in classroom remediation. Mpofu (1999) agrees that teachers should be competent in test construction.
Whole school identification or screening was not a common phenomenon but was observed in a few schools. It mainly took the guise of whole school reading programmes. Even the MoESAC was carrying out experiments on reading in selected grades and provinces. This is a noble strategy and needs support from all concerned. During this study no results on the progress of these programmes was available.

Some educationists Clay (1992) support this assertion as they believe that the most suitable way to ascertain the progress of a child is through their ability to read. Reading competence is therefore the ideal aspect to look for in a class. Classrooms where children read for meaning provide the right education. The schools which had whole school screening models believed that reading remediation was the only way of helping children. However schools seem to rely on old tests to screen children.

The use of reading ages computed from old and foreign tests on mostly African children rendered the whole exercise ineffective. Maybe schools should use local materials when carrying out their reading programmes. Whole school screening should provide class teachers with information which they should use to plan for the children. Children who continue to fail may be referred to the clinical remedial programme for an accurate identification of their problems. This is also suggested in Wilson and Cleland’s classroom diagnosis model (1985).

The whole school model consists of both informal and formal assessment methods. The whole school model must include informal assessment strategies
because these show the child’s performance in different settings. Part of this would be the teacher or school made tests which indicate the child’s performance in relationship to their peers. Class, grade and even cluster tests indicate the child’s attainment. Ignoring them is an omission of the child’s continuous performance over time. The teachers’ class observations of the child are a vital source of their on and off task behaviours within the classroom. The class teacher would do the initial assessment and they would refer these children who are defined as having LDs to the school remedial teacher. These children would be tested by the school remedial teacher using formal tests. These tests should be suitable for the level of the child. Currently good practice was seen in some schools which have identification committees whose role is to help in the identification of children. The school committees consist of the Head, class teachers and the remedial teachers. They agree on the child who should be in the programme using both the informal and formal means.

The main weakness of the whole school programme is on its reliance on the old tests whose norms are not compliant to the African society despite globalisation. This was highlighted by Mpofu and Nyanungo (1998) in their study of assessment in Zimbabwe.

A major strength of this method is its ability to place the child’s needs in a holistic setting. The child is viewed in relationship with other children in a naturalistic manner which proves the teacher with an opportunity to correctly ascertain the child’s reading competencies. I noted that in such instances the parents support encouraged the children to remain in the programme.
It must be acknowledged that if a school carries out the identification and provided intervention programmes to the children with LDs they would be no need for extra lessons which are clandestinely conducted. It was observed that some teachers were doing this either at the school or in their homes for a fee. Extra lessons are not a problem if they are conducted by the teacher as part of classroom remediation with the correct children. I was informed that parents were the ones who were demanding these oblivious of the fact that schools have an obligation to offer them within the school time. Parents as the first teachers feel duty bound to offer education to their children but they need to ensure that this is done within the school system; helping to improve their schools.

**Challenges in the Identified Assessment Models**

In this section I look at challenges which affected all the models in the seven districts. The findings show that despite teachers teaching in separate schools settings the challenges which besiege them are the same. Teacher definitions of LDs and assessment are major challenges to the identification of children with learning disabilities. Both teachers and their school heads are not conversant with learning disabilities and the nature of assessments of LDs. The majority saw children with learning disabilities as being slow and requiring help. Some even saw them as having physical disabilities.

We must understand that learning disabilities can occur to any child who is of average or above average intelligence who may have physical, sensory disabilities or even behaviour challenges. Teachers need to be staff developed in what
learning disabilities or any other disabilities are. Such knowledge will help them to know the different types of children with disabilities in their classes and the type of provision to give them. Studies have indicated similar findings in the developed countries also (Halliwell and Williams, 1992).

Most classroom teachers and remedial teachers had problems in identifying children because they did not know how to do the assessment. The findings show teachers mechanically coming up with a position. The elaborate method of the discrepancy model posed problems of understanding what it meant. Throughout the study I got an impression that teachers were just going through the identification without understanding what was actually involved. That is why their models tended to differ significantly from the SPS and SNE model. That is why also remedial teachers could not justify the type of children they were identifying.

Most schools which followed this model either do it incorrectly or could not proceed with the assistance of their district remedial tutor. These teachers reflect what the study by the European Agency for Development in Special Needs (2005) mentioned concerning remedial teachers. The knowledge of assessment is crucial to the teaching of children with learning disabilities. In those countries where teachers were knowledgeable about assessment they were able to identify, and teach their children effectively. Test development is part and parcel of any good teaching programme.
This study highlights a major deficiency in teachers’ competencies in testing children. That is why they are having difficulties in understanding the various assessment models being used to identify children with learning disabilities. At the end of the data collection I wondered how many children in the various remedial programmes genuinely belonged to the programmes. There is a need for a major shift in how assessments are being run both in the private and public schools. This seems to be the trend in Africa as commented by Asim et al (2011) who recommend in-service training in assessment to be seriously considered.

Teachers’ awareness of policy was scanty in comparison to their heads. The teachers in the Trust schools were guided more by their school policies than the national policies. These participants are highlighting the fact that there is no policy on special education an observation made by the Nziramasanga Commission of 1999. Zindi (1997) comments that lack of specific legislation on special education inhibit identification and provision for students with disabilities. Enabling policy must be put in place to promote assessment and delivery of programmes. However, Vandeyer and Killen (2007) warn that policy alone cannot bring in change; there is need for knowledge and resources. The current practice on remediation, where it is directed through government circulars as established by Nziramasanga (1999), reduces the remedial assessment of children with LDs to the level of extra mural activities and yet parents and many authorities view the remedial programme as the solution to the mismatched grade seven failure rates and the reading comprehension difficulties students’ face at the secondary school level. Remediation policy needs to take into consideration current environmental challenges. It seems the private schools are not aware of these policy gaps and
have moved on to create identification structures which support children from the primary school all the way to the secondary school. This practice is commendable and would be an invaluable aspect of the assessment model.

The challenge of resources in the form of tests, books inadequate classes and manpower was mentioned by all the participants although the need was acute in government schools. This confirms the Technical Committee of the Education for All Campaign’s (2005) report that the SPS and SNE face challenges due to inadequate resources. Class size was observed to be a significant variable in providing in-class identification (Berihun, 2006). Teachers with reasonable class sizes were able to identify and teach children without undue stress. The smaller the class size the more that teacher is able to work individually with those children with LDs. Most children with LDs have normal to above average intelligence and therefore are aware that they have learning challenges but do not know how to overcome the problem. Some might even be gifted, talented or creative as history has proved. Therefore large classes provide them with a sanctuary to hide resulting in them moving from one grade to the next. If special needs provision is to improve, then parents and their communities will have to build inclusive schools and provide the funds for the much needed resources.

All the schools in the study claimed that they had inclusion in their schools however, no evidence of this was observed in the schools. This confirms Chireshe’s (2011) finding that class teachers do not have the necessary training to adapt and accommodate special needs children. There is need to train student...
teachers in inclusive education principles so that they implement them in their classrooms.

5.5 African Epistemologies in The Tests

The issue of African epistemologies in the tests is more acute in the languages. The use of Shona names in the English tests does not make it represent the multicultural nature of Zimbabwe. Some studies point out that there is no need for culture specific tests since the world is now a global village and ideas are not cultural bound. This study revealed that all the teachers including those from the private schools felt that tests should be culture sensitive. This is in agreement with scholars like Higgs (2007), Nyamnjoh (2004), NABSE, (2002) and Chataika et al (2012) who are advocating for an African perspective in education. I believe that good aspects of African heritage, culture and traditions should be depicted in our syllabuses and the tests we construct. The subtle differences between our environments should be seen and appreciated in all our endeavours.

The development of African epistemologies or knowledge systems should permeate all sections of our culture. I believe that our education system has absorbed many foreign practices some of them good and others negative effects which may be responsible for the deteriorating morale standards and behaviours in society. The Unhu, Ubuntu which we are proud of should be reflected in our activities to the minute levels.

There are some schools of thought which believe that tests and models are universal and should remain so. This should not be the case because it results in
the domination by other epistemologies thus reducing our own self identity as Africans. Foreign influences in many forms have permeated our culture since the coming to our lands of Arabs, and Europeans. It is obvious that their influences in the form of products and other cultural influences will continue to be with Africans. I believe that we should look at how we can shape them to suit our circumstances.

5.6 Constructing an Assessment Model

I have discussed the assessment models for identifying children being used in the schools and shown both their weaknesses and strengths. None of these can be termed a suitable assessment model. The constructed model can be used by schools to identify children with LDs. This model was a design which came from the teachers and was verified and supported by heads DRTs, EPs and DEOs. The procedure used in this study was to go into the Province and find out what was happening in terms of identifying and teaching the children. The visits to the various schools revealed teachers and heads that were committed to the provision for children with disabilities and were eager to tell their stories.

One request was for ways or models in which schools can carry out both inclass identification and clinical identification. The assessment model I am going to reveal is a collage of the good practices which were drawn from each model. The schools which took part will be able to see a portion of their model in this prototype. Such a model will evoke feelings of ownership in the various schools which will embark on the identification of children with learning disabilities.
I have always felt that in this age, home-grown programmes and models have relevance to the local environment rather than adopting wholesale foreign models. The provided model is not prescriptive but should be used as a guideline to be used by schools as they identify children with learning disabilities. Schools should be at liberty to adjust portions of the model to suit their local needs.

Each of the models which have been discussed yielded something positive which became part of the cycle of the proposed assessment model. The wheel has five components which revolve around the children with learning disabilities. I propose that this wheel should consist of The Administration, The Identification, Intervention, Collaboration, and Staff Development and awareness. These components of the model are equally important and should assist the schools to provide for all children in the schools. This model combines the best from the mechanistic reductionist theories and the constructivist theories (Poplin, 1988b) producing a model which is responsive to the needs of the type of school using it.

Educationists are in agreement that there is no one size fit all when providing for children with learning disabilities. Therefore I have noted that despite the authorities providing rigid models which were designed for all children schools have, with best intentions adjusted and adapted them to fit their schools. In most cases with good results although in some schools have not adjusted the programme has failed to take growth disadvantaging the children who have learning disabilities.
The assessment model is a process therefore which starts in the classroom. In that way it is not prescriptive but directive in the sense that it points schools to what should be done when identifying and teaching children. Many schools do not have teachers with special needs training and those with it were in need of refresher courses. During the administration classroom teachers screen those children who are at risk of developing learning difficulties. Here all the children are on the spotlight. Teachers and administrators can and should refer children to the allocated remedial teachers. These together with the teachers test and mark the children. Good practice demands that an Assessment committee be set up to plan and carry each schools' assessment programme.

Members of the SPS and SNE preferably the District Remedial Tutor, an Educational Psychologist and an Education Officer should be part of this team. This will develop ownership in all the members which will ensure the survival of these programmes. Research indicates that the provision for children with special needs demands commitment from those who work with them (Harding et al 1999). This has been missing in these programmes because such a weighty responsibility was left to a few who due to fatigue and lack of recognition ended up abandoning the programme.

Documentation of what has been occurring in schools is grossly inadequate. The few records which were seen were usually poorly filed with gaps especially in the IEPs. Schools need to develop a culture of keeping meaningful records which would be used in the first components of the assessment model.
The actual identification of children should be a well coordinated process which is characterized by well constructed tests with some local items. Psychometric tests need to be valid and reliable. New tests should be bought. Tests should have administration guidelines and norms. Norms indicate the type of benchmarks a child must attain to be placed in a programme. Currently both the SPS model and the school models do not indicate what child should be in the programme.

Through the elaborate mathematical calculations involving the mean teachers are supposed to end up with the right candidate. The way it is done does not guarantee that the correct children with LDs are identified. There is need therefore to use more than one test for the selection. An average of the tests would then be used to identify the children. Although the use of the selection procedure graph helps teachers to work together it unfortunately highlights teachers’ in competencies in calculations. I suggest that the calculations be done together with the class teachers input when placing the children.

Test adaptation is very important because it gives teachers the flexibility to use available resources. It is vital that teachers are given skills to adapt available tests of course under the guidance of the SPS and SNE and other experts.

The actual identification of the child should be collaboration between the class teacher, the remedial teacher and members of the test committee. These would look at the performance of the children and then identify those who should be in the programme. The identification criteria should include quantitative and qualitative aspects. The quantitative aspects are the testing results and the
qualitative aspects are those observations made during classroom learning. This aspect is recommended in the literature whereby it is acknowledged that some children may perform poorly on a particular day due to illness or other factors and yet they are capable (Deisinger, 2004).

It is also important to collaborate with the parent. Merely informing them that their child has been selected to be placed in a special programme may instil hostility in them as they may feel undervalued. During the collaboration meetings parents are made aware of the value of the programme especially its benefits to the child’s academic performance. It is important that the assessment should not only focus on children with learning disabilities but must provide help in terms of further referral to all the children at risk of failing and those deemed to be hopeless cases. Programmes are available for them in the form of Special Classes and Resource Units. There is also need to create extension programmes for those who are gifted, talented and creative learners who according to Maunganidze and Nyamuyakura-Shoniwa (2001) exhibit learning disabilities unique to them.

Identification of the child with learning disabilities should not end up during the identification period; it is an ongoing process which is extended to the intervention period. Intervention would also be a process of further identification to make sure that the right candidate was selected. Diagnostic testing during intervention fulfils two roles, to verify that the identified child belong to the group and to identify the strengths and weaknesses of the child so that the intervention can begin. This is what Willis (2007) advocates the interactive nature of the educational process. This reveals more information on the child’s discrepancies.
Continuous staff development should be an ongoing activity unlike the present fragmented approaches. This is in agreement with Ainscow (2004) who sees the value of staff development as a facilitator of improvements in all students. Assessment would be used to improve educational quality (Kellaghan and Greaney, 2001). I feel that each of the components of the model should have staff development and awareness campaigns imbedded in them. This is collaborated by various studies that staff development in assessment methods improves the way teachers carry out their tests.

Teachers who are versatile in assessing children are able to identify and interpret the test results. I observed that in most of the schools teachers tended to struggle with test interpretation because they did not have any knowledge of test development and its role in the teaching of children with disabilities. This seems to be correct on the African continent as found by Greaney and Kellaghan (2008). Even the training in the universities did not focus on psychometric and qualitative methods of assessment. During this time awareness campaigns should be held with parents and children. Cases of children refusing to take part in the programme once selected where common especially in the government schools.

One school suggested awareness programmes for parents of the children entering school at either the zero grades or grade one. This is a 'catch them young' philosophy. Such parents have not been influenced by other people and because this is being introduced to them early tend to be more accommodating if their child is identified with LDs or any other problem later. It is accepted that parents
are the ones fuelling the extra lessons being carried out. I believe that once parents realize that extra lessons are remedial lessons in disguise they will demand for such services in their local schools. This was already happening in some of the schools I visited.

The proposed assessment model for identifying children with learning disabilities is a process which involves teamwork from the authorities to the children in the school. As in a team everyone should play their part to ensure success.

5.7 Implications for Policy and Practice

This study’s findings are lifelines to those students who are casualties of poor teaching. Studies have shown that poor teaching tends to be a cause for learning disabilities (NABSE, 2002) although in an African context this may be quite significant (Abosi, 2007). Because of this study have immediate implications for Special Needs Education Policy and Practice. The findings shared that many teachers on children with learning disabilities and had vague school policies on children with learning disabilities.

Although there is a national policy on remedial children it is too old and vague on what should be done. This study has a major effect on how schools should handle all children with disabilities. I believe that although the assessment model focuses on the children with learning disabilities it is actually a model which highlights the plight of all children with disabilities in the classroom. This means that policy should also acknowledge and indicate what should be done with the different categories. As the teacher is handling those with learning disabilities they should
be also checking what they are doing for the gifted, creative and talented learners, those with global learning disabilities and the ones with mental retardation. Learning disabilities can also be seen in students with sensory and physical disabilities. We need to acknowledge that policy should be flexible enough to allow schools to make adjustments to their provision.

Current practices do not emphasise the remedial identification models. They have relied on the cascade method whereby trained teachers teach their colleagues on the proper ways of selecting and teaching students with learning disabilities. This method has failed as indicated by this study and also collaborated by Ainscow (2007) in his British study on teacher preparation.

New teachers who had inadequate knowledge on how to identify and teach children with learning disabilities staffed the remedial programmes in most government and peri-urban schools. Closer analyses of these schools show that most of the schools have still got remedial teachers who have been staff developed by SPS and SNE but are not in the school’s remedial programme. This lack of continuity has throttled most of the remedial programmes. There is need to cultivate a robust in-service training programme for all the people involved in the provision of remedial children. Staff development has been acknowledged as very important in the development of the remedial programme. It helps in attitude changes across the board and creates advocates for the student with learning disabilities a situation suggested by Burkhardt (2004).
Presently in-service training programmes are disjointed since there are one day workshops which do not give participants opportunities to learn link their learning with previous content. Most workshops did not focus on assessment but tended to deal with the introduction of disabilities. The Remedial Teachers Association (REMTA) carried out workshops on this but only to those teachers from private schools. District Remedial tutors also carried half day to full day workshops with teachers once a term. Although this was a good approach teachers felt that it did not adequately prepare them. A half day or full day workshop was not enough for the teacher to fully grasp what was needed to select the children. District tutors had inadequate resources to run continuous workshops for all the forty schools in their districts. This resulted in the late resumption of the remedial programmes in almost all the government schools.

In the past in-service training programmes and workshop were one to two weeks in duration especially for remedial tutors allowing them to retain the content learnt. Ainscow (2004) proposes teacher development programmes which allow teachers to practice what they learn. These were not certified a situation which should be redressed if SPS and SNE is going to offer training programmes. Government should offer these in collaboration with Universities.

The Leonard Cheshire Disability Trust in conjunction with the MOESC and the Zimbabwe Open University Department of Disability Studies has already done this when they had inclusive training for classroom teachers in their pilot programme (Leonard Cheshire, 2011). Such in-service training programmes would start with background information on definition and justifications.
Identification models of children with learning disabilities and other categories would make up the initial week block of the in-service training. Teachers would be awarded certificates of competency which would be allocated university credit points. This would be acceptable at the university if teachers want to embark on a degree programme related to the in-service training programme.

The study will affect how teachers teach in their classrooms. Responses acknowledged that classroom remediation is the basis of any programme which children will undergo. It is more important because it is the first time a child is identified as in need. The type of reception a child receives from the classroom teacher, other classroom teachers and the parents will formulate the attitude the child will carry with them everywhere they will go. Therefore classroom teachers need to be accepting and to provide the first line help which may be enough to set them on the correct path.

There is need to develop literature which will be used by the teachers. Such literature would take the form of guidelines on the tests, booklets on how to identify basic texts on the teaching of specific subjects. Schools said that one of their biggest challenges was lack of material to use during the entire duration of the remedial programme. The reason why such programmes were more successful in the former group ‘A’ and Trust schools is because they have the resources for their remedial programmes. Having the literature is not a guarantee that the teachers will do the work since other areas also need to be addressed; however it ensures a solid foundation for committed teachers.
5.8 Chapter Summary

The clinical, classroom and whole school remediation and their tests play a role in teaching children with learning disabilities. Everybody agrees that children benefit from the programmes because despite everything it enables the children to see their learning problems. Under such a spotlight children with real learning disabilities end up improving their performance. Anecdotes of such children were provided by the schools. The remedial programmes will be enhanced by the use of the proposed assessment identification model which will act as a model for all types of primary schools.
CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter concludes this research as it revisits the research questions and provides answers to them from the research findings. I have done this to highlight the impact of the findings on the provision of the children with learning disabilities. Assumptions and propositions raised are relooked at with a view of either confirming or disproving them. The findings were looked at in the light of the limitations of the study. This will give rise to recommendations for future research.

6.2 Revisiting The Research Questions

This study focused on the construction of an assessment model for identifying students with LDs in Primary Schools in Zimbabwe. In order to achieve this I posed and answered these research questions: What assessment models do teachers use to identify children with learning disabilities and why do they use them? How effective are these tests and what challenges have schools encountered when using them? What African assessment epistemologies are reflected in these tests? How can an assessment model with relevant tests be constructed? In the following sections I give the answers revealed by the study.
6.3 **Assessment Models Used to Identify Children With LDs in Primary Schools in Harare Province.**

The study identified five (5) assessment models namely; clinical mean discrepancy identification, in class identification, whole school screening, clinical age discrepancy identification and nominations. The results revealed that all government primary schools in low and high density area and those in the peri-urban area were using the clinical mean discrepancy identification model. Trust schools or private schools where the ones using whole school models and had remedial models. The study revealed that there are differences between the government primary schools whose models are not properly conducted and the Trust primary schools that have adequate resources. Nominations for extra lessons were being carried by teachers outside the school system.

There are too many models being implemented without clear guidelines. The numerous identification models are indicated a lack of clear policy on what to follow. The existing SPS and SNE mean discrepancy identification model was vague.

6.4 **How Schools Carry Out The Identification of children with LDs**

The findings showed two ways of identification in the different models. The government schools mainly followed a discrepancy model for English and Mathematics in the clinical mean identification model. The Shona programmes used norms to identify the children with LDs. These tests had specific ways in which they were supposed to be done but because they needed a lot of time their administration and in the procedure teachers ended up using the cut off point of the test to select children.
There was a difference between how the schools were selecting and the definition in C.E.O. circular Minute No. 12 of 1987. The circular required that the child be behind their grade level instead of comparing means of two different tests. Because of this most children identified in the schools did not have LDs.

The private schools relied on classroom teacher identification of the children. Children were identified through a discrepancy between reading ages and chronological age. These children were then referred to the schools remedial teacher or the remedial department.

All schools used in class identification for the classroom remediation. In certain schools where there was also a clinical mean discrepancy identification model in place they were treated as two different programmes. In the private Trust schools and some government schools the classroom identification and the clinical age discrepancy identification model were seen as a continuous process which began in the classroom and ended in the classroom.

6.5 Effectiveness of Attainment Tests and Approaches used to Identify children with LDs
In this section I first address the effectiveness of these attainment tests and approaches. The findings show that the attainment tests being used in the clinical identification as recommended by the SPS and SNE are unreliable. The attainment tests being used are now very old since they were constructed in the 1980s and are no longer accurate in identifying children with LDs.
All three-attainment tests for English, shona and mathematics were not synchronised with the syllabus and the child’s environment. Observations of SPS and SNE attainment tests being taught orally and also being used as written exercises are that they are now invalid and unreliable. The use of only one attainment test to identify a child is unreliable and ineffective since some children may not be at their best on the day the test is administered.

In the schools which have remedial departments, the use of foreign attainment tests in an African context affected their reliability since they were developed for a foreign environment.

The use of more than one person to identify children with LDs in the Trust school was effective in identifying children with LDs.

The use of experts in Trust schools to assess children was an effective way of identifying children since it enabled the child to get the best service available. However, many parents could not afford the cost required by these private educational psychologists. In addition to this, some parents felt that these so-called experts were overrated since the identified children failed to improve and ended up being referred to government psychologists.

Extra lessons are a challenge to the identification of children with LDs and their subsequent intervention in all the high and low density primary schools. The use of parent and guardian nominations is not scientific or professional in their approach. The extra lessons were not linked to the children’s classroom work.
In the government schools inclass identification by classroom teachers was not effective because it was not linked to the clinical mean discrepancy identification proposed by the SPS and SNE department. It was an adhoc measure which did not lead to any referral either to the school remedial teacher or an educational psychologist.

The findings highlight classroom screening as a first step to identifying all children with LDs. Teacher effectiveness was more crucial in the classroom. Experienced teachers who had been teaching for some time were more patient and accepting to children with learning difficulties. They created environments which enabled children to reveal their idiosyncrasies which exhibited the nature of their learning difficulties.

Teacher effectiveness in identifying children with LDs was curtailed by inadequate training in assessing children with learning disabilities. This did not mean that because a teacher had a diploma or degree in Special education they automatically were effective in identifying the children with LDs in their classes since they needed constant training to keep abreast with current issues. Teachers with special needs qualifications were not keen to help children with special needs. Gipps et al. (1987) advises that this may be due to their knowledge of the extent of the magnitude of the work prevalent in special needs settings.
6.6 Challenges Being Encountered in Schools when Using their Assessment Models for Identifying Children with LDs.

Two types of challenges teachers and schools faced were identified. They were challenges to do with the implementation of the assessment models which are in use. The other was on the factors which affect the conducting of the assessment models by the schools hindering the whole assessment process.

The first category of the challenge has to do with the steps being followed in the models. I looked at each model in turn. In the mean clinical identification model being prescribed by the SPS and SNE had three challenges. The first one was that there were no clear administration procedures for the two models. Having two models without any guiding literature or norms tended to put teachers in a quandary. In the schools visited it was evident that the class teachers did the administration of the tests and the remedial teachers did the final identification. This has resulted in the second challenge.

Some teachers in government schools thought that the identification of many children with LDs from their classroom indicated that they were ineffective teachers. In order to ensure that their students are not identified into the remedial programme some teachers resorted to teaching the test items to their students. This resulted in less children being identified although they were still children with LDs who needed help. The teaching of test items renders the test invalid and requires that new test items be produced.
The use of a discrepancy model is the major weakness of the clinical mean discrepancy identification model being promoted by SPS and SNE because it is cumbersome to use and most teachers cannot do the identification properly.

There is no clear policy on the identification of children with LDs and the circular CEO Minute No. 12 of 1987 does not specify how teachers should select children with LDs.

Despite the fact that some teachers were in well resourced schools they did not have adequate training in assessment.

Inadequate resources affected most of the remedial programmes. Tests needed to be duplicated; time was needed to test all the children and also to allow teachers to do the selection. Team work was seen in those schools which were running successful programmes. Teachers worked as a team to administer, mark and score the tests. In the government schools the selection was left to the remedial teachers. However the situation was different in the private schools where selection was done by the whole school. Human and material resources enabled schools to develop their programmes effectively. Teachers in government schools did not have time to do the assessments due to many duties.

There was no evidence to indicate that inclusive education was being carried out in the schools.
6.7 **African Epistemologies Incorporated in These Tests**

Teachers across the different school systems felt that the language tests especially the English ones tended to depict Western images and culture. However the Shona being used in the government schools needed to be revised so that it captured the demands of the syllabus. African parents were not supportive of the Shona remedial programmes.

Foreign tests should be adapted to our local needs. We can also use the tests as models which we can copy and produce to make them culturally fit for Zimbabwean students.

6.8 **The Proposed Assessment Model for Identifying Children with LDs Incorporating Relevant Tests**

The findings indicate a variety of models being carried out in the schools. Participants indicated aspects they felt should be in the proposed assessment model and these aspects were used to develop it. Figure 6.1 shows the proposed Whole school or classroom assessment model for identifying children with LDs in Harare Metropolitan Province in Zimbabwe. In this model children with disabilities will be defined as those who are continually lagging behind in specific subjects or related areas, this may be reading, mathematics or any other school subject. The children will show potential for improvement in that subject or the related areas.
6.9 Conclusion

The case study findings showed that there were five assessment models for identifying children with LDs in the primary schools. Best practices were noted and bad practices revealed and remedies used mentioned. The latter was due to lack of expertise, poor resource allocation and archaic instruments. The proposed assessment model was constructed using assessment best practices from the identified assessment models. This is the whole school or classroom assessment model for identifying children in primary schools in Zimbabwe. In the model the process of identification should start from the child’s classroom moving on to the clinical setting; here instruments which are at the child’s level suitable for their
environment will be used. Identification will focus on children who are lagging behind in a specific area. This should continue during diagnostic testing as verification of the two initial identification processes. This ensures the link between identification and intervention. The intervention becomes part of the continuous process of identification. The assessment model is not prescriptive but follows the principle of special needs education that students with learning disabilities can be taught through an individual education plan in inclusive classrooms.

6.10 **Recommendations**

The following recommendations are put forward in line with the findings:

6.10.1 The proposed assessment model for the identification of children with LDs should be availed to all primary schools. This will enable schools to target children with LDs from the classrooms. A pilot programme should be initiated in the Harare Metropolitan Province in a few schools before spreading it to other schools.

6.10.2 Staff development of all remedial tutors should be carried out to introduce the model. It is important that this be done in line with the current workshops the SPS and SNE carries out. SPS and SNE remedial tutors should be the first ones to be trained in the programme. Later on remedial teachers, classroom teachers and Heads should be trained. All members of the identification teams should also be trained.

6.10.3 Schools should set up identification committees consisting of Head, classroom teachers and remedial teacher to lead in the whole school assessment programme. The DRT and DEO should also be informed of the committee’s progress through school heads termly reports.
6.10.4 The SPS and SNE test development committees should be resuscitated to review the current tests in use. Its terms of reference should acknowledge the relevance of African epistemologies. There should be agreement on what should be included in these tests in recognition of the children’s varying environments. It should also consider aspects of test adaption of all foreign tests. Care must be made to secure attainment tests so that they are not invalidated by misuse in schools or in the community.

6.10.5 Remedial tutors must be trained in Special Needs Education especially in the area of assessment. Collaboration with local universities will help to develop home grown programmes for remedial teachers, tutors, and educational psychologists.

6.10.6 In class identification should focus on all children, which are those with LDs, global learning difficulties and the gifted, talented and creative.

6.10.7 Schools and community awareness campaign should be carried out with the focus of improving attitudes to develop child friendly schools.

6.11 **Recommendations for Further Research**

The research’s focus was on the assessment models for identifying children with LDs in the schools. Various models were identified and best practices revealed. However there were other areas which were not the focus of this study which need further research in their own right.

- Research must focus on how home grown instruments reflecting African epistemologies can be developed. This should cascade into all the resources for the diagnostic testing and teaching. The area of assessment was viewed to be significant if we are to improve the correct placement of and intervention for the
child with LDs. The use of diagnostic test and other means of formation assessment need focus in the research.

- There is need to find out how children with LDs are faring in the secondary schools and find ways of linking the two. The provision of remediation at the secondary level must be strengthened.

- SPS and SNE should coordinate studies in the area of reading programmes to inform schools on the correct direction to follow. Reading is crucial to any students’ learning. Failure to read has been identified as an important aspect in learning at any level. Throughout the research schools were embarking on various school based reading programmes without a well grounded empirical basis and direction. This is an area which needs clarity and direction through research.

- There is need to identify the link between remediation the grade seven pass rates. This should identify the main variable responsible for improving the pass rate.

- A comparative study should be done on the efficacy of extra lesson as compared to school based remedial lessons. Although extra lessons have found favour with some schools and parents, it is important to focus on them with the intention of incorporating them into the school system. The large amounts of money being spent on them can be channelled towards the improvement of school based remedial programmes.
6.12 Chapter Summary

This chapter gave a summary of the answers to the research questions posed in chapter 1. Namely five assessment models for the identification of children with disabilities were seen in the primary schools in the Harare Metropolitan Province. It also covered aspects of attainment tests’ effectiveness in identifying children with LDs. Challenges were mentioned. The issue of African Epistemologies or local content in the attainment tests was dwelt upon. The Whole school or classroom assessment model for identifying children with Learning Disabilities in Primary schools was proposed for use in schools. Lastly recommendations for the provision and further research were made.
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APPENDICES
APPENDIX I

QUESTIONNAIRE FOR HEADS

Phase One: Questionnaire on Assessment of Children with Learning Disabilities

This questionnaire aims to collect information on assessment of children with learning disabilities or remedial children who may be in your remedial programme at your school. They may be in a classroom or a withdrawal setting. The aim is to come up with an effective way of identifying these children so as to effectively teach them.

All information is confidential and will only be used with the permission of the participants.

Instructions: Please answer all the items by ticking or completing accordingly.

Baseline Information

1. Name of School:……………………………Location………………………………
2. Respondent:…………………………………………………………………………
3. Type of School: Private ☐ Government ☐ Other ☐
4. Number of teachers at the school: Male ☐ Female ☐
5. Is there inclusive education at the school? Yes ☐ No ☐
5.1 If ‘Yes’ Which children are included? ………………………………………

…………………………………………………………………………………………

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5.2 If ‘No’ Why is there no inclusive education in your school? 

……………………………………………………………………………………

6. Is there a school based Remedial Programme? Yes ☐   No ☐

7. If yes select the type:

1. Clinical Programme ☐ Grade(s)…………Subject(s)………………

2. Classroom Remediation ☐ Grade(s)…………Subject(s)………………

3. Extra Lessons per grade ☐ Grade(s)…………Subject(s)………………

4. Remedial Class ☐ Grade(s)…………Subject(s)………………

5. Special Class ☐ Grade(s)…………Subject(s)………………

6. Other ☐ Grade(s)…………Subject(s)………………

8. Number of children in the remedial programme.

Girls……………………………… Boys………………….…Total………

9. How are these children identified?

9.1 Classroom tests ☐ Responsible person(s)………………

9.2 Grade specific school tests ☐ Responsible person(s)………………

9.3 Teacher nominations ☐ Responsible person(s)………………

9.4 Informal tests for each grade ☐ Responsible person(s)………………

9.5 Formal tests ☐ Responsible person(s)………………

9.6 Parent nominations ☐ Responsible person(s)………………

9.7 Other (Specify) ☐ Responsible person(s)………………

10. If No, how are you catering for children with Learning Disability?

10.1 Head (School) ……………………………………………………………………

……………………………………………………………………………………

10.2 Teacher (Classroom) ……………………………………………………………..
11. What other programme(s) do you have for children with learning disabilities in your school? ………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

12. What problems have you met in identifying children with Learning Disabilities (Remedial)? ................................................................................................................
…………………………………………………………………………………………
…………………………………………………………………………………………

13. How have you solved them?
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

Thank you for your immense contribution!
APPENDIX II

INTERVIEW SCHEDULE FOR TEACHERS

Phase Two: Models for Identifying Learning Disabilities

This interview schedule focuses on what is actually taking place in the various schools in terms of identifying children with learning disabilities. All information will be treated with the utmost confidentiality.

Background Information

1. Name
2. Designation
3. Sex
4. Do you have a qualification in education? Yes / No
4.1 If ‘Yes’ mention the correct one(s):
   - Certificate/ Diploma in Education Primary
   - Certificate/Diploma in Education Secondary
   - Bachelor’s Degree in Education
   - Master’s Degree in Education
   - Doctorate in Education
   - Other(s) (Specify)
4.2 If ‘No’ what do you have?

5. Do you have a qualification in Special Needs Education/Disability Studies?
   - Yes/No.
5.1 If ‘Yes’ mention the correct one(s)

Certificate/ Diploma in Special Education
Bachelor’s Degree in Special Education/Disability Studies
Master’s Degree in Special Education/ Disability Studies
Doctorate in Special Education/Disability Studies
Other(s) Specify

5.2 If No what do you have?

6. Year Started Teaching:

7. Grades Taught Grade: 1 2 3 4 5 6 7

Remedial group Remedial class
Special class Resource unit
Other(s) specify

8. Remedial Experience

8.1 Clinical Remediation

Shona / English / Mathematics
Other (specify)

8.2 Classroom Remediation

8.3 Extra Lessons Subjects

8.4 Remedial Class Grade(s)

8.5 Special Class Type of school
9. Number of years as Remedial Teacher
10. Did you attend any training workshop in assessment of LDs? Yes / No
11. If ‘Yes’, name of organiser
   - Theme of workshop:
   - Year you attended workshop:
   - Duration of workshop:
12. List the tests you use for:
   - Identifying children
   - Diagnostic teaching
   - Evaluation of the children’s progress

**Model of Identifying Learning Disabilities**

1. How do you define learning disabilities?
2. What other term do you normally use for these children?
3. What do you think assessment is?
4. What policy is there for assessing LDs?
5. Which steps do you take to test and identify children with LDs at your school?
6. How do you carry out each step?
7. Comment on the effectiveness of the tests you used. How much local content is in them?
8. Explain how the tests results are interpreted in identifying and linking to the teaching programme.
9. Whose responsibility is it for teaching and supervising?
10. What do you see as the weaknesses of the current approach?
11. What challenges have you faced?
12. What are the remedies?
13. What do you see as the strengths of your approach?
14. In your opinion how best do you think children should be identified for learning disabilities?

Thank you for your participation.
APPENDIX III

INTERVIEW SCHEDULE FOR HEADS

Phase Two: Models for Identifying Learning Disabilities

This interview schedule focuses on what is actually taking place in the various schools in terms of identifying children with learning disabilities. All information will be treated with the utmost confidentiality.

Background Information

1. Designation
2. Sex
3. Do you have a qualification in education? Yes / No
4. If ‘Yes’ mention the correct one(s):
   - Certificate/Diploma in Education Primary
   - Certificate/Diploma in Education Secondary
   - Bachelor’s Degree in Education
   - Master’s Degree in Education
   - Doctorate in Education
   - Other(s) (Specify)
4.1 If ‘No’ what do you have?
5. Do you have a qualification in Special Needs Education/Disability Studies? Yes / No
5.1 If ‘Yes’ mention the correct one(s)
   - Certificate/Diploma in Special Education
   - Bachelor’s Degree in Special Education/Disability Studies
Master’s Degree in Special Education/ Disability Studies
Doctorate in Special Education/Disability Studies
Other(s) Specify
5.2 If ‘No’ what do you have?
6. Year Started Teaching
7. Grades Taught Grade: 1 2 3 4
   5 6 7
   Remedial group Remedial class
   Special class Resource unit
   Other(s) specify
8. Did you attend any training workshop in assessment of LDs? Yes / No
8.1 If ‘Yes’, name of organiser
8.2 Content of workshop
8.3 Year you attended workshop
8.4 Duration of workshop

Model of Identifying Learning Disabilities
1. What is your definition of learning disabilities?
2. What other term do you normally use for these children?
3. What do you think assessment is?
4. What policy is there for assessing and teaching children with LDs?
5. How is your school identifying and teaching children with LDs?
6. Comment on the effectiveness of the tests used. How much local content is in them?
7. Explain how the tests are interpreted.
8. Whose responsibility is it for assessing teaching and supervising?
9. What do you see as the weaknesses of the current approach?
10. What challenges have you faced?
11. What are the remedies?
12. In your opinion how best do you think children should be identified for learning disabilities?

Thank you for your participation.
APPENDIX IV
INTERVIEW SCHEDULE FOR EXPERTS/INFORMANTS

Phase Two: Models for Identifying Learning Disabilities

This interview schedule focuses on what is actually taking place in the various schools in terms of identifying children with learning disabilities. All information will be treated with the utmost confidentiality.

Background Information

1. Designation
2. School/Dept/Unit/Section
3. Sex
4. Do you have a qualification in ED/PSY? Yes/No
   4.1 If ‘Yes’ mention the correct one(s):
       Certificate/Diploma in Education Primary
       Certificate/Diploma in Education Secondary
       Bachelor’s Degree in Education/Psychology
       Master’s Degree in Education/Psychology
       Doctorate in Education/Psychology
       Other(s) (Specify)
   4.2 If ‘No’ what do you have?
5. Do you have a qualification in Special Needs Education/Disability Studies? Yes/No
   5.1 If ‘Yes’ mention the correct one(s)
       Certificate/Diploma in Special Education
Bachelor’s Degree in Special Education/Disability Studies
Master’s Degree in Special Education/ Disability Studies
Doctorate in Special Education/Disability Studies
Other(s) Specify

5.2 If ‘No’ what do you have?

6. The year you started teaching/working (Grades/Forms)

7. Did you attend any workshop in remediation/assessment of LDs? Yes / No

7.1 If yes, name of organiser

Theme of workshop

Year you attended workshop

Duration of workshop

8. How many workshops have you conducted for Remedial Tutors/ teachers/Heads/Class teachers since 2010?

9. List the themes/topics covered?

10. How many of each took part?

**Model of Identifying Learning Disabilities**

1. What is your definition of learning disabilities?

2. What other term(s) do schools normally use for these children?

3. What is your interpretation of assessment

4. What policy is there for assessing and teaching children with LDs?

5. How are schools identifying and teaching children with LDs in the schools?

6. Comment on the effectiveness of the tests used.

7. What do you see as the strengths of each approach?

8. Explain how the tests results are interpreted.

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9. Whose responsibility is it for assessing, teaching and supervising children with LDs?

10. What do you see as the weaknesses of the current approach?

11. What challenges have you faced?

12. What are the remedies?

13. In your opinion how best do you think children should be identified for learning disabilities?

Thank you for your participation.
APPENDIX V
CHECKLIST

Phase Three: Document Analysis Checklist for Identifying Learning Disabilities

This will capture all the documents pertaining to assessment of LDs going on at the school.

Please complete all sections.

Designation of informant…………………………… School/ Grade…………………………..

1. Policy

<table>
<thead>
<tr>
<th>Name and date</th>
<th>Purpose, Description and Action taken</th>
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</thead>
</table>

2. Institutional Records

<table>
<thead>
<tr>
<th>Type</th>
<th>Purpose and Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Register</td>
<td></td>
</tr>
<tr>
<td>2.2 Individual Educational Plans</td>
<td></td>
</tr>
<tr>
<td>2.3 Reports on children</td>
<td></td>
</tr>
<tr>
<td>2.4 Teachers Records</td>
<td></td>
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</tbody>
</table>

3. Tests

<table>
<thead>
<tr>
<th>Name and Type</th>
<th>Purpose and Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal</td>
<td></td>
</tr>
</tbody>
</table>
### Children’s Work

<table>
<thead>
<tr>
<th>Type</th>
<th>Purpose and Description</th>
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</thead>
<tbody>
<tr>
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</table>

### Other Records

<table>
<thead>
<tr>
<th>Name and Type</th>
<th>Purpose and Description</th>
</tr>
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<tr>
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</tbody>
</table>

Comments……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………

**APPENDIX VI**

**INFORMED CONSENT FORM: TEACHERS**

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**Key Components:**
- Thank you
- Your name
- Purpose
- Confidentiality
- Duration
- How interview will be conducted
- Opportunity for questions
- Signature of consent

I want to thank you for taking the time to meet with me today. My name is _______ and I would like to talk to you about your experiences participating in the assessment of children with LDs in your school.

The interview should take less than an hour. I will be taking some notes during the session, I can’t possibly write fast enough to get it all down. Please be sure to speak up so that I may not ask you to repeat some of your comments.

All responses will be kept confidential. This means that your interview responses will only be shared with research team members and will ensure that any information we include in our report does not identify your as the respondent. Remember, you don’t have to talk about anything you don’t want to.

Are there any questions about what I have just explained?

Are you willing to participate in this interview? __________ __________ __________

Interviewee Witness Date

---

### APPENDIX VII

**LETTER OF INTRODUCTION**

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![Letter of Introduction](image-url)
LETTER FROM MINISTRY OF EDUCATION, SPORT, ARTS
AND CULTURE

APPENDIX IX
LETTER FROM HARARE PROVINCIAL OFFICE

RE: PERMISSION TO CARRY OUT RESEARCH IN SOME SELECTED SCHOOLS

An operational assessment model for identifying students with learning difficulties in primary schools in Harare.

Reference is made to your letter dated 26 January 2012.

Please be advised that the Provincial Education Director grants you authority to carry out your research on the above topic. You are required to supply Provincial Office with a copy of your research findings.

For Provincial Education Director
Harare Metropolitan Province

APPENDIX X

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LETTER TO THE PROVINCIAL EDUCATION DIRECTOR
(MINISTRY OF EDUCATION, SPORT AND CULTURE, HARARE)

Thomas M. Kaputsa
11 Rydal Way,
Benside,
Harare
0773393305/04742713

The Regional Director
Harare/Chitungwiza Region

Dear Sir/Madam,

APPLICATION TO CARRY OUT A RESEARCH IN HARARE/CHITUNGWIZA REGION

I am a candidate of the Doctor of Philosophy in Education with the Zimbabwe Open University. I would like to carry out a research in your primary schools in your region. The thesis is titled “An appropriate assessment model for identifying students with learning disabilities in primary schools in Zimbabwe.”

The target groups for this research are teachers, heads and selected Ministry of Education staff in your schools and Regional office. I will use questionnaires, interviews, observations, and document analysis procedures to collect data.

I look forward to your favourable response.

Yours faithfully,

Thomas M. Kaputsa
(PUR25241K)

Cc: Higher Degrees Directorate

APPENDIX XI

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LETTER TO THE SECRETARY FOR EDUCATION SPORT

Thomas M. Kaputa
11 Rydal Way,
Brasilie,
Harare
0993 393 305 / 04-742713

The Secretary for Education Sport and Culture
P. O. Box CY 121
Causeway
Harare

Dear Sir / Madam

RE: APPLICATION TO CARRY OUT A RESEARCH IN PRIMARY SCHOOLS IN YOUR REGIONS

I am a candidate of the Doctor of Philosophy in Education with Zimbabwe Open University. I would like to carry out a research in your primary schools in your regions. The thesis is entitled:

An Appropriate Assessment Model for Identifying Students with Learning Disabilities in Primary Schools in Zimbabwe

The target groups for this research are teachers, heads and selected ministry of Education staff in your schools and Regional offices. I will use questionnaires, interviews, observations and document analysis procedures to collect data.

I look forward to your favourable response.

Yours faithfully,

Thomas M. Kaputa
(P0825241K)

cc: Higher Degrees Directorate

APPENDIX XII
ENGLISH COMPREHENSION TEST 4

Name: __________________________ Date of birth: __________________________
School: __________________________ Age: __________________________
Grade: ___________________________ Home language: __________________________
Date of test: _________________________________

Test B1.1 (Synonyms)
Look at the first word on the left. Then look at the four words on the right. Underline the word on the right which has the same meaning as the first word on the left. Your teacher will do the first one with you.

- 
  1. small
  2. make
  3. new
  4. old
  5. poor
  6. rich
  7. midnight

Test B1.2 (Phrases)
Underline the word on the right which has the same meaning as the phrase on the left.

- 
  1. a person who makes bread
  2. a place where bees live
  3. not feeling well
  4. belonging to a boy
  5. to be worn out

Test C1 (Sentence completion)
Read each sentence carefully. Choose the best word inside the brackets that completes the sentence. Underline the word.

- 
  1. Today I am going to school (on, by, for, in) bicycle
  2. He climbed the fence and fell (under, into, below, between) a ditch.
  3. Daddy works everyday (except, next, and, on) Sunday.
  4. The leaves are (in, above, under, behind) and the roots are (above, below, behind, beneath) the ground.

Test D
Read each passage. In each passage words have been left out. Fill in the missing words.

Only one word is missing in each blank space.

- 
  1. Jack and Jane are riding their bicycles. Is Jack walking? No, he is riding his bicycle. (i) is walking.
  2. The children are in the playground. They are playing a game. They are jumping over and under a rope. They are playing a game. (ii) the rope. What games are they playing? They are jumping over and under a rope. (iii) a rope.
  3. The new teacher gave the children pieces of paper to draw on. She was very pleased with (iv) pictures. She said, "Well done! (v) children. Please bring (vi) a picture to my class. We will (vii) the wall (viii) the classroom." The children were (ix) a picture to their teacher.
  4. Mr. Tembo's motor car has stopped. Mr. Gabi walks up to it. He asks Mr. Tembo about the engine of his car. Mr. Gabi says, "(xii) afternoon! What's the matter?" Mr. Tembo replies, "Good afternoon! (xiii) car has stopped. Do you know about cars?" Mr. Gabi says, "I know very little about cars. My son works at a garage. He is a mechanic."
SHONA ATTAINMENT TEST 4

Test A

Cheka wakuruva.

Dzidzora.

1. Chidza

2. Chibafa

3. Chibhoro

4. Chibhiri

5. Chihwa

6. Chiwire

7. Chiganja

8. Chikwa

9. Chikwanji

10. Chikwanwa

Test B

Cheka chekuva.

1. Chimo

2. Chikiwa

3. Chikwekwe

4. Chikwekwe

5. Chikutu

6. Chikutu

7. Chidza

8. Chidza

9. Chidza

10. Chidza

Test C

Cheka chekuva.

1. Chimo

2. Chimo

3. Chimo


5. Chimo

6. Chimo

7. Chimo

8. Chimo

9. Chimo

10. Chimo

Test D

Cheka chekuva.

1. Chimo

2. Chimo

3. Chimo

4. Chimo

5. Chimo

6. Chimo

7. Chimo

8. Chimo

9. Chimo

10. Chimo
57. Vana vanotaka chitawo vanovanekeva ne? ........................ 
   A. zuva     B. mwezi     C. rima     D. denga

58. Matambo wechitawo unotakwa vanhu vanhi ........................................ 
   A. fura     B. zveka     C. dzingirana     D. vaka

59. Teraga manyora kurudzi unotamanga disikira riri kumbosho. Nyora 
    vana reivo rinoshandira. 

60. Aposta magaka. ................................................................. 
    A. zviba     B. amutoripa     C. anopopota     D. amodziya.

61. Ane neyo kurefu. ................................................................. 
    A. mweva     B. ase rembo rakanaka     C. kubatsireva kufunga 
    D. haikurumitso kuchatireva
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<td>1.</td>
<td>Add</td>
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<tr>
<td>2.</td>
<td>Add</td>
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<tr>
<td>3.</td>
<td>Multiply</td>
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<tr>
<td>4.</td>
<td>Subtract</td>
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<tr>
<td>5.</td>
<td>Add</td>
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<tr>
<td>6.</td>
<td>Subtract</td>
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<td>7.</td>
<td>Add</td>
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<td>8.</td>
<td>Subtract</td>
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<td>9.</td>
<td>Divide</td>
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<tr>
<td>10.</td>
<td>Subtract</td>
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<tr>
<td>11.</td>
<td>Multiply</td>
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<tr>
<td>12.</td>
<td>Subtract</td>
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</tr>
<tr>
<td>13.</td>
<td>Multiply</td>
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</tr>
<tr>
<td>14.</td>
<td>Multiply</td>
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<tr>
<td>15.</td>
<td>Divide</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Multiply</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Divide</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Divide</td>
<td></td>
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</table>

**Example Answer:**

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<tbody>
<tr>
<td>3.</td>
<td>Multiply</td>
<td>4 x 5</td>
</tr>
<tr>
<td>5.</td>
<td>Add</td>
<td>0.3 + 0.6</td>
</tr>
<tr>
<td>7.</td>
<td>Add</td>
<td>67 + 28</td>
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<tr>
<td>9.</td>
<td>Subtract</td>
<td>15 - 4</td>
</tr>
<tr>
<td>11.</td>
<td>Multiply</td>
<td>15 x 3</td>
</tr>
<tr>
<td>13.</td>
<td>Multiply</td>
<td>16 x 2</td>
</tr>
<tr>
<td>15.</td>
<td>Divide</td>
<td>55 / 11</td>
</tr>
<tr>
<td>17.</td>
<td>Divide</td>
<td>2 / 2</td>
</tr>
<tr>
<td>19.</td>
<td>Multiply</td>
<td>150 x 5</td>
</tr>
<tr>
<td>20.</td>
<td>Divide</td>
<td>6 / 2</td>
</tr>
</tbody>
</table>

**Ex:**