GUIDELINES FOR A REMEDIAL READING PROGRAMME FOR STANDARD ONE AND TWO PUPILS

by

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I can do all things through Christ which strengtheneth me
Phillippians 4 verse 13

SUMMARY

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A synopsis of the importance and the nature of reading serve as the point of departure for this study. The pupils involved are learning restrained as well as Group A learning disabled pupils although learning disabled pupils in Group B and C can also be involved.

The total reading process is illustrated by means of a reading model. The two main components, namely, word identification and comprehension, form the basis of this study. The different subcategories featuring in each component are highlighted. This model serves as a framework for the diagnosis and remediation of reading problems.

A teaching model is used to illustrate the complexity of teaching. The factors within the teaching model are indicated, as well as the ways they may serve when reading is taught. The reduction and choice of reading content for a specific pupil are set out as important aspects to be taken into consideration in reading remediation.

Determining each pupil's reading levels, namely, his/her independent level, instructional level and frustrational level, enables the teacher to choose the appropriate reading material.

A comprehensive reading problem analysis table, compiled for analysis of individual reading problems, facilitates identification of the remedial reading areas, as well as the underlying subskills causing the problems to be accommodated in remedial reading. A control chart, developed for recording the information concerning the pupil's reading problem area and underlying subskills, facilitates compilation of an integrated remedial reading programme.

Existing exercises, selected from the works of various authors and adapted, provide guidelines and exercises for particular remedial reading areas. These guidelines serve as a point of departure for the compilation of a specific remedial reading programme for a particular pupil with reading problems.

Two case studies elucidate how a remedial reading programme can be compiled according to the pupil's background, reading problems and inadequacies in the underlying subskills.

Title of thesis:

GUIDELINES FOR A REMEDIAL READING PROGRAMME FOR STANDARD ONE AND TWO

Key terms:

Reading problems; Disabilities and restraints; Standard one and two; Reading models; Teaching model; Guidelines; Remedial reading programme; Reading problem analysis table; Control chart; Exercises.

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CHAPTER 1

READING PROBLEMS AND REMEDIATION: CLARIFICATION OF TERMS AND STATEMENT OF THE PROBLEM

1.1 INTRODUCTION

"If you can read this, thank a teacher." (Source unknown)

The essential value of reading need not be stressed, throughout our lives reading plays a role not only in successful achievement but also in personal gratification. Literacy is a norm by which one is measured. It is suggested that the ability to read well is the basis of success in school and in later life (Kamhi & Catts 1989: 6). The foundation is laid during successful teaching of initial reading and is continued by means of follow up teaching throughout future years, as the demands on one's reading ability increase. If however, a child is unable to read, he/she is seriously handicapped in school and later in life.

Modern society demands from the individual various reading tasks to be performed daily in order to function with ease and adequacy (Du Plessis & Bouwer 1990: vii). Criscuolo (1988: 13) declares that:

> "Many activities we perform in our daily lives, such as looking up addresses in the telephone book, following the directions in a recipe, filling out a job application, and a whole host of other activities require the ability to read and to write. Yet the competency to perform such routine tasks has eluded far too many people."

Most pupils learn to read and write as easily and naturally as they have learned to talk, in a manner appropriate to their requirements. They come to know that reading is personally valuable to them and once they internalise it as a value, teaching has been successful.

Seeing that reading is crucial to the development necessary for the survival in modern society, it is essential for primary school pupils to learn how to read and write, so as to utilise their own inner ability to the maximum. One of the most significant roles of the primary school is therefore, to teach the children to read.

Teachers know more about teaching and the recognition of problems in learning today than in the past (Du Toit 1989: 32). Their training is more comprehensive and better teaching methods have been introduced. This applies to reading as well, because "... reading has received more attention than any other aspect of education in the ... literate societies" (Kamhi & Catts 1989: xi).

Reading instruction has become a challenge to teachers. Their teaching ability is frequently judged by their teaching of reading. New reading approaches which could possibly contribute to effective reading instruction are continually being sought (Du Plessis & Bouwer 1990: 1). Firstly, the teacher should understand the reading process and become acquainted with the history of teaching methodology. This enables him/her to avoid repetition of teaching fads and to discover some sound and universal practices which may serve most of the pupil's needs. There is much controversy regarding which methods are best, as one method may be successful with some pupils, but will not be successful with others. The teacher can only choose a suitable method once he/she has discovered the pupil's weaknesses (Hughes 1975: 13).

Reading problems not only jeopardise a pupil's language but also adversely affect most of his/her other subjects, consequently the pupil underachieves. At school, the progressive and self-discovery methods being used in those subjects place great emphasis on the pupil's ability to read, for example, a pupil is required to complete assignment cards or to record observations which he/she cannot do owing to a reading problem. This becomes a vicious circle feeding itself because the pupil becomes a habitual passive participant and loses interest in learning and reading. Underachievement becomes chronic and the teacher becomes disappointed and disinterested in the pupil and his/her work.

During the first three years at school pupils' approach to reading changes rapidly. By the age of seven they have become more flexible but the poor reader persists in using one strategy for spelling and another for reading (Bryant & Bradley 1990: 95). Yet others never learn to read. Over the years, reading attainments have improved, but there are still too many pupils with reading problems. According to Guszak (1985: 2) "some of these people have a degree of success, but even that is usually far short of what they might have achieved with greater reading skill". It is therefore the teacher who needs advice on the teaching of reading and it is important that the necessary requirements are met.

Reading instruction is a special task. Du Plessis and Bouwer (1990: 1) are of the opinion that it is essential that educators continue seeking new reading approaches and improved methods which could possibly contribute to more effective reading instruction. These educators need remedial reading programmes and guidelines to enable them to assist pupils with reading problems. This study was conducted to fulfil this need.

1.2 MOTIVATION FOR THE STUDY

In 1983 - 1984, research on the nature and extent of aid and quidelines for the senior primary phase in South Africa was conducted by the Human Sciences Research Council (HSRC). A total of 67 281 pupils from various education departments were involved in the research project. A greater percentage of pupils with learning disabilities and reading problems was found to be in the senior primary phase than in the junior primary phase (Van Zyl 1990: 1).

Further to the above, the nature of this author's profession (Educational Advisor: Teaching Matters) made it possible to observe that many pupils in South African schools have inadequate reading attainments. These inadequacies were measured by means of the standardised reading tests prescribed by the Transvaal Education Department, namely, the TED one minute reading test; Neale's analysis prose reading, and the University of Cape Town's graded reading test. Van Niekerk and van Zyl (1984: 17-19) also mention that aid to the pupil in the senior primary phase is qualitatively poorer than in Grade one and two. Thorough observation and exchange of views with educators, established that prevention of reading problems in the senior primary school phase demanded more flexible teaching methods for Standard one and two pupils as well as focus on curriculum content.

More opportunities were necessary for in-service training of senior primary teachers with regard to the teaching of remedial reading. Owing to personal circumstances or for other reasons, teachers were sometimes unable to attend the extra remedial courses offered. Therefore, in this thesis, the author endeavours to provide guidelines for remedial reading to be used by teachers of the Standard one and two school phase, to assist pupils with reading problems.

1.3 CLARIFICATION AND DISCUSSION OF TERMS

Before an exposition of the progress of the study can be given, it is necessary to describe some of the terminology relevant to this study.

1.3.1 WHAT IS READING?

A study of various descriptions of reading, revealed that earlier authors defined reading rather more readily than their modern counterparts. It appears that more recent authors are more cautious and less inclined to commit themselves to a circumscribed definition.

However, for the purposes of this research, it was essential to analyse the reading process and to establish the anatomy of reading. This did not imply that the various components would be separated. They were merely distinguished; the aim being to establish which skills a pupil could be required to master in order to read adequately.

The following descriptions are an indication of the elements involved in reading.

Rosner (1979: 131) sees reading as an "... act of reconverting symbols into a language with which the individual is already familiar." For Rosner reading is a "... reconversion process, a restoring of the information back to its original oral form".

Ekwall and Shanker (1989: 3) accept the definition of the National Institute of Education of 1985 (Becoming a Nation of Readers), namely, "Reading is a process of constructing meaning from written texts." The authors continue to explain that reading consists of two main components, namely, decoding (word recognition and word analysis) and comprehension.

Dauzat and Dauzat (1981: 6) say: "Reading ... is a process that involves mental activity embedded in other communication abilities and converts graphic stimuli (letters) into meaning." Decoding and comprehension are also implicit in this definition.

Rude and Oehlkers (1984) do not describe the term reading explicitly but the chapter division of the work (pp. 63-191) gives prominence to diagnosis and aid

with regard to word identification and reading comprehension. Other aspects considered are motivation and individualisation, which are aimed at the pupil's participation rather than the reading act.

Kamhi and Catts (1989: 4) accentuate the two basic components of reading, namely, word recognition and reading comprehension. They regard definitions explaining reading as a "... decoding ability (which) is the skill of transforming printed words into spoken words" as too narrow and add "... reading is thinking guided by print" as a broader definition. In conclusion the authors (1989: 5) see the definition emphasising the decoding act as applicable to younger pupils still in the process of learning to read, and the broader definition as applicable to older pupils and adults who read for the purpose of understanding the content locked up in the text.

Richek, List and Lerner (1983: 7) believe that for beginner readers, word recognition and direct reading comprehension (literal comprehension) is important, while for the older pupils, underlying or indirect reading comprehension is of more consequence.

Searfoss and Readence's (1989: 4) definition which they extract from Glazer and Searfoss, emphasises comprehension and the meaning which the reader extracts from the text while reading.

Upon consideration of all these definitions and descriptions it becomes clear that the act of reading consists of two main components namely, word recognition (which includes decoding and word analysis) and reading comprehension, which is divided into different comprehension levels (direct and indirect reading comprehension). These aspects are discussed in greater detail in Chapter two.

Word identification includes sightwords, decoding and recoding. Pupils learn a number of sightwords before attempting word analysis. They get to know these words as visual pattern units before they understand all the print-to-sound relationships. In the earlier stages of reading, it is easier to recognise words by sight. However, the words must be meaningful and within the pupil's everyday conversation. The pupil sees a word as a whole pattern which he/she memorises because of certain details in the word, and subsequently associates it with meaning (Hughes 1975: 13).

For Samuels (1988: 756) the meaning of the term decoding is the pupil's knowledge of print-to-sound. Pupils do not necessarily decode each printed letter or letter clusters separately into sound, but also decode whole words which they identify by sight into sound.

McMurray (l985: 18) also refers to word recognition as a technique for recoding. He sees recoding as the pronouncing of the whole word after the reader has phonetically analysed the word into its different letter sounds and letter clusters. Recoding is usually used to read new or unknown words which the pupil is unable to recognise as whole words. However reading does not end with word identification but has a comprehension component which should take place simultaneously.

Furniss (1985: 62) states that "comprehension is an active, composing process which, if it is to be effective, must be in control of the reader-writer". Guszak (1985: 101) maintains that comprehension is personal meaning given to text. It is the product of what the reader brings to text and what the writer brings to it. According to Brown (1982: 9), it is important that one "... understands what the writer writes in order to be an effective reader." Inadequate comprehension may be due to the fact that one does not understand the vocabulary and concepts.

Du Plessis and Bouwer (1990: 28) conclude that the word-recognition and comprehension components are inseparable and that both should be mastered before one can refer to reading. In the case where a pupil encounters any problems with one of the components or an aspect of a component, he/she will inevitably experience reading problems.

There are various skills underlying the components which are discussed and examined in more detail in Chapter two of this study. Pupils who are unable to master the reading skills can be classified into different groups, although the criteria for these groups may overlap.

1.3.2 READING PROBLEMS AND THE CLASSIFICATION OF SCHOLASTICALLY IMPAIRED PUPILS

It is necessary firstly to look into the meaning of the common term, *dyslexia*. A number of learning disabilities are regarded as indicators "... of

neurophysiological problems and thought by some to be common or even causative of dyslexia" (Manzo & Manzo 1993: 425). Gillet and Temple (1990: 475) refer to dyslexia as "... a medical term for a profound inability to read or to learn to read". This term is widely used but there is no consensus regarding symptoms, diagnosis or method of remediation, which causes great confusion amongst those who use it. There is no clear definition of dyslexia but most definitions agree that it is a learning disability which causes reading problems. Caution should be exercised however, not to use the term dyslexia in order to describe a reading problem (Gillet & Temple 1990: 475-477).

Guszak (1985: 6) states that this term is so generally used to describe a reading problem that it perhaps obscures other reading problems, because not all pupils who cannot read have a neurological dysfunction. Their problem may be developmental and could therefore be solved by means of appropriate reading experiences. Although the term dyslexia was used in the 1940's to describe a problem of neurological origin which caused reading problems, it was later substituted by the term *minimal brain dysfunction* (MBD) because many of these pupil's problems are not limited to reading only. With regard to the Murray Report of 1969, the term "minimal brain dysfunction" was generally accepted in South Africa. This report of 1969 formed the basis of the education policy regarding learning disabilities in South Africa. The HSRC (1981: 142-143) largely agrees with the definition of MBD adopted in the MBD report of Murray (1969: iv), but describes a pupil suffering from this disability, as the *scholastically handicapped pupil.* This term is applied to any pupil who is not reaching his/her achievement potential.

The Interdepartmental Advisory Committee regarding Handicapped Pupils (1980: 17), gives preference to *specific learning disabilities* as a substitute for the term MBD, as the brain dysfunction is not always indicative.

According to Gerber (1985: 7) all learning disabilities are specific by nature and therefore it is not necessary to refer to specific learning disabilities but to *learning disabilities.* Although learning disability still is a controversial description among writers, researchers and education departments (in this country), it is at this stage the most widely accepted term for the problem.

The American National Joint Committee for Learning Disabilities proposed the following definition of learning disabilities (Hammill, Leigh and Larsen 1981: 339-340):

> "Learning disabilities is a generic 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 presumed to be due to central nervous system dysfunction. Even though a learning disability may occur concomitantly with other handicapping conditions (e.g. sensory impairment, mental retardation, social and emotional disturbances) or environmental influences (e.g. cultural differences, insufficient/inappropriate instruction, psychogenetic factors) it is not the direct result of these conditions or influences."

This definition is criticised by McLouchlin and Netrick (1983: 22) because it does not allow for the difference between the learning disabled's actual potential and his/her level of functioning. Too much emphasis is placed on shortcomings and too little on abilities.

According to Derbyshire (1989: 451-452), internationally, the term refers to a particular group of pupils who

1. have shortcomings in the development of listening, speaking, reading, writing, comprehension and mathematical abilities;

2. show a discrepancy between given potential and actual functioning level, the deficiencies being intrinsic and related to deficiencies in the functioning of the central nervous system, and

3. may experience learning disabilities in conjunction with other disabilities, such as blindness, and deficiencies resulting from environmental factors. These deficiencies are however, never the direct cause of learning disabilities.

The common denominator derived from the above information is that learning disabilities result from deficiencies in the central nervous system which consequently influence the ability to learn to read.

Learning disabled pupils can be classified in different categories. The report of the HSRC (1981: 31) offers the following classification which has been accepted in South Africa:

> "Learning disabled pupils are divided into three groups, A, B, and C. Group A pupils are assisted within the classroom situation; Group B pupils are accommodated and helped in separate schools or classes, thus outside the mainstream classroom situation but within the provincial education department (s); Group C pupils are referred to the Department of National Education for Specialised Assistance where they are accommodated for the rest of their school career."

The three groups are mainly identified by orthopedagogues or orthodidacticians, as they have more refined evaluation media at their disposal enabling them to identify the problem with greater accuracy (scientifically designed media). This study addresses Group A and B pupils, especially those in Group A, as their problems are less likely to be identified and they remain in the mainstream. It is important to note that normal pupils with learning problems reveal the same symptoms and may also be included in this group. Where the problems of learning disabled pupils are intrinsic or due to a neurological dysfunction, the learning problems of these pupils are mostly of external origin, such as, emotional, didactical and environmental factors.

1.3.3 MAINSTREAM EDUCATION

"Every child has the right to receive education, irrespective of his sex, race, aptitude, interests or abilities" (HSRC 1981: 1). Normal or mainstream education, special education and other educational forms of a specialised nature are important facets of the same differentiated educational system. Provision is made for all these forms of education within a broad educational structure in a pedagogically justifiable manner. It is important to understand what mainstream education is, seeing that all other forms of education branch out from there. Most pupils start off in mainstream education. Pupils who do not enter mainstream education are those who have been identified, pre-school, as not educable or who are, on the grounds of the seriousness of their handicap, not able to start off in the mainstream. There are also those pupils whose aggravating circumstances are so manifested in scholastic restraints that they are unable to be accommodated in the mainstream education (HSRC 1981: 3-6).

The same author (1981: 67) gives the following description of mainstream education:
Due to the uniqueness of every pupil and underlying differences, there is no perfect or utopian situation in the mainstream. For some pupils the curriculum contents are too easy and for others again, too difficult. The latter group falls behind and consequently requires special attention from the teacher. This applies to scholastically impaired pupils or to pupils with other characteristics which complicate their daily learning and thereby qualify them as pupils with *particular educational needs*. These pupils have to be provided with special educational services to satisfy their particular educational needs to their best advantage. According to the HSRC (1981: 2) the aims for pupils with particular educational needs are identical to those for normal pupils, that is, to realise their potential; to improve their standard of living, and to assist them to become independent adults making a contribution towards the economic growth of the country.

The scholastically impaired pupil (for this study: the learning disabled in group A) is considered an underachiever if, in subjects like reading, writing and mathematics, his/her scholastic achievement is not in accordance with his/her abilities. This may also have some relation to problems in the educational situation which can be rectified in the normal class (HSRC 1981: 4). To accommodate these pupils, the teacher should re-evaluate and change his/her teaching strategies and methods, for example, by differentiation.

Differentiated education in the mainstream also implies equality of all pupils with recognition of their individual differences. Every pupil should receive education according to his/her unique educational, physical, emotional and spiritual needs and potential (HSRC 1981: 4-5). The Group A pupils in the mainstream are also entitled to the type of teaching that will take their particular needs and problems into consideration. If pupils do not benefit by such education they require the attention of the orthopedagogue and more specialised remediation.

1.3.4 ORTHOPEDAGOGICS, ORTHODIDACTICS AND REMEDIATION

1.3.4.1 Orthopedagogics

Orthopedagogics is an integrated part of pedagogics and thus studies the same

educational phenomena and evaluates according to the same pedagogical criteria. The main difference is that orthopedagogics searches for ways to eliminate causes which impede the pupil's education. According to Du Toit (1989: 13), "orthopedagogics is that subdiscipline of pedagogics which studies problems concerning the education and instruction of children and the correction of such problems".

Refined criteria provided by other part-disciplines are also considered, as they are employed in the evaluation of pupils' problems. They also serve as guidelines when the orthopedagogue in his planning helps the pupil in a fundamentally, didactically, psychopedagogically accountable educational situation. Orthopedagogics is concerned with pupils with problems. This means there may also be physical, medical, social, psychological and legal implications (Du Toit 1989: 11-17).

1.3.4.2 Orthodidactics

Orthodidactics, like orthopedagogics is also concerned with pupils with problems but these problems manifest mainly in a disharmonious teaching situation. Orthodidactics function in didactical situations such as teaching and learning and become involved when aid is given to a pupil with a learning problem. The problem may be identified in any one of the components of the teaching situation namely the pupil, the educator or the content to be mastered (Du Toit 1989: 15).

According to Den Dulk & Van Goor (1974: 27) upbringing and teaching, orthopedagogics and orthodidactics cannot be divorced. Du Toit (1989: 15) also believes that they are interrelated and that the one implies the other; orthopedagogical aid will contain orthodidactical aspects and vice versa.

Möller (1983: 103-104) suggests that orthodidactical teaching is necessary when the pupil displays a continual inability to achieve scholastically according to his/her ability. He describes orthodidactical assistance as the aid which a pupil who has not benefitted by regular teaching (thus unsuccessful teaching), receives; a teaching act subsequently contributing to his/her upbringing. In addition, he states that teaching will not be successful unless it keeps up with normal didactical acts. When the orthodidactician works with the problem situation, he/she firstly establishes where the pupil has failed in the normal teaching situation. Aid must be in accordance with the components and

categories of normal teaching. However, Du Toit (1982: 37-59) identifies a difference between the orthodidactical methods and conventional teaching methods. During the orthodidactical involvement, the lesson design must be specific and directed towards the way the pupil learns and the educator has to concentrate on the correction or improvement of the problem by means of structured didactical procedures. These can take place in the following forms:

- compensatory education
- corrective teaching
- re-teaching
- remedial education
- pedotherapy

1.3.4.3 Compensatory education

Compensatory education specifically refers to educational efforts to alleviate developmental backlog as a result of socio-economic deprivation (HSRC 1981: 6 & 182). Pretorius (1987: 147) declares that it may be applied to informal teaching, for example, literacy and non-formal teaching such as television programs. Compensatory education can also be connected to remedial education which aims to develop stronger abilities in the pupil in order to enable him/her to compensate for his/her deficiencies (Du Toit 1989: 62).

Compensatory education is more inclusive and less specific than other forms of orthodidactical assistance. Aid is not aimed at a specific problem, for example, reading. It rather aims at providing knowledge and learning experiences to this particular group of pupils, enabling them to benefit more from regular teaching. "Instruction that is good for one pupil is good for another" and procedures used for disadvantaged pupils should also be included (Bereiter, in Du Toit 1981: 61). Early implementation of compensatory intervention while viewing the pupil in totality and concentrating on his positive abilities, would be the most effective.

Group A pupils may also benefit by the educational procedures of compensatory education, because many of them are also environmentally deprived.

1.3.4.4 Corrective teaching

If a pupil who is an underachiever, makes mistakes, or has weaknesses inspecific areas, such as poor language development which occurred due to external causes (for example, erroneous teaching) and he/she does not have a psychological or mental disability, then he/she would probably benefit by corrective teaching.

Mercer (1983: 145-146) divides the pupils who may benefit from corrective teaching into different groups. The one group consists of pupils with mild learning disabilities (those involved in this study). They should remain in the regular classes but receive additional help including special materials, equipment, teaching methods, intenerate services and a resource room with a specially trained teacher as well as a diagnostic perspective teaching centre.

The teacher points out the pupil's mistakes, which are not causes but rather symptoms of learning difficulties. He/she explains the correct course of action and allows adequate practice, subsequently reinforcing the correct action. Corrective teaching concentrates mainly on symptoms in pupils. The pupil's pattern of thoughts and actions are changed or corrected instead of only supplying and reinforcing the correct answer (TED Manual for Remedial Education 1991: 10-11).

To prevent the Group A pupil from falling behind later, corrective teaching should be done timeously. If the pupil does not benefit by effective corrective teaching, then re-teaching should be considered (TED Manual for Remedial Education 1991: 10-11).

1.3.4.5 Re-teaching

According to Ferreira (1983: 138), re-teaching is:

> "Heronderwys (waar daar 'n leesprobleem is) is 'n poging tot uitwissing van leer- en leesuitkoms tekorte, dit wil sê die opheffing van leesfoute en die vernouing of uitskakeling van 'n agterstand in die leespeil."

When the pupil's problem is of such a nature that it warrants personal attention over a longer time than the time allowed in the class situation, the pupil needs re-teaching after school hours (TED Manual for Remedial Education 1991: 12).

According to Pretorius (Du Toit 1989: 139) re-teaching includes pupils who have fewer opportunities, where their social and/or economical and/or cultural environment prevents them from optimally actualising their potential. It also includes pupils who have had inadequate teaching due to frequent absence from school for various reasons (illness, poor housing and parents who move home often, resulting in the teaching process being interrupted).

Re-teaching makes use of set guidelines for effective teaching methods. It re-evaluates the teaching situation in order to identify the reasons for unsuccessful teaching and to rectify the problems by adopting other teaching methods, selecting new content and avoiding repetition of the previous teaching mistakes. These efforts should be applicable to Group A pupils, because all avenues should be explored before removing them from mainstream education. Pupils who do not progress after being re-taught, are thus in need of remedial education (TED Manual for Remedial Education 1991: 12).

1.3.4.6 Remedial education

The definition provided by the HSRC (1981: 6) is as follows:

> "Remedial education is specialized, corrective assistance provided by education departments for pupils who are scholastically impaired and/or with specific handicaps."

Gardner (1986: 101) says that pupils in need of remediation have problems which are different both in nature and intensity.

In order to prevent pupils from becoming at risk, it is logical to prescribe early prevention and intervention programmes in the primary school, where they begin to be "at risk" or become "at risk" to drop out of high school (Friedel & Boers 1989: 37). Pupils who have not benefitted by the above measures, are in need of remedial education and should respond to it. Remedial education includes efforts varying from mild to prolonged, with disabled pupils, those who are seriously learning disabled and those with other problems such as socio-economical deprivation, serious illness and/or behavioural problems. Learning disabled pupils do not generally have social, sickness or behavioural problems, but for this study all these factors will be taken into account.

Remedial action follows the same pattern as for normal teaching because learning, which includes learning to read, is the same for all pupils. Remedial education differs from normal teaching in that the emphasis is firstly on the background and underlying causes of the failing pupil when planning a programme (Gardner 1986: 101). A remedial programme should be specific, realistic and attainable. It concentrates on one or two areas at a time instead of too many, as this is more likely to ensure success and increase the confidence of the pupil.

Ekwall & Shanker (1988: 353, 356) discuss the necessity of teachers of remedial reading knowing which programmes have been unsuccessful for their pupils in the past in order "... to avoid unfruitful duplication of efforts". Some procedures are highly successful while others have failed.

The success of procedures also depends on the individual differences between pupils. Standardised reading comprehension tests used in remedial education provide useful data to ascertain the extent to which individual pupils differ from one another in their learning and reading abilities (Friedel & Boers 1989: 38).

These data concerning pupils also determine the procedures to be followed. The following remedial procedure is an example of those used in the case of reading remediation for a specific pupil (Brill 1985: 145):

- gathering of diagnostic information concerning the pupil;
- determining the weaknesses and strengths of the pupil;
- setting of objectives for a reading programme;
- choosing of methods and materials to be used in reading;
- implementation of the reading programme, and
- evaluation of the success of the programme used for remedial reading.

The success of remedial programmes can be judged by the number of pupils who return to, and remain in the mainstream of education. A problem of remedial education is that teachers teach to the pupils' present levels of academic functioning rather than to the levels which they will need to achieve for future success. Therefore the teacher should increase the pace at which pupils in remedial education move through the curriculum in order to prevent them from falling further behind their peers (Anderson & Pellicer 1990: 11-14).

Many Group A pupils are referred to remedial education because mainstream education teachers do not have the time or knowledge to help these pupils overcome their problems in a specific and individualised way.

1.3.4.7 Pedotherapy

Pedotherapy is the aid offered by an orthopedagogue to pupils with affective and/or behavioural problems. These problems can be due to educators who make educational mistakes such as over-strictness or a lack of discipline, or may be caused by parents who evade their educational responsibility (Pretorius 1972: 117).

The aim of pedotherapy is to alleviate these problems and to guide the pupil towards discovering the meaning of life (Du Toit 1989: 72). The pedotherapist's intention is to support and guide the pupil in order to confront his/her unassimilated experiences, by means of directive or non-directive play therapy, picture drawings or conversational therapy. It tries to help the pupil to rediscover meaning in a planned and deliberate manner. He/she learns to attach new meanings to those situations/events which cause anxiety, conflict and distress, in this case, the reading situation.

It is important that not only the pupil, but also others such as the parents and family members become involved (Du Toit 1989: 72-73). Although pedotherapy is only practised by registered therapists, it can be initiated in the classroom. The teacher can create a safe environment with a relaxed atmosphere by using relaxation and play activities and alternative teaching methods or programmes. These activities may help the pupil to overcome his/her learning and reading problems which in turn, may alleviate anxiety, conflict and distress. The relaxed feelings resulting from his/her improvement in reading may heighten his/her success level further.

1.3.5 READING PROGRAMMES

Reading programmes may serve as the basis for a pupil's reading instruction. Different programmes allow for different types of pupils in the mainstream; pupils who are average, less able, learning disabled, or gifted and creative. Some programmes may also be of benefit in special education. Therefore a reading

programme should be viewed in terms of all the places where reading can be taught. It can also be used in other subjects such as mathematics and science (Cooper & Worden 1983: 5-14). These authors state that an actual reading programme is a plan of what is to be done in teaching pupils to read. According to them four components should be taken into account when implementing a programme: objectives, characteristics of pupils, instructional procedures and resources.

1.3.5.1 Objectives

There are two types of objectives, namely,

- *statement*; what the pupil must learn generally in reading, and
- *scope and the reading skills*; that which the teacher should be aware of to determine what the pupil should be able to master. These aspects also include knowledge of the pupil's background, his/her language development and other factors, such as, the influence of the skills having to be taught.

1.3.5.2 Characteristics of pupils

Diagnostic aspects which evaluate the

- characteristics of pupils, for example, their background, interests, attitudes, stage of language development, general style of learning, and
- their reading ability and needs.

1.3.5.3 Instructional procedures

An instructional procedure for systematic and effective reading includes

- organisation of the intended instruction;
- management of the programme, and
- teaching methods.

1.3.5.4 Resources

Resources are the selected materials (teaching-learning aids) to be used in accomplishing the objectives (books, games, films and the like).

Reading programmes come in two categories; *remedial reading programmes*, and *developmental reading programmes*. The main difference between remedial reading programmes and developmental reading programmes is the very heavy emphasis in the former on a thorough diagnosis of the pupil's reading problems, while the focus of the latter programme is on the sequential development of reading skills (Milligan 1981: 24-25).

The ultimate goal of remedial programmes is to bring academically deficient pupils back into the academic mainstream and these programmes should be seen as an "... integral part of the total school program and as an important component in the school's educational mission." (Anderson & Pellicer 1990: 14-15).

As this research involved mainly Group A pupils with reading problems in the mainstream, orthodidactical aid was in the form of remedial reading programmes. Although the emphasis was on remediation, aspects of the developmental programme were also integrated.

Reading programmes should firstly comply with the reading instruction criteria identified in a teaching model and secondly with the reading criteria identified in a scientifically based reading model. The model should equip the teacher with guidelines for diagnosis, exercises for word recognition and comprehension, integration of both of these, and for reading evaluation.

1.4 STATEMENT OF THE PROBLEM

"The ability to read is vital to every child: the ability to teach reading is vital to every teacher" (Winch 1985: Preface). Mann & Brady (1988: 811) find that learning to read poses a problem for 4 - 10% of pupils in normal elementary school classrooms. It hampers their educational progress and has long-term effects on their self-esteem, social status and occupational choice.

Each year there are pupils in the first-grade who experience substantial difficulty in learning to read and if they do not read well by the end of the first grade, they often battle academically throughout school, perform poorly in achievement tests, develop a dislike for school and suffer a poor self-esteem. These negative

effects associated with low reading achievement are a source of frustration to teachers, parents and pupils alike.

Allington & Broikou (1988: 806) have concluded that pupils who fail in the regular classroom are most frequently served in either remedial reading or special education programmes producing a fragmentation of the literacy curriculum. The pupil at risk thus experiences two different curricula, namely the curriculum used daily in the classroom situation and that which is used in remediation outside the classroom context. This pupil has less instructional time to master either, compared with the achieving pupil. Therefore the additional aid in reading is often unsuccessful.

On the grounds of reports in popular magazines, radio and television talks and enquiries at educational clinics, it is apparent that there is an increasing public concern about pupils who are not reading adequately. Pupils who experience reading failure should be given access to larger amounts of higher quality reading instruction; the quality of instruction being of central concern. Schools should be devoting more time and attention to this problem. These pupils have much to gain from preventative plans and organised developmental, remedial and supplemental prescriptive-teaching programmes.

The amount of research done, as well as the programmes being developed, is good reason to believe that pupils with severe reading disorders can be educated much more effectively than they have been in the past. In order to do so, it is necessary to possess the will and determination to implement new programmes in the schools. Teachers should guard against inducing a low self image in their pupils. An eleven-year-old girl explained the reasons why she was not able to read as follows: "One (reason) is being stupid, and the other is being lazy." This is an example of a teacher induced assessment which the pupil has come to believe.

Due to personal experience of the author in the teaching situation and modern demands made on individuals to read effectively and on the teacher to teach reading effectively, the need for suitable remedial reading programmes and guidelines for teachers is clear.

In order to produce guidelines for the compilation of a remedial reading programme for specific pupils in Standard one and two, and by way of promise for the research, this study set out to address the following questions and to make it conducive to practical tests:

1 (a) Is it possible to compile exercises and guidelines for a remedial reading programme suitable for pupils with reading problems in the mainstream of education?

(b) Which guidelines and exercises should be included in the programme to enable a teacher to offer all the reading facets of the programme to the pupil?

(c) How should the guidelines for particular programmes be compiled so as to provide exercises for word recognition and comprehension?

2 (a) In which way can the different factors posed in existing reading and teaching models be integrated so as to include a maximum of reading and teaching criteria?

(b) How should the subcategories of the two main components, namely, word recognition and comprehension be accommodated in the programme in order to ensure optimal reading aid?

3 (a) How could such a programme accommodate the variety of each pupil's uniqueness, for example,

- interest, and
- problems causing inadequate reading behaviour?

4. Is it possible to build a diagnostic component into the programme to enable the teacher to establish the reading areas as well as the underlying factors causing reading problems for the pupil?

1.5 AIM OF THE STUDY

1.5.1 GENERAL AIM

The general aim of this research was to create a programme to facilitate the reading ability of, primarily, Group A pupils in Standard one and two. It would however be possible to accommodate some Group B and C pupils as well as learning restrained pupils. Teachers teaching in mainstream, aid-classes and remedial schools would also be able to utilise the programme in order to aid these pupils.

1.5.2 SPECIFIC AIMS

The specific aims were as follows:

- to study different reading models and to glean the most relevant and valuable components which these models offered;
- to describe the reading phenomenon and the underlying skills needed by Group A pupils in Standard one and two in the mainstream;
- to compile a desireable and improved remedial reading model by which a remedial reading programme could be developed for Group A pupils in Standard one and two, who have reading problems, and
- to provide guidelines to teachers to aid them in the implementation of the programme.

1.6 NATURE OF THE STUDY

The study took the form of a literature survey. By means of interviews with teachers and observations of pupils' reading performance in reading tests and in general, it was established that an increasing number of pupils experienced reading problems. Literature verified these conclusions. By means of literature, information regarding the nature of reading, it's components, contributing factors of reading problems as well as the approaches and the methods used to teach reading were collected. In addition various suggestions for remediation of reading problems were consulted in various literary works on the subject. On the basis of this information and the author's personal teaching and orthodidactic experience, exercises were compiled and guidelines developed for the compilation of a remedial reading programme. Case studies were used to elucidate methods of compiling a remedial programme for specific pupils.

1.7 COMPOSITION OF THE THESIS

The first chapter of this study serves as an introduction to the study and it deals with various terms and the statement of the problem.

In Chapter 2 a reading model is selected which presents the two main components of reading, namely, word recognition and comprehension and their subcategories. In addition, factors influencing the acquisition of reading are

discussed because it is imperative that the teacher should understand reading and what influences the pupils' reading acquisition, in order to plan remedial intervention. Reading approaches were also studied and are discussed in this report to add insight into the way to teach reading, namely, by means of a top-down, bottom-up or interactive approach.

In the third chapter a teaching model describing the teaching aim, basic didactical principles, content arrangement principles, methodological principles and teaching methods is set out. This model is meant to serve the teacher with insight into the teaching-learning situation ultimately leading to the effective teaching of reading.

In Chapter 4, an integration of the reading model, teaching model, reading approaches and the factors leading to reading failure is made. With this integrated approach, guidelines for the compilation of a remedial reading programme are developed for the teacher to use when remediating a pupil with reading problems. This information is explained by means of two case studies. The pupils are observed and an error analysis is made of their reading performances. This information is indicated on a control chart. On the grounds of this information, guidelines for the selection of reading exercises for each specific pupil are provided. The aim is to give the reader an indication of how the information can be implemented in practice.

In Chapter 5 the findings are presented, and conclusions and recommendations are made.

CHAPTER 2

READING MODELS

2.1 INTRODUCTION

Chapter 1 establishes the components of reading, by means of various definitions and explanations. Researchers in reading confirm that reading consists of two main components, namely, *word recognition* and *comprehension* (Par.1.3.1). In order to assist a pupil to master these two components it is important to understand the components and the skills enabling a pupil to read. There is general consensus that the ability to recognise words depends on the decoding and recoding of words as well as on the identification of words by sight. To understand the content of a text, direct and indirect comprehension is essential. Underlying these abilities, prerequisite skills are necessary for embarking on the reading act. Reading models are consulted for this purpose and to explain the reading process. It is also necessary to look into reading approaches to subsequently illustrate how the aspects discussed in the models can be presented to the pupil.

A reading model, according to Pumfrey (1991: 82) is comprehensive if it explains how reading develops and what it consists of. Models are also used to clarify the reading phenomenon, but there are as many models as there are books.

Although some researchers of reading refer to either *approaches, theories or models* in order to illustrate what reading is all about, the term model is preferred for this study.

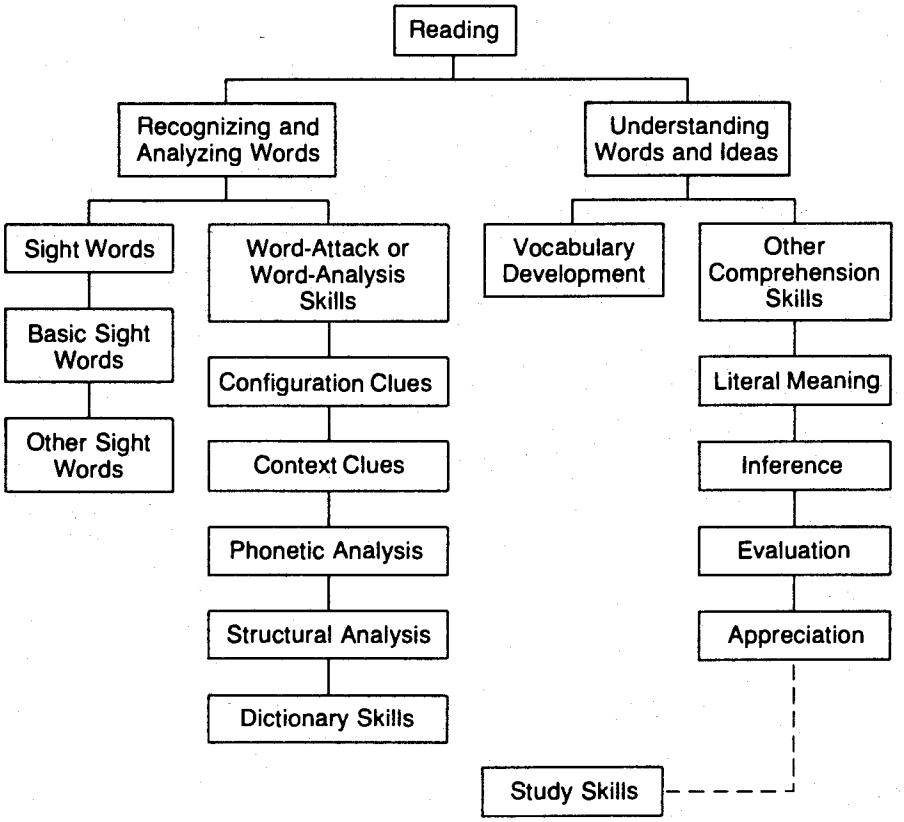
2.2 SELECTION OF A READING MODEL: THE READING FRAMEWORK OF EKWALL AND SHANKER (1988)

The model of Ekwall and Shanker (1988: 72-78) gives a comprehensive scope of reading components and the subcategories. Supplemented by information from other authors, it was selected as the point of departure for this research to

determine the different subskills necessary to attain the reading components, namely, word-recognition and comprehension.

Figure 2.1 below, of Ekwall and Shanker, (1988: 78) offers a schematic framework illustrating the scope of reading skills.

Figure 2.1 Scope of the Reading Skills (Ekwall & Shanker 1988: 78).



Reading, as already mentioned in Par. 1.3.1, consists of two basic components, namely, word recognition and understanding (comprehension; the understanding of words and ideas).

2.2.1 RECOGNISING AND ANALYSING WORDS

Ekwall and Shanker (1988: 74) subcatogorise word recognition and analysis into sight words and word attack skills.

2.2.1.1 Sight words

Anderson (1984: 209) describes sight vocabulary as "... words that a reader automatically pronounces and recognizes at sight", while Zintz and Maggart (1986: 487) refer to sight words as, those words which are "... memorized and recognized as a unit." For the purposes of this study sight words are those which the pupil can recognise immediately. Acquisition of such sight words depends on frequent reading opportunities, the level of difficulty of the reading material, or the pupil's learning potential. Ekwall and Shanker (1988: 74) call these words *sight vocabulary* but make a clear distinction between sight vocabulary and vocabulary, sight vocabulary being equivalent to sight words, and vocabulary on its own, referring to the words a pupil understands.

The latter authors further subdivide sight words into *basic sight words* and *other sight words*.

(1) Basic sight words

Basic sight words are high frequency words which appear in the whole language system, for example and, is, the. They do not require word attack skills as they are seen so frequently that the pupil easily recognises them on sight. Anderson (1984: 209) also describes these high frequency words as "... function or structure words that hold sentences together." They include prepositions, such as, in, under; conjunctions, such as, and, but; pronouns, such as, he, I; adverbs, such as, when, then; auxillary verbs, such as, are, were, and adjectives, such as, big, large and others.

(2) Other sight words

Other sight words are also recognised immediately and may require word attack skills initially. These words are those the pupil has in his/her own collection of words. Such words depend on the frequency of the words read by a pupil on a specific topic of interest to him/her. They are not high frequency words for others. They consequently become sight words and word attack skills are no longer required.

2.2.1.2 Word-attack or word-analysis skills

Decoding is an important word attack skill because it enables the pupil to recognise written words. Searfoss and Readence (1989: 175-176) divide the decoding act into:

- The *initial decoding act* which initiates an awareness of the detail in words and is closely related to sight words. It serves as a bridge to the permanent decoding act. It includes the use of picture clues and function words which hold sentences together for example and. The initial decoding act includes the *prompting act* where the teacher says the word the pupil cannot read. The *listening act* takes place when he/she hears others read, while he/she follows the words in the text. Some of the words are irregular and cannot be sounded out, for example, are. Such words have to be learned as sight words.
- The *permanent decoding act* comes into play as words become more difficult and are not recognised immediately. A combination of permanent word attack skills are then learnt. According to Ekwall and Shanker (1988: 75) these word attack skills include configuration clues, context clues, phonics, structural analysis and dictionary usage.

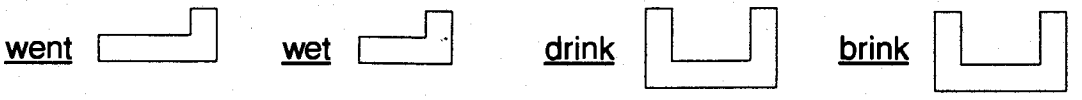
(1) Configuration clues

By looking at the shape or configuration of the word, the pupil can get an idea what the word is. Examples are the length of the word, for example, went/wet; capital letter/lower case, for example, ON/on; extender/descenders, for example, h/y and g/d, and double letters, for example, book/gutter. Goodman et al (1987: 204) also accept the configuration clues within the text as the words have shape and directionality, which serve as an indication of what the word may be.

Culyer and Culyer (1987: 466) distinguish between two types of configuration clues, namely:

(a) External clues

External clues are the shapes of the words which give an indication of what the word is. The shape of father  often enables the pupil to pronounce the word, although it can be confusing if a number of words have the same shape for example:



(b) Internal clues

Internal clues are the shapes of letters within the word which are associated with the meaning of a word. The word look can be associated with two eyes, but for a word such as moon one cannot use the same association and this can be confusing. In exceptional cases a pupil with learning problems can make use of these kind of internal clues, but otherwise they should be avoided.

By considering internal and external configuration clues, it would appear that these clues are limited as there are so many words which have more or less the same shape and internal similarities. Therefore configuration clues may be useful in the initial stages of reading, while the vocabulary to be read is limited to only specific and simple words.

(2) Context clues

Context clues enable a pupil to determine words which are difficult to decipher and unknown words from the total sentence construction. By reading the whole sentence, the pupil can make a deduction as to what the word which is difficult to read, is, for example, "A big ... is touching down at the airport." Due to the pupil's background knowledge he/she knows that the word which fits into that sentence is aeroplane. If a pupil with problems is unable to analyse the word he/she will not be able to check whether his/her clue is right or wrong.

Anderson (1984: 214-215), categorised context clues as follows:

(a) Experience clues

A word may fall into the experience field of the pupil and is logical, for example:
"The postman brought a letter from aunt Mary."

(b) Comparison or contrast clues

The pupil may be able to compare the meaning of words in sentences, for example:
"Rabbits have short tails and cats have long tails."

(c) Synonym clues

The word or idea is repeated, for example:
"Nancy laughed as she ran. She looked like a happy girl."

(d) Summary clues
Summary clues are a whole set of conditions which are described in just one word, for example:
"They marched in line just like a parade."
(e) Mood or situation clues
The pupil can make out the word by looking at the mood in which the text is written, for example:
"Now we can't have picnic, look at the rain!"
(f) Definition clues
The word is actually defined, for example:
"A home on a boat is called a houseboat."
(g) Familiar expression clues
An example is:
"She was as proud as a peacock."

Zintz and Maggart (1986: 242) consider the extent of the pupil's background as an important factor in his/her attempt to read. To be able to make use of context clues the pupil has to depend on his/her reservoir of previous experiences. The ability to derive meaning from the context, new words should always be read in "... meaningful context". In Goodman's model (Gollasch 1982: 34) pre-knowledge is also considered to be important because limited knowledge, according to him, is a cause of reading errors.

According to Culyer and Culyer (1987: 469-470) there are advantages when using context clues. Guessing is eliminated because the pupil can focus his/her attention on the printed word as it is being related to meaning. The disadvantages of using context clues are that these may not be effective if not used together with phonics. Many words cannot be recognised in sentences, for example, "He looks at a ...", as there are not enough clues. The pupil then has to rely on the phonics in the word to recognise it. Searfoss and Readence (1989: 183) mention another disadvantage, namely, that the pupil with limited background experience, will not be able to read text which contains too many strange words if he/she cannot use phonics.

(3) Phonetic analysis

Phonetic analysis is the analysis of the written word into its phonetic components. Phonics are the sound-symbol relationships which represent the symbols in words. Phonics have no meaning of their own in language.

Harris and Smith (1980: 23) describe the reading process as relating letters to sounds by means of a decoding operation. In this way the print is transformed into spoken language enabling the pupil to recognise a word and to pronounce it as part of his/her listening vocabulary.

In order to read the pupil should know phonics, including consonants, consonant blends, consonant digraphs, vowels, vowel teams and letter combinations (Ekwall & Shanker 1988: 75). Anderson (1984: 211) distinguishes the following phonic sounds:

- Initial and end consonants b, c, d, f, g, h, j, k, l, m, n, p, r, s, t, v, w
- Consonant blends br, cr, dr, gr, pr, tr, scr, spr, str, thr, bl, cl, fl, gl, pl, sl, spl, sc, sk, sm, sn, sp, st, sw
- Consonant digraphs sh, wh, th, ch, ng
- Silent consonants as in ladder, know, night, wren, often, neck, comb
- Short and long vowels a, e, i, o, u and sometimes y as in why, w as in bow
- Vowel digraphs ee, oa, ai, ea
- Vowel diphthongs ou, ow, oi, oy, ay
- Vowel followed by r: ar, er, ir, or, ur
- Vowel followed by l: al, el, il, ol, ul
- The oo sound as in boot, foot, blood

A fully detailed list of frequently used phonics (Appendix A) which the pupil should know in order to read, is offered by Crawley and Merritt (1991: 76-79).

For Ekwall and Shanker (1988: 75) "phonics also include phonetic generalization, e.g. rules governing vowel sounds" of which most are set out in Appendix B. Goodman (Gollasch 1982: 57) contributes to the theory that all the letters in a word are not equally important, for example, the initial consonant gives a fair indication of what the word may be. The pupil uses vowels only when

other information is inadequate. It is the beginning graphic cue and knowledge of the grammatical system which enables him/her to predict what the word structure is. As the pupil uses the minimum cues, guessing is also involved in reading. These expectations are based on meaning. Therefore Goodman's point of departure concerning phonic analysis is closely related to the reading skill previously discussed, namely, context cues.

Culyer and Culyer (1987: 468) explain phonic analysis as one of the initial techniques taught for word identification. After the initial stage of reading, the pupil still utilises phonics in order to pronounce unknown words by means of letter-sound associations.

The disadvantages of the use of phonics are that words are pronounced but neither the words nor the meaning of the text are necessarily understood by the pupil. Because he/she analyses the word before pronouncing it, the pupil becomes a word-by-word reader thus impeding his/her understanding of the text. Consonants and blends are taught separately and are inclined to distort the sounds and the words when pronounced, concealing the meaning of the word.

(4) Structural analysis

According to Ekwall and Shanker (1988: 75) structural analysis is closely related to phonics but refers to the analysis of larger parts of words (morphemes) (Par. 2.3.3.2), which have meaning and include root words, suffixes, prefixes and word endings. Apostrophe + s (possession), contractions, and compound words can be included here. Structural analysis enables the reader to understand the words because each structure has specific meaning.

Searfoss and Readence (1989: 198) elaborate on structural analysis. Where pupils come across compound words unfamiliar to them, they break up the words into pronounceable parts larger than single letters, by means of their acquired phonic analysis skills. To do this pupils must know the phonics and understand what syllables are and what role they play in word analysis. In their turn Zintz and Maggart (1986: 245) consider knowledge of root words and affixes as imperative to word analysis. This knowledge enables one to understand why word forms, sounds, accent, and spelling change.
Syllables are set out by Zintz and Maggart (1986: 245) as follows:

(a) Syllables

Each syllable contains only one vowel or diphthong. A word can consist of one or more syllables. Syllabification is governed by rules, for example, where there are two consonants between two vowels, the division is between the two consonants - mon/key.

(b) Affixes

Affixes can be divided into prefixes and suffixes and are used to form derived words, for example, pretended, derived from the root word tend. A prefix is the beginning syllable of the word, for example, pretend and the suffix is the end syllable of the word, for example, pretended.

Anderson (1984: 213) mentions the following three forms in which suffixes are used:

- Plural forms
  Examples are, adding -es to box (boxes) or -s to boy (boys)
- Possessive forms
  Addition of the apostrophe s, for example, Bill's coat.
- Inflected forms
  -ly, -ing, -ed, -er and -est are added to root words, for example, largely, larger, largest.

(c) Combining forms

Zintz and Maggart (1986: 245) postulate that combination forms are usually derived from Greek or Latin. Two root words are combined. Both syllables have meaning on their own but the one serves as an affix to the other. If the pupil knows the meaning of these words he is able to understand the word, for example, biology. Bio- means life and -logy means study. Thus the meaning of the combination can be derived as the study of living things.

(d) Compound words

A compound word consists of combined root words for example (rail+road) (Anderson 1984: 214).

(e) Contractions

Contractions are two words which are shortened to make one. "Oral forms that do not appear in print except as individual words" are contracted into one word, for example, cannot (can't). They result from "... major structural changes in words" (Anderson 1984: 213).

(5) Dictionary skills

According to Searfoss and Readence (1989: 183) dictionary skills enable a pupil to unlock words. These skills refer to the ability to alphabetise, locate a particular word, use guide words and interpret spellings (Ekwall & Shanker 1988: 75).

Dictionary skills are necessary in order to find the words, their pronunciation and meanings, as required and applicable to the pupil's needs. However, having to make use of a dictionary is very difficult for most pupils in Standard one or two with reading problems and therefore the author chooses not to elaborate on this aspect. These pupils should, however be encouraged to make their own basic dictionaries as they learn new words, in order to refer back to them whenever necessary.

While teaching a pupil to recognise and to analyse words he/she should also be taught to understand the words and ideas in the text.

2.2.2 **UNDERSTANDING WORDS AND IDEAS** (Comprehension)

According to Ekwall and Shanker (1988: 76-77) the understanding of words and ideas is most often categorised as *vocabulary* and *reading comprehension.* They accept Barrett's categorisation of comprehension, namely, *literal meaning*, *inference*, *evaluation* and *appreciation.* These aspects are related to the semantic dimension of language (Par. 2.3.3.2).

2.2.2.1 Vocabulary

Vocabulary is referred to by Ekwall and Shanker (1988: 74-77) as "meaning vocabulary"; those words which have meaning to one. Vocabulary can be subdivided into *meaning vocabulary* and *utility vocabulary.* The words a pupil understands when he/she hears them, make up his/her meaning vocabulary and

the *utility vocabulary* refers to the words used by the pupil in his/her own communication. *Meaning vocabulary* includes all the words in one's *utility vocabulary* and these enable a pupil to understand concepts (which he/she finds difficult to discuss).

Vocabulary is one of two categories of understanding skills, the other being reading comprehension skills. Hence vocabulary development is considered a subskill of comprehension and is discussed in conjunction with comprehension. As vocabulary is crucial to reading comprehension, it is imperative that both skills be developed together. The pupil should also be taught words representing concepts and strategies to assist him/her to infer meaning on a strange word (Leu & Kinzer 1987: 156). When subcategories of reading, for example, sight words and word analysis are taught, vocabulary should also receive attention. Therefore vocabulary will not be discussed separately in this study but will be integrated in all the subcategories of Ekwall and Shanker's reading model.

2.2.2.2 Other comprehension skills

(1) Literal meaning or literal comprehension

According to Barrett (Ekwall & Shanker 1988: 77) literal meaning is the understanding of "... ideas and information which is explicitly stated" in the text. Harris and Smith (1980: 24) view literal meaning as the perceptual images formed by the senses and as the first step to comprehension. The pupil forms a concept of the word, for example, when reading the word dog he/she knows it is a four-legged creature that barks and comes when called. He/she is now able to classify the word dog as an animal, a pet or a kind of dog.

For Dauzat and Dauzat (1981: 143), the literal level is the simplest. It requires recall of the explicitly stated in the text information. The pupil receives "surface messages" which enable him/her to understand the basic facts, details and ideas in the paragraph. An example provided by Searfoss and Readence (1989: 261-262) is the word horse printed in the text. The pupil can answer the question "What is David riding?" immediately because it is literally stated in the text. They refer to it as "text-explicit". No inference is required to gain the facts.

Zintz and Maggart (1986: 281) explain that although on the literal level the pupil is able to repeat and remember the content of what he has read, it does not necessarily imply that he/she understands what the author means or is trying to say.

(2) Inference

Barrett (Ekwall & Shanker 1988: 77), states that inference occurs when the pupil "uses the ideas and information explicitly stated in the selection, his intuition, and his personal experience as a basis for conjectures and hypotheses."

Zintz and Maggart (1986: 143) base inferential comprehension on literal comprehension, in order to gain meaning which is "... deeper than those at the surface." Inferential comprehension requires a "... higher level of thinking" because the pupil is expected to combine text information with the knowledge he/she has acquired, as all the information is not given. Searfoss and Readence (1985: 262) refer to inference as "text-implicit comprehension" as the pupil must be able to read between the lines.
Burmeister (1983: 302) says that by means of inferences, the pupil changes, extends, continues, reconstructs and recombines the author's ideas. Ideas, are either synthesised by the pupil in the ordinary way or in unusual creative ways. In order to do so the pupil is expected to be flexible, original, fluent and able to elaborate the information in a divergent or convergent way.

(3) Evaluation

Barrett (Ekwall and Shanker 1988: 77) explain that evaluation by the pupil "... deals with judgements and focuses on qualities or correctness, worthwhileness or appropriateness, feasibility, and validity" .

Burmeister (1983: 303) has found that in order to evaluate the text the pupil is required to judge the text by comparing it with external criteria, for example, information supplied by the teacher, and internal criteria, for example, the pupil's experiences. It is therefore of importance that the pupil must have or develop experiences further than the reading task.

Dauzat and Dauzat (1981: 143-144) explain that by means of analysis and synthesis of the content, the text is broken down into parts and new parts are constructed and evaluated.
Literal and inferential meaning, which goes further than the text, are also to be used to evaluate the reading material. By using the information in the text the pupil is expected to think of multiple possibilities which may occur. By evaluating the text the pupil is able to determine how correct, acceptible and valuable the information is and consequently arrive at a conclusion.

(4) Appreciation

For Barrett (Ekwall and Shanker 1988: 77) appreciation includes literal meaning, inference and evaluation. When the reader understands the text in its different levels and is able to evaluate it he/she becomes emotionally and aesthetically involved with it. He/she will experience feelings such as fear, excitement and so forth when reading the text. At this level, according to Burmeister (1983: 303) the pupil is acquainted with the techniques, forms, styles and structures which authors use to evoke emotional feelings in the pupil. The pupil must also be sensitive to the author's ways of evoking emotions and having an intellectual influence. One should therefore be able to recognise and respond to plots, themes, settings, incidents, and characters as well as the language used by the author, which according to Goodman (Gollasch 1982: 56) communicates a message, a need, a feeling, an idea, and a reaction to the world.

2.2.3 STUDY SKILLS

Study skills flow forth and develop from recognising and analysing words as well as understanding words and ideas which are the ultimate skills development of reading acquisition. Ekwall and Shanker (1988: 77) believe that study skills can contribute to comprehension although they do not elaborate on it.

Dauzat and Dauzat (1981: 434) describe study skills as "skills needed to obtain and retain information effectively from reading materials such as textbooks and reference books. The abilities to locate, summarize, and outline information."

As this study concentrates on pupils with reading problems, the different levels of comprehension are stressed and not study skills as such.

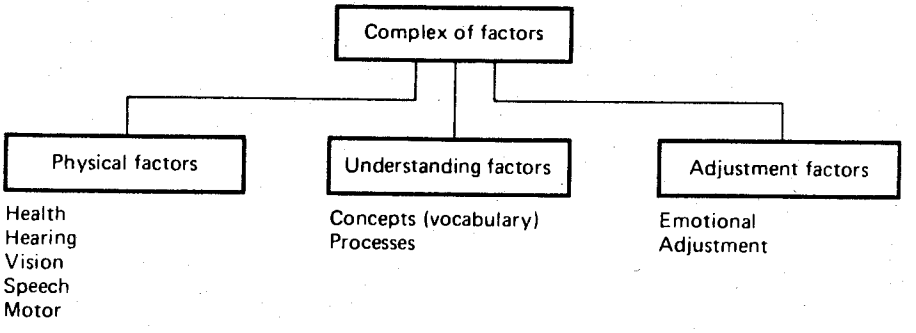
2.3 FACTORS INFLUENCING THE ACCOMPLISHMENT OF READING TASKS

2.3.1 INTRODUCTION

The ability to learn to read adequately is not merely determined by the pupil's ability to acquire the various word recognition and comprehension skills, but also by other factors within the pupil and his/her environment.

Guszak (1985: 135-136) gives a comprehensive scope of the different factors influencing reading, therefore his schematic presentation was chosen as a point of departure for this discussion.

Guszak (1985: 135-136) states that there are complex factors which "... work together to support the accomplishment of selective reading tasks". These are set out in Figure 2.2 below:
Figure 2.2 A complex of factors that allow selective reading (Guszak 1985: 136).



2.3.2 PHYSICAL FACTORS

2.3.2.1 Health

Ekwall and Shanker (1989: 130-131) find that frequent absence, as a result of health problems, may affect the pupil's success in learning to read, especially during the first two years of schooling, as he/she loses essential instruction.
Allergies and colds may result in hearing loss which could affect the pupil's ability to learn phonics. This could become a major contributing factor to reading

problems. Guszak (1985: 136) also considers factors such as hunger, tiredness and low energy levels as hampering the pupil's ability to learn (and to read) because these imply a general inability to concentrate and respond to teaching.

2.3.2.2 Hearing

(1) Auditory acuity

Auditory acuity, as defined by Ekwall and Shanker (1988: 9) is "... the ability to hear various (sound) frequencies at various intensities of loudness". Rude and Oehlkers (1984: 42) explain that the "... sound is transmitted by vibrations through a series of connected bones until nerve endings are stimulated. This in turn, is translated into sounds." Many of these sounds are language sounds.

Ekwall and Shanker (1988: 10) are of the opinion that limited hearing is not necessarily indicative of a disabled pupil, although there are exceptions. Hearing loss can however result in reading problems. Rude and Oehlkers (1984: 41-42) also mention that the ability to hear clearly is not essential to learning to read. However, because reading is so closely related to language development, it is important that the pupil's hearing acuity is intact.

Dauzat and Dauzat (1981: 29) explain that hearing the spoken language plays an important role in learning to read, as pupils need to perceive and produce sounds and to fuse them into words, in order to attach meaning to words. Burmeister (1983: 38-39) says that the pupil learns to speak by listening and if the pupil's hearing is inadequate his/her vocabulary and sentence patterns are likely to be reduced. It is also unlikely that he/she will benefit from listening experiences such as conversation, hearing reading and class discussions or the teacher's directions.

According to Guszak (1985: 136) hearing and the "... psychological act of understanding" should not be separated seeing that sounds are "... organized into meaningful communication." There are numerous other factors connected to the hearing mechanism which are considered as prerequisites for reading. Apart from auditory acuity, auditory perception also plays an important role in learning to read.

(2) Auditory perception

Guszak (1985: 136) explains auditory perception as "... the ability to perceive (hear) and make some mental association with sounds in the environment."

Various authors, among them Ekwall and Shanker (1989: 125), and Westman (1990: 466-467), consider *auditory discrimination, segmentation, analysis and synthesis, memory* and *sequencing*, as well as *comprehension* as important auditory skills necessary for learning to read.

(a) Auditory discrimination

According to Ekwall and Shanker (1989: 125) auditory discrimination is dependent on good auditory acuity. These authors describe auditory discrimination as the ability to hear the subtle and gross differences between sounds. Culyer and Culyer (1987: 198-200) warn that auditory discrimination should not be confused with auditory acuity which is the ability to hear, as pupils with good auditory acuity may have poor auditory discrimination.

According to various researchers auditory discrimination is essential to succeed in reading. An example of auditory discrimination is gross discrimination between speech sounds that differ, for example, [s] is different from [m] (own examples) and easily distinguishable. Where speech sounds are more or less similar in sound, for example, [b] and [p] and [m] and [n] (own examples) the pupils seem to have more difficulty (Culyer & Culyer 1987: 199 & 200).

Ekwall and Shanker (1988: 323) affirm the importance of being able to discriminate between similar sounding phonemes. In order to reproduce sounds, pupils should also be able to hear differences in them in the presence of other sounds and noises, especially when using phonic skills while decoding words. Kamhi and Catts (1989: 5-6) point out that if one sound is changed to another it could change the meaning of the word, for example, [b] instead of [k] changes the word to bat instead of cat (own example). This will affect the pupil's interpretation of what he/she hears. The pupil must be able to distinguish which differences between sounds make a difference in meaning.

What appears to be discrimination problems are often "... higher-level language (problems) based (on) conceptual problems" (Kamhi & Catts 1989: 8-9) and therefore it is important to establish which one of these two processes is causing the problem. Higher conceptual processes, which develop from phonological knowledge often eliminate the need to identify each phoneme in words.

Rude and Oehlkers (1984: 45) are of the opinion that auditory discrimination problems, in many cases, can also be the result of incorrect instructional methods. Training in auditory discrimination, according to Dauzat and Dauzat (1981: 33) is of particular significance when the sound-symbol approach of teaching reading is used.

(b) Auditory analysis and synthesis

Roberts (Ekwall & Shanker (1988: 120) refers to analysis as "oral phonemic segmentation". Ekwall and Shanker (1989: 480) define segmentation as "a child's ability to recognize that when oral language is translated into print, the language is divided into discrete units, such as sentences, words, or phonemes (or individual sounds)." Segmentation is an act of analysis and synthesis. Segmentation enables the pupil to recognise similarities in sounds in different spoken words, which is important for learning to read. If not, each word to be learnt will appear unique.

Mann et al (1992: 127) describe synthesis as "the act of blending or the fusion of sounds into syllables and syllables into whole words."

According to Bradley (1980: 22-32), pupils should also be able to segment speech into syllables because it is easier to decide how many syllables than phonemes there are. Often pupils with reading problems do not understand that syllables can also be analysed into shorter sounds or phonic segments. Thus the inability to break words into syllables or sounds, or to blend syllable and sounds into words would affect reading.

(c) Auditory memory and sequencing

Ekwall and Shanker (1988: 326) refer to auditory memory as "... the ability to listen to, remember and repeat a series of words or digits, a sentence, nonsense symbols etc." The pupil should be able to hold the sounds and then put them together, especially in word analysis.

Memory includes both short-term and long-term processes. According to Liberman and Shankweiler (1991: 9), Mann et al (1992: 45), and Kamhi and Catts (1989: 109) short-term memory stores and processes linguistic information through the phonological structures, and is also referred to as "working memory". New information is stored in the short-term memory and then the information in long-term memory is utilised.

In order to be able to recognise words and to read, the pupil should also remember which grapheme is associated with which phoneme. This is a task for the long-term memory.

By means of short term memory the pupil remembers sequences of letters which enable him/her to form words and sequences of words and eventually sentences. These words and sentences are processed ultimately to comprehend the text and to store it in the long-term memory (Stanovich in Mann et al 1992: 45-46).

The quality of one's memory depends on memorisation strategies such as elaboration and image, verbal rehearsal strategies and attentiveness. Problems in any of these aspects may affect cognitive planning, study strategies and understanding of complex information. Very often short-term memory becomes overloaded which also leads to failure in reading (Liberman & Shankweiler 1991: 10). Denckla and Rudel (Smith 1991: 161) explain that poor readers often find it difficult to read by means of sounding as they forget from one sound to the next and from one sentence to the next. This leads to poor comprehension. Swanson, Torgenson, and Hauck, et al (Smith 1991: 161) put this memory problem down to a learning disability, or slow articulation, insufficient word-knowledge, or inadequate retrieval strategies.

(d) Auditory comprehension

Guszak (1985: 137) describes auditory comprehension as the ability to understand and process that which is communicated to one. In the opinion of Rosner, Weaver and Rosner (Westman 1990: 327-328) lower level reading skills like analysis and synthesis, discrimination and memory are also necessary for "higher-level reading and comprehension skills".

Poor readers are often inclined to only notice certain words, or parts of words or letters, and this may lead to misreadings and loss in contextual meaning.

A pupil with auditory problems may lose interest in classroom activities because he/she cannot sustain the effort needed to listen to the teacher. This may result in learning problems in general and consequently in reading problems.

Although reading is a language act, it does not only involve auditory skills but also visual skills because reading is the decoding of visual (observable) symbols in language sounds.

2.3.2.3 Vision

(1) Visual acuity

Guszak (1985: 137) is of the opinion that vision is closely related to reading as the text consists of visual symbols and involves near-point vision and accommodation. According to Brown (1982: 9) reading cannot take place if the pupil's vision is impaired as he/she must be able to see the word with sufficient clarity and detail.

According to Winch (1985: 8-9) "reading takes place in front of and behind the eye." Approximately 90% is "... in front of the eye" reading as the eye moves in jumps and fixates. Thus peripheral vision is also involved and refers to perceiving approximately four letters left of the central vision and about twelve letters to the right, which enables the pupil to get an idea of the shape and information regarding first and last letters in a word.

Guszak (1985: 137) says that when reading, the eyes must accommodate both images and fuse them into one image and fixate frequently from left-to-right to receive the visual stimuli.
The eyes, however, limit the act of reading as they can only move at a certain speed and perceive limited information; therefore one cannot speed up the eyes, but rather what is happening behind the eyes in other words the thinking process. Brown (1982: 64) explains that recognition takes place as meaningful associations with visual images are made. Perception is included when recognising words, but if the visual stimuli become distorted because the eyes

are not functioning properly, it may become difficult to recognise a word. This problem may be incorrectly diagnosed as a visual perception problem.

(2) Visual perception

In the process of reading, visual perception takes place behind the eyes. Brown (1982: 6-7) refers to visual perception as the ability to derive meaning from the visual information received. The brain is able to analyse the visual impulses, thus perception is what the brain does with that which is seen through the eye. In other words we move away from the senses and enter processes which involve brain functioning.

Smith (1991: 146) says that it has been found by researchers that visual perceptual problems are closely related to the academic progress in the beginning of the pupil's school career. It also affects the pupil's later school years, because, if a pupil is unable to learn to read due to perception problems, this may cause the inability to understand the written word.

The visual perceptual skills playing a role in learning to read are *visual discrimination, memory, sequencing, form constancy, figure-ground, directionality* and *analysis and synthesis.*

(a) Visual discrimination

Dauzat and Dauzat (1981: 33) and Ekwall and Shanker (1988: 318) refer to visual discrimination as perceiving the similarities and differences between visual shapes such as letters and words. This is also applicable where the pupil has to recognise words immediately, where he/she needs to remember spelling patterns or irregular words which cannot be sounded out.

Pupils with visual discrimination problems will have difficulty distinguishing for example between n and h and will probably not see the difference between words such as snip and ship (Mann et al 1992: 41).

(b) Visual Analysis and synthesis

According to Grové and Hauptfleisch (1982: 149-150) analysis is the ability of the pupil to analyse words visually into syllables, for example, the word letter: let-ter; and into letters or sounds, for example, cat: c-a-t. Synthesis on the other

hand is the ability to join letters, sounds or syllables to form words, such as, c-a-t: cat or hap-py: happy. This is an important facet of initial reading, when the pupil learns the basic reading skills.

A child who experiences problems with visual analysis and sythesis may have difficulty in analysing visual symbols and synthesising language sounds when attempting to read words.

(c) Visual memory

May (1986: 195) defines visual memory as "... the ability to recognize, recall and produce graphemes and grapheme sequences" and Burns, Roe and Ross (1982: G12) describe it as the ability to recall what one has seen. Written text consists of graphemes in words which the pupil must memorise and remember to be able to recall them in a later stage.

If a pupil experiences problems remembering letters which are in words and words on sight, he/she will have difficulty reading written text.

(d) Visual figure-ground

According to Mann et al (1992: 41) the ability to distinguish an object from the background stimuli and to hold on to it while the total pattern is being scanned, is visual figure-ground perception. For reading, the pupil must be able to single out a letter, word or sentence from the text, ignoring the rest of the text while identifying it.

The child who has a visual figure-ground problem will have problems to read text on a fully written paper because he/she tends to lose his/her place or to skip the lines.

(e) Visual form constancy

Visual stimuli, such as, objects, geometric shapes, letters, numerals and words are recognised because of the constancy of their basic shape. However there may be a variability on the sensory surface of written words and letters, for example, a word may start with a capital letter or the font in which it is printed can vary. The pupil must be able to recognise the letter or word in any position or font as it remains constant, regardless of its shape, size or position.

Pupils who experience problems with form constancy are inclined to find it difficult to read a word if it is presented differently, for example, print in capital letters, cursive and a slight variation in the print of the words.

(f) Visual closure

Visual closure is the ability to recognise an incomplete object and, for example, to read a word where its top half is covered or a part of it is unclear. Most of the time the words provide enough clues for visual closure to enable a pupil to identify them (Lerner 1985: 283).

A pupil who has a closure problem has difficulty identifying a word on sight because he/she has to look at every letter in order to see and read the word. He/she is inclined to read slowly.

(3) Directionality and sequencing

In addition to Guszak's factors, Ekwall and Shanker (1988: 12) consider another factor which influences reading, namely, *directionality.* They refer to it as the knowledge of one's left and right side. This ability enables the child to identify the direction of letters and the sequences of letters in words, as well as the reading direction from left to right.

Alexander and Heathington (1988: 63) refer to directional confusion as the "uncertainty or inconsistency in left-right directionality". Directionality may be influenced by physiological or psychological factors and is corrected with mixed hand dominance. Directional confusion influences reading in that the pupil is inclined to reverse and rotate letters and words for example "b/d", "t/j", dog/god and dog/bop.

Sequencing is discussed as an aspect of directionality. Letters in words appear in a fixed sequence. If the pupil mistakes the sequence of letters in a word, he/she will read beard for bread and gird for grid.

To conclude:

Earlier researchers emphasised the role of auditory and visual skills in reading. They concentrated particularly on the integration of the auditory and visual stimuli because reading implies the conversion of printed symbols into language

sound. Although many researchers have attributed reading problems to poor auditory-visual integration, more recent research has shown that what appears to be poor auditory-visual integration is actually poor language usage, which is essential to memory enhancement. When the pupil must name the visual stimuli, it is the language aspect which should contribute to the auditory-visual integration and not the auditory and perceptual skills per se (Smith 1991: 148-149).

Authors such as Reid and Hresko (1981: 75, 85) and Gaddes (1985: 145) agree that there is an interaction between perception and cognition and that it affects all the developmental levels of the pupil. Sensation, cognition and perception take place simultaneously. Perception is thus an active cognitive process which includes conscious and unconscious activities influencing observation and reaction (Leahey, 1987: 396). Although cognition and perception are important skills in learning to read, motor skills are also involved.

2.3.2.4 Motor skills and speech

Guszak (1985: 136) mentions the term motor as a reading readiness factor but does not elaborate on it. According to Critchley (Smith 1991: 154-155) motor skills include gross-motor, hand or oral movements. Because the eyes have to perceive printed words, visual motor skills are also involved in reading.

(1) Eye movement

The motor component which may affect a pupil's reading is visual motor skills. According to Hinds (1986: 1-3) completion of the visual process involves motor and central processing mechanisms. The mechanism responsible for successive eye aiming to see clearly is firstly the motor mechanism and secondly the mechanisms involved in classification, organisation and comprehension of the visual stimuli in the central processing system. Therefore, adequate vision is an integration of sensory, motor and central mechanism processes.

The motor mechanism involves uniting the images seen separately by each eye into one clear image. This is done by the six muscles (saccadic) on the outside

of each eye which work together so that the eyes fixate on the same object. Both eyes should move together rhythmically and simultaneously, horizontally and vertically, in order to be able to follow the symbols and symbol groups consecutively in a line while reading (Hinds 1986: 1-3).

Clear visual images are decoded into language patterns which are classified, organised and comprehended while reading. Therefore, if the pupil is unable to accommodate these visual symbols due to motor dysfunction, he/she will be unable to accommodate, classify, organise or comprehend the reading matter. A match of what is seen and what is heard is essential to the reading task (Hinds 1986: 3).

According to Kirk, Kliebhan and Lerner (1978: 43), it is not clear from research, that there is a relationship between visual difficulties and reading problems. Therefore exercises for eye-muscle co-ordination are not included in Chapter four.

(2) Speech and pronunciation

Ekwall and Shanker (1988: 327) mention the role of speech in learning to read because speech is closely related to auditory discrimination (and the use of language). It is, however, difficult to establish whether speech disorders do have a restraining effect on reading.

According to Kottler (1968: 123) an overall inadequacy of the motor system could affect the pupil's speech. For instance, a pupil who speaks slowly or inarticulately may have difficulty manipulating his/her tongue. Such a pupil's ability to read aloud will probably be affected. This does not mean a pupil need always be capable of pronouncing all the words correctly to be able to read, as reading aloud is not the crux of reading. Nevertheless, during the initial stages of learning to read, speech does play an important role because the pupil pronounces the words in order to understand what he/she is reading.

Guszak (1985: 137) claims that speech plays an important role; especially in the phonics-centered reading approach, where the pupil has to encode the symbols into sounds, as there is a link between sound production and the symbols representing sounds.

Ekwall and Shanker (1988: 11) postulate that there may be a connection between neurological dysfunctions, speech inadequacy and reading problems, and that the latter is a result of the speech problem when in fact they "... both result from the neurological dysfunction". Speech problems may lead to poor pronunciation, but the pupil may pronounce words poorly without having a speech problem, which in turn may have an effect on his/her reading, for example, he/she may read sheep for ship as in "The sheep (ship) is sailing on the sea."

2.3.3 UNDERSTANDING FACTORS

2.3.3.1 Introduction

Written text is explained by Guszak (1985: 138) as "... ideas are being conveyed through written language, which is largely talk written down." Talk or speech can be considered as one way of reflecting one's thoughts. According to Pumfrey (1991: 72, 86 & 211) human thought is based on the usage of symbols, as it involves interpreting, manipulating, communicating and creating symbol systems. A person reflects and hypothesises in order to understand the past and present and to predict future happenings. It enables one to change and control the environment. Thinking is empowering. In order to be able to read, one needs to develop one's thoughts. The pupil brings his/her experiences, language and thinking abilities to the reading task. "The principle that reading is a thinking process must never be neglected" (Pumfrey 1991: 211) because language is so closely related to thoughts.

McMurray (1985: 26) postulates that "... poor readers suffer from a general language disability." According to Forester and Mickelson (Higgins 1985: 70) the relationship between oral language and reading development is significant in early reading development. "Reading involves translating print into mental representations that are constructed using linguistic knowledge (e.g., word meanings, grammatical knowledge), knowledge about reading and general world knowledge" (Dickinson 1990: 40). It is now generally accepted that reading is a language-based process.

2.3.3.2 Language

Dechant (1993: 54) defines language as "... systematic (one cannot indiscriminately alter the sequence of words), and is generally automatic, reflexive behavior." She further explains that "... language has individual and social significance." Dechant (1993: 57) expands on this by stating that one uses language to influence others and to express one's experiences, resulting in the acquisition of beliefs, attitudes and knowledge of the past and culture. It also offers a sense of security and belonging. Through language, one is able to make sense, manipulate and control the world by symbolising and ordering one's concepts of it.

On the other hand, learning of abstract knowledge is essential in order to gain new knowledge and understand language. This implies an interaction between cognition, behaviour, behavioural learning strategies (for example, auditory and visual discrimination) and the environmental stimuli (Mann et al 1992: 383). According to Dechant (1993: 56) language and thinking are similar in that they require the same basic processes, namely, to abstract, conceptualise and form categories. The cognitive function involved in this process is grouping of information with similar characteristics. This includes differentiating between stimuli and objects, classification and generalisation of information and the association of stimuli and objects. These prosesses form part of one's inner language.

(1) Inner language

Phelps-Terasaki et al (1983: xiv) describe inner language as the basis for constructing, communicating and decoding messages received, and as the language in which one thinks and precedes language as such. Experiences are coded, organised and associated by means of inner language and the pupil is able to think about them. Auditory receptive language is therefore closely related to inner language.

(2) Receptive language

By means of perception which is a receptive process, auditory sensations are organised and structured in meaningful units within the auditory receptive areas

of the brain. This takes place by means of decoding of auditory stimuli, enabling a person to understand the spoken word. Memory and previously obtained knowledge also plays an important role in the organising and structuring of new information into units. Receptive language may also be visual as in the case of reading (Phelps-Terasaki et al 1983: xiv).

It can thus be concluded from the above that deficiencies in learning skills, such as perception, result in problems gaining linguistic knowledge, language, speech and reading.

(3) Expressive language

Expressive language on the other hand, refers to experiences and meanings being communicated. Messages are conveyed to another person by means of words and sentences which are constructed according to the linguistic rules of the specific language. Both listener and speaker must be acquainted with the dimensions of language in order to communicate and understand a message (Phelps-Terasaki et al 1983: xiii).

(a) Dimensions of language

The major dimensions of language as viewed by Mann et al (1992: 382-384) as well as by other authors, are discussed below:

(i) Phonology is the study of speech sounds. It is a sound system consisting of phonemes which have specific sequence in accordance with set rules in order to form words. Emphasis and intonation are also included in phonology. Dechant (1993: 296-298) says it is "... based on the probabilities that characterize the written/spoken or printed/sound relationships of (a specific) language." In the case of reading, this author sees the sequence and position of visual-orthographic information in text, as related to phonological sounds and rules. Unknown words are decoded from the graphic symbol to the sound symbol and are subsequently pronounced. It enables the pupil to understand the written text.

Many poor readers have difficulty mapping orthography onto sounds due to visual and/or auditory perceptual deficiencies like discrimination, spatial relationships and memory problems.

(ii) Morphology is the study of morphemes (the smallest unit of meaning in words) (Manzo & Manzo 1993: 283). Mann et al (1992: 23) explain that morphemes can stand on their own and be a root word, such as, cat. Adding a morpheme to a root word may change the meaning of a word. Morphemes include prefixes such as re- as in rearrange, suffixes such as -tion as in action, verb tense forms such as -ed as in stopped and plurals, such as, -s as in cats. Morphemes may also change the part of speech, for instance, the verb read changes to the adverb readable when the suffix -able is added to it.

Pupils who have inadequate morphemic awareness will probably have difficulty reading unknown words with more than one syllable and which are not part of their vocabulary. They do not have the skill to segment words and have to resort to sounding words or trying to identify the total word on sight. This will result in loss of textual meaning (comprehension).

(iii) "Syntax is the study of the structure of language" (Marzano et al 1987: 14). It has to do with the order of words, where it carries meaning on a deep-structure level and is viewed by many theorists as a basic innate quality of man (Marzano et al 1987: 30).

Syntactic awareness is "... the ability to reflect on and manipulate aspects of the internal grammatical structure of sentences" (Tumner 1990: 99). Syntactic awareness also influences reading development by expanding one's phonological decoding skills, for example, if a pupil cannot read a word it enables him/her to analyse the sentence and to choose the most appropriate word in the "... surrounding semantic and syntactic context" (Tumner 1990: 99). This word is then translated into phonemes and morphemes and related to the letters and letter-patterns with the appropriate spelling rules. To establish whether it is the correct word the pupil then checks it on it's phonological features.

The pupil who has a reading problem very often has a language problem and is unable to rely on his/her syntactic awareness. He/she then needs to depend on his/her knowledge of morphemic or phonemic structures when reading.

(iv) Semantics refer to the meaning of words and sentences which enables one to form concepts. Semantics includes:

- lexical semantics, which is the literal meaning of each word in a sentence, for example, "The man is big", referring to his size literally means it is a big man (own example);
- sentence semantics, where not only the words have meaning, but the sentences as a whole, for example, "They are smart", means they are intelligent (own example);
- interpretive semantics, where the same ideas can be communicated differently, for example, "The mouse fled from the cat", which means the cat chased the mouse (own example), and
- semantic relationships where each word has a specific function in the sentence, for example, "The clouds gather" which means the clouds move towards each other (own example) (Falk 1981: 401-417).

Kamhi and Catts (1989: 76-80) explain that words and sentences gain meaning when the pupil knows the specific language. By perceiving sounds and reconstructing them into words, the pupil is able to understand, store and remember messages. Knowledge of word meanings (vocabulary) and semantic representations is an obvious correlate of good reading performance. At approximately age eight, reading becomes the main determinant of vocabulary growth consequently the more the pupil reads the better his/her vocabulary. Limited vocabulary has a reciprocal causal relationship with reading failure as limited vocabulary may lead to poor word recognition which on the other hand leads to slower vocabulary growth.

(v) Pragmatics is described by Marzano et al (1987: 30) as "... the study of the contextual variables surrounding the use of language and their influence on the meaning of language". The context in which an expression is uttered determines the meaning being conveyed. Depending on the social situation, an expression such as "good morning" in a holiday resort would probably mean that hopefully the weather would be fine but the same expression in the city could mean a mere salutation.

Pupils who are language impaired will in all probability have pragmatic problems. They will have problems asking and answering questions, making use of or interpreting non-verbal language, to communicate information accurately, and to negotiate with other people. This may lead to misunderstanding (Mann et al 1992: 23).

With regard to reading, pragmatics play an important role because it enables a pupil to understand the interpretive semantics and semantic relations. If a pupil is unable to interpret pragmatics into spoken language and to use it himself/herself, he/she will be unable to understand it in written language.

In conclusion, Dechant's (1993: 298) definition of reading explains the interrelationship between the dimensions of language in reading clearly:
"Reading is message sharing, and the message reveals itself through the schematic-semantic, syntactic, and lexical cues, as well as through the within-word cues."

According to Kamhi and Catts (1989: 76-80) several studies have proved that poor readers rely heavily on higher language processes to aid word recognition. Good readers on the other hand have larger speaking vocabularies and verbal fluency; and they use more complex, complete sentences and more transformations. Poor readers have deficient listening comprehension skills and this strongly affects their reading ability. In addition, poor readers also have deficient knowledge of inflectional morphology and grammatical rules. It has also been found that there is a positive relationship between mature reader's syntactic knowledge and their reading quality. This is however only a causal relationship with secondary manifestations only. It is therefore important to look beyond the relationship between higher-level language abilities and reading, to cognitive and metacognitive processes.

2.3.3.3 The relationship between language and cognition

Seeing that it is difficult to separate language from thought, Fin (Burns, Roe & Ross 1982: 46) looks at language learning in relation to cognitive development. He comes to the conclusion that thinking and language skills are closely related as there is a connection between the way a pupil learns to use language and the way he/she knows and understands concepts and ideas. Goodman et al (1987: 3-4) explains that language and thinking are innate human potentials, which develop simultaneously, and that language development is facilitated by cognitive development. The person observes, listens, makes inferences and tests them. It can thus be concluded that cognition involves all types of mental activity, such as, *perception*, *attention thought*, *memory* and *knowledge* (Reid and Hresko in Mann et al 1992: 26). Meaningful information is processed

selectively, based on previous knowledge, and is dependent on the person's nervous system and an ability to organise information. The ability to process information adequately is normally determined by means of intelligence quotient (IQ) tests, for example, the Old South African Individual Scale (OSAIS), and the Senior South African Individual Scale Revised (SSAIS-R). If the pupil achieves a high score it is probably due to his/her ability to process information on a higher level, as opposed to the pupil who scores a low IQ score. The latter pupil will probably be less successful in learning to read.

(1) Cognition

Piaget (Mann et al 1992: 51-52) describes cognition as the process of:

(a) Assimilation
This occurs when the pupil interprets new experiences in the environment on the basis of his/her previously learned knowledge and fits it into his/her existing systems.

(b) Accommodation
Existing psychological structures are adapted to new experience and reality. Cognitive structures are continually being modified in order to accommodate new experience.

(c) Equilibrium
"Equilibrium is the mental process of putting the assimilation and accommodation of experiences into a state of balance" (Mann et al 1992: 52). New experiences are always interfering with the mental homeostasis, and therefore there is a need for a state of equilibrium.

New information which is gained by means of these new experiences, becomes what is known as a schema. The schemas are cognitive or information structures containing knowledge about particular concepts and their interrelationship (Zintz & Maggert 1986: 279). As new information increases it is added to existing schemas. These schemas become interlocked to form more complex schemas where auditory and visual schemas are coordinated and where reorganising, combining, differentiation and recombining of information takes place (Mann et al 1992: 52). For example the schema "car" the pupil generalises everything

about "cars" to this schema. The schemata which one has about the concept "car", are interrelated and may include the car's construction, appearance, operation and so on. Different people will attribute different meanings to this concept, as they have different experiences and therefore perceive this word differently. When confronted by a problem, the person modifies his/her own schemas by making use of impressions, attitudes and ideas.

With regard to reading Zintz and Maggart (1986: 279 & 365), Pumfrey and Elliot (1990: 276) and Idol and Croll (1987: 214-215) agree that all readers have schemata which are the building blocks of cognition and which increase with experience gained from events, actions, emotions, roles and objects and can be complemented by reading. A pupil with limited schemata will probably have great difficulty comprehending what he/she is reading as he/she may have limited schemata for concepts such as metaphors, similes, idioms when he/she comes across them. In addition, the reader also needs to possess schemata that include concepts such as the arrangement of print on paper, purpose of printed material, vocabulary, sentence patterns and many more, in order to be able to read successfully.

According to Bromley (1988: 178) the pupil learning to read for the first time should have gained enough background experiences and knowledge to equip him/her with concepts that he/she can apply to print. This knowledge includes metacognition.

(2) Metacognition

In literature a distinction is made between cognition and metacognition. Mann et al (1992: 436) describe cognition as follows: "Cognition refers to intellectual functioning of the mind (while) metacognition refers to one's knowledge of this cognition." Brown (Swart 1988: 59) explains that cognition is seen as knowledge and metacognition is the understanding of knowledge, therefore cognitive processes are important for metacognition. These aspects can be referred to as that which the pupil knows about his/her own thought processes and the ability to control these processes by means of planning, selecting and monitoring. Brown (Mann et al 1992: 29-32) sums up metacognition as "knowing about knowing" and involves areas of personality such as achievement, control,

aspiration, roletaking, communication processes, needs, failure avoidance. The pupil becomes aware of how he/she learns.

Brown (Slife, Weiss & Bell 1985: 437) divide metacognition into two components, namely,

- stable and statable knowledge about one's own cognition, and
- regulated planning, monitoring and checking activities that orchestrate cognition.

By means of metacognition pupils monitor their thought processes while reading. This means they monitor their understanding of what they are reading and is proof that they understand what they have read. Meaning is therefore derived from text through a complex interaction between a pupil's prior knowledge and the information in the text (Billingsley & Wildman 1990: 18).

(3) Metalinguistics

To understand the reading process it is also necessary to consider metalinguistic abilities when discussing cognition and metacognition.

Metalinguistic ability can be described as the ability to think about the nature and function of language and to consider language itself as an object of thought (Swanepoel 1985: 20). It can thus be concluded that metalinguistic ability, reading experience and general language ability have a positive influence on one another.

A child entering school is not yet aware that language is compiled of units such as words, segments and phonemes. A child becomes aware of words when he/she gets to know the word as a metalinguistic term and acquires a phonological realisation of the grammatical structure of words as units of language (Swanepoel 1985: 41-44).

In order to read, a pupil must understand language and therefore must function on a certain cognitive, metacognitive and metalinguistic level. If the pupil is aware of the spoken word as an object which consists of isolated phonemes, he/she has gained phonological awareness. Only then will he/she be able to

learn to divide words into phonological units (Swanepoel 1985: 38-41) and be able to give meaning to visual symbols.

The pupil learning to read, also needs knowledge of larger linguistic units, that is, how phrases and sentences are organised (syntax). It is important that the pupil should be able to integrate phonemes, words and sentences into a meaningful pragmatical whole and that he/she knows the important relationship between reading comprehension and recall of information (Swanepoel 1985: 49-51).

In their lists of problems which will interfere with reading acquisition, Smith (1991: 155-164), Pumfrey and Elliot (1990: 43), and Fin (Burns, Roe & Ross 1982: 46) include problems with metalinguistic awareness. According to them, the pupil is unable to think about and manipulate language objectively. In order to do so he/she has to advance through various stages before reaching metalinguistic awareness. It starts at a phonological level (awareness of sounds) and progresses to a syntactic level (awareness of grammar) and finally to the semantic level (awareness of the distinction between words as symbols and what they symbolise). A higher level of metalinguistic knowledge is reached as new concepts of language are gained.

If the pupil does not have metalinguistic awareness and his/her knowledge of different types of text is inadequate he/she will experience problems to read with comprehension. This includes knowledge of letters, words and overall meaning (Rumelhart in Mason & Au 1990: 7-16).

In conclusion, reading is a strategic process. We adjust our reading according to our reason for reading. According to Idol and Croll (1987: 214-215), we organise our thoughts into schemata which in turn facilitate our memory and recall, and guide the act of encoding. Downing (Westman 1990: 123) says it is important for beginner readers to understand what the purpose and the technical features of the printed word are. They are to know that the letters in words are two-dimensional abstract forms and that their meaning is in their sounds. Each letter represents a speech sound which in turn is part of every word. Burmeister (1983: 90-91) explains that the pupil should:

- know the meaning of words and strings of words;
- have sentence sense to understand and enjoy reading;
- have pictures in his/her mind to understand what the author is saying, and
- have the ability to use images from long-term memory.

The ability to read does not only require certain intrinsic skills and abilities, but also a need to be able to read which is influenced by the pupil's environment.

2.3.4 ADJUSTMENT FACTORS

Under this heading, Guszak (1985: 14O) includes adjustment as well as emotional factors. He maintains that a pupil who is unresponsive and defiant, or has unwarranted fears and becomes upset over small things, despite having his/her physical and understanding factors in tact, indicates an emotional instability.

2.3.4.1 Emotional factors and adjustment

The term emotional problems is so diverse that it is virtually impossible to define (Hallahan & Kauffman 1991: 174).

Pupils who are emotionally unstable often develop psychosomatic manifestations in order to avoid the conflict situation and this can be categorised as personality maladjustment (Schubert & Torgerson 1981: 48). These maladjustments may have an adverse effect on the pupils' emotional health and they often display the following symptoms as cataloged by Gates (Schubert & Torgerson 1981: 49-50):

- They are nervous and develop habits such as stuttering and nailbiting.
- They make use of defence mechanisms, such as, loud talk and defiant behaviour.
- They withdraw by daydreaming.
- They make use of counterattack strategies such as bullying and destructive behaviour.
- They become self-conscious and develop a defeatist attitude.

Attitude maladjustments may be caused by

- repeated failures;

- physical factors, such as, physical abnormalities which are not of relevance to this study;
- poor home circumstances or broken homes where the parent rejects the child; is oversolicitous; or disciplines inconsistently so that the child requires security, attention, and
- teachers' attitudes towards their pupils, such as, rejecting them, comparing them with their siblings, making sarcastic remarks, or causing an unpleasant teaching situation.

Some of these factors may cause an internal inability in the pupil to cope with the environmental demands.

It is generally accepted that emotional problems and maladjustment due to situations, such as, the above have a definite influence on reading performance. One particular problem may trigger another (vicious circle effect) to the detriment of the pupil. Rude and Oehlkers' (1984: 53-59) discussion of environmental factors give a broader perception of sociological and educational factors.

(1) Sociological factors

Sociological factors include:

(a) Home environment

Parents who are not interested in their children, do not attend to them and support them cognitively, are partly responsible for their children's problems in reading. A stable family gives the child sufficient attention, stabilises him/her and offers the child the incentive which is a prerequisite for reading success.

(b) Cultural expectations

It is believed that reading problems are partly caused by cultural expectations. There are for example, more boys than girls with reading problems. The reason for this may be that in some cultures boys are expected to participate in non-academic activities in which they are more active than attentive, consequently they begin with a reading backlog.

(c) Socio-economic levels

The socio-economic level of the parent may have some impact on the pupil's reading. Reading disabilities, however, occur in high and low socio-economic levels. Burns, Roe and Ross (1982: 39-40) sight studies carried out by Coleman in 1972 and Loban in 1976 who found a positive relationship between socio-economic level and reading performance. In many cases pupils from higher socio-economic homes display superior verbal ability which enables them to read better. Comprehension and good usage of decoding strategies such as phonology, semantics, and syntax are dependent on a good verbal grounding and on these grounds language is considered an important factor in learning to read.

However, it has been found that environmental measures, for example, disciplinary techniques, responsive and trusting parents and a pupil's attendance of pre-school are more influential to reading readiness.

(2) Educational factors

Rude and Oehlkers (1984: 57-59) have estimated that one third to one half of pupil's reading problems can be put down to inadequate teaching. Burmeister (1983: 56) says that if the school appears to be drab and unattractive, the pupil will probably associate learning and reading with it and consequently lose interest.

Teachers may affect pupils ways of learning as follows:

(a) Instructional level

Pupils are often forced to read at their frustrational level in other words, the chosen reading material is too difficult, advanced and challenging. This results in a frustrated, angry and poorly behaved pupil. Alternatively pupils become bored when they are advanced readers but their teachers insist they attend to skills already mastered, before they are allowed to proceed to the following reading level.

(b) Instructional pace

Pupils do not learn the same content at the same rate, which implies that some pupils need more time to learn something than do others. In a classical teaching

situation, pupils with reading problems are unable to cope with the teaching pace.

(c) The teacher's disposition towards the pupil

The teacher often models an ideal type of pupil and groups pupils accordingly, for example, fast and slow learners. The consequence is that such a teacher is inclined to pay more attention to the ideal type and less to the poor reader. The amount of time spent on teaching language arts, and interest in reading correlates well with reading success (Burmeister 1983: 44-58).

"It is the total of all experiences, as interpreted by the child that determines the child's status" (Burmeister 1983: 58). One can thus conclude that emotional stability (which results from a stable environment), home circumstances, and adequate teaching are aspects which play an important role in reading success.

On the other hand, reading problems can lead to emotional instability, antagonism, inattentiveness and poor socialisation. These pupils become unsure of themselves resulting in negative behaviour (Rude & Oehlkers 1984: 52-53). On these grounds it can be concluded that emotional problems, poor self-concept, and reading disabilities are closely related. If the pupil has difficulty accepting his/her reading problems this may result in emotional difficulties.

In order to teach a pupil to read the teacher has to follow a systematic approach to reading. During the initial stage of reading the pupil's level of reading readiness has to be considered.

2.4 READING READINESS

Burns et al (1982: 39) state that before a pupil begins to read, it is necessary to prepare himself/herself for "... meaningful interpretation of printed or written verbal symbols" and to subsequently lay a foundation for successful reading. A pupil goes through a prereading phase which stretches from birth to a stage where he/she is taught to recognise words and to read them. Interests and abilities develop and the pupil is guided into reading readiness.

If a pupil is not ready to read this can lead to intense frustration. Three conditions which could affect readiness for reading are, gender, home

environment, and participation in preschool programmes, of which the teacher has no control.

There are five main factors which play a role in the degrees of readiness (Burns et al 1982: 4O-41).

2.4.1 EXPERIENTAL BACKGROUND

The experience which the pupil gains both at home and school form an integral part of the reading readiness programme. Experience gives meaning to reading because it is the background to vocabulary and concepts. It enables the pupil to relate experiences to symbols. "Experiences are the foundation for building concepts, and concepts are the foundation for building vocabulary" (Burns et al 1982: 39). Experience enables the pupil to change and refine perceptions in order to understand a concept clearly.

Experiences are not only limited to concrete objects, but the young pupil also has experiences with written symbols without having anything to do with the formal reading act.

Searfoss and Readence (1989: 56 & 58) give an example of how informal "print awareness" is developed. By exploring print such as signs and logos on food cans the pupil makes a connection between print and meaning and he/she becomes naturally aware of the uses and functions of print. This awareness is transferred to book print, which is a prerequisite for learning to read.

2.4.2 COGNITIVE DEVELOPMENT AND LANGUAGE LEARNING

Burns et al (1982: 46-47 & 61) explain that the way the pupil learns to use language and how he/she develops the ability to know and understand concepts and ideas are closely related. Language is used to understand and communicate thoughts accurately, which is the foundation for reading. Both language and cognitive factors are vital for learning to read. This includes intelligence.
Piaget (Finn 1985: 14 & 58) is of the opinion that when there are changes in the pupil's language behaviour, it is symptomatic of his/her mental development. Piaget's main interest is therefore growth of cognition and language development. During the preoperational stage, the child's language is egocentric

and seldom communicates by means of speech, with others. As cognition develops, his/her thoughts become "inner speech" which in turn becomes audible speech (still egocentric). At the end of the preoperational stage the child has gained "socialized speech" (communication with others). Because the child's cognition is maturing and he/she is interacting with others, his/her mental organisation and language usage changes as he/she becomes older.

In the child's early years language is intuitive, lacking in metalinguistic awareness which would enable him/her to think about, and manipulate it. The young child uses language for functional and communicative purposes. He/she is aware of the message, but not of the language as he/she is not able to analyse the language.

When the pupil enters school, however, he/she needs to consciously analyse language and make use of metalinguistic skills (Ekwall & Shanker 1989: 126). Thus language abilities should include knowledge of sound/symbol relationship, vocabulary and functional uses of language. Finn (1985: 35) explains that if a pupil understands oral language and thus has metalinguistic awareness he/she will in all probability become a good reader.

According to Searfoss and Readence (1989: 61) the pupil's vocabulary and language abilities which he/she brings to school should enable him/her to learn to read. According to Ekwall and Shanker (1989: 129) pupils who use good oral language, vocabulary, sentence structure and syntax, have an advantage over those who do not, while learning to read.

2.4.3 INTEREST IN READING

Interest in learning to read develops by exposing the pupil to language and literature in his/her early, preschool years (Burns et al 1982: 57). Because "the story is the heart of many beginning reading programs" (Searfoss & Readence 1989: 59) the pupil should be able to understand the story as a whole, it's characteristics and elements and develop a "story sense".

2.4.4 SOCIAL AND EMOTIONAL DEVELOPMENT

Burns et al (1982: 63-64) claims that individual as well as group communication is important for a pupil to develop emotionally and socially. As "language is the most important basis of cooperation" (Burns et al 1982: 63-64) the pupil learns to work independently as well as in a group where he/she is expected to cooperate, share and socialise with others. Love, attention and acceptance, and a positive attitude towards himself/herself and his/her peers are developed during preschool years through structured communication experiences.

According to Ekwall and Shanker (1989: 131) the pupil must be able to sit still and attend while being taught. He/she should be able to handle frustration and follow verbal instructions. A calm, stable pupil learns to read better.

It is also important that pupils develop a positive self-concept (to feel loved, accepted and valued) through opportunities of experiencing success. As the pupil embarks on reading this is gained by having literary experiences which help to develop a positive self-concept (Ekwall & Shanker 1989: 313).

2.4.5 PHYSICAL DEVELOPMENT

Burns et al (1982: 65-69) stress the importance of good health, visual acquity (far and near), eye co-ordination, and auditory acquity. The latter three aspects are important for visual and auditory perception, memory and discrimination which enable the pupil to read. According to Finn (1985: 30) he/she is required to put symbols and sounds together, in order to say words when he/she sees them. Thus knowledge of letter sounds and the ability to carry out word learning tasks are essential aspects of reading-readiness.

Motor co-ordination is related to directionality and kinesthetic-tactile development, which are important for reading and writing. Development of motor co-ordination skills enable the pupil to hold the book correctly and to turn the pages. These skills are learned in early years where the pupil is given the opportunity to manipulate objects and books.

To conclude, a pupil is ready to learn to read when he/she is reasonably well adjusted emotionally, has gained background experience and attitudes, has

reasonable language development and his/her self-concept and physical state is in tact (Dauzat & Dauzat 1981: 27).

"The readiness period does not end when reading begins but continues as the child moves on into reading." The pupil must develop readiness for each new reading task he/she has to learn (Burns et al 1982: 38).

Where a pupil is pushed into reading without having developed a specific degree of reading readiness he/she may become negative about reading, experience failure anxiety or become frustrated when reading. Creative thinking and problem solving are discouraged and the pupil becomes fatigued (Ekwall & Shanker 1989: 10 & 131). In addition he/she develops a negative attitude towards reading.

It is difficult to determine just when a pupil is ready to learn to read, as there are many abilities and conditions which interact. Letter knowledge, metalinguistic skills, language development, interest in reading, social and emotional maturity, culture and self-concept are the complexities which ensure future reading success.

Deficiencies in intelligence, auditory and visual skills which are not fully developed, and health, places the pupil at a disadvantage when he/she learns to read. However, strengths in these abilities do not necessarily place the pupil at an advantage.

Age, gender, visual-motor or visual perceptual skills are not predictive of reading success. Some pupils learn to read without having adequately mastered these prerequisites, while others who have mastered them do not (Ekwall & Shanker 1989: 132). According to Humphrey and Humphrey (1990: 35) pupils may be ready to learn but not ready to learn to read. If the pupil has not mastered reading skills, reading instruction will be to no avail.

The pupil who is reading ready will benefit from the following approaches, namely, bottom-up, top-down and the interactive approach. These are discussed below in order to get an insight into the basics of reading instruction and to understand what happens in the reading process including the nature of reading.

2.5 APPROACHES FOR READING INSTRUCTION

The three approaches, bottom-up, top-down and interactive, illustrate a "central theoretical concern", namely, "... to read well requires appropriate attention to print as well as meaning in the mind of the reader" (Rude & Oehlkers 1984: 23 & 30). A major controversy in the reading field is whether reading should be viewed as a bottom-up, top-down or interactive process. These approaches determine the way in which reading is taught. The former two approaches view the reading process from opposed perspectives, while the third accommodates them both.

2.5.1 BOTTOM-UP APPROACH

"Master the simple before tackling the complex, is the cry" (Pumfrey 1991: 115).

Rude and Oehlkers (1984: 24-25) describe the term *Bottom-up* in terms of the direction it takes in teaching reading. Reading is a step-by-step process that begins with the initial detection of an auditory or visual stimulus. The initial input goes through a series of stages where the symbols or sounds are "chunked" into larger and more meaningful units. Gough (Andrews 1989: 15) explains that the pupil starts from a low level of analysis and goes on to a high level of analysis by recognising letters, then proceding to words and meanings, and eventually integrating them in sentences which the reader can understand.

According to this approach the letters, words and sentences are translated to speech and once this has materialised, meaning comes automatically when language ability and cognitive background are utilised. May (1986: 23) summarises the bottom-up model as emphasising decoding and word accuracy rather than comprehension (understanding the message).
The bottom-up theory according to Pumfrey (1991: 117), places the emphasis in reading instruction on the development of skills and automatically includes aspects of word identification and comprehension. These skills are hierarchically arranged to be mastered individually by each pupil. The diagnostic nature of the bottom-up approach would mean finding out which skills were not sufficiently mastered. Aid begins by exercising these skills. Many learning disabled pupils have difficulty in utilising the skills that would enable them to learn to read and for them this approach is rather a burden than a help.

In the case of the bottom-up model, according to Pumfrey (1991: 123), the sound-symbol system can cause frustration when the reader decodes from print to language sound and sometimes, more than likely, does not pay attention to meaning. Higher levels of linguistic processes, such as, meaning and experience are excluded in favour of decoding. According to Rude and Oehlkers (1984: 28-29) pupils become "barkers at print" (word callers).

2.5.2 TOP-DOWN APPROACH

In contrast to the analytic or bottom-up approach, which follows an inductive working strategy (from the part to the whole) there is the whole word or top-down approach which follows a deductive working strategy (from the whole to the part).

The focus is on meaning and contextual usage. Gough (Andrews 1989: 15) says that the reader starts from the top, which represents meaning (high-level information) and uses this to aid lower level analysis of words.

The top-down approach is also referred to as the psycholinguistic approach to reading and begins with the pupil's language and what it represents. This approach is reader-driven not text-driven because the pupil uses all his/her experiences and expectations in trying to obtain meaning from text (Kamhi & Catts 1989: 5-6).

According to May (1986: 17) this approach begins with knowledge and hypotheses. The pupil's background knowledge enables him/her to provide the correct words and his/her ability to hypothesise enables the pupil to confirm his/her choice. The pupil predicts on the basis of his/her stored cognitive information, which is either visible or not (Rude & Oehlkers 1984: 26).

A pupil making use of the Top-down approach may ignore text information and lose the author's message because of using his/her own predictions and guesses. Pupils are inclined to pay little attention to the printed material because they ignore the textual detail, resulting in misreading. Misreadings are also caused by the invisibility of the pupil's language experience (Pumfrey 1991: 119-120) which, according to May (1986: 17) includes semantics and syntax,

morphology, orthography and phonological rules. The pupil who lacks language experiences is consequently unable to predict the actual printed text.

According to Pumfrey (1991: 120) the Bottom-up and Top-down approaches both have their value; if either had been adequate on its own the other would have become redundant. However, both approaches have shortcomings. It is on these grounds that the Interactive approach came into existance.

2.5.3 THE INTERACTIVE APPROACH

The old proverb "tell me, I'll forget, show me, I may remember. But involve me and I'll understand" is a way of depicting the interactive approach (May 1986: 42).

It involves a combination and synthesis of the bottom-up and top-down approaches of reading, implying that both print and background knowledge are important in the reading process. Rude and Oehlkers (1984: 30-31) compare it to a "two-way staircase" where one can commence from either the top or the bottom.

According to Stanovich (Andrews 1989: 16-17) the interactive approach allows "... for a compensation between different levels of analysis". One must have word recognition skills as well as higher-level linguistic and conceptual knowledge in order to read well.

Robinson and Kirby (1987: 32) describe this approach as information which is being processed simultaneously and which includes lexical and semantic skills, syntactic analysis and phonic decoding skills. While the pupil is reading he/she makes use of graphic information to be able to understand lexical codes, which in turn form syntactic units, and these are further used to encode the words. Ultimately, after the cues have been sampled through a semantic model is developed, which facilitates word identification.

Pupils' experiences are essential to make inferences, predict and understand the author's message. On this basis it can be concluded that an interactive process between the author's words (the print) and the pupil's knowledge is the most

suitable approach for teaching reading especially for pupils with reading problems.

2.5.3.1 The advantages of the interactive approach

Rude & Oehlkers (1984: 31-32) discussed the following advantages of this approach:

- It is flexible; reading can either start with the letter or with the meaning, because information from the one influences the other simultaneously.
- It emphasises both visual and non-visual aspects of reading. Word detail gets enough attention to enable the pupil to gain the correct meaning. The limitations of word identification in isolation are also reorganised and therefore words are also identified in the whole context.
- It inhibits poor reading habits, for example, overuse of phonics and own interpretations.
- It caters for pupils with different reading behaviour, for example, if pupils are inclined to use their own interpretations, they learn to attend more to print by means of phonics and word attack skills.

The most important advantage is that it allows a pupil with encoding problems to compensate by means of comprehension and vice versa and thus it caters for the analytic as well as the global reader.

2.6 SUMMARY

To be able to read, the pupil needs to master the different reading components. These consist of *recognising and analysing words* and *understanding words and ideas*, as well as the *subcategories* of each component.

There are also basic factors which enable the pupil to read, namely, *physical, understanding* and *adjustment factors.* In addition to these factors the pupil needs to be *ready to read.*

Seeing that reading instruction cannot take place superficially, the teacher makes use of a fixed approach. Initially the *bottom-up approach* was the point of departure, but eventually the emphasis shifted to the *top-down approach.* Due to

shortcomings in both the approaches, an *interactive approach* was subsequently adopted.

In order to ensure reading success, all the mentioned criteria should manifest to a more or lesser degree during reading instruction and the acquisition of reading skills.

CHAPTER 3

A TEACHING MODEL FOR TEACHING READING

3.1 INTRODUCTION

"A model is a way of depicting a theory's variables, mechanisms, constructs and their interrelationships. A theory is dynamic, that is, it describes the way in which a model operates ..." (Singer et al 1985: 620-621). A teaching theory can be represented by a teaching model reflecting the variables, mechanisms, constructs and their interrelation as they occur in an adequate teaching situation.

The purpose of a teaching model is to serve as a mechanism enabling the teacher to fulfil his/her main aim, which according to Van Niekerk, McDonald & de Klerk (1985: 55-56) entails leading the pupil to adulthood by means of instruction. Such instruction should not lose out of sight the pupil's totality, which includes his/her affective, cognitive and normative life. Teaching pupils to achieve goals which they could not attain previously is also part of this aim (Wallen 1981: 6). The purpose of a teaching model for this study is to serve as a model according to which a teacher should teach the pupil in a teaching-learning situation to read and to ultimately make use of reading in his/her adult life.

The teaching-learning situation is the instructional situation where interdependent relations occur between the components of reading, the skills enabling the pupil to manage the subject components and the components of teaching as a whole. The emphasis shifts from instruction, content and learning, to the teacher, the pupil and the subject content. Although each situation is different and unique it should contain all the fundamental characteristics as incorporated in a teaching model. Therefore it is crucial to plan each teaching-learning situation progressively and to keep it organised. When referring specifically to reading, the purpose of a teaching model is to assist the teacher to enable his/her pupils to become adequate readers and to apply "...major, productive notions about letters and sounds to unfamiliar words successfully" (Pflaum 1986: 199).

Understanding of the reading process is a prerequisite to finding the best method of teaching reading. Following this, an optimal teaching procedure is sought, incorporating formal teaching procedures as prescribed by a teaching model (Williams 1986: 109). Formal instruction in reading, according to Gibson (1985: 236) can only be considered after the following steps have been taken:

- analysis of the reading task; that is, deciding *what* basic reading skills should be mastered in order to read, and this would include grapheme-phoneme relations, morphological aspects, syntax, semantics and pragmatics of the written text.
- analysis of the learning process to determine *how* to teach each pupil to read by means of the components of a teaching model.

Reading instruction is an integrated process in which both reading approaches are used interactively to teach word parts and comprehension for successful reading. The integrated nature of the reading act implies that different teaching principles should feature continually during instruction to ensure a successful reading lesson.

3.2 READING REMEDIATION AND THE TEACHING MODEL OF VAN DER STOEP AND LOUW (1979)

This text makes use of the teaching model of Van der Stoep and Louw (1979: 108-208) as the point of departure because it clearly reveals the integrated nature of the reading act.

The teaching model concentrates on the *how* of teaching reading. This implies the involvement of the teacher in the reading lesson. The teacher should also consider the components of the teaching model when teaching a learning disabled pupil to read. The teacher firstly considers his/her aim.

3.2.1 THE TEACHING AIM

The teaching aim of the teaching model consists of a *lesson aim* and a *learning aim*. The *lesson aim* refers to the teacher's effort which means, specifically what he/she wants the pupil to know. The *learning aim* refers to the pupil's effort; that

which the pupil must master to enable him/her to read (Van der Stoep & Louw 1979: 180-181). The teaching aim is divided into the *indirect* and the *direct aim*. The *indirect aim* of reading is to teach a pupil to read adequately or in the case of a pupil with reading problems, to teach him/her to overcome his/her reading problems. This aim is not solely to teach the pupil to recognise single, separate or isolated words (Groff & Seymour 1987: 11) but to also develop reading comprehension. It is the ability to read any reading material suitable for the specific reading level in which the pupil should function.

The *direct aim* is to teach the pupil specific reading skills of word identification and comprehension in order to achieve the *indirect aim*, namely, to be a competent reader. Competency in teaching reading depends on the instructional procedures followed by the teacher. Successful achievement of the teaching aim depends on the goals and subgoals set for instructing reading. According to Wallen (1981: 29) the goals of teaching reading are:

- *decoding skills*, where written text is translated into verbal sounds. The subgoals would be decoding by sight and decoding by means of word attack skills (Par. 2.2.1.1)
- *attainment of literal comprehension*, where the subgoal would be to enable the pupil to translate associated verbal sounds into meaningful thought units (Par. 2.2.2.2)
- *inferential comrehension*, where the pupil can verbally use relevant knowledge added to new information gained in the text and answer inferential questions (Par. 2.2.2.2). The subgoals would be to associate relevant knowledge with new information and to draw conclusions.

The learning aim is reached when the pupil has attained the above goals and subgoals. To enable the pupil to reach the learning aim the teacher has to incorporate the teaching components into the teaching-learning situation. The following components included in the teaching model of Van der Stoep and Louw (1979: 70-105) serve as the foundation for teaching reading in this study, namely, basic didactic principles, content arrangement principles, methodological principles and teaching methods.

3.2.2 BASIC DIDACTIC PRINCIPLES

Basic didactic principles are spontaneous ways in which the adult teaches the pupil to learn content (Van der Stoep and Louw 1979: 71). It is thus a way in which the pupil realises reality and develops skills enabling him/her to learn, to gain information, and to adjust to his/her environment. By means of the basic didactic principles, namely, *play*, *conversation*, *example* and *instruction*, the pupil's observation, experiences, objectivity, thoughts and language are developed. These basic didactic principles are closely related and are difficult to divorce one from the other, because while the one is taking place the other is also happening to a greater or lesser degree.

3.2.2.1 Play

Play, according to Van der Stoep and Louw (1979: 74) is a unique basic didactic form of the human relationships with reality. By means of play the pupil gains meaning of the world surrounding him/her. During play, the pupil applies and practices that which he/she has learnt from the example of others. Play has a socialising component as well because, during play, the pupil learns to comply with rules, roles and organisation. This enables him/her to conform with socially acceptable behaviour.

By means of didactical play activities the pupil can acquire specific reading skills. He/she may learn to identify letters, words and sentences or to associate written words with meaning. Play is also particularly effective for the pupil who is a slow starter. Because he/she wants to participate in the game he/she is willing to start even if he/she is not a proficient reader. Frequent repetition is needed when learning to read and by means of play the same aspect could be repeated without the pupil realising this or getting bored.

The repetition taking place while a pupil plays a reading game, enhances his/her ability to achieve success in reading. This enhances his/her self-esteem and promotes responsibility resulting in reading improvement.

Children who have reading problems are not always ready for formal teaching and therefore play is a valuable means of teaching these pupils. Play activities such as the following may be used to teach certain reading skills:

- card games, with words instead of pictures in order to learn phoneme/grapheme relations (Snap or memory games with letter cards)
- board games, for learning sight words as the pupil gets the opportunity to reread the same words several times (Monopoly)
- word analysis and syllables are learnt where the pupil sees how many words he can make with a given number of syllables. This type of game can take the form of social play where one pupil can put down a syllable card and his/her partner has to put down another card in order to make a word. The pupils take turns to put down the first card. If one does not have a syllable to complete a word, the opponent scores.
- comprehension is improved when the pupil mimics a written instruction read from a card. One pupil can put down a picture and the other one has to find the word or sentence matching the picture.

When making use of games it is important to consider that pupils should have many opportunities to respond; that there should be no complex rules to apply, and that the teacher should not be required to do detailed preparation (Cairney 1983: 29-30). If the activity is too strictly structured it may inhibit the spontaneity of the pupil.

An effective teaching method, namely, *demonstration* (Par. 3.2.5.5) forms a crucial part of play activity, because the teacher demonstrates how the activities are to be played. While playing takes place, dialogue takes place spontaneously.

3.2.2.2 Dialogue

Dialogue is primary to one's lifestyle and one's relationship with reality (Van der Stoep & Louw 1979: 78-79). Dialogue always takes place between two participants in the teaching-learning situation, namely, the adult (teacher) who introduces reality to the pupil by means of dialogue. He/she initiates a dialogue that will enhance the pupil's need to gain knowledge about reality.

In the didactic situation, by means of dialogue, language is used to repeat, continue, break down and resume information later. Both participants listen and understand the information shared by them.

With regard to reading, the teacher could, for example, read the story and discuss the topic and main ideas with the pupil. This method includes aspects such as classifying information, seeing relations between events, anticipating outcomes and making comparisons (Cairney 1983: 40 & 42-44). Class discussions contribute to the pupil's confidence in using oral language, his/her understanding of concepts, and the extension of the vocabulary which he/she encounters later in a written text (Pumfrey 1991: 210). By making use of dialogue, the pupil who is inclined to keep quiet may be more willing to participate actively in the learning activities.

The teaching methods used here could be *discussion*, *question and answer*, *demonstration*, classroom *dialogue* (between teacher and pupil or pupils with one another). By listening to nursery rhymes and sentences, words that, for example, have the same initial or end sounds (consonants or consonant combinations) (Crawley & Merritt 1991: 11) could be discussed. By means of written examples the beginning and end sounds in words can be demonstrated and questions can be asked for the pupil to answer. This can also be done with syllabification of words and spelling rules to improve the pupil's decoding skills.

In a teaching-learning situation the teacher could also use an example to initiate dialogue.

3.2.2.3 Example

The main aim of the example is to serve initially as a basis to enable the pupil to understand the essence of a particular case. The pupil lives in a world of reality and in order to reveal this reality to the pupil, the adult (teacher) selects certain examples from reality which makes a concept understandable for the pupil. By means of *discussions* (dialogue) the information based on reality is analysed and synthesised (Van der Stoep & Louw 1979: 81-82).

With regard to reading, information, such as spelling rules gained from the word, are generalised. The pupil is, for instance, taught to analyse an example of a written word into letter sounds, blends, or clusters of letters; to apply the spelling rules and eventually to synthesise them to form a spoken word (Carbo, Dunn & Dunn 1986: 64). This enables the pupil to use the same analytic method and spelling rules for reading words he/she has never seen before.

The pupil who has reading problems depends on examples because explanations by themselves often do not mean anything to him/her. By means of examples of words the pupil learns how to analyse words in letter sounds, letter blends, or clusters of letter sounds in a specific order.

The teaching methods *example* and *demonstration* (Par. 3.2.5.5) are the most obvious methods for use here because the example demonstrates a concept.

3.2.2.4 Assignment

Assignment is the application of knowledge in order to find a solution to a problem and to acquire new knowledge. The adult creates a situation in which he/she gives an assignment to a pupil in order to attain the pupil's involvement in reality. While doing assignments, particular achievements are expected from the pupil within a specified time period (Van der Stoep & Louw 1979: 89).

In reading, the pupil can be given the assignment of breaking sentences up into word units, and then breaking words into letters or word syllables in order to identify the words. The pupil should also be led to realize that the written word he/she reads, enables him/her to gain meaning from the text. This may be done by giving him/her the assignment to draw certain pictures about the story and sentences he/she has read, or he/she may anticipate a conclusion by way of drawing what he/she thinks is going to happen prior to reading about it (Cairney 1983: 26).

Seeing that pupils who have reading problems find it difficult to work independently, the above method is essential during remediation. The teacher gives the pupil assignments continually in order to involve him/her in the reading act. Assignments also enable a teacher to determine whether a particular reading goal has been reached. By asking questions it is possible to determine whether the pupil understands what he/she has read. For this the *question and answer method* (Par. 3.2.5.2) is the most obvious teaching method applicable.

The basic didactic principles are the most spontaneous ways of involving a pupil in reality while assisting him/her to gain knowledge of content. Subject matter in a teaching-learning situation should always be arranged in a specific order, so as to make it more accessible to the pupil.

3.2.3 CONTENT ARRANGEMENT PRINCIPLES

Arrangement of subject matter refers to how the lesson content is presented so as to be clear to the pupil (Van der Stoep & Louw 1979: 99).

3.2.3.1 Chronological arrangement/sequence

The chronological arrangement of subject matter is the introduction of facts in the same order in which the events took place (Van der Stoep & Louw 1979: 100). Subjects of a historical nature should be presented in this order. The chronological arrangement can also be applied to any other subject which should be presented in a specific sequence to enable the pupil to grasp the content.

Although this arrangement mainly applies to subjects such as history, it is possible to apply it to reading as well, as order can be used effectively in word recognition. The pupil starts at the basics where grapheme-phoneme relations are learnt and then the sounds are synthesised to form words and sentences. Ultimately this enables the pupil to derive meaning from the word and the sentence. It implies the build up from the elementary to the more complex and can be related to the bottom-up approach (Par. 2.5.1).

Although, as mentioned before (Par. 2.3.3.2), research has proved that pupils with problems find this chronological development of learning to read difficult, it still has value for these pupils. They often have language problems and their vocabulary and pre-knowledge is limited (Par. 2.3.3.2). Thus they are unable to depend on contextual clues when they cannot read a certain word on sight. By following the chronological sequence of events the pupil is assisted to know which word it should be because he/she has knowledge of the content. This arrangement may also enable the pupil to identify certain letter features of words when making use of contextual clues, because he/she can relate the letters to the sounds in a word. On the other hand the identification of the letters in words may enable the pupil to confirm that the word he/she has read was correct.

Basal readers which cover topics concerning people and events, are also valuable to pupils who have reading problems as the chronological sequence of events allows for repetition. Repetition of the same word may improve sightword

vocabulary, and repetition of information in the text may improve the pupil's memory of events and other information.

3.2.3.2 Symbiotic arrangement

The point of departure of the symbiotic arrangement principle is that the pupil is faced with reality in his/her surrounding world which he/she needs to understand. In the learning situation the pupil learns about the reality surrounding him/her. He/she sees things in general and then learns to reduce this into finer details (Van der Stoep & Louw 1979: 101) in order to understand it. The symbiotic arrangement could be applied to reading in a top-down approach (Par. 2.5.2). Where the pupil starts from the known to the unknown he/she first sees the word globally (sight words) and later on reduces it to the finer details, namely, the sounds and their symbols. The symbiotic arrangement can also be applied to the interactive approach (Par. 2.5.3). Words are learnt globally (sightwords) and are at the same time analysed and reduced to phonemes. The phonemes are then synthesised into spoken words again.

For the pupil who has reading problems the point of departure is that which is obvious and known. The pupil starts with familiar words which he/she analyses into sounds which he/she relates to the letters. Therefore the text should begin with known content.

3.2.3.3 Linear arrangement

Linear arrangement means that the particular learning content is analysed and reduced to the basic facts. It is then synthesised in order to gain insight into the whole concept (Van der Stoep & Louw 1979: 101).

In reading, the pupil first learns to analyse the written word into sounds and then synthesises these into a spoken word in order to comprehend it. This principle and the bottom-up approach (Par. 2.5.1) bear strong resemblance. It is thus advantageous for the pupil who is analytically inclined and prefers to start with word analysis.

This method may also be used to teach certain spelling rules for example the letter q is always followed by a u. The pupil analyses different words starting with

g and discovers the similarities, namely, in every one of these words there is always a u following the g.

The disadvantage of the linear arrangement is that many learning disabled pupils with reading problems are concrete bound and consequently unable to analyse words into detail because the concept of the letter symbols and sounds and their relationships is too abstract for them to grasp.

3.2.3.4 Punctual arrangement

Punctual arrangement occurs when a subject is taught systematically starting at a midpoint or a main or central concept and branching out in all directions, (Van der Stoep & Louw 1979: 102) for example, the subconcepts which are related to the main or central concept.

It is difficult to relate this arrangement to reading although not impossible. For instance, when teaching a pupil syllabification this concept is first explained by means of examples, namely, that some words consist of more than one part when pronounced. The pupil discovers that each part has specific letter components, namely, consonants and vowels. The consonants are always at one or both ends of a syllable. The vowel, however, can be at one of the ends or in the middle of a syllable. Once the pupil has become familiar with the concepts these can be extended into spelling rules, such as, for open and closed syllables. When using this arrangement for pupils with reading problems it should be carefully incorporated, so as not to confuse the pupil or make the work too difficult to understand.

3.2.3.5 Spiral arrangement

Spiral structuring of content refers to the concentric arrangement thereof where one proceeds from the elementary to the complex or the more difficult. The pupil starts from the simple concepts and learns to control more intricate and complex structures (Van der Stoep & Louw 1979: 103) related to the basic concept.

The bottom-up approach for reading is a good example to be related to the spiral arrangement where the pupil begins to analyse words into letter-sounds (grapheme-phoneme) and then synthesises them into words. Then he/she

learns to analyse the words into syllables. He/she starts at two syllable words and eventually masters multi-syllabic words. Once the pupil is able to analyse the words he/she learns about the morphemic rules, namely, affixes which include prefixes and suffixes. This arrangement is also applicable to comprehension because it starts at a literal comprehension level and progresses to an inferential comprehension level.

The disadvantage of this arrangement is that the pupil is inclined to read word-for-word. Pupils with reading problems also find it difficult to start learning letters and their sounds because these are too abstract for them.

3.2.4 METHODOLOGICAL PRINCIPLES

The methodological principle implies the way in which the subject matter is presented to the pupil when starting to apply the content in the practical or teaching-learning situation (Van der Stoep & Louw 1979: 104). In order to lead the pupils to gain insight into the contents the inductive and deductive principles may be utilised.

3.2.4.1 Inductive principle

Van der Stoep and Louw (1979: 188) describe this principle as follows: "Die induktiewe benadering dui op 'n opstyging uit gegewe voorbeelde tot 'n algemene gevolgtrekking." One starts from the known and progresses to the unknown; from part to whole through synthesis which progresses step by step towards generalisation (Van der Stoep & Louw 1979: 188).

The pupil is presented with an object or a number of objects known to him/her. He/she has previously become accustomed to these objects by means of perception. The objects contain the same essentials, basic components or rules. In a teaching-learning situation the objects are reduced in order to discover the essentials, components or rules they consist of.

With regard to reading, it is possible to follow this approach by reducing the reading content to a number of words containing similar concepts, for example vowels (r<u>ea</u>d, m<u>ea</u>t, l<u>ea</u>d), consonants (<u>th</u>e, <u>th</u>at, <u>th</u>ere), word structures (consonant vowel consonant - CVC: <u>mat</u>, <u>dog</u>, <u>bed</u>), word syllable structures

(beginning syllables: before, between, believe and end syllables: ...tion or ...ly) or rule (silent "e": date, ride, rose).

The advantage of this principle according to Van der Stoep and Louw (1979: 189) is that it ensures lasting insight. The younger pupil adapts better to this method and so do pupils with learning disabilities who are not yet able to work on an abstract level.

The disadvantage is that it requires longer teaching time and is based on perception (Van der Stoep & Louw 1979: 105).

3.2.4.2 Deductive principle

Deduction, according to Van der Stoep and Louw (1979: 105 & 188) is to enunciate a principle, hypothesis or rule in order to enable the pupil to apply it to information and subsequently arrive at a conclusion.

Although it is difficult to apply this principle to reading it is however, possible to do so when the pupil knows the different components (letters, syllables, word structures and rules) of the written word. By means of his/her knowledge of letters and word structures, the pupil is able to synthesise these to read a word. If for instance, a pupil knows the rules associated with word syllables, he/she will be able to identify the syllables within a longer word and to synthesise them into a whole word, for example, concentrate consists of con-(CVC and C+O=[k] rule), -cen-(CVC and C+E [s] rule) and -trate (consonant digraph tr and silent "e" rule ate).

The advantage of the deductive principle is that work tempo is quicker than in the case of the inductive principle. The disadvantage is that it requires a high level of abstract thinking from a pupil. To understand, remember and apply rules is difficult for a young pupil, especially the learning disabled pupil, because he/she has not yet reached an abstract level of thought.

Due to the nature of reading it is not possible to separate the two principles when teaching reading. The reading act requires a pupil to be able to analyse the words and at the same time to apply the rules applicable to the analysed components of the written words. For instance, when reading a word like

aeroplane the pupil has to analyse the word in it's syllable components aer + o + plane (inductive). Then he/she has to identify the detail and apply rules to each syllable aer: ae [â] + r; o: [o]; and plane: silent "e" rule plane (deductive). This enables him/her to synthesise the word and to read the word and understand it.

The analytic reader will have less problems with the inductive principle while the global reader will be more comfortable with the deductive principle.

To conclude, due to the integrated analytic and synthetic nature of the normal reading act, the best way to incorporate the mentioned principles when teaching reading to a pupil with reading problems, is to use them simultaneously in an interactive way (Par. 2.5.3). If the pupil is an analytic reader the inductive principle will compensate for his/her problems with sight words and if he/she is a global reader the deductive principle will compensate for his/her problems to analyse the word components.

3.2.5 TEACHING METHODS

Reason and Boote (1986: 22) equate a method to a route to a mountain top. By means of a method the pupil is guided along the route which best suits him/her. This is also applicable to teaching methods used to teach a pupil subject matter. When teaching a pupil reading, there are different methods which can be used. They need not be used in isolation but can be used simultaneously.

The following teaching methods are identified by Van der Stoep and Louw (1979: 93-98). These methods are interwoven and cannot be separated, but for the sake of clarity they are discussed individually. The methods are explained by means of examples.

3.2.5.1 The narrative method

According to Van der Stoep and Louw (1979: 93) this method is utilised more than any other.

Concepts related to the subject matter are explained to a pupil by means of the narrative method. The teacher has enough knowledge and knows more than the pupil, therefore the pupil is the silent listener. This method moves from a

monological nature to a dialogue when both the parties converse, reason or discuss the content (Van Niekerk et al 1985:71). There is always an aim within a specific context, for example, the pupil is taught to think critically while he/she is reading. The pupil is then asked literal and inferential questions. However, in terms of the reading act, this does not apply only to comprehension but also to other aspects of reading, for example, spelling rules. If a silent "e" is added to the end of a CVC word the name of the vowel letter is pronounced in the word, for example, m<u>a</u>t<u>e</u>. The same concepts can also be illustrated by means of a word wheel whereby the word beginning (CVC) is turned several times until it is next to the silent "e", and then it is read. This enables the pupil to supply similar rules to CVC words thereby extending his/her vocabulary.

With regard to the pupil who has a reading problem this can be an effective method for the concepts to be applied in an interesting way as it enhances the pupil's attention enabling him/her to understand and remember the concepts better.

3.2.5.2 Question and answer

According to Van der Stoep and Louw (1979: 94) this method is closely related to the interrelation between two people and therefore one of the most general methodological principles. The pupil is always questioning his/her world and expects answers from those with whom he/she is in relationship at that moment.

The question and answer method has a dual purpose in a teaching-learning situation, namely, to teach a pupil new concepts and to evaluate the pupil's knowledge and insight. In a teaching-learning situation, content is provided to the pupil and afterwards questions directly related to this content, are asked. The pupil has to supply the answers giving an indication as to whether he/she has gained insight into and remembers the content, and whether the teaching-learning situation has been successful.

With regard to reading, this method is used to teach comprehension skills. Literal questions (what, where, when and who), interpretive questions, critical questions and creative questions are asked to determine whether the pupil gained insight into the reading content (Cairney 1983: 39). These questions are mostly asked after the pupil has read the reading material. Questions however,

can also be asked before the pupil reads to enhance the quality of his/her attention. The question and answer method is also useful when teaching the pupil word identification skills.

The question and answer method can be successfully combined with the narrative method, for example, word families containing the same vowel and end consonant such as top and hop are taught and explained and the pupil is asked to identify the same components in the following words dog, log and cot, pot. This applies to syllabification as well. The pupil is taught to analyse words into their syllables. Then he/she is asked to do it with other words and to give words containing the same type of syllable. The pupil who is a global learner with a reading problem will probably benefit by this method as it will make him/her aware of word components and thus enable him/her to analyse and synthesise words. The method can be useful if the questions asked are direct questions which do not expect the pupil to make inferences.

3.2.5.3 The textbook method

Van der Stoep and Louw (1979: 95) explain that the textbook is mainly used for independent studies. It is used functionally and is an additional aid where the pupil uses it to learn from and complete assignments. In the teaching-learning situation the textbook can be included when teaching content. When the teacher goes about teaching by means of examples which are also discussed in the textbook, this method requires a particular level of reading proficiency from the pupil, because he/she has to relate the information gained from the example to the information in the textbook.

The following problems may occur when using the textbook method for pupils with reading problems:

- Pupils with reading problems will also experience problems using a textbook to gain information related to the school subjects. Therefore this method, in the case of reading, will merely be used to read a story and to answer questions on the story.
- The problem is also that if the written text in a basal reader is suitable for a pupil with a reading problem, the standard of reading content is mostly too simple, thereby rendering it unsuitable for gaining information.

The indirect aim of this method, with regard to reading, is that the pupil should gain content from the written word, and the direct aim is that he/she should learn to read.

Basal readers are mostly used when teaching a pupil to read. Therefore these books are mainly chosen on account of the written material and the content is secondary, although the choice of content remains an important issue when choosing the basal reader. Basal readers are also used to improve comprehension and reading rate by rereading favourite stories (Crawley & Merritt 1991: 40). The written text should match the pupil's learning style and abilities and should be adapted to the pupil's reading level, while the content should make provision for his/her various interests (Carbo, Dunn & Dunn 1986: 95). Books of which the standard of the written texts are one or two years below the pupil's tested reading age, are best for him/her to read as the pupil can experience success (Reason & Boote 1986: 18).

3.2.5.4 Free activity

Free activity according to Van der Stoep and Louw (1979: 95) allows for spontaneity and initiative during the teaching-learning situation. It is mainly used in the pre-primary and junior primary phase. It gives the opportunity to work with unlimited subject contents.

The aim of this method is to make learning as pleasureable as possible. Therefore free activity naturally develops from spontaneous play as a basic didactical principle where free, creative expression, pleasure and physical and motor development takes place.

With regard to reading, sight word vocabulary can be improved by playing with words and word cards. Word cards in the shape of a fish with paper clips attached to them are picked up by means of a magnet fishing rod and the words are then read. If the pupil cannot read a word the fish is placed back into the fish bowl. When a pupil has caught all the fish he/she is rewarded. Another activity could be a scavenger hunt in the class, where the pupil is given a word card and he/she must match it with the correct object in the class (Crawley & Merritt, 1991: 8 & 14). Comprehension can also be improved by playing or mimicking a story read.

The pupil with a learning problem is usually ready to play and therefore this method is ideal.

3.2.5.5 Demonstration

Demonstration has been used since the origin of mankind. It takes place when one is an onlooker while another person performs a task (van der Stoep & Louw 1979: 96). The aim of this method is for the pupil to observe the correct way of approaching a learning task and mastering it.

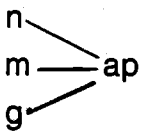
In the teaching-learning situation a concept is demonstrated by means of an example while the pupil observes the demonstration. With regards to reading by means of reading demonstration the pupil observes the pronunciation, phrasing and intonation, which enables him/her to read in the same way. Pupils with reading problems are usually monotonous readers and the demonstration may improve their reading style. By demonstrating and discussing spelling rules and word analysis, this method may help pupils to understand word attack skills and to be able to apply them by themselves.

3.2.5.6 Experimenting

Experimenting is concerned mainly with the discovery of reality by means of a particular example in order to come to a general valid conclusion (Van der Stoep 1979: 97).

With regard to reading, experimenting can be used because some word structures and spelling rules within a specific word, can be applied (by means of experimentation) to other words containing the same structures and rules. This knowledge enables the pupil to read words he/she never saw before. The silent "e" rule, for instance, is a rule which is useful for experimenting because it can be applied to other words.

This method is not very effective as the pupil who has a reading problem experiences problems with basic reading skills to such as extent that he/she is unable to experiment with structures and rules within words and sentences. It is thus only effective on a very low level such as CVC word analysis, where one word is derived from another, for example:



3.2.5.7 Drillwork

Drillwork entails doing repeated exercises which include particular facts or information in order to enable the pupil to apply such information in a similar situation. Drillwork enables the pupil with a reading problem to recognise, for example, sight words. This method has great value when used in conjunction with play (Van der Stoep & Louw 1979: 97). Games such as Snap give the opportunity to see and read the words repeatedly as the pupil places cards one upon the other and reads them aloud. Awareness of syllables in words can be established by repeating the word syllables, for example, by clapping or stamping with the feet while pronouncing each syllable.

Rhyme is another valuable aid which contains a strong repetitive element and which can be used effectively as a pre-exercise for reading, as well as for reading itself. Pupils enjoy using rhymes for repetition at the earlier stages of reading (Pumfrey 1991: 211) in order to establish a pupil's awareness of the correspondences of sounds (phonemes) within different words. With rhyme the pupil can identify words with similar beginning sounds which promote decoding of consonants and consonant combinations, for example, bring, bright, brown (Crawley & Merritt 1991: 11) and band, hand, land, sand.

The computer is an excellent teaching aid for drillwork in reading, especially in remedial reading. It provides ample opportunity for repetition. It offers no resistance against the repetitive element. Most pupils like to play with a computer and therefore are less resistant to the repetition of the reading work. The computer also supplements the initial instruction by the teacher with its repetition (Alexander & Heathington 1988: 361-362). It is important, however not to leave the pupil on his/her own with the computer.

3.2.6 REDUCTION AND CHOICE OF CONTENT

Reduction means to revert back to the original content and to set aside pre-formed opinions and conclusions about content.

The aim of the reduction of choice of content is to introduce the content to the pupil in a meaningful way. This takes place by interpreting the essentials and their interrelation within the text and by explaining and evaluating it. The function of reduction of content is thus to place the content within the pupil's learning level (Van der Stoep 1979: 182-183).

3.2.6.1 Selection of reading matter

Before learning content is selected it is necessary to take into account and establish on what level the pupil is functioning, cognitively, as well as the development of his/her perceptual skills. In the case of reading, the reading level the pupil has attained should be taken into consideration. It is necessary to decide on the level of the pupil's reading skills and his/her interests in order to determine the level of the reading material to be used. There are three levels, namely, the *independent level*, where the reading material can be read without assistance, the *instructional level*, where the reading material can be read with some assistance and the *frustrational level*, where the reading material is too difficult for the pupil (Betts in Guszak 1985: 161).

In order to teach the pupil with a reading problem, one needs to start with material which can be applied at the instructional level and therefore it should be suitable to his/her interest and reading skills. It also needs to be easily presentable and age-appropriate. According to Mann et al (1992: 440-443) the pupil's oral language development, background knowledge and sociocultural influences when selecting reading material, should also be taken into account when teaching reading to the pupil who has a reading problem. The material should be carefully selected in order to function successfully at an instructional level because these pupil's learning skills (Par. 2.3) are often not adequately developed and may cause difficulties when learning the basic reading skills for word identification and reading comprehension (Par. 2.2). Their language development is often at a lower level than expected at their age. They may also experience problems with language and thought as well as receptive and expressive language (Par. 2.3.3) which may impede their reading acquisition.

Ariel (1992: 370-371) is of the opinion that reading materials should be diverse and include informational reading, fiction, non-fiction, poetry and drama. Therefore it should emcompass all aspects of reading.

3.3 SUMMARY

Determining the teaching-learning *aims* is the basic point of departure which guides the reading lesson.
The basic didactic principles which refer to the spontaneous manner in which pupils become involved with their world are *play, example, dialogue* and *assignment.* By means of these principles they get to know their world and to adjust to their environment. To achieve this, the teaching-learning content should be arranged in a logical manner to ensure that the pupils understand it and are able to master it. The way in which the content is presented to the pupil is determined according to *inductive* and *deductive methodological principles.*

Teaching methods used in presenting learning content to pupils depend on the type of learning content appropriate to the specific pupil. Successful teaching implies that the teaching principles have to featured successfully during the teaching process.

CHAPTER 4

COMPILATION OF A REMEDIAL READING PROGRAMME

4.1 INTRODUCTION

Reading is a complex task which is influenced by a variety of factors. First of all the pupil should have acquired various skills such as language, cognition, visual and auditory perception (Par. 2.3.2.2). Secondly the pupil should to be ready to read before being able to learn to read adequately. It is also necessary that he/she should have mastered different reading skills in order to recognise words and to comprehend sentences and paragraphs. Most pupils do not learn to read automatically by being exposed to written text only. However, there are pupils who are able to learn to read without formal guidance from adults. Others need to be instructed intentionally to learn to read by means of conventional teaching methods which are generally used within the classroom. This group of pupils comprises the largest percentage. There is also a small percentage of pupils who, owing to a variety of problems, do not learn to read adequately in the normal teaching situation. Such pupils require special teaching methods to learn to read. These methods are aimed at teaching the pupil with problems in specific ways, so as to master the different reading skills as discussed by Ekwall and Shanker (1988), (see Par. 2.2 of this study) or to overcome reading problems. Different teaching methods can be used as set out by Van der Stoep and Louw's (1979) teaching model (see Par. 3.2 of this study).

According to the teaching model the teaching-learning aim (Par. 3.2.1) should be the point of departure of reading tuition. This aim is determined by the basic components and subcategories of reading, and these are gleaned from an error analysis of a pupil's reading errors.

Seeing that pupils in the grades as well as those in Standard one and two are inclined to learn optimally when they are engaged through the basic didactical principle of *play* (Par. 3.2.2.1), it is important that this principle be incorporated as much as possible whenever reading instruction takes place. Seeing that *dialogue* (Par. 3.2.2.2) occurs spontaneously during *play* it should consequently also feature during reading instruction. Pupils become acquainted with reading skills by means of *example* (Par. 3.2.2.3) and *dialogue* will necessarily take

place. During the reading instruction, the pupil is also required to perform the reading act independently by doing an *assignment* (Par. 3.2.2.4).

The teaching-learning content required when the pupil needs to learn to read, should be arranged according to a specific order to present it in a logical way. The manner of presentation, namely, in a *chronological, symbiotic, linear, punctual* or *spiral arrangement* (Par. 3.2.3) depends on the content involved in the tuition, for example, sight words (symbiotic), phonic analysis (punctual, linear, chronological and spiral) or comprehension (chronological) (Par. 3.2.3.1).

Learning content is presented in a specific manner, namely, *inductively* or *deductively.* To ensure success the teaching-learning content should be presented to pupils interactively; that is, teaching should not be limited to either the one (*inductive*) or the other (*deductive*) (Par. 3.2.4).

In the practical situation the specific method (Par. 3.2.5) used in the teaching of reading content will necessarily make it a combined, multifacetted task, for example, spelling rules are taught to a pupil through the *narrative method* (Par. 3.2.5.1) by means of *demonstration* (Par. 3.2.5.5). The pupil can then *experiment* (Par. 3.2.5.6) with this information by compiling similar examples. When it is clear that the pupil has grasped the concept, evaluation can be done by means of *question and answer* (Par. 3.2.5.2) and followed up by *drilling* (Par. 3.2.5.7) in the form of repetition.

As these principles feature throughout a reading lesson, the above discussion will also necessarily be applicable to a more or lesser degree when the subcategories of reading, such as sight words and comprehension are dealt with. Therefore it is not discussed in detail again in describing the methods and reading exercises.

4.2 DEVELOPMENT OF A REMEDIAL READING PROGRAMME

In this chapter an attempt is made to provide methods and exercises and to develop guidelines by which a reading programme can be compiled for a specific pupil in Standards one or two with particular reading problems.

Pupils do not only learn to read but also read to learn. Being able to read words and understand them, is therefore essential. Among others, they are required to read instructions, and answer worksheets in all their subjects. In order to assist them, word recognition and comprehension skills are concentrated on, but an integrated and interactive approach to the reading is followed. For the sake of clarity, this model begins with word recognition and moves towards the comprehension level. In this way it is possible to offer clear guidelines for the way in which the pupil can learn to master the total reading act by way of an interactive reading approach.

It is generally accepted that pupils who have reading problems probably have spelling problems as well, which both affect their writing ability. Thus reading, spelling and writing should be combined in order to reinforce the same words in different ways. However, in this study reading receives priority as the inclusion of formal spelling and writing exercises would render it cumbersome.

As reading is such an integrated process, word recognition exercises feature simultaneously with concentration on specific word recognition skills. An example is word analysis which features in the discussion of sight words. Of necessity, various overlapping researcher's methods are considered.

Exercises and guidelines to teach reading skills as set out by Ekwall and Shanker (1988) have also been suggested by the following authors: Burns et al (1982), Johns (1986), Karlin & Karlin (1987), Marzano et al (1987), Groff and Seymour (1987), Hughes (1988), Collins (Hayes 1991), Crawley and Merritt (1991), Klein et al (1991), Mann et al (1992), Dechant (1993), Manzo & Manzo (1993) and May (1994). These exercises have been adapted by this author to suit the individual needs of pupils.

4.3 GENERAL GUIDELINES FOR THE COMPILATION OF A READING PROGRAMME

4.3.1 INTRODUCTION

A procedure to be followed in compiling a reading programme for a specific pupil is discussed in this section. The remedial teacher needs to decide on appropriate reading material for a particular pupil. This material is chosen within

the framework of the pupil's age and existing gained experience. He/she makes sense from the text by imagination, extending or relating the story to his/she own experiences and predicting the outcome of the story. Therefore the pupil's cultural background, emotional state, home circumstances and interests are all considered when choosing text content.

4.3.2 CHOICE OF READING MATTER

In the choice of reading matter, the level at which the pupil is able to read, has to be taken into consideration, for instance, at the pupil's own *independent level* he/she is able to understand the vocabulary and enjoy the concepts of his/her age-group/development phase (Par. 3.2.6.1). This level should be the starting point to give the pupil confidence, to ensure a positive attitude towards reading remediation and to motivate him/her to give his/her optimal co-operation. He/she then progresses to the *instructional level* where the pupil has to learn new vocabulary and concepts and different ways in which to improve his/her comprehension of the text (Par. 3.2.6.1). This is the level on which remediation should take place. The level of difficulty of the text chosen for the pupil should be of such a nature that the pupil will be able to learn to read it by means of remedial reading methods and to understand it, because it is more or less within his/her foreknowledge. On the *frustrational level* the text is too difficult to read and understand (Par. 3.2.6.1). The reason for this is that the words, word structures and content are not at the same level as the pupil's phase of development in reading and understanding. This level of text should be avoided. In the next section guidelines are given on determining the appropriate reading level of difficulty of the text.

4.3.2.1 Determining the appropriate reading level of a specific child with reading problems

The appropriate reading level is based on the pupil's reading accuracy and fluency of word recognition. In order to determine the appropriate level to instruct a specific pupil, Betts (Barr et al 1990: 74-78) suggests the following criteria:

- If the pupil makes more than one error for every ten words (less than 90% accurately) he/she is reading on the *frustrational level.*
- If the pupil makes one error per twenty words, this means he/she reads 95% accurately and is thus on the *instructional level.*
- If the pupil makes no more than one error per hundred words and reads with fluency, good intonation and phrasing, the pupil is on the *independent level.*

The types of errors made by the pupil should be noted as well as the number of errors. Comprehension should also be considered. These aspects are discussed in Par. 4.3.3.3 on the identification of reading problems.

4.3.3 THE POINT OF DEPARTURE FOR REMEDIATION OF READING

4.3.3.1 Introduction

In Chapter two (Par. 2.5) mention is made of the bottom-up approach initially used to teach pupils to read; this approach implied breaking the written code. It dominated the late 1960's and early 1970's (Klein et al 1991: 13). However, not all pupils were successful in learning to read following this approach, and subsequently the top-down approach emerged.

The top-down approach (Par. 2.5.2) advocated going directly from print to meaning so that the pupil did not need to recode print into speech. Some pupils benefitted by this approach and others did not. On this basis the interactive approach (Par. 2.5.3) was introduced. This approach was more than a compromise between the bottom-up and top-down approaches (Marzano et al 1987: 48).

The point of departure of the interactive approach is that the reader begins with one approach and if it is not successful he/she moves to the alternative approach thus combining the two in order to compensate for the inability to benefit solely from either the bottom-up or the top-down approach. The most important aspect is that the information obtained from each approach is then combined in order to interpret the text (Hayes 1991: 5-7).

The interactive approach has gained great support. The teaching of pupils with reading problems, to a large extent, now focusses on the underlying factors inherent in the pupil self.

4.3.3.2 Recent views regarding the teaching of pupils with reading problems

Although the nature of the modern reading approach is still interactive, the focus, which used to be on underlying factors, has shifted considerably.

Aaron and Joshi (1992: 102) quote some researchers advocating that in teaching reading, the learning style, for example, modality preferences (such as, auditory and visual perception of the pupil) should be matched in order to ensure optimal reading acquisition for the pupil. This implies that the underlying problems, such as, perceptual and conceptual problems are first identified and remediated, before starting with reading instruction. Aaron and Joshi (1992: 102) mention that researchers like Cronbach and Snow (1977) and Stahl (1988) find no evidence to substantiate this approach as there are additional factors influencing reading acquisition.

The point of departure is thus to remediate the pupil in terms of subject content instead of objects, pictures and so forth. With regard to reading, the underlying reading skills within the reading components will be the focus instead of the underlying skills such as strong modalities or problem areas (Aaron & Joshi 1992: 102).

In order to correct reading problems in a remedial situation, it is necessary to establish what the pupil's reading problems are. Aaron and Joshi (1992: 102) advocate that the pupil's weaknesses in reading have to be identified in order to instruct him/her how to overcome his/her reading problem.

It is therefore important that the teacher be aware of the general reading problem errors which pupils with reading difficulties are inclined to experience. He/she must first analyse the pupil's reading in general before commencing error analysis. This will enable the teacher to determine the reading area in which remediation is required. Following this, the underlying factors influencing the reading are determined.

4.3.3.3 Guidelines for the identification of reading problems: The reading problem analysis table

The reading problem analysis table which follows, includes the most common reading problems and underlying skills which may cause the inability to learn to read adequately. In the left hand column, there is a list of reading problems under the following headings:

- Poor reading behaviour
- General reading problems
- Specific reading problems

The middle column under the heading *Remedial area* contains the subcatogories of the reading process with which the pupil may experience difficulty. This implies that the teacher will need to focus on this specific area in planning a remedial programme for the pupil.

In the right hand column the possible *underlying skills* which may have led to the reading problems, are indicated. This implies that in remediation the teacher should also consider these problems. He/she should, for instance, when teaching sight words, not concentrate mainly on dialogue and explanations, when the pupil, for example, displays auditory problems. The underlying skills, however, should be accommodated when teaching the pupil one of the subcategories or areas of reading. This is done in the suggested exercises.

The following *reading problem analysis table* may serve as a point of departure when dealing with a pupil with reading difficulties.

Reading Problem Analysis Table

Reading problem	Remedial area	Underlying factors
(a) Poor reading behaviour		
1. Slow reading rate	Sight words Phonetic analysis Comprehension	Visual analysis and synthesis Fine eye movements

		Emotional
2. Excessive vocalisation and lip movement	Sight words Comprehension	Auditory comprehension Emotional
3. Poor phrasing	Sight words Comprehension	Auditory memory and sequencing Visual memory Language Emotional
4. Word-by-word reading	Sight words Comprehension	Visual figure-ground Visual form constancy Visual closure
5. Head movements	Sight words	Visual figure-ground Fine eye movements
6. Points at words	Sight words	Visual figure-ground Fine eye movements
7. Loses place	Sight words Comprehension	Visual figure-ground Fine eye movements Emotional
8. Relies on pictures	Sight words Phonetic analysis Structural analysis	Auditory analysis and synthesis Visual memory
9. Guesses at words	Context clues Phonetic analysis Structural analysis	Visual discrimination Visual analysis and synthesis

		Visual memory
10. Over dependence on word analysis	Sight words	Visual memory Emotional

(b) General reading problems

1. Cannot understand words	Vocabulary Literal comprehension	Cognition Language
2. Cannot relate details	Vocabulary Literal comprehension	Cognition Metacognition Language
3. Unable to retell a story	Sight words Literal comprehension Inferential comprehension	Auditory memory and sequencing Language
4. Inability to follow sequence of events	Literal comprehension Inferential comprehension	Auditory memory and sequencing Metacognition Language
5. Difficulty identifying the main idea	Vocabulary Inferential comprehension	Cognition Metacognition Language
6. Difficulty finding information in the text	Sight words Configuration clues Comprehension	Visual discrimination Visual figure-ground Visual form constancy

7. Inability to identify a spelling rule within words	Phonetic analysis	Auditory analysis and synthesis Cognition Metacognition
8. Repetitions	Context clues Phonetic analysis Structural analysis Literal comprehension Inferential comprehension	Visual analysis and synthesis Fine eye movements Emotional
9. Hesitation	Sight words Literal comprehension Inferential comprehension	Visual memory Emotional
10. Poor enunciation	Phonetic analysis Vocabulary	Auditory acuity Auditory discrimination Speech and pronunciation
11. Mispronunciation, for example, mat for met	Configuration clues	Auditory discrimination Auditory memory and sequencing Visual acuity Visual discrimination Visual memory Visual form constancy

		Speech and pronunciation
12. Ignores punctuation	Inferential comprehension	Cognition Metacognition Language Emotional
13. Relies on word beginning and or word endings and anticipates the rest of the word	Sight words Phonetic analysis	Visual analysis and synthesis Visual memory Visual form constancy Visual closure

(c) Specific reading errors

1. Unable to remember letters (consonants, vowels and the like)	Configuration clues Phonetic analysis	Visual memory
2. Reversal of letters, for example, dag for bag (rotations)	Configuration clues	Auditory discrimination Visual memory Directionality and sequencing
3. Reversal of words, for example, was for saw	Configuration clues	Auditory memory and sequencing Auditory comprehension Visual memory Directionality and sequencing

4. Inversions, for example, me for we	Configuration clues Context clues Phonetic analysis Literal comprehension	Auditory comprehension Visual discrimination Visual form constancy Directionality and sequencing
5. Letter confusions, for example, ship for snip	Configuration clues Context clues	Auditory discrimination Auditory memory and sequencing Visual acuity Visual discrimination Visual memory Visual form constancy
6. Additions of sounds, such as, dogs for dog	Configuration clues Phonetic analysis	Visual closure
7. Letter and word insertions, for example, went for wet and bird for bid	Sight words Context clues Phonetic analysis Literal comprehension	Auditory discrimination Auditory memory and sequencing Directionality and sequencing
8. Substitutions, for example, is for was, can't for cannot, funny for laugh and house for	Configuration clues Phonetic analysis Structural analysis	Visual discrimination Visual analysis and synthesis Visual memory

home		
9. Omissions of letters in words, for example, lad for land	Sight words Configuration clues Context clues Phonetic analysis Literal comprehension	Auditory comprehension Visual discrimination Visual figure-ground Directionality and sequencing
10. Incorrect syllabication	Sight words Structural analysis	Auditory memory and sequencing Visual analysis and synthesis Visual memory Cognition Metacognition

Once the teacher has established the problem, he/she is responsible for assisting the pupil in the remedial area concerned, as set out in the *reading problem analysis table* above. The teacher selects remedial exercises from the exercises and guidelines table appearing and discussed in Par. 4.3.4. The exercises should be chosen to accommodate the underlying skills with which the pupil may be experiencing problems.

The exercises in the first column of the appropriate section of the exercise table, are used to address the adjacent problem area in the last column. The underlying skills indicated in the right hand column not only bear relation to the specific corresponding exercise indicated in the left hand column, but also to the entire exercise in the left hand column.

The examples of words and sentences in the exercises have been added only for the sake of clarity. The choice of words and sentences for remediation depends mainly on the reading matter the pupil is busy with in class.

4.3.4 SUGGESTED EXERCISES WHEN TEACHING THE SUBCATEGORIES OF READING TO PUPILS WITH READING PROBLEMS

4.3.4.1 Recognising and analysing words

This section deals with sight words, word analysis skills, and understanding words and ideas.

(1) Sight words (Par. 2.2.1.1)

(Basic sight words and other sight words)
High-frequency sight words which are not known by the pupil and which he/she needs to learn, are selected from the chosen text and taught in a specific way. This tuition should be based on the pupil's strongest modality, for instance, whether auditory or visual; but his/her emotional immaturity should also be taken into consideration, for instance, if he/she still wishes to play, then the basic didactical principle to be used will be play. Where the pupil has poor featural and orthographic knowledge, he/she will resort to semantic-syntactic clues, that is, reading within context.

According to Ariel (1992: 370-371) it is important to integrate core literature with reading skills development as this overcomes the problems of a strict phonic approach. Sight words are usually presented as a whole without paying much attention to make-up, but there will always be a need to examine words closely. Pupils need to know how to combine phonic and structural clues with context clues in order to identify words (Karlin & Karlin 1987: 194, 236). Some sight words have similar shapes or configurations, for example, then and than, making it difficult to picture the specific word in one's mind (Crawley & Merritt 1991: 6). Therefore it is necessary to resort to phonics.

According to Groff and Seymour (1987: 49) based on research evidence, sightwords should not only be identified on the basis of overall shape and configuration. Letter cues, especially first and last letters of a word are an important means of enabling a person to recognise words on sight (Barr & Johnson 1991: 187, 189). When the pupil encounters multisyllabic words, he/she needs to resort to syllabification, because the eye span of most people is

not wide enough to see more than three to four letters at the same time, that means that the pupil should also be able to recognise syllables on sight.

Carbo, Dunn and Dunn (1986: 67-68) explain that by teaching letter clusters and word families, for example, get, wet, let in a particular sequence, the pupil is enabled to decode strange words by identifying the clusters and word families (-et) within words. The basal readers are valuable for these pupils as they contain most words with similar sounds and configurations.

(a) Exercises for teaching sight words

According to McCormick (1987: 231) a reader needs approximately 90% instant word recognition to read independently. If not able to do so, the reader has to stop too frequently to identify words and consequently comprehension is disrupted. A large sight word vocabulary enables a pupil to read fluently and to use context clues effectively. Frequent repetitions are important to do so, but the meaningfulness of the word is crucial, therefore these words need to be taught in context (Johns 1986: 64 & 71). At least three high frequency words in a text should be taught for five to ten minutes daily. (For the most used high frequency words which pupils should be able to identify on sight, see Appendix A).

The following exercises are discussed by means of examples but the teacher will need to select his/her own words from the text chosen to suit the pupil. (An indication is given of the underlying skills dealt with in each exercise, and these are reflected in the right hand column).

Sight words (see appendix A) (Par. 2.2.1.1)

Exercises and guidelines	**Underlying subskills accommodated**
1. The teacher	
• writes the word, for example, dog on the blackboard;	Auditory memory and sequencing
• pronounces the word;	Auditory comprehen-

• discusses the meaning of the word; • underlines, frames or colours the word; • uses the word in a sentence, and • explains the function of the word dog in a sentence	sion Visual memory Speech and pronunciation Cognition Language
2. The teacher and the pupil • discuss the word elements, for example, double letters, ascenders, and descenders in the word dog. The pupil • identifies the beginning sound of the word; • establishes whether the word makes sense in the sentence by attempting to read it, for example: . The dog/day barked at the man.	Auditory discrimination Visual discrimination Visual figure-ground Cognition Metacognition Language
3. The pupil • says the sight word five times in degrees of loudness.	Visual memory
4. The pupil • looks at a sight word on the blackboard; • closes his/her eyes and visualises the word while pronouncing it; • traces it in the air; • opens his/her eyes and traces the word on the card with a finger; • sounds each letter while tracing it, and • says the word.	Visual analysis and synthesis Visual memory Directionality and sequencing

5. The teacher • exhibits three word cards containing, for example, the words dog, bag, hoop; or words with the same beginnings, for example, dog, donkey, and dove; or words with the same word endings, for example dog, log, and rag, and a target word, dog. The pupil • looks at the target word; says "no" if the target word is not seen amongst the three word cards and "yes" if it is; • whispers the target word if it matches one of the three alternative words; • spells the target word and says the word, and • places the correctly read word card (dog) in his/her word bank.	Auditory discrimination Auditory analysis and synthesis Visual discrimination Visual memory Visual figure-ground Visual form constancy
6. The teacher • gives a list of words to the pupil, and • says a word. The pupil • circles that word on his/her list which rhymes with the word the teacher has pronounced.	Auditory discrimination Visual discrimination Visual figure-ground Speech and pronunciation
7. The pupil • draws a picture which represents a word, for example, wash; • writes an accompanying sentence under the picture, and • underlines the target word in	Visual discrimination Visual figure-ground Cognition Metacognition

his/her sentence.	
8. <u>The pupil</u> • starts reading a simple short sentence, for example: . I see a dog. • extends it to . I see a big dog. . I see a big black dog. . I see a big black dog playing. . I see a big black dog playing in the garden. <u>The teacher</u> • writes the sentences on the board as they develop. <u>The pupil</u> • illustrates the extended sentence on a piece of paper. <u>The pupil and the teacher</u> • discuss the picture and together they compile a story about the picture. <u>The teacher</u> • writes down the story and reads it while the pupil follows in the text. <u>The teacher and the pupil</u> • read the story together. <u>The pupil</u> • reads the story on his/her own.	Auditory memory and sequencing Auditory comprehension Directionality Speech and pronunciation Cognition Metacognition Language
9. <u>The pupil</u> • dictates a story to the teacher in accordance with a picture sequence. <u>The teacher</u>	Auditory memory and sequencing Directionality and sequencing

• writes it down word for word and reads it. The pupil and the teacher • read the story together. The pupil • echoes what the teacher has read; • uses a *phrasing scope.* (The story is typed by the teacher onto a long strip of paper with double spaces between sentences. A piece of cardboard is folded and sealed at the sides with the top and bottom open. A window is cut near the top of the cardboard. The strip of paper is slid through the cardboard and a dowel stick attached at each end of the strip of paper.) • rolls the paper from the bottom up and he/she reads the sentence as it is exposed through the window. (If the pupil cannot read a word, the teacher pronounces it for him/her).	Speech and pronunciation Cognition Metacognition Language
10. The teacher • provides worksheets containing the following type of exercises: . The .... is in the ..... . These words are in the pupil's word bank which he/she has mastered and which have become sight words. The pupil	Visual discrimination Visual memory Visual figure-ground Visual form constancy Visual closure Cognition

• uses word cards from his/her word bank and completes the sentences by choosing the appropriate one and writing it in the space.	Metacognition Language
11. <u>The pupil</u> • is given a written sentence, for example: . Pam ... she was bigger than Jane. • fills in the blank in the sentence choosing from a number of sight words often confused, for example, <u>though</u>, <u>thought</u>, <u>through</u> provided by the teacher on cards or on the blackboard.	Visual discrimination Visual figure-ground Cognition Metacognition
12. <u>The pupil</u> • underlines the correct commonly confused word in a multiple-choice sentence, for example: . He wanted to (walk, wash) his clothes.	Visual discrimination Visual figure-ground Cognition Metacognition
13. <u>The pupil</u> • circles specific sight words in children's magazine clippings.	Visual discrimination Visual figure-ground
14. <u>The teacher</u> • provides a list of five sight words. <u>The pupil</u> • writes a sentence making use of as many of these sight words as possible, and • underlines the words on the list	Cognition Metacognition Language

which were used in the sentence.

Sight word games:

Games that can be played after each lesson for the benefit of enjoyment, to heighten concentration, socialisation and drilling, are taken from examples of Karlin and Karlin (1987: 197-202), Gillett and Bernard (1989: 96) and Groff and Seymour (1987: 192-196).

Bingo

Words are written on cards. The pupil chooses a word and covers the corresponding word on a bingo card if he/she can read the word. When the pupil's bingo card is full, he/she is rewarded with a star on the star chart. When playing with a partner, the one whose bingo card is full first is the winner. This card can be taken home as a reward.

Board games - for example, checkers (group game)

Sight words are printed in the blocks on the checkerboard. When a player lands on a square the word must be read (apply the same rules as for checkers). If the player cannot read the word, the disc is placed back on the previous block. If the partner's discs have been jumped, and the player cannot read the word landed on, the pupil must move back to the place he/she came from and put back his/her partner's disc.

Dominoes

Cards containing sight words are used. The pupil must match similar words and say the word. The same rules apply as for dominoes.

Card game

Two sets of ten basic sight words are used. They are placed face down. Player A turns over a card and reads it. He/she turns over another card in order to try to find the duplicate. If not he/she turns back the card and player B continues. They try to find as many corresponding words as possible. The one with the most corresponding cards, wins.

Racetrack

A racetrack is marked on a board. Each player has a toy car of a specific colour. A pack of word cards marked 1 - 6 is used. When the pupil reads the word correctly he/she moves his/her car on the track according to the number on the card. The pupil who reaches the finishing line first, wins.

Carpenter

A card is read from a deck of cards. If the pupil reads it correctly, a shingle is added to the roof of a play house. The pupil sees if he can complete building the roof before all the cards are finished.

Riddles

Riddles are written on cards and are read by the pupil. Pictures or other cards are used to answer them. The pupil chooses the picture matching the riddle.

The same methods which are used for sightwords can be applied to other sightwords mentioned in Chapter two (Par. 2.2.1.1) of this study. All the new words the pupil has mastered, are added to his/her word bank. Vocabulary development and the evaluation component featuring in Ekwall and Shanker's model (2.2.2.1) come into play here.

(2) Word analysis skills (Par. 2.2.1.2)

Word analysis skills refer to strategies a pupil makes use of if he/she cannot identify a word by sight automatically (Marzano 1987: 148). According to Ekwall and Shanker's model (Par. 2.2) word analysis skills include configuration clues, context clues, phonetic analysis, structural analysis and dictionary skills.

(a) Configuration clues (Par. 2.2.1.2: 1)

Configuration clues include shape and height of letters and words. These serve as crutches to identify words. Configuration clues can thus also be employed as an aid to remember sight words (Collins 1991: 21-22).

The following methods can be used in a remedial lesson to teach configuration clues:

Configuration clues (Par. 2.2.1.2: 1)

Exercises and guidelines	**Underlying subskills accommodated**
1. The pupil • looks in the chosen text for all the words with a specific letter or letter cluster with which he/she has difficulty, for example, words beginning with a d or words ending with g • he/she then underlines/circles only the d's or g's in words.	Visual discrimination
2. The teacher • identifies words which cause difficulty for the pupil in the chosen text, during the lesson. The teacher and the pupil • discuss these words one by one noting the length and form of the word, height of the letter and placement of letters in, above or below the line of print.	Visual form constancy Directionality and sequencing
3. The pupil • matches the lower case letter with the capital letter for example d and D when having difficulty with a capital letter. (This can be done by playing a card game such as Snap where one of the cards has the lower case letter and the other card the capital	Visual discrimination Visual memory

letter). The pupil and the teacher • take turns to draw a card from a pack of cards and to place it on the second accumulating pile, if it does not match the one on the second pile; or to say "snap" if it does, and to claim this pile for him/herself. (The player who ends with the most cards is the winner).	
4. The teacher • writes three words, identified from the text as causing problems for the pupil, on the blackboard The pupil • matches the words on the blackboard with those in the text by circling them on the text, and pronounces them. The teacher • explains the meaning of the word by using it in a sentence. The pupil • reads the text.	Visual discrimination Visual form constancy
5. The teacher • writes short sentences on cards and attaches them to the blackboard haphazardly. Some of these sentences appear in the pupil's text in front of him/her, others not. The pupil • chooses the sentences on the	Visual figure-ground Cognition Metacognition

cards which do appear in the text and arranges them in the same sequence as those in the text.

(b) Context clues (Par. 2.2.1.2: 2)

Context aids a pupil to become more proficient at word recognition. Each word in a sentence has meaning, therefore its order as well as previous and successive words in the sentence serve as clues to identify an unknown word (Gillet & Temple 1990: 238).

Younger readers initially rely heavily on pictures, but gradually there are more words and less pictures in the reading material and he/she has to find other ways to decode words, such as, using context clues (Collins 1991: 28-29). The following methods to teach context clues can be used in a remedial lesson:

Context clues (Par.2.2.1.2: 2)

Exercises and guidelines	**Underlying subskills accommodated**
1. The teacher • reads a sentence taken from the prescribed paragraph to be read by the pupil and leaves out a word, for example: . The ... barked at the cat. The pupil • selects a picture word card from other picture word cards to complete the sentence (cards containing the picture and the word on the same card); • first reads the word on the card and then the whole sentence in the paragraph, and • writes the sentence and underlines the target word.	Auditory comprehension Visual figure-ground Cognition

2. <u>The pupil</u> • reads a sentence and completes it by filling is a word, for example: . The . was in the circus. . The ..... was in the circus. . The e.....t was in the circus. (length) . The el-ph-nt was in the circus. (no clue)	Auditory comprehension Visual analysis and synthesis Visual closure Cognition
3. <u>The pupil</u> • reads a sentence and chooses the appropriate word from among three other words and underlines it, for example: . The (book, elephant, name, pail) was in the circus.	Auditory comprehension Cognition
4. <u>The pupil</u> • composes a story in response to questions or an event. <u>The teacher</u> • types it on the computer and reads it while the pupil looks on; • reads it back and if the pupil wants to change the story, the teacher types in these changes; • gives the pupil a print-out and keeps one copy <u>The pupil</u> • attempts to read the story and the teacher underlines on his/her copy all the words the pupil is unable to read or misreads • rereads the story. <u>The teacher</u>	Auditory comprehension Visual discrimination Visual analysis and synthesis Visual memory Visual figure-ground Visual form constancy Directionality and sequencing

• again underlines the words the pupil cannot read or misreads with a second line. Other words which he/she could read the first time but not the second time, are underlined. • writes those words on flash cards and in sentences. The pupil • reads the flash cards and when he can read them at sight, he reads the whole story.	
5. The teacher • makes a sentence card with a blank space for the target word for example: . The . girl is kind. • He/she then staples a card with the target word pretty in the blank space in the sentence. A second card is stapled on top of this card containing the first letter of the word pretty. A third card which is blank is stapled on top of this card. The pupil • predicts the word in the sentence. If he/she is unable to, he/she flips the blank card for the second card with the initial letter clue. If he/she is still unable to find the word he/she flips to the second card for the third card with the target word. The pupil then reads the	Visual analysis and synthesis Visual closure Directionality and sequencing Cognition Metacognition Language

sentence adding the target word.	
6. <u>The teacher</u> • writes a target word on the blackboard for example, <u>naughty</u>; • then shows the pupil three sentence cards of which only one describes the target word on the blackboard, for example: . John is playing with his sister. . John is breaking the window. . John is kissing his mother. <u>The pupil</u> • chooses the most appropriate sentence card and reads the target word and the describing sentence.	Visual figure-ground Cognition Metacognition Language
7. <u>The teacher</u> • writes a simple song on the blackboard or overhead projector, deleting some words which are also in the pupil's word bank. <u>The pupil</u> • learns the song and sings it with the correct or alternative words for the words deleted (these words can be nonsense words) <u>The teacher</u> • writes these words in the blank spaces <u>The pupil</u> • then sings the song again with its new words <u>The teacher and the pupil</u> • discuss the new words, their configurations and their meanings and whether they make sense with-	Auditory memory and sequencing Auditory closure Auditory comprehension Visual form constancy Cognition Metacognition

in the sentence.

Game: Make Sense

The teacher

Prepares word cards and sentence cards. The target words on the sentencecards are deleted. All these cards are placed in two piles - a pile with word cards and one with the sentence cards (The teacher is player A and the pupil is player B).

Player A

Draws a card from each pile and reads the sentence adding the word on the word card in the deleted space on the sentence card. If the word makes sense in the sentence, he/she keeps the pair, if not, the word card is placed under the word card pile and the sentence card in the middle of the playing area.

Player B

draws a card from each pile and compares his/her card with the sentence he/she has drawn. If the word card does not fit in the drawn sentence, the player places his/her sentence in the middle of the area. Then he/she places his/her word card onto the sentence already in the playing area, placed there by player A. If it fits he/she keeps both cards, if not, he/she places his/her word card back under the pile of word cards, and player A plays again. The one with the most sets of cards is the winner.

(c) Phonetic analysis (see appendix B)

"Phonemic analysis is the act of translating letters (in written words) into speech sounds" (Marzano et al 1987: 137) which helps one to identify words (McCormick 1987: 254). The phonics are combined according to set rules. The reader must know these rules (see Appendix B for the basic rules).

Schubert and Torgerson (1981: 259) explain that pupils should rather be led to discover the phonic principles than be taught them and that phonics should be used together with the other word-attack skills. Although the normal pupil is generally able to discover phonetic analysis by him/herself, the pupil with learning problems is not capable of doing so and needs intentional instruction with regard to phonetic analysis. The order in which the words should be learned

by these pupils should start from the easiest word structures to the more complex rules (see Appendix B).

The following exercises can be used in a remedial lesson to teach phonetic analysis. These exercises only serve as examples that can be used by the teacher as the scope of this study does not make provision for inclusion of a vast number of exercises.

Phonetic analysis (Par. 2.2.1.2: 3)

Exercises and guidelines (Sequence of words: Appendix D)	**Underlying subskills accommodated**
a. Consonant sounds The exercises given are only applicable to beginning consonants and should be adapted to the medial and final consonants as well.	
1. The teacher • reads, for example: . I hit the ball. • instructs the pupil to supply other words beginning with the same sound as ball.	Auditory acuity Auditory discrimination
2. The teacher • pronounces three words (two begin or end with, or have the same medial sound) for example, sing, same and find The pupil • says the two words beginning with the same sound.	Auditory discrimination Auditory memory and sequencing Speech and pronunciation
3. The teacher • puts a board containing a number of squares with words on them in front of the pupil	Auditory memory and sequencing Visual discrimina-

• calls out a word, for example, hot The pupil • places plastic chips of a particular colour on all the squares containing the words which begin with the same letter as hot (the same is done with the medial and final sounds, but other colour chips are used).	tion Visual figure-ground
4. The teacher • says a target word, for example, chair The pupil • names objects in the class beginning with the same sound as the target word (ch-).	Auditory discimination Language
5. The teacher • gives the pupil a worksheet with words, for example: top, ten, duck, tap The pupil • underlines the words not belonging (that is, the odd one out, namely, duck)	Visual discrimination Visual figure-ground Cognition Metacognition
6. The teacher • reads alliterative sentences for example: . Peter Piper picked a peck of pickled peppers. The pupil • identifies the consonant sound heard at the beginning of each word; and	Auditory discrimination Speech and pronunciation Cognition Metacognition Language

• composes his/her own alliterations and writes them down.	
7. The teacher • prints, for example, boy, bat, but on the blackboard. The teacher and the pupil • pronounce the words together. The teacher • asks the pupil how the words sound alike. The pupil • gives the [b]-sound and indicates that the b is in the beginning of the words. The pupil • gives other words beginning with b. The teacher • writes them on the blackboard The pupil • makes sentences containing these words and writes them down.	Auditory discrimination Speech and pronunciation Cognition Language
b. Consonant blends and digraphs 1. The teacher • gives the pupil word cards (some begin with single consonants and the other with blends and digraphs). The pupil • sorts the word cards into two piles (those beginning with single consonants and those beginning with blends/digraphs), • and reads the words while sorting them.	Visual discrimination

2. The teacher • holds up a blend/digraph card, for example, str and pronounces it; • then reads a sentence written on the blackboard, for example: He is not weak he is ..... The pupil • calls out the appropriate word beginning with the str digraph, namely strong, and • copies the sentence and underlines the word strong.	Visual closure Cognition Metacognition Language
3. The teacher • hands a set of cards, for example, one containing ch and the other ain to the pupil The pupil • matches the cards to make up a word, and • reads the word and writes it.	Visual analysis and synthesis Visual closure Cognition Metacognition
4. The teacher • writes a list of words (beginning with blends and digraphs) and a sentence with one word omitted, on the blackboard; • hands the pupil pictures corresponding with the listed words. The pupil • attaches the correct word card in the space in the sentence to the blackboard, and • attaches the picture to the blackboard next to the word which fits	Cognition Language

in the space in the sentence; • reads the word on the blackboard. The teacher • writes the word in the space in the sentence. The pupil • reads the completed sentence; • writes the sentence down on a worksheet, and • colours the target word.	
5. The teacher • prints, for example, th on the blackboard and pronounces it; • explains that this combination can be pronounced differently at the beginning of different words, and • prints this on the blackboard and pronounces it. The teacher and the pupil • pronounce the word this together The teacher • uses the word in a sentence • then prints that on the blackboard • pronounces both words (this and that) • sounds out th in both words The teacher and the pupil • pronounce the th- sound and the words together The teacher • uses the word that in a sentence; • uses the same procedure with other words like thin, throw of which the th- sound differs from that	Auditory discrimination Auditory analysis and synthesis Visual discrimination Speech and pronunciation

in this and that, and • pronounces the voiced th (this and that) and unvoiced th (thin and throw) sounds. The pupil • tries to identify the difference in sounds of the two groups of words; • pronounces the two different sounds. The teacher • asks the pupil to give another word which begins like that and one which is like thin • explains that the th combinations represent two different sounds	
c. **Phonograms** (word families) 1. The teacher • hands a number of tangible letlers (vowels in one colour) to the pupil; • instructs him/her to build a high frequency word such as and (learnt on sight). The pupil • builds the word and on the table with the tangible letters. The teacher • asks the pupil for another word that sounds like and The pupil • says the word, for example, sand and adds s to the letters on the table forming the word sand;	Auditory discrimination Auditory analysis and synthesis Auditory sequencing Visual analysis and synthesis Visual memory Visual form constancy Visual closure Speech and pronunciation

• forms other words containing and, such as, land, stand; • writes sentences with these words, and • draws a frame around the words containing the and.	
d. Vowel sounds	
1. The teacher • pronounces a particular vowel sound. The pupil • listens to words read slowly one by one on a tape recorder and simultaneously follows on a written text; • when he/she hears the word with the target sound he/she circles it.	Auditory analysis and synthesis Auditory memory and sequencing Visual figure-ground
2. The teacher • says a riddle, for example: . You see me in a circus. You laugh at me. I begin with the same sound as clap and clean The pupil • tries to guess the answer. The teacher • shows the pupil a picture of a clown if the pupil cannot find the word; • writes the word down on a card, and • adds it to the pupil's word bank under the word with the ow sounds.	Auditory comprehension

3. The teacher

- explains the following rule: where words contain ai, ay, ea, oa and ee the first vowel sound is heard but the second is silent; — Auditory discrimination; Visual discrimination
- teaches the pupil the following nonsense rhyme written on the blackboard to aid the pupil to remember the rule, namely:
  . maids may eat oak trees.

The pupil

- looks for words containing these sounds in a few selected paragraphs from the basal reader, and
- writes them down on a card
- colours the sounds and adds the word cards to his/her word bank.

e. "r"-controlled words

1. The teacher

- gives the pupil a worksheet with words containing vowels followed by r for example corn, term, car bird, fur — Visual discrimination; Visual figure-ground; Visual closure

The pupil

- sorts and writes these words under the following headings:
  or er ar ir ur

f. Silent "e"

1. The teacher

- writes, for example, the following words on the blackboard: — Auditory discrimination

cap cape pin pine pop pope cut cute • asks questions, like: . How many vowels are there in the words in the second column? . Are these words next to each other? . What is the last vowel? . Do the first vowels in the words in the second column sound the same as those in the first column? . Can you hear the e vowel at the end of the words in the second column? . Do they sound short, long, or are they silent? The pupil • answers all these questions; • supplies more words containing words such as those in the second column; • writes them down; • marks the vowels in the beginning of the word with a colour and the silent "e" with another colour; • reads these words, and • places them in his/her word bank.	Auditory analysis and synthesis Visual discrimination Visual analysis and synthesis Cognition Metacognition
2. The teacher • asks the following type of questions:	Auditory discrimination

. What vowel sound do you hear in hat and mat? . What vowel sound do you hear in hate and mate? . What vowel sound to you hear in cap? . What vowel sound do you hear when an e is added to this word? The pupil • answers all these questions and if he/she is unable to, the teacher helps him/her with the answer. The teacher • gives the pupil a worksheet with the following type of exercise: . I am going to fly my kit/kite. The pupil • underlines the correct word.	Visual discrimination Cognition Metacognition
g. Hard and soft "c" and "g" in the beginning of words 1. The pupil • gives words beginning with c The teacher • writes these words on the blackboard; • points to each word and asks how the c sounds, in for example, cent (s - soft) and came (k - hard) differ The pupil • makes up a rule: If c is followed by e, i and y the soft sound (s) is usually heard while otherwise the hard sound (k) is usually heard.	Auditory discrimination Cognition

This rule also applies to g.

h. Silent consonants

1. The teacher

- gives the pupil short lists of written words;
- asks the pupil to add w to the beginning of the words in the list, for example:
  ring wring
  rap wrap
- asks the pupil to add k to the beginning of the next list of words for example to the following words:
  not knot
  now know
- gives the pupil a list of words, for example:
  wring, not, now, ring
  knot, rung, know
- also provides written sentences where a word is deleted for example:
  . I want to ..... a bell.
  . I ..... that man's name.

The pupil

- completes the sentences and underlines the word.

The teacher

- alternates the exercise with written sentences such as the following:
  . I tied a (knot, not) in my handkerchief.

The pupil

- underlines the correct word.

Visual Discrimination
Visual analysis and synthesis
Cognition
Metacognition
Language

(2) <u>The teacher</u> • writes sets of four words on the blackbaord, for example: <u>kneel knit kite knot</u> <u>wrap wren wish wreck</u> <u>The pupil</u> • crosses out the word in each set with a different beginning sound on the blackboard • writes down the rule which applies, for example in <u>kneel, knot</u>	Visual discrimination

<u>Games that can be played</u>

<u>Scrabble</u>

Two players play. Each player chooses seven letter bricks (without seeing the letters). Player A builds a word and player B tries to build a new word onto one of the letters on the word of pupil A. Then pupil A has a turn to build a new word onto any one of the letters on the board (the words can be horizontal or vertical). The players complement their letter bricks to have seven bricks in their hands. They continue building words until they have used all the bricks or are not able to build any more words. Each word is scored according to the number on each letter block. The player with the most points at the end of the game, is the winner.

<u>Sound lotto</u>

The teacher hands a large piece of cardboard divided into six squares, to two players each. A key picture is pasted on the top of each card. The teacher has a pile of cards with pictures on and words on the other side. He/she names the object which the picture represents and the pupil must establish whether the object begins with the same sound as his/her key picture. If the beginning sound of the pupil's key picture coincides with that which the teacher read, he/she takes it and places it with the word facing right side up, on a block on his/her card. The pupil whose card is full first, wins. The players then read the teacher's words, write them on cards and place them in their word banks.

(d) Structural analysis (Par. 2.2.1.2: 4)(see Appendix C)

Structural analysis includes root words and suffixes. Affixes include prefixes and suffixes. The pupil may recognise root words but may have problems when suffixes and prefixes are added. It is advisable to start with suffixes like inflected endings, where very little of the root word is changed (Johns 1986: 92). The following exercises can be used to teach structural analysis in a remedial lesson.

Structural analysis

Exercises and guidelines	**Underlying subskills accommodated**
a. Suffixes: Inflected endings (s, es, ed, er, est, ing, 's and d)	
1. The teacher • writes a list of nouns on the blackboard The pupil • uses each of them in a sentence. The teacher • adds the inflectional ending s at the end of these words on the blackboard. The teacher and the pupil • discuss the effect of the s on the word's meaning (plural). The pupil • uses these words in a sentence.	Auditory memory and sequencing Auditory comprehension Speech and pronunciation Cognition Metacognition Language
2. The teacher • gives the pupil a worksheet with the following type of exercises: . Bill was look... at the lake. . The cats were (plays, played, playing) in the sand. The pupil	Visual closure Auditory comprehension Cognition Metacognition Language

• completes the word looking in the first exercise • circles the appropriate word playing in the second exercise.	
3. The teacher • gives the pupil two sets of cards. One set consisting of root words and the other, inflected endings The pupil • draws a card from each set and matches them to make a new word. • he/she writes the word down and reads it.	Visual analysis and synthesis Visual closure
4. The teacher • writes a word, for example, showing, on the blackboard. The pupil • uses a worksheet divided into two columns; • writes the root word in the left column and the inflected ending in the right column.	Visual analysis and synthesis
5. The teacher • provides a worksheet with the following type of sentences: . My mom is older than my brother, but my dad is the ..... . The pupil • completes the word oldest in the sentence.	Visual analysis and synthesis Visual closure Metacognition
6. The teacher • provides a worksheet with the	Visual analysis

word jump printed four times on it. The pupil • adds the inflected endings for example s, ed, ing to the word; • makes a sentence with each word.	Visual closure Cognition Metacognition Language
7. The teacher • writes the following words on the overhead projector: eating, weekly, unfaithful, slightly The pupil • identifies the root words and uses them in sentences; • underlines the root word written on a worksheet provided by the teacher.	Auditory comprehension Visual figure-ground Metacognition Language
b. Combining forms 1. The teacher • writes the words on the board, for example: classroom, inside, grandmother The pupil • finds two smaller words in each of the words and writes them down next to each other; • circles or underlines each smaller word with a different colour on a worksheet provided by the teacher.	Auditory comprehension Visual analysis and synthesis Visual figure-ground Metacognition
2. The pupil • draws two pictures illustrating the two words which make up, for example, dog + house = doghouse	Visual closure Cognition Metacognition Language

• writes down the word and uses it in a sentence	
3. <u>The teacher</u>	
• gives the pupil a work-sheet with the following exercise on, for example: . My bed..... is up..... (plane, room, body, stairs) <u>The pupil</u>	Visual closure Cognition Metacognition Language
• chooses the correct word to form a combined word and fills it into the appropriate space.	
c. <u>Prefixes</u>	
1. <u>The teacher</u>	
• writes, for example, the follow-ing sentence on the blackboard: . The room was <u>tidy</u>. <u>The pupil</u>	Auditory comprehen-sion Cognition Metacognition
• rewrites the sentence but writes down the opposite word for <u>tidy</u> by adding the prefix <u>un</u> in front of <u>tidy</u> - <u>un</u>tidy.	
d. <u>Prefixes, suffixes and root words</u>	
1. <u>The teacher</u>	
• gives the pupil a set of cards with affixes, for example, <u>ed</u> and <u>pre</u>, and keeps a set of cards containing root words such as <u>rake</u> and <u>cook</u>;	Visual analysis and synthesis Visual closure Speech and pronun-ciation
• holds up one of the root word cards. <u>The pupil</u>	Cognition Metacognition Language
• holds up an appropriate card containing an affix to form	

a new word together with the teacher's card; • says the newly formed word; • uses it in a sentence; • writes it down on a card, and • adds the new word to his/her word bank.	
2. <u>The teacher</u> • gives the pupil a worksheet with the following heading: <u>word</u>: <u>prefix</u> <u>root</u> <u>suffix</u> • gives a word, for example, <u>unbreakable</u> <u>The pupil</u> • fills in the parts of the word under the appropriate headings, namely: <u>prefix</u> <u>root</u> <u>suffix</u> un break able	Visual analysis Visual figure-ground Cognition Metacognition
3. <u>The teacher</u> • gives the pupil a worksheet with the following exercise, for example: . The boy laughed as he was ..... (happy, unhappy). <u>The pupil</u> • fills in the correct word.	Cognition Metacognition Language
4. <u>The teacher</u> • writes the word for, example, <u>joy</u> on the blackboard <u>The pupil</u> • builds a word tree on the blackboard, by adding prefixes and	Visual closure Cognition Metacognition Language

suffixes to the word on the black-board, for example: joy enjoy joyful joyous enjoyment enjoyable • writes them down on cards and adds them to his/her word bank.	
5. The teacher • provides the pupil with a short paragraph or story written on a worksheet. The pupil • reads the whole paragraph or story first, then • circles or underlines each syllable of the compound word in the paragraph or story.	Auditory analysis Auditory comprehen-sion Visual figure-ground Cognition Metacognition

For more examples of words like these see Appendix C.

Games for reinforcement

Card games played by two pupils

The teacher writes the words prefix and suffix on the blackboard. The pupils take turns writing words containing prefixes and suffixes on a piece of paper. The teacher checks and the pupil with the most words is the winner.

The teacher places cards containing root words and cards containing matching affixes, face down, in mixed order, in two separate piles. Each player turns over two cards one from each pile, simultaneously (the two piles contain an uneven number of cards). If the two can form a whole word he/she keeps them if not, the cards are placed under their piles, and the next player plays. The player with the most cards wins.

Listening games played by two pupils

The teacher reads a word's definition to two pupils. The pupil who can give the words and it's syllables, is rewarded a point on a scoring board. The pupil with the most points wins.

The pupil listens to a number of syllables in a word pronounced by the teacher. He/she then hops on each syllable as it is being pronounced for the second time.

The words of favourite songs are written on the blackboard by the teacher and the pupil syllabicates the words by clapping while singing the song.

(3) Understanding words and ideas (Par. 2.2.2.2.)

Ekwall and Shanker (1988) identified *vocabulary* and *other comprehension skills* as the understanding of words and ideas. Vocabulary is not discussed separately but as a component of all the different subcategories of reading, because vocabulary features in all reading exercises. In the following section the main emphasis is on comprehension.

Although word recognition is a prerequisite for reading comprehension (which Ekwall and Shanker refer to as other comprehension skills), is central to the reading act. If one is able to decode words one does not necessarily understand the meaning of those words or the message within the text (Alexander & Heathington 1988: 276-277).

The pupil is expected to reconstruct the author's meaning by means of understanding, interpreting and reacting to the author's message (Johns 1986: 118). Carnine et al (1990: 40-42) believe that comprehension skills are hierarchically related, for example, vocabulary knowledge is a prerequisite for being able to draw inferences. Therefore it is necessary for the pupil to learn certain comprehension skills before others, beginning with the simple and working towards the more complex. When teaching reading, the teachers begin with the meaning of words and continue on to whole passages, from literal comprehension to inferential comprehension; from simple vocabulary to

sophisticated vocabulary, and from smaller comprehension units to complex units.

The following exercises and suggestions are offered for teaching the various subcategories of reading comprehension:

a. Literal comprehension

Exercises and guidelines	**Underlying subskills accommodated**
1. The teacher • numbers each sentence in a passage. The teacher and the pupil • read the passage together. The pupil • makes response cards with a number corresponding to the number at each sentence in the passage. The teacher • asks factual questions on the passage provided. The pupil • while answering the questions he/she holds up an appropriate card corresponding with the appropriate sentence in the passage.	Auditory comprehension Cognition Metacognition
2. The teacher • provides the pupil with the following type of sentence, which the pupil reads: . Yesterday, Steve left his book at the library. • asks the following type of	Auditory comprehension Cognition Language

questions: . Who left the book at the library? . What did Steve leave at the library? . When did Steve leave his book at the library? . Where did Steve leave his book? The pupil • answers the above questions orally.	
3. The teacher • provides a picture The pupil • reads a few sentences. One of the sentences describes the picture. The pupil • selects the most appropriate sentence.	Cognition
4. The teacher • lists step-by-step instructions for making a fridge tart The pupil • reads the instructions and carries them out.	Auditory memory and sequencing Auditory comprehension Cognition Metacognition Language
5. The teacher • arranges three pictures in sequence and omits the fourth. The pupil	Cognition Metacognition

• selects the omitted one from three other pictures to complete the sequence. The pupil • explains his/her choice and describes the events.	
6. The pupil • arranges mixed up comic strips in the order in chronological order. The pupil • reads the captions and tells the story.	Visual memory Cognition Metacognition Language
7. The pupil • draws a sequence of pictures to illustrate the sequence of the story read by the teacher.	Auditory comprehension Directionality and sequencing Cognition Metacognition
8. The teacher • places pictures in sequence • he/she hands sentence strips to the pupil The pupil • reads the sentence strips and arranges them in the same order as the pictures.	Directionality and sequencing Cognition Metacognition
9. The teacher • writes a major event in three different time settings (haphazardly) on the blackboard, for example: . John is sleeping in his bed.	Cognition Metacognition Language

. John slept in his bed. . John is going to sleep in his bed. The pupil • rewrites the events in the correct time order; • discusses the sentences in terms of the time component.	
10. The teacher • hands the pupil a written paragraph with a sentence deleted. The pupil • reads the paragraph and selects from four sentences on cards, the one which fits into the paragraph; • reads it in context; • discusses the other sentences - the reason why they are not appropriate in the text.	Cognition Metacognition Language
11. The teacher • gives the pupil a worksheet. On it is a string of words which are numbered as well as three sets of numbers. The pupil • decides which of the number sets represents the sequence of events for example: l. noon 2. sunrise 3. sunset 123 132 213 • circles the appropriate number sequence.	Visual discrmination Visual figure-ground Cognition Metacognition

b. Inference **Exercises and guidelines**	**Underlying subskills accommodated**
1. The teacher • places pictures of events in sequence in front of the pupil. (the main idea is represented by the sequence of the pictures on the blackboard) The teacher and the pupil • discuss the main idea The pupil • writes the main idea down and reads it.	Directionality and sequencing Cognition Metacognition
2. The teacher and the pupil • discuss the topic to be read in terms of the vocabulary, incidents, characters and so forth. The pupil • reads the passage and answers the questions which follow, orally.	Speech and pronunciation Language
3. The pupil • listens to a story read on tape by the teacher. The pupil • gives the main idea and writes it down.	Auditory comprehension Cognition Metacognition Language
4. The teacher • gives the pupil a short written passage and cards with possible headings. The pupil	Cognition Metacognition

• selects an appropriate title from the cards for this passage; • reads the heading and the passage.	
5. <u>The pupil</u> • reads two simple paragraphs; • gives the main idea in one sentence, and • writes the sentence down.	Cognition Metacognition Language
6. <u>The teacher</u> • pastes a cutting from a children's magazine on strips of cardboard. At the back of the card the the main idea is written down. <u>The pupil</u> • reads the strip; • writes the main idea down as he/she sees it; • compares the main idea he/she wrote down to the one on the back of the card.	Cognition Metacogniton Language
7. <u>The teacher</u> • provides the pupil with a short passage accompanied by three sentences (the one sentence states the main idea, the other may be too detailed and the last one has information which is not in the passage). <u>The pupil</u> • reads the passage and selects the sentence which depicts the main idea;	Cognition Metacognition

• explains why the other two sentences are not appropriate.	
8. <u>The pupil</u> • reads a selected passage in a children's magazine and underlines the main idea.	Cognition Metacognition
9. <u>The teacher</u> • cuts out headlines and passages from children's magazines <u>The pupil</u> • matches the headlines with the passages.	Cognition Metacognition Language
10. <u>The teacher</u> • gives the pupil a few words, for example: small, minute, little ..... on a worksheet <u>The pupil</u> • thinks of another word which fits the classification and fills it in the space provided on the worksheet.	Cognition Metacognition Language
11. <u>The pupil</u> • classifies the words carrots, apples, pork, celery, oranges and lamb under the three headings *vegetables, fruit* and *meats* on a worksheet.	Cognition Metacognition Language
12. <u>The pupil</u> • reads a passage for example: . Bill was reading about sheep,	Cognition Metacogntion

cattle, and goats. It was a book about the (farm animals/pets).; • underlines the correct alternative in the sentence.	Language
13. <u>The pupil</u> • crosses out the word which does not belong, on a worksheet: run jump walk sleep crawl	Cognition Metacognition Language
14. <u>The pupil</u> • substitutes a group of words with one word on a worksheet: . The boy was (*tears were running down his face)* when his cat died. (crying)	Cognition Metacognition Language
15. <u>The pupil</u> • underlines the correct word in the following sentence on a worksheet: . The man was (right, write) about the distance. • then reads it.	Visual analysis and synthesis Visual memory Cognition Metacognition Language
16. <u>The pupil</u> • reads on a topic, for example, <u>sleeping</u> <u>The teacher</u> • instructs the pupil to answer the question: . What would happen if you did not sleep for two days?	Cognition Metacognition Language
17. <u>The pupil</u> • reads the beginning of a story and tells an end to the story.	Cognition Metacognition

	Language
18. <u>The pupil</u> • reads a passage <u>The teacher</u> • stops him/her at some point, and • asks what he/she thinks is going to happen next. <u>The pupil</u> • predicts the possible outcome.	Speech and pronunciation Cognition Metacognition Language
19. <u>The teacher</u> • reads the beginning of a passage <u>The pupil</u> • selects the outcome of the story from three possible conclusions (on cards); • reads the whole passage and decides whether his/her choice is correct.	Auditory comprehension Cognition Metacognition
20. <u>The teacher</u> • omits adjectives and leaves spaces in a written story; • reads the story to the pupil <u>The pupil</u> • reads the passage and guesses which adjectives are applicable in those spaces; • writes it in the spaces and rereads the passage. <u>The teacher</u> • asks questions (if the pupil cannot answer, the teacher helps.	Cognition Metacognition

21. <u>The pupil</u> • reads a sentence on the black-board concerning an event which took place; • decides whether it is true/false, for example: . It is raining outside.	Cognition Metacognition
22. <u>The teacher</u> • reads a passage which presents a problem. <u>The pupil</u> • suggests a few possible solutions to the problem. <u>The teacher</u> • writes the pupil's responses on the blackboard. <u>The teacher and the pupil</u> • discuss each solution and evaluate each one. <u>The pupil</u> • chooses the most appropriate solution	Cognition Metacognition Language
23. <u>The pupil</u> • reads a passage and answers written questions concerning it, for example: . What person in the story did you like best and why? . What was the most important thing the main character did and why do you think so? . Did you enjoy the story? . Why/why not?	Cognition Metacognition Language

4.4 CASE STUDIES

4.4.1 INTRODUCTION

Merriam (1991: 9-10 & 21) describes a case study as "... an examination of a specific phenomenon such as a program, an event, a person, a process, an institution, or a social group." Characteristically, case studies concentrate on a specific situation or phenomenon, are descriptive, and supply insight into phenomena. There is no prescribed method of gathering data because any method may be used to gain insight, discovery and interpretation.

The disabilities and restraints of each child with learning problems are unique (Par. 1.3.2), nevertheless, is possible, by means of case studies, to gain a deeper insight into the specific pupil's situation and problems.

A case study design is chosen for this study in order to illustrate how the exercises and guidelines given in this chapter can be (and have been) implemented to compile a remedial reading programme for specific pupils with their unique reading problems. The case studies discussed in this thesis are not meant to illustrate the value and success of the exercises, or the progress of the pupils during reading remediation sessions. The aim of these case studies is merely to confirm that effective utilisation of the exercises and guidelines is possible in a practical situation.

The case studies are included to enhance the significance of the contribution to the practice of remedial education by means of exercises and guidelines for teachers compiling a remedial reading programme.

4.4.2 GUIDELINES FOR APPLICATION OF A REMEDIAL READING PROGRAMME TO A SPECIFIC PUPIL WITH READING PROBLEMS

4.4.2.1 General guidelines

Pupils of the same age, display a wide variety of reading levels and therefore it is necessary to determine these levels before selecting the appropriate reading material. Careful analysis of the reading problem is also essential to identify the

pupil's problems and needs in order to provide appropriate reading instruction for him/her in view of overcoming his/her reading problems.

By using the reading problem analysis table the teacher is able to identify the pupil's reading problem, the area in which he/she needs remediation, as well as the underlying factors which may be the cause of the specific reading problem.

Once the teacher has identified the above factors, he/she consults the different reading areas in order to determine which exercises and guidelines should be applied. These exercises also accommodate the various underlying subskills. Only those exercises applicable to the specific pupil's needs are used when planning a remedial reading programme for the pupil. The teacher adapts these exercises to the specific problems manifested in the pupil. The teacher also uses his/her own ingenuity and creativity to develop exercises similar to those suggested in the programme.

Furthermore, it is essential to gain general information on each pupil before planning such a programme, so as to form an overall picture of the pupil. This information includes the following aspects:

1. *Testing date*
The testing date enables the teacher to keep track of the pupil's progress over a period of time.

2. *Chronological age and standard*
The chronological age and standard enables the teacher to choose the appropriate reading material. It also gives an indication of the reading problems revealed by the pupil and whether these should be considered problems as such. In addition the pupil's chronological age (and standard) gives an indication of the cognitive level on which the pupil needs to be helped, for example, on a concrete or an abstract level, as well as the basic didactical principles to be incorporated.

3. *Intelligence quotient (IQ)*
From the IQ the teacher can establish whether the pupil is underachieving in reading and whether remediation can be successful. The IQ score alone is not the only criteria to be considered. From general observation, it is possible to

determine whether the pupil may have a higher IQ than indicated. If the IQ is too low the pupil is not underachieving, and therefore remediation will probably not be effective.

4. *Reading age*
The reading age gives an indication of the level on which the pupil is able to read and of the reading material to be used during remediation.

5. *Physical factors*
Physical factors, such as, the pupil's general health, vision, hearing, motor skills and speech should be considered and investigated before initiating remediation. Any problem in one or more of these areas should be referred to a medical practitioner or other professional.

6. *Home background*
From information gained regarding the home circumstances it is possible to determine whether the pupil is emotionally stable or labile. The quality of exposure, motivation and intellectual stimulation at home also gives an indication of the pupil's general knowledge. This information determines the methods which can be used and the content of the text to be chosen for the pupil.

The financial status of the parents gives the teacher an indication whether he/she should provide extra reading material for the pupil to read at home.

7. *Social cultural conditions*
From the social cultural conditions it is possible for the teacher to establish the exposure of the pupil to that which will contribute to his/her general knowledge as well as the type of information that should be provided to him/her.

8. *Emotional state*
The information regarding the emotional state of the pupil, is gained from his/her background and observation in the classroom and playground. It implies the way in which the pupil should be approached. Praise and success experiences can restore self-confidence. In many cases once the reading problem is overcome, the emotional problems also seem to disappear.

4.4.2.2 Choice of the reading material

When initiating remediation, the reading material is selected according to the *independent level* as this will alleviate the pupil's anxiety when confronted with scholastic activities. When it is clear that there is a good relationship between the pupil and the teacher, and that the pupil has accepted the remedial situation, the teacher and the pupil can move on to the *instructional level.*

4.4.2.3 Interpreting the information gained from the reading problem analysis table: The control chart

The information gained from the reading problem analysis table is recorded on a *control chart* (Fig. 4.1) for the remedial reading areas and underlying subskills.

CONTROL CHART (Figure 4.1)

UNDERLYING SUBSKILLS / REMEDIAL AREAS	Recognising and analysing words	Sight words	Configuration clues	Context clues	Phonetic analysis	Structural analysis	Understanding words and ideas	Literal comprehension	Inferential comprehension
Auditory discrimination									
Auditory analysis and synthesis									
Auditory memory and sequencing									
Visual discrimination									
Visual analysis and synthesis									
Visual memory									
Visual figure ground									
Visual form-constancy									
Visual closure									
Visual directionality and sequencing									
Speech and pronunciation									
Cognition									
Meta cognition									
Language									
Emotional									

In the left hand column of this chart (Fig. 4.1) all the remedial areas receiving attention are listed under *recognising and analysing words* and *understanding words and ideas.*

Next to the remedial areas column on the left hand side of the chart, all the different *underlying subskills* which may, according to the *reading problem analysis table*, influence the pupil's reading are indicated in a number of vertical columns.

When analysing a pupil's reading problem, the different problem areas requiring attention are determined first from the *reading problem analysis table*. Thereafter the remedial areas are brought into context with the underlying subskills possibly responsible for the reading problems as indicated in the *reading problem analysis table*. This is done by making a mark in the horizontal column of the remedial area where it crosses the vertical column of that underlying subskill. All the underlying subskills related to that specific remedial area are found in the *reading problem analysis table* and each one is indicated in the *control chart* as mentioned. (In some of these blocks there can be more than one mark.)

The same procedure is followed with the other remedial areas.

The following two priority lists are drawn up according to the *control chart*:
drawn up:
The remedial area list
The remedial areas are arranged in sequence according to their frequency on the *control chart.*
The underlying subskill list
The subskills are similarly set out in sequence according to frequency, indicated on the *control chart.*

The tables offering exercises and guidelines, are then consulted. Firstly one looks for the remedial area which has the highest frequency on the frequency list. From the table containing exercises for that remedial area, the exercise is selected which accommodates the highest frequency of underlying subskills. Secondly, exercises for the second highest frequency of underlying subskills are selected in that table. Then the exercises for the third highest frequency of subskills are determined.

From this it can be concluded that some of the subskills related to the exercises overlap. The exercise which includes the most relevant subskills is the one to be chosen as the initiating exercise.

The same procedure should be followed with the other remedial areas indicated in the priority list.

The various exercises selected should coincide with the frequency of remedial areas. High frequencies in particular require more exercises (plus minus four) than low frequencies. The lowest frequency may require only one exercise to be adapted to the pupils's problem. However, if the pupil's problem persists irrespective of the exercises done, more exercises are selected from that specific area.

The remedial programmes for the following pupils are discussed according to the procedure set out above.

4.4.3 PUPIL A (Jane)

4.4.3.1 General information

1. *Testing date:* 94-03-30

2. *Chronological age and standard:* 9 years and 7 months,
Standard 1

3. *Intelligence quotient (IQ):* 99 (Old South African Individual Scale)
As Jane has an average IQ, it can be expected that she should be able to read according to her chronological age. She is, however, underachieving.

4. *Reading age*: 8 years and I month
When comparing Jane's chronological age of 9 years 7 months to her reading age of 8 years 1 month, there is a backlog of approximately one year and six months, which implies a Grade two reading level.

5. *Physical factors:*
There is an indication of an eye problem. Jane has been referred to an optician who has prescribed reading glasses.

Her speech and hearing are normal.

6. *Home background*
The home situation appears to be stable. Jane's mother is more involved with her scholastic activities than her father. Her father has moved onto the background and seems to have distantiated himself from her scholastic problems. This may have an effect on her scholastic progress as she yearns for her father's attention and approval.

Both parents seem to be impatient with Jane and often resort to screaming at her and sending her to her bedroom. This may be the reason why she is tense, nervous and has bad sleeping habits. The implications for the teacher are that he/she should relate to Jane in an opposite way. This means he/she should be patient, supportive, speak in a soft tone of voice and praise her and provide situations where she can experience success.

Jane has a keen interest in horses, and she takes part in horse riding on a regular basis. Her parents support her in this activity. It is important that her teacher takes this into consideration when choosing reading material for the lesson.

7. *Social cultural conditions*
Her father is a regional manager at a company and her mother is a draughtsman. They live in an average socio-economic suburb. It can thus be concluded that the teacher can expect the parents to be co-operative when extra reading material and apparatus must be bought or if it is necessary to take Jane to a library for extra reading activities at home.

8. *Emotional state*
Jane
- is co-operative in the testing situation, if she feels she can do the work;
- is anxious, especially during school hours, which has led to a negative attitude towards school work;
- has a fear of failure;
- has poor concentration when she feels she cannot cope;
- chews her nails;

- talks incessantly;
- resorts to crying if she cannot complete a task;
- has a defeatist attitude;
- is restless and distracted, and
- needs constant encouragement.

From the above information, it can be concluded that Jane needs to be stabalised emotionally, before initiating remediation. Initially the emphasis would be on lessening her anxiety by building her self-confidence through experiencing success when carrying out reading activities. Teaching should also take place in a relaxed environment where there are no distractions.

Jane's parents should be informed of her reading problem and be given guidance regarding their upbringing approach.

4.4.3.2 Choice of reading material

When initiating remediation, the reading material should be selected according to Jane's independent level to alleviate her anxiety on being confronted with scholastic activities. When it is clear that there is a good relationship between Jane and the teacher and that she has accepted the remedial situation through experiencing success in reading, she can proceed onto the instructional level.

Jane's interest in horses should be taken into consideration when choosing reading material, as it complements her background knowledge and is a motivating factor for reading.

As Jane reads on a Grade two level, the words in the text should consist of the prescribed words which are in the syllabus for Grade two. The following text is an example of the type of text used at the instructional level:

They went round the house to the apple tree. The branches were hanging down with big red apples. And under the tree was the pony. His sides were fat. His brown coat shone in the sunlight.

"Oh, he's beautiful!" said Carol.

"His name is Sam," said Mrs Peacham. "Would you like to ride him?"

"Could we?" asked Carol.

"Yes," said Mrs Peacham. "Just climb on. Sam will know what to do."

Michael helped Carol up on the pony's back. The pony trotted round the apple tree. He ran in two neat circles before he stopped.

Then Michael had his turn.

Reading 360. The Ginn Reading Programme. Level 8, Book 4 written by T. Clymer and P.H. Neff.

This text is a good choice for a pupil with an interest in horses; the words are more or less on the pupil's independent reading level and it allows for the selected exercises to be adapted accordingly.

4.4.3.3 Error analysis

The chosen tests and questions are not prescribed as the teacher is free to use her own text. The texts used here are from the Neale Analysis of Reading Ability.

Test 1:

Jane reads the test on an independent level and she has 100% reading accuracy (Par. 4.3.2.1). Her reading behaviour as observed during both the tests is as follows:

- Points at words.
- Reads word-for-word.
- Ignores punctuation.

Test 1

A black cat came to my house. She put her kitten by the door. Then she went away. Now I have her baby for a pet.

Questions:

1. **What came to the little boy's/girl's house?**
   (A black cat. Kitten.) ✓
2. **Where did the black cat leave her kitten?**
   (By the door.) ✓
3. **What did the black cat do then?**
   (She went away.) Stayed there
4. **What did the little boy/girl do with the kitten?**
   (Kept him. Kept him for a pet.) ✓

Test 2:

During Test 2, Jane reads on an independent level and she has 96% reading accuracy (Par. 4.3.2.1).

Test 2

Tom stopped on his way to school. The milkman's house **horse had wandered in the fog. The horse and** kite **cart blocked the centre of the road. Traffic was coming. There was no time to call the milkman. Quickly Tom led the horse to safety just as the frightened milkman returned.**

Questions:

1. **Where was Tom going?**
   (To school.) ✓
2. **What did he see on the way ?**
   (A horse and cart- blocking the road.) A house that disappeared.
3. **What had happened to the horse?**
   (It had wandered.) ✓
4. **What kind of day was it? OR What was the weather like?**
   (Foggy.) ✓
5. **Why was it dangerous for the horse and cart to stay there? (Traffic - a car - was coming.)** Because there was fog.
6. **Why didn't Tom call the milkman?**
   (There was no time.) Don't know.
7. **What did Tom do?**
   (He led the horse to safety - the side of the road.) He stopped.
8. **How did the milkman feel as he came running back?**
   (Afraid. Frightened. Worried.) Can't remember

Test 3:
Test 3 is too difficult and she scores below the 95% reading accuracy which is the frustrational level (Par. 4.3.2.1). She also finds the comprehension of this test too difficult, therefore it is discontinued and was not taken into consideration for reading analysis.

The following word (The Transvaal Education Department: One-minute reading test) list gives an indication of the number of words she reads within one minute.

is	me	on	at	by	so	us
an	it	or	be	to	as	he
of	in	go	up	am	if	no
we	my	ox	do	the	and	for
but	him	are	can	she	dog	let
you	not	was	out	try	see	mix
cat	now	boy	saw	bit	met	top
run	man	pet	lot	get	dig	van

The following reading errors are identified and selected from the reading problem analysis table:

(a) Poor reading behaviour

Number 4, 6, 9 in the reading problem analysis table.

Reading problem	Remedial area	Underlying factors
4. Word-by-word reading	Sight words Literal comprehension	Visual figure-ground Visual form constancy Visual closure
6. Points to words	Sight words	Visual figure-ground Fine eye movement
(Eye movement as mentioned in Par. 2.3.2.4, is not taken into consideration.)		
9. Guesses at words, for ex-	Context clues Phonetic analysis	Visual discrimination

ample, and for you	Structural analysis	Visual analysis and synthesis Visual memory

(Structural analysis is not applicable as errors are only made with mono-syllabic words.)

(b) General reading problems

Number 2, 5, 7, 8, 12.

2. Cannot relate details	Vocabulary Literal comprehension	Cognition Metacognition Language

(Vocabulary is integrated in all the exercises.)

5. Difficulty identifying main ideas	Vocabulary Inferential comprehension	Cognition Metacognition Language

(Vocabulary does not receive attention here as it is integrated in all the exercises)

7. Inability to identify a spelling rule within words, for example, of for off	Phonetic analysis	Auditory analysis and synthesis Cognition Metacognition

8. Repetitions	Context clues Phonetic analysis Structual analysis Literal comprehension Inferential comprehension	Visual analysis and synthesis Fine eye movement Emotional

(Her fine eye movement does not require remedial exercises.)

12. Ignores punctuation	Inferential comprehension	Cognition Metacognition Language Emotional

(c) Specific reading errors

Number 8.		
8. Substitutions for example kite for cart house for horse	Configuration clues Phonetic analysis Structural analysis	Visual discrimination Visual analysis and synthesis Visual memory

(Structural analysis is not relevant.)

The information collected from the reading problem analysis table is recorded, as described in Par. 4.4.2.3, on the control chart for remedial reading areas and underlying subskills.

CONTROL CHART (Figure 4.1)

UNDERLYING SUBSKILLS / REMEDIAL AREAS	Auditory discrimination	Auditory analysis and synthesis	Auditory memory and sequencing	Visual discrimination	Visual analysis and synthesis	Visual memory	Visual figure-ground	Visual form constancy	Visual closure	Visual directionality and sequencing	Speech and pronunciation	Cognition	Metacognition	Language	Emotional
Recognising and analysing words															
Sight words							✓✓	✓	✓						
Configuration clues				✓	✓	✓									
Context clues				✓	✓✓	✓									✓
Phonetic analysis		✓		✓✓✓	✓✓✓	✓✓✓						✓	✓		✓
Structural analysis															
Understanding words and ideas															
Literal comprehension					✓		✓	✓	✓			✓	✓✓	✓	✓
Inferential comprehension					✓							✓✓	✓✓	✓✓	✓✓

From this control chart the remedial reading areas are placed in sequence according to the frequencies of underlying subskills, from highest to lowest, as follows:

1. Phonetic analysis (14x)
2. Literal comprehension (9x)
3. Inferential comprehension (9x)
4. Context clues (5x)
5. Sight words (4x)
6. Configuration clues (3x)

The underlying subskills are placed in sequence according to their frequency as follows:

1. Visual analysis and synthesis (9x)
2. Visual discrimination (5x)
3. Visual memory (5x)
4. Metacognition (5x)
5. Emotional (5x)
6. Cognition (4x)
7. Visual figure ground (3x)
8. Language (3x)
9. Visual form-constancy (2x)
10. Visual closure (2x)
11. Auditory analysis and synthesis (1x)

At this stage the first four underlying subskills receive priority and progressively the others are incorporated. However, some of the lower frequency subskills are already included in the exercises. The following list gives an indication of the selected exercises.

4.4.3.4 Selected exercises

Phonetic analysis (first priority)
Exercise a.3, a.5, b.1, and e.1 (word family -ar and -or)
Literal comprehension (second priority)
Exercise 1, 2, 3, 6
Inferential comprehension (third priority)
Exercise 2, 7, 16

Context clues (fourth priority)
Exercise 2, 5
Sight words (fifth priority)
Exercise 1, 3
Configuration clues (sixth priority)
Exercise 1

The exercises required are as follows (The examples are reduced in size for the sake of space but the actual exercises are bigger.):

Phonetic analysis (first priority)

a. Consonant sounds

3. The teacher

- puts a board containing a number of squares with words on, in front of Jane

pony	tree	carol
apples	could	round
two	climb	brown

- calls out a word, for example, coat
  Jane
- places plastic chips of a certain colour on all the squares containing the words which begin with the same letter as coat (the same is done with the medial and final sounds, but other colour chips are used).

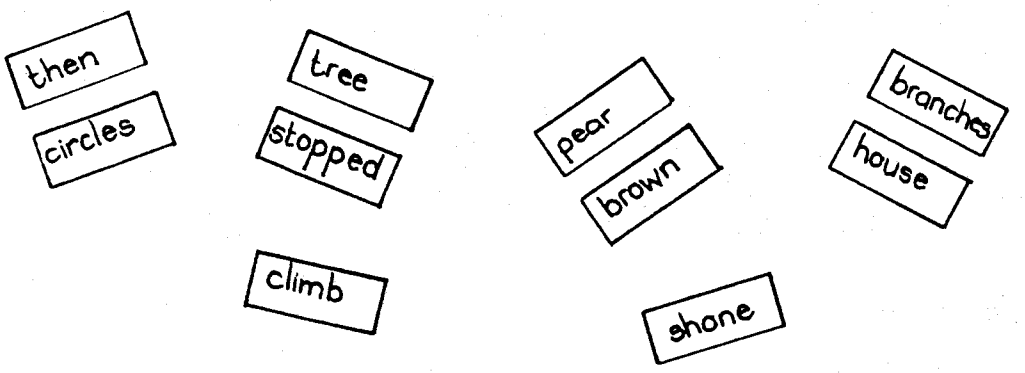
5. The teacher

- gives Jane a worksheet with words, for example:
  yes, yolk, yen, back
  Jane
- underlines the words not belonging (that is, the odd one out, namely back)

b. Consonant blends and digraphs

1. The teacher

- gives Jane word cards (some begin with single consonants and the other with blends and digraphs) for example:



Jane

- sorts the word cards into two piles (those beginning with single consonants and those beginning with blends/digraphs);
- reads the words them while sorting them.

.....

e. (r)- Controlled words

1. The teacher

- gives Jane a worksheet with words containing vowels followed by r as in corn, her, form, circle, Saturday

Jane

- sorts and writes these words under the following headings:

or er ar ir ur

Literal comprehension (second priority)

1. The teacher

- numbers each sentence in a passage

They went round the house to the apple tree. The branches were hanging down with big red apples. And under the tree was the pony. His sides were fat. His brown coat shone in the sunlight.

"Oh, he's beautiful!" said Carol.

The teacher and Jane

- read the passage together

Jane

- makes response cards with a number corresponding to the number at each line in the passage:

The branches were hanging down with big red apples.

His brown coat shone in the sunlight.

They went round the house to the apple tree.

And under the tree was the pony.

"Oh, he's beautiful!" said Carol.

His sides were fat.

The teacher

- asks factual questions on the passage provided:
  . Where was the apple tree?
  . What was under the tree?
  . How did Sam look?
  . Who said the pony was beautiful?

Jane

- while answering the questions, holds up an appropriate card corresponding with the appropriate sentence in the passage.

2. The teacher

- provides Jane with the following sentence and she reads it:
  . Yesterday Carol rode the pony on the farm.
- asks the following questions:
  . Who rode the pony?
  . What did Carol do?
  . When did Carol ride the pony?
  . Where did she ride the pony?

Jane

- answers the above questions orally.

3. The teacher

- provides a picture;

Jane

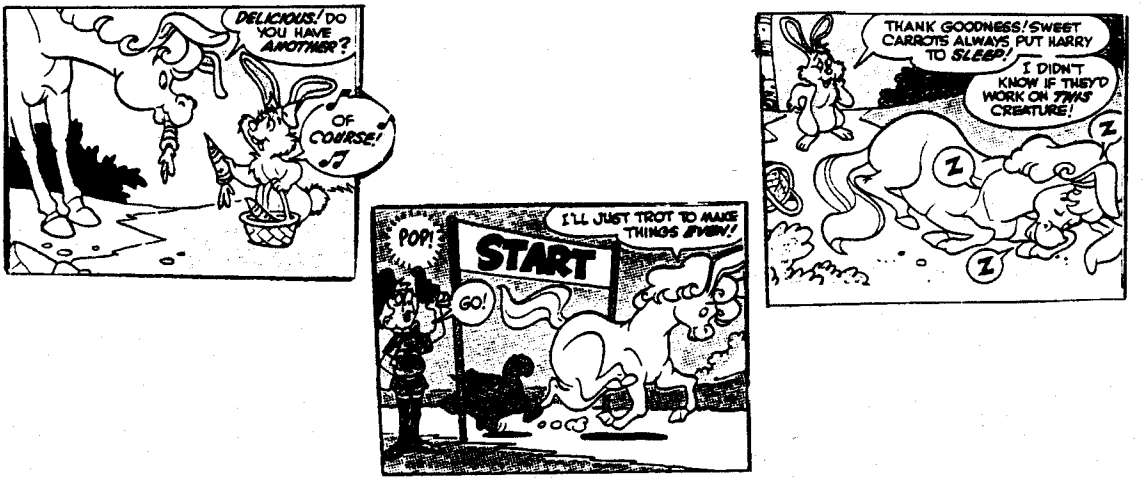
- reads a few sentences. One of the sentences describes the picture.
  . The pony was big and fat.
  . Michael stood under the apple tree.
  . Carol rode the pony.
  . Mrs Peacham asked Carol if she would like to ride.

Jane

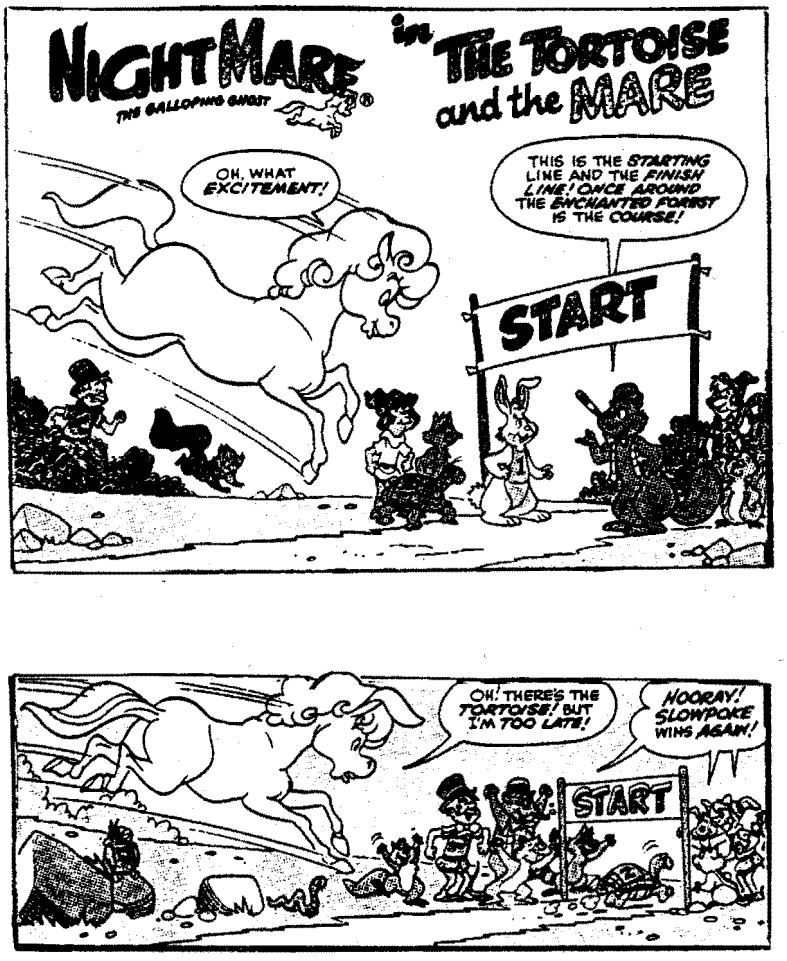
- selects the most appropriate sentence.

6. Jane

- arranges mixed up comic strips in the order of occurence.



- reads the captions and tells the story.



Inferential comprehension (third priority)

2. The teacher and Jane

- discuss the topic to be read in terms of the vocabulary, incidents and characters.

Jane

- reads the passage and answers the questions which follow, orally.

.....

7. The teacher

- provides a short passage accompanied by three sentences to Jane (the one sentence states the main idea, the other may be too detailed and the last one has information which is not in the passage)

. Carol rode the pony, Sam (the main idea).

. Sam, the fat, brown pony was standing under the apple tree (irrelevant).

. The pony trotted off to the barn (untrue).

Jane

- reads the passage and selects the sentence which depicts the main idea
- explains why the other two sentences are not appropriate.

.....

16. Jane

- reads the topic on The pony

The teacher

- instructs Jane to answer the question:

. What will happen if Sam runs too fast and you do not know how to ride a pony?

Context clues (fourth priority)

2. Jane

- reads a sentence and completes a word (trotted):

. The pony . round the apple tree.

. The pony ..... round the apple tree.

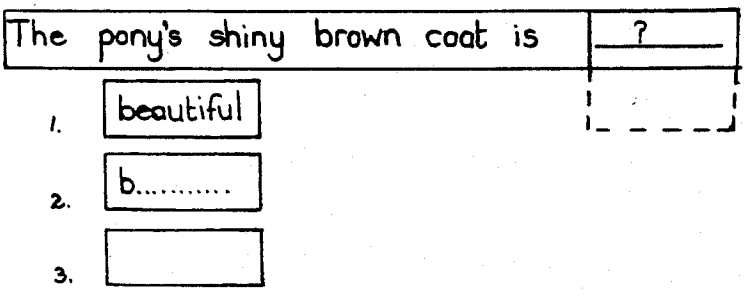
. The pony t.....d round the apple tree.

. The pony tr.tt.d round the apple tree.

.....

5. The teacher

- makes a sentence card with a blank space for the target word:



- he/she then staples a card with the target word beautiful on the blank space in the sentence. A second card is stapled on top of this card containing the

first letter of the word beautiful. A third card which is blank is stapled on top of this card.

Jane

- predicts the word in the sentence. If she is unable to she flips the blank card over for the next card with the initial letter clue. If she is still unable to recognise the word she flips to the next card which is the target word. She then reads the sentence adding the target word.

Sight words (fifth priority)

1. The teacher

- writes the word would on the blackboard;
- pronounces the word and discusses the meaning of the word;
- underlines, frames or colours the word;
- uses the word in a sentence, and
- explains the function of the word would in a sentence

The teacher and Jane

- discuss the word elements, for example, double letters, ascenders and descenders in the word would.

Jane

- identifies the beginning sound of the word;
- establishes whether the word makes sense in the sentence by attempting to read it:

. Carol would/wants like to ride the pony.

.....

3. Jane

- says the sight word would five times in degrees of loudness.

Configuration clues (sixth priority)

1. Jane

- looks in the chosen text for all the words with a specific letter or letter clusters which caused difficulty for her, such as diphthong like ou

- she then underlines/circles only the ou in words which sound like ou in house.

As an end activity for the remedial session the following games are played:
- Sight words - Bingo
- Context clues - Makes sense
- Phonetic analysis - Scrabble

4.4.3.5 Conclusion

Jane's keen interest in horses was taken into consideration in the choice of reading material for her. Her problems in reading were mainly in the comprehension component and she displayed signs of anxiety and emotional instabililty.

It was possible to determine her reading level as well as her level of interest which gave an indication of the type of reading material to be selected.

The *reading problem analysis table* of the reading programme made it possible to analyse Jane's reading problem areas and to determine which subskills were not adequately developed. It made provision for choosing the most appropriate exercises, in order to practice the problematic reading areas and, at the same time, to reinforce the subskills.

From the many possibilities built into the programme, exercises were selected to alleviate Jane's distractiblility and anxiety. The exercises were of such a simple nature that she was able to complete them, experience success and enjoy them. By ending the remedial lesson with a game, her interest and reading was heightened and she could develop an enthusiasm to read again.

4.4.4 PUPIL B (Grant)

4.4.4.1 General information

1. *Testing date:* 94-06-07

2. *Chronological age and standard*: 9 years 9 months

3. *Intelligence quotient* (IQ) Verbal - 131, non-verbal - 138, full scale - 139 (Senior South African Individual Scale - Revised)
Grant's IQ falls within the superior range of intelligence and it can thus be expected that he should function above his chronological age.

4. *Reading age:* 8 years 5 months
Grant's reading age indicates that he is functioning one year and four months below his chronological age, thus functioning on a standard one level and totally underachieving.

5. *Physical factors*
Grant's hearing, vision and speech are intact. There are no physical problems. He has been tested by a speech therapist who has found that he is functioning within age limits in all areas, but above average in grammatical comprehension.

6. *Home background*
Grant's parents seem to be happily married. His father is a teacher and his mother an estate agent. His mother suffers from depression. She is always late in fetching the children from school. She does all the disciplining of the children. His father is rather shy in expressing his love for his family. Grant has a keen interest in singing and sings in the school choir. His parents support him in this activity, however his mother finds it difficult to always take him to choir practice. His parents have low expectations of their son, which has resulted in his feelings of anxiety and not having the ability to do his schoolwork. The parents have been councelled regarding their parent-child relationship.

7. *Social cultural conditions*
This family lives in an average socio-economic environment. However, they have indicated that they are having financial problems. From this it can be

concluded that Grant's parents are finding it difficult to make ends meet, and therefore not always in a position to convey the children to different school and cultural activities or to buy educational aids. This makes it difficult for the teacher to communicate with Grant's parents and to get their full co-operation when Grant needs to attend remedial lessons. Consequently his teacher needs to compensate by finding extra time during the school day to fit in a remedial lesson for him.

8. *Emotional state*

Projection tests establish that Grant has identification problems with his mother, and identifies strongly with his father. He lies awake at night worrying about his parents leaving him, resulting in lack of concentration at school. He experiences the upbringing situation as problematic. At school he has difficulty communicating and is reluctant to form friendships, making the school an unhappy place to learn at. It is therefore necessary that the teacher set short-range objectives and work in small steps. Achievable tasks and short assignments are required, and the use of music in and during the lesson will ensure Grant's enjoyment while encouraging him to look forward to the next lesson. Recording his progress graphically and giving him rewards will ensure a sense of achievement.

4.4.4.2 Choice of reading material

The reading material is at first chosen in such a way that Grant is able to read it on an independent level, as he needs to gain confidence by experiencing success. Once he is ready to move on to a higher level, he proceeds to the instructional level. His love for music is considered in the choice of reading material, as this topic is familiar and will motivate him to attempt to read the text. The teacher also keeps in mind that Grant has a year and four months backlog which puts him on a Standard one level. Therefore the text is chosen from the available Standard one reading material, but adapted to his interest and background information.

Grant is an intelligent boy and therefore it is necessary that the content of the text be chosen carefully. Too simple content will bore him and possibly make him feel humiliated. The following text is an example of the type of text used at the instructional level:

Saturday was a big day for the band. They had been asked to play at the local Carnival. During the afternoon they would be on the back of a huge decorated lorry going through the streets. In the evening "The Big Noise" were taking part in a Disco in the church hall.

Benny and the family were all going along to hear them.

"Though I don't know why," said Benny's mother. "We could all stay at home and hear it just the same. When they get going it is *deafening!*"

But even though she moaned, Benny and Joe knew she was just pretending. She was really very pleased and went round telling everyone about it.

"My Joe's in a rock band," she told the neighbours. "They're really good. You want to come and hear them."

She sold a lot of tickets for the Disco.

Benny woke up the morning after the practice in the garage with the beat still bouncing through his head. He rattled his knife and spoon on the plate at breakfast.

"Ta-ta-tara-ta-ta," he whispered under his breath. Tonk-tonk he went on the side of the cup with his spoon.

"Eat your cornflakes," said his father from behind the newspaper. "Save the music for later."

Wide Range Readers. Blue book 2.
New edition written by F.J Schonell
and P.Flowerdew.

4.4.4.3 Error analysis

Test 1:
Grant reads test 1 with a 96% reading accuracy which is on an independent level (Par. 4.3.2.1).

Test 1
A black little **cat came to my house. She put her kitten by the door.** When **Then she went away. Now I have her baby for a pet.**

Questions:

1. **What came to the little boy's/girl's house?**
   (A black cat. Kitten.) ✓
2. **Where did the black cat leave her kitten?**
   (By the door.) ✓
3. **What did the black cat do then?**
   (She went away.) ✓
4. **What did the little boy/girl do with the kitten?**
   (Kept him. Kept him for a pet.) ✓

Test 2:
Test 2 is read with a 92% reading accuracy, thus on an instructional level. The third test is too difficult and Grant reads it with below 90% reading accuracy on a frustrational level and it is therefore not taken into consideration for an error analysis.

Test 2
started house
Tom stopped on his way to school. The milkman's horse had wandered in
house
the fog. The horse and cart blocked the centre of the road. Traffic was
tell house
coming. There was no time to call the milkman. Quickly Tom led the horse
cart
to safety just as the frightened milkman returned.

Questions:

1. **Where was Tom going?**
   (To school.) ✓
2. **What did he see on the way ?**
   (A horse and cart- blocking the road.) The milkman's house
3. **What had happened to the horse?**
   (It had wandered.) It blocked the traffic

is	me	on	at	by	so	us
an	it	or	be	to	as	he
of	in	go	up	am	if	no
we	my	ox	do	the	and	for
but	him	are	can	she	dog	let
you	not	was	out	try	see	mix
cat	now	boy	saw	bit	met	top
run	man	pet	lot	get	dig	van
bad	red//	cup	bee	lit	pin	had

The following reading errors are identified and selected from the reading problem analysis table:

(a) Poor reading behaviour

Number 7, 9, 10 in the reading problem analysis table

Reading problem	Remedial area	Underlying factors
7. Loses place	Sight words Literal comprehension Inferential comprehension	Visual figure-ground Fine eye movements Emotional
(Fine eye movement is not relevant as the pupil does not have any visual problems.)		
9. Guesses at words, for example, started for stopped	Context clues Phonetic analysis Structural analysis	Visual discrimination Visual analysis and synthesis Visual memory
10. Over dependence on word analysis example l-o-t	Sight words	Visual memory Emotional

(b) General reading problems Number 11, 13.		
11. Mispronunciation, for example: put for pet as for us is for in bed for bad	Configuration clues	Auditory discrimination Auditory memory and sequencing Visual acuity Visual discrimination Visual memory Visual form-constancy Speech and pronunciation
(Visual acuity is not applicable here as no abnormalities have been detected.)		
13. Relies on word beginnings and or word endings and anticipates the rest of the word, for example, started for stopped	Sight words Phonetic analysis	Visual analysis and synthesis Visual memory Visual form constancy Visual closure
(c) Specific reading errors Number 2, 7, 8.		
2. Reversal of letters, for example, dit for bit	Configuration clues	Auditory discrimination Visual memory Directionality and sequencing
7. Letter and word	Sight words	Auditory discrimina-

insertions, for example, may for my and left for let	Context clues Phonetic analysis Literal comprehension	tion Auditory memory and sequencing Visual sequencing
8. Substitutions, for example, he for him and of for for tell for call milkcart for milkman house for horse	Configuration clues Phonetic analysis Structural analysis	Visual discrimination Visual analysis and synthesis Visual memory

The information collected from the reading problem analysis table is recorded on the control chart for remedial reading areas and underlying subskills.

CONTROL CHART (Figure 4.1)

UNDERLYING SUBSKILLS / REMEDIAL AREAS	Auditory discrimination	Auditory analysis and synthesis	Auditory memory and sequencing	Visual discrimination	Visual analysis and synthesis	Visual memory	Visual figure-ground	Visual form constancy	Visual closure	Visual directionality and sequencing	Speech and pronunciation	Cognition	Meta cognition	Language	Emotional
Recognising and analysing words															
Sight words	✓		✓		✓	✓✓	✓	✓	✓						✓
Configuration clues	✓✓		✓✓	✓✓	✓	✓✓		✓		✓	✓				
Context clues	✓		✓	✓	✓	✓✓									
Phonetic analysis	✓		✓	✓	✓✓	✓✓✓		✓	✓						
Structural analysis				✓✓	✓✓	✓✓									
Understanding words and ideas															
Literal comprehension	✓		✓				✓			✓					✓
Inferential comprehension							✓								✓

From this control chart the remedial reading areas are placed in sequence according to the frequencies of the underlying subskills, from highest to lowest, as follows:

1. Configuration clues (12x)
2. Sight words (10x)
3. Phonetic analysis (10x)
4. Context clues (6x)
5. Structural analysis (6x)
6. Literal comprehension (5x)
7. Inferential comprehension (2x)

The underlying subskills are placed in sequence according to their frequency as follows:

1. Visual memory and sequencing (13x)
2. Visual analysis and synthesis (7x)
3. Visual discrimination (6x)
4. Auditory discrimination (6x)
5. Auditory memory and sequencing (6x)
6. Visual figure ground (3x)
7. Visual form-constancy (3x)
8. Emotional (3x)
9. Visual closure (2x)
10. Speech and pronunciation (1x)
11. Directionality and sequencing (1x)

The first four underlying skills receive priority and progressively the others are incorporated. However, some of these subskills are already included in the exercises chosen, as set out below:

1. Configuration clues
   Exercise I, 2, 4, 5
2. Sight words
   Exercise 3, 4, 5
3. Phonetic analysis
   Exercise b.1, c.1, e.1
4. Context clues
   Exercise 1, 4, 5

5. Structural analysis
   Exercise a.3, b.1, d.1
6. Literal comprehension
   Exercise 4, 11
7. Inferential comprehension
   Exercise 15

4.4.4.4 Selected exercises

Configuration clues (first priority)

1. Grant
- looks in the chosen text for all the words with a specific letter or letter cluster which cause difficulty for him, for example, words beginning with a wh
- he underlines/circles only the wh in words.

2. The teacher
- identifies words which caused difficulty for Grant in the chosen text, during the lesson.
- The teacher and Grant
- discuss these words one by one regarding the length and form of the word, height of the letter and placement of letters in, above or below the line of print.

4. The teacher
- writes three words (started, horse, milkcart), identified in the text as causing problems for Grant, on the blackboard.

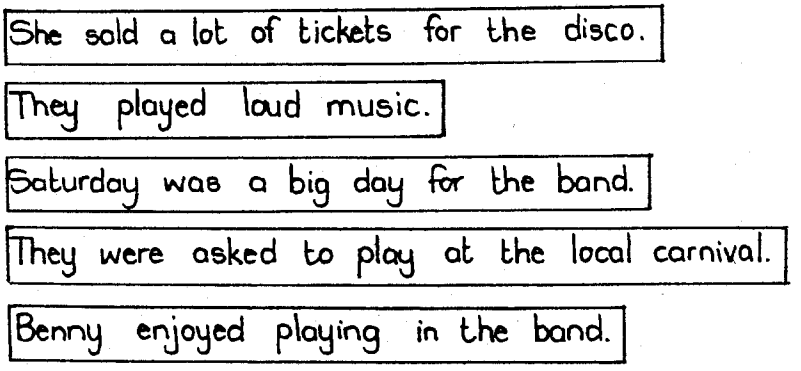
Grant
- matches the words on the blackboard with those in the text by circling them in the text and pronounces them.

The teacher
- explains the meaning of the word by using it in a sentence.

Grant
- reads the text.

5. The teacher

- writes short sentences on cards and attaches them to the blackboard haphazardly. Some of these sentences appear in Grant's text in front of him, others not for example:



Grant

- chooses the sentences on the cards appearing in the text and arranges them in the same sequence as those in the text.

Sight words (second priority)

3. Grant

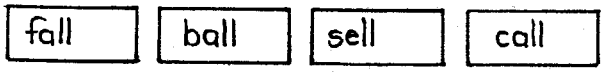
- says the sight word then , five times in degrees of loudness.

4. Grant

- looks at a sight word us on the board;
- closes his eyes and visualises the sight word while pronouncing it;
- traces it in the air;
- opens his eyes and traces the word on a word card with the finger;
- sounds each letter as he traces it, and
- says the word.

5. The teacher

- exhibits four word cards containing, for example, the following words fall, ball, sell, call and a target word call



Grant

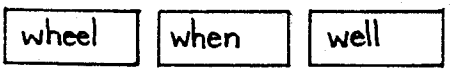
- looks at the target word;
- says "no" if the target word is not seen amongst the three word cards and "yes" if it is;
- if it does match with one of the three alternative words, he whispers the target word;
- spells the target word and says the word;
- places the correctly read word card call in his word bank.

Phonetic analysis (third priority)

b. Consonant blends and digraphs

1. The teacher

- gives Grant word cards, such as, wheel, when, well



Grant

- sorts the word cards into two piles, those beginning with single consonants and those beginning with blends/digraphs;
- reads the words while sorting them.

c. Phonograms

1. The teacher

- hands a number of tangible letters (vowels in one colour) to Grant;
- instructs him to build a high frequency word such as all learnt on sight.

Grant

- builds the word all on the table with the tangible letters.

The teacher

- instructs Grant to give another word which sounds like all.

Grant

- says the word, for example, hall and adds h to the letters on the table forming the word hall;
- forms more words containing all, such as, tall and fall;

- writes sentences with these words, and
- frames the words containing the all

---

e. "r"-controlled words

1. The teacher

- gives Grant a worksheet with words containing vowels followed by r, for example, morning, afternoon, part, bird, church

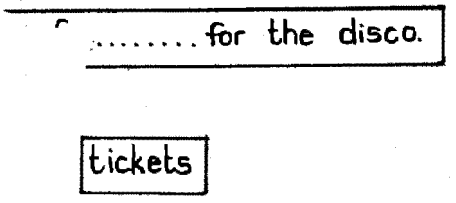
Grant

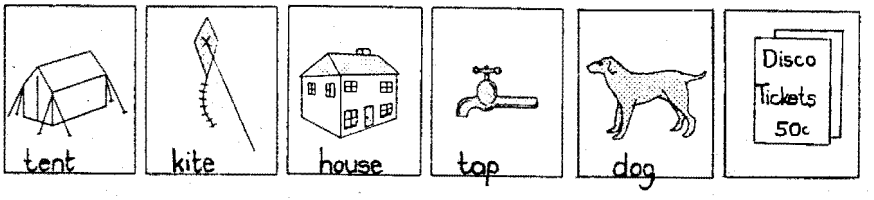
- sorts and writes these words under the following headings:
  or er ar ir ur

Context clues (fourth priority)

1. The teacher

- reads a sentence taken from the prescribed paragraph to be read by Grant and leaves out a word, for example:





Grant

- selects a picture word card from other picture word cards to complete the sentence (cards containing the picture and the word on the same card);
- first reads the word on the card and then the whole sentence in the paragraph;
- writes the sentence and underlines the target word.

---

4. Grant

- composes a story in response to questions or an event.

The teacher

- types it on computer and reads it while Grant looks on;
- reads it back and if Grant wants to make changes, the teacher does so on the computer;
- gives Grant a print-out and keeps one copy.

Grant

- attempts to read the story and the teacher underlines on his copy all the words the pupil is unable to read or misreads;
- rereads the story.

The teacher

- again underlines the words he cannot read or misreads with a second line. Other words which he could read the first time but not the second time, are underlined;
- writes those words on flash cards and in sentences.

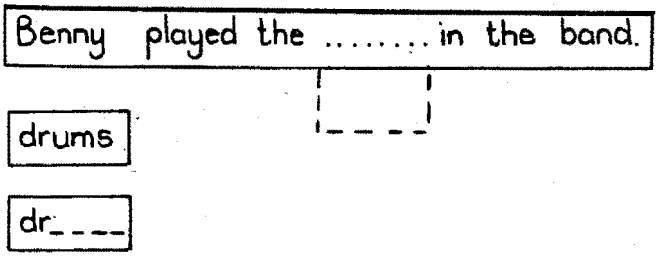
Grant

- reads the flash cards and when he can read them on sight, he reads the whole story.

---

5. The teacher

- makes a sentence card with a blank space for the target word, for example:



- A card with the target word drums is stapled on the blank space in the sentence. A second card is stapled on top of this card containing the first letter of the word drums. A third card which is blank is stapled on top of this card.

Grant

- predicts the word in the sentence. If he is unable to, he flips over the blank card for the second card with the initial letter clue on. If he is still unable to

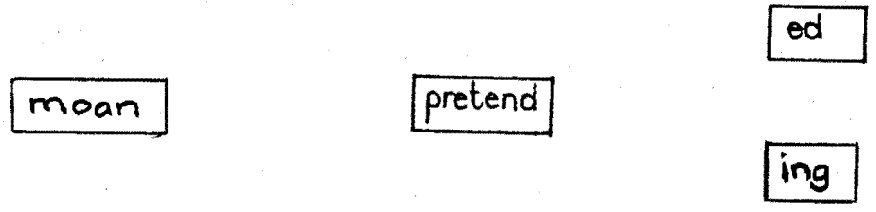
recognise the word he flips over the second, to reach the third card with the target word. The pupil then reads the sentence adding the target word.

Structural analysis (fifth priority)

a. Suffixes: inflected endings (s, es, ed, er, est, ing, 's and d)

3. The teacher

- gives Grant two sets of cards. One set consisting of root words for example moan and pretend and the other, inflected endings such as ed and ing



Grant

- draws a card from each set and matches these to form new words
- he writes the word down and reads it.

---

b. Combining forms

1. The teacher

- writes the words on the board, for example:
  afternoon, everyone, cornflakes

  Grant

- finds two similar words in each of the words and writes them down next to each other;
- circles or underlines each smaller word with a different colour on a worksheet provided by the teacher.

---

d. Prefixes, suffixes and root words

1. The teacher

- gives Grant a set of cards with affixes on for example ed and pre, and keeps a set of cards containing root words such as pleased and pretend

- holds up one of the root word cards

Grant

- holds up an appropriate card containing an affix to form a new word together with the teacher's card;
- says the newly formed word;
- uses it in a sentence;
- writes it down on a card, and
- adds the new word to his word bank.

Literal comprehension (sixth priority)

4. The teacher
- lists step-by-step instructions for making a musical instrument, for example, bottle bells - made with glass bottles, filled with water.

Grant

- reads the instructions and constructs the instrument accordingly.

.....

11. The teacher
- gives the Grant a worksheet. On it is a string of words which are numbered, as well as three sets of numbers,
  for example:
  1. noon 2. sunrise 3. sunset
  123 132 213

Grant

- decides which of the number sets represents the sequence of events and circles the correct number sequence.

Inferential comprehension (seventh priority)

15. Grant
- underlines the correct word in the following sentence on a worksheet:
  . The man was (right, write) about the distance.
- then reads it.

The remedial session is concluded with the following games:

- Phonetic analysis - Sound Lotto
- Sight words - Racetrack
- Context clues - Makes sense
- Structural analysis - listening games

4.4.4.5 Conclusion

Grant's interest in music was taken into consideration when choosing reading material for remediation. His main problems were word recognition and analysis and he appeared to be rather unstable due to his home circumstances, which resulted in poor performance at school.

Seeing that Grant's IQ is in the superior range (139), it is important that he should always be adequately stimulated in order to keep him interested. The programme compiled for him, was of such a nature that it offered sufficient opportunities for becoming involved in activities and therefore to prevent boredom. There were also enough exercises available to alternate and to allow him to become interested. Because the exercises were within his ability, they offered enough opportunity to overcome his reading problems during remediation and his increased attention ensured success. This could lead to emotional stability.

4.5 GENERAL CONCLUSIONS

In the first instance, the programme offers guidelines to determine the level of difficulty of the reading material and makes it possible to adapt it to the pupil's interests.

It appears that the point of departure for reading remediation should be the specific area in which the pupil needs remediation.

Secondly, guidelines are available to identify the pupil's remedial reading areas and underlying subskills by making use of a reading problem analysis table. The programme also makes provision to analyse the pupil's reading behaviour, general reading problems and specific reading errors. It includes exercises

which incorporate both main reading components, namely, word recognition and comprehension as well as other reading facets.

The step-by-step presentation of the manner in which a pupil with a reading problem should be approached is also indicated in the programme. The way in which the exercises are selected is discussed systematically according to a control chart. By means of case studies, it has been possible to illustrate how the programme should be incorporated.

CHAPTER 5

SYNOPSIS, FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

5.1 INTRODUCTION

It may be projected with some confidence that reading problems are one of the most handicapping conditions in society. Based on observations and interviews with teachers it has been concluded that there is an increasing number of pupils who are experiencing reading difficulties. It is therefore necessary that teachers be provided with guidelines in order to help these pupils with special needs.

The Standard one and two pupils in mainstream education, classified as Group A learning disabled pupils, and those with learning restraints were the target groups of this study. Group B and Group C pupils could also benefit from the results thereof. The reason for this choice was the observation, through experience, discussions with educators and literature, that reading problems were more conspicuous in these two standards than in the lower classes.

The following matters as set out in the statement of the problem were investigated:

1(a) The possibility of compiling exercises and guidelines for a remedial reading programme to be used for pupils with reading problems in the mainstream of education;

(b) Exercises and guidelines built into the programme so that the teacher can offer all the facets of the programme to the pupil;

(c) A way of compiling guidelines for exercises including word recognition and comprehension;

2(a) The optimal integration of the different factors featured in existing reading and teaching models and the incorporation of the various basic teaching criteria in the programme;

(b) A way of accommodating the subcategories of the two main reading components, namely, word recognition and comprehension so as to ensure optimal reading remediation.

3(a) A way of making provision in the programme for each pupil's unique problems, needs and abilities with regard to his/her

- particular interest;
- problems leading to inadequate reading.

4(a) The possibility of building a diagnostic component into the programme that would enable the teacher to determine the reading areas pupils have difficulty with as well as the possible underlying subskills which may have caused the reading problems.

5.2 SYNOPSIS

The first chapter emphasises the importance of reading as well as the challenges of reading instruction for the teacher. Continually improving methods for more effective reading instruction remain of the utmost importance. The nature of reading is discussed, based on the definitions of various authors. The classification of scholastically impaired pupils is considered, to distinguish the background knowledge that teachers require to provide for these pupils. The type of interventions used to aid pupils with reading problems in the teaching-learning situation are also explored. For the purpose of this study, remediation is the particular type of intervention selected for helping pupils overcome their reading problems.

In Chapter 2 the reading model of Ekwall and Shanker (1988) is used to give an overview of all the *components of reading*. The two main components of reading are recognising and analysing words, and understanding words and ideas. In recognising and analysing words, sight words are found to be essential and these are subdivided into basic sight words and other sight words. Recognition and analyses of words also require inclusion of word analysis skills, which consist of configuration clues, context clues, phonetic analysis and structural analysis. Dictionary skills, study skills and vocabulary development also merit inclusion under this heading, but are not elaborated on, as the pupils targeted for this study firstly have reading problems and secondly are too young to utilise these other skills while their reading problem persists. Understanding words and ideas include other comprehension skills such as literal meaning, inference, evaluation and appreciation. Vocabulary development, although forming part of this component, is mainly incorporated in the other reading subcategories in the rest of the thesis.

Still in Chapter 2, the *factors influencing reading acquisition,* as set out by Guszak (1985) are looked into. These included physical factors such as health, hearing, vision, speech and motor skills. Under this heading auditory and visual perception are also considered for their role in reading acquisition. Comprehension factors, such as, concepts and processes are elucidated as are, language, cognition and Metacognition, as part of the understanding factor.

Emotional factors and adjustment are discussed as strongly influencing reading in an indirect way. Sociological factors, such as, home environment, cultural expectations and the socio-economic levels of the parents are regarded as having a considerable influence on the pupil's reading performance. In addition, educational factors playing a crucial role in the pupil's reading acquisition are commented on.

Reading readiness, with all it involves - experiental background; cognitive development and language learning; interest in reading; social and emotional development, and physical development, is seen as having a profound influence on the pupil's ability to acquire reading skills.

The *bottom-up, top down* and *interactive approaches* for the teaching of reading are explored in order to determine the effect of each approach on reading acquisition.

In Chapter 3 the *components of teaching* are investigated by means of the teaching model of Van der Stoep and Louw (1979). Ways of featuring the various aspects of reading tuition are discussed. These aspects include the teaching-learning aim, which guides the reading lesson. The basic didactical principles, including play, dialogue, example and assignment, are all found to be spontaneous ways of involving pupils with reality. The arrangement of the learning content will enhance the pupil's ability to master reading as this is the way to ensure comprehension of the lesson content. This can be achieved by chronological, symbiotic, linear, punctual and spiral arrangement of the content. Methodological principles, such as, the inductive and deductive principle, explain ways of presenting the subject matter. In addition, the teaching methods are applied in practical situations, and explained, for example, the narrative, question and answer, textbook, free activity, demonstration, experimenting and drillwork methods. The reduction and choice of the content is aimed at making it

meaningful and within the pupil's level of learning. It is concluded that all these aspects are necessary for effective teaching of reading and are therefore integrated in reading remediation.

Chapter 4 explains how the independent, instructional and frustrational reading level of a pupil can be determined in order to arrive at a starting point for remediation. A *remedial reading analysis table* enables the teacher to identify the pupil's reading problem areas as well as possible causative underlying subskills. A *control chart* for remedial reading areas and underlying subskills has been developed, and can be utilised by the teacher to determine the frequencies and correlations of the remedial areas as well as the underlying subskills. With this, a teacher will be able to compile a remedial reading programme for a specific pupil with reading problems. Exercises and guidelines selected from various authors are included so that the teacher can make an informed choice on the basis of the high frequency remedial areas and subskills recorded on the control chart. The implementation of these exercises and guidelines is demonstrated by means of two case studies.

5.3 FINDINGS

In order to help a pupil with reading problems adequately, it is important to have knowledge of reading and it's components. From an analysis of the reading model and existing reading approaches, it is clear that remedial reading cannot be approached superficially, but must be systematic and integrated. All the reading components, such as word recognition and analysis, and the understanding of words and ideas should be taken into consideration. This should be done in an integrated and interactive manner during reading, while the underlying subskills should be accommodated simultaneously.

It is thus clear that the subcategories of reading should be the point of departure for the compilation of the remedial reading programme. Both the main components must feature as integrated while a specific subcategory is worked on during remedial reading.

It is difficult and sometimes impossible to determine exactly which underlying subskills are responsible for the reading problems of a pupil. To determine this, as well as the preferred learning style of a pupil, an interactive approach, with its

compensatory nature, is the most effective approach to follow during remediation of reading.

Use of teaching-learning principles, as set out in the teaching model of Van der Stoep and Louw (1979), is strongly recommended in a remedial teaching situation. By implementing the different teaching principles it is possible to remediate the pupil's reading problems within mainstream education.

In the first place the design of the reading lesson implies the choice of text content to be used, and secondly, the exercises to be applied to remediate pupils with reading problems. The choice of the text content is determined by the pupil's reading level, the reading areas in which the pupil experiences problems and the subskills which underlie the reading problems. The pupil's experiences gained from the home background and cultural environment in which he/she grows up should also be taken into consideration.

After the teacher has determined the text content to be used, it is necessary to choose the relevant exercises. Before these can be chosen and designed for a specific pupil, it is essential to determine which reading problem areas need attention during reading remediation. The information gained from the remedial reading analysis table is imperative for compilation of the remedial reading programme. The exercises for each remedial reading area are determined according to the pupil's problems in underlying subskills.

Knowledge of the causes of reading problems, namely, the inadequate underlying subskills in each reading area can also assist the teacher in determining the teaching principles on which to base his/her reading lesson and the appropriate methods that will be effective for that pupil. The methods will help the pupil to master the specific subcategories under one or both of the reading components and at the same time to overcome the problems in the subskills responsible for inadequate reading.

By means of the suggested exercises and guidelines, which are mainly multi-sensory and integrated, it is possible to cater for most of the inadequate reading areas and their causes during remedial reading.

The suggested reading exercises have already been applied in practice by the various authors who described them. With guidelines and exercises as set out in this study, it is possible for a teacher to help the pupil to overcome his/her reading problem.

5.4 RECOMMENDATIONS

The importance of reading efficiency cannot be emphasised enough, as it is probably the most important academic skill that a pupil learns during his/her school career. Therefore the teaching of reading cannot be done without good preparation based on valid knowledge of reading, its components and the teaching situation.

The two main components of reading, namely, word recognition and comprehension were taken into consideration when selecting the exercises. The factors determining how pupils function in each specific reading area have been included in the exercises. These factors influence the compilation of a remedial reading programme for a specific pupil.

However, recommendations can be made concerning the proposed programme and guidelines:

- Specific guidelines could be included in the different exercises to cater for problems, such as, the elimination of poor reading behaviour, just as it was done for general reading problems and specific reading errors.

- Additional guidelines to accommodate aspects, such as, concentration problems and behavioural problems could also be included in the exercises.

- Guidelines to accommodate the metacognitive facet of reading with regard to word recognition and comprehension could feature to a greater degree.

- Clearly structured evaluation material for analysing the pupil's reading level and reading problems could form an integral part of the programme. More intensive assessment is therefore necessary to establish the pupil's reading problems.

- An evaluation component where the pupil's progress in reading can be monitored should be built into the programme such as a running record of the pupil's progress.

- Seeing that the programme is comprehensive, with many aspects to be taken into consideration when compiling a remedial reading programme for a specific pupil, it would be more effective to computerise it.

- Exercises in paired reading, where parents can become involved could be included.

- With empirical research the genuine effectiveness of the programme could be determined to eliminate the disadvantages and to complement the shortcomings.

5.5 CONCLUSION

The issue of dealing positively with reading problems has emerged relatively recently. The problem of inadequate reading ability in the light of life's demands cannot be ignored. Written work plays an important role and therefore more reading efficiency is required as the subject matter increases. Increased reading ability will consequently lead to greater self-confidence as the pupil experiences increasing success; ultimately to become a successful adult in his/her future career.

The author trusts that this study will serve the teacher in mainstream education with valuable guidelines and exercises for the design of effective remedial reading programmes. It is also hoped this study will make a positive contribution towards raising the literate level of South Africa's school population.

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APPENDIX A

THE FIRST THREE HUNDRED SIGHT WORDS: as listed by Crawley and Merritt (1991: 70-71)

These words are the high frequency words which apply in the USA. Although there may be differences in South Africa, it gives a good indication of the words which should be concentrated on.

The first hundred

the	or	will	number
of	one	up	no
and	had	other	way
a	by	about	could
to	word	out	people
in	but	many	my
is	not	then	than
you	what	them	first
that	all	these	water
it	were	so	been
he	we	some	call
was	when	her	who
for	your	would	oil
on	can	make	now
are	said	like	find
as	there	him	long
with	use	into	down
his	an	time	day
they	each	has	did
I	which	look	get
at	she	two	come
be	do	more	made
this	how	write	may
have	their	go	part
from	if	see	over

The second hundred

new	great	put	kind
sound	where	end	hand
take	help	does	picture
only	through	another	again
little	much	well	change
work	before	large	off
know	line	must	play
place	right	big	spell
year	too	even	air

live	mean	such	away
me	old	because	animal
back	any	turn	house
give	same	here	point
most	tell	why	page
very	boy	ask	letter
after	follow	went	mother
thing	came	men	answer
our	want	read	found
just	show	need	study
name	also	land	still
good	around	different	learn
sentence	form	home	should
man	three	us	America
think	small	move	world
say	set	try	high

The third hundred

every	left	until	idea
near	don't	children	enough
add	few	side	eat
food	while	feet	face
between	along	car	watch
own	might	mile	far
below	close	night	Indian
country	something	walk	real
plant	seem	white	almost
last	next	sea	let
school	hard	began	above
father	open	grow	girl
keep	example	took	sometimes
tree	begin	river	mountain
never	life	four	cut
start	always	carry	young
city	those	state	talk
earth	both	once	soon
eye	paper	book	list
light	together	hear	song
thought	got	stop	leave
head	group	without	family
under	often	second	body
story	run	late	music
saw	important	miss	colour

APPENDIX B

PHONETIC ANALYSIS:

The following lists compiled from the information of Cushenbury (1969: 65-66), Christman (1990: 7-216), Kaluger and Kolson (1978: 308) and Crawley and Merritt (1991: 76-78) give an indication of the different types of word combinations. It begins with the most elementary words and proceeds to the more complex words.

PHONICS

(a) CONSONANT SOUNDS

b ball	c car	d deer	f fish
g gate	h hat	j jet	k kite
l lamb	m monkey	n nickel	p pie
q quail	r river	s sun	t tuba
v vine	w wagon	x xylophone	y yellow
z zipper			

Note: q is always found in the qu combination and is pronounced kw as in queen

When the preceding consonant is made with the vocal cord the s takes on the voiced sound pronounced like z for example buns. The soft sound of the s is heard after unvoiced consonant f, k, p and t for example bats.

The y functions as the consonant [j] if it begins the word or syllable, for example, yet and unyielding.

Consonant blends

Initial blends

l blends	r blends	s blends	other blends
bl- blanket	br- bridge	sc- scare	dw- dwarf
cl- closet	cr- crib	sk- skate	tw- twin
fl- flag	dr- drink	sl- slice	
gl- glass	fr- fry	sm- smile	
pl- plate	gr- grass	sn- snow	
sl- sled	pr- prize	sp- spill	
	tr- tree	st- stone	
	wr- wreath	sw- sweet	
	thr- three	sch- school	
		scr- scream	
		spl- splash	
		spr- spring	
		squ- squash	
		str- string	

Ending blends

-ft raft	-ld fold	-lf self	-lt malt
-mp lamp	-nd bend	-nk bank	-nt sent
-pt crept	-sk risk	-sp lisp	-st fast
-lk milk	-lp help	-lm film	

Note: The -ld and -lt lengthens the o as in cold and bolt and ll lengthens the o as in roll.

The -nd and -ld lengthens the i sound as in blind and mild. The i usually sounds long before silent gh as in night.

Consonant digraphs

Two letters that are not alike, but produce one sound (phoneme) which is different from the sound of the two letters and occur at the beginning or at the end of the word.

(a) Initial consonant digraphs

sh-	ship	(sh)
ch-	chip	(ch)
	chorus	(k)
	chef	(sh)
ph-	phone	(f)
th-	them	(voiced - th)
th-	thimble	(unvoiced - th)
wh-	wh	(hw)

(b) Final consonant digraphs

-ck	sack	(k)
-ch	clench	(sh)
-gh	cough	(f)
-ng	wing	(ng)
-sh	bush	(sh)
-th	path	(th)

Note: Both the c and k in ck has the same sound as the letter k alone.

The -gh sounds like f and it usually follows au and ou for example laugh and tough.

ch is a hissing sound when ch follows a vowel. A t is often present to indicate that the vowel is short for example pitch.

Silent consonants

In words containing two similar, adjacent consonants, the first consonant is sounded and the second is silent.

bb rubber	mm summer	cc raccoon	nn funny
dd ladder	pp floppy	ff ruffle	rr barrel
gg egg	ss boss	ll yellow	tt mitten

The following are combinations of two unlike letters in which the sound of only one letter is heard.

kn	knit
igh	frighten
ps	psycho
wr	wrap
-dg(e)	fudge
-lm	calm
-mb	lamb
-tch	witch

Hard and soft c and g

When the consonants c and g are followed by the vowels e, i, or y, they usually have their soft sounds. That is, the sound of [s] and the sound of [j].

c:(s)	c:(k)	g: (j)	g: (g)
cent	cat	gentle	game
cereal	cake	giant	goat
city	coat	gym	gutter
cite	corn		
cycle	cut		

Note: In some words the c has both the k and s sounds as in circus In some words with the cc-combination, each c has the same hard sound for example accuse.

After c the long e is spelled ei for example ceiling.

(b) VOWEL SOUNDS

Short vowel sounds	Long vowel sounds
a apple	a ape
e egg	e eagle
i igloo	i ice
o otter	o oboe
u umbrella	u mule

The e at the end of a short word is usually long for example me.

Vowel generalizations

- A single vowel in a syllable followed by a consonant usually has its short sound, except if it is followed by a single l or r or w for example bat, in, wet and will.

- A word ending with a silent "e" preceded by one consonant usually have a silent e and the vowel has its long sound for example hate, dime, rope.

- If y at the end of a word follows a consonant in a one-syllable word, it usually has the long i sound (my, fry). In words containing two or more syllables, the y usually has the long e sound for example ba-by.

- A vowel followed by r is r-controlled. It is not long or short.

  ar er ir ur or
  car her bird bird born
  lard were fir fur word

  (the or in word is pronounced as [u])

  The er, ir and ur are all sounded the same and e, i, and u in front of the r are reduced to the "schwa" sound. (A "schwa" is a very short or softened short-vowel sound.)

- The vowel sound in an unstressed syllable is the "schwa". Excess sounds become de-emphasised or dropped altogether and is the same for all vowels.

  about fable pencil rayon circus

Vowel digraphs

Vowel digraphs are vowel pairs that are pronounced as a single sound.

ai train	ea reach	ie piece	oa goat
ay hay	ea weather		oo look
	ee meet		oo spoon
	ei freight		ou rough
	ei ceiling		ow row

When the vowels ai, ay, ea, ee, and oa appear together in a word, the first vowel usually has the long sound and the second vowel is silent for example maid, bait, may, hay, eat, feat, tree, free, oak, oat).

Note: ai is spelled as ay at the end of a word for example play. The o lengthens when adding an a for example oa as in coat.

The ei and ie are pronounced as long e. In general the i is always before the e, example field, except after c as in ceiling.

If an ou as in bound is followed by a -ld at the end of the syllable, it is pronounced as ou as in would, should and could.

The ou is usually in the middle of a word for example bound.

The consonant l followed by a can be pronounced as aw as in fall.

Vowel diphthongs

Vowel diphthongs are vowel pairs that make a single sound treated as one vowel.

oi coil
ou pout

Other sounds are also accepted as diphthongs such as:

ai rail eu feud
au saucer ew crew
aw crawl ow bowl
all fall oy toy

The aw is usually at the end of a word for example raw.
The ew is pronounced as short e followed by the long u.
The oi is in the middle of a word.
The oy is at the end of a word.
The ey is usually spelled ei in a word and ey at the end of a word for example veil and they.
The oe in foe is pronounced as a long o.

Unusual phonic words

Usually a vowel at the end of a syllable is pronounced long as in go, so exceptions being to, do.

off has no change in the sound value of the f, and in of, the stress falls on the f, it is voiced and pronounced like v.

APPENDIX C

STRUCTURAL ANALYSIS

According to Crawley and Merritt (1991: 78-79), Christman (1990: 7-216) and Cushenbury (1969: 65-66), the point of departure for structural analysis is as follows:

(a) Syllabication

Each syllable must contain a vowel sound. There are as many syllables as vowel sounds.

If there is an open syllable (a vowel at the end of the syllable), the vowel usually has its long sound, for example, spi-der.

In many words the syllable division determines whether the vowel is short or long as in hoping where the consonant goes with the second syllable the vowel is long. In hopping the consonant goes with the first syllable and the vowel is short.

Syllables are divided between root words in the text.

cow-boy fire-fly

Syllables are divided between two like consonants.

bat-tle lad-der trol-ley

Syllables are divided between two unlike consonants if they are located between two vowels.

har-den lim-ber

Generally, there is no division between consonant digraphs or consonant blends.

preach-er a-pron

One consonant between vowels, the consonant goes with the following syllable and the vowel that ends the first syllable is usually long, as in lo-cate.

A consonant plus le usually forms the final syllable of a word.

ea-gle nee-dle ca-ble sim-ple

The le causes the previous vowel to be long if there is only one consonant separating the vowel and le. With the le, to keep the short vowel short, the final consonant is doubled as in bot-tle.

Prefixes and suffixes usually form separate syllables.

un-known fear-less dis-appoint-ment

(b) Forming suffixes

When a suffix that begins with a vowel is added to a word ending in silent e, the final e is dropped before adding the suffix.

rake: raked raking raker
wise: wiser wisest

When adding suffixes to a word ending in a y that is preceded by a consonant, the y is changed to i and the suffix es is added, for example, baby - babies. If the suffix begins with an i, the y is not changed to i for example annoy - annoying.

If the word ends in a vowel + y, the y is not changed to i.

play: player playing
monkey: monkeying

If the word contains one vowel and ends with a consonant, the final consonant is doubled before adding an ending that begins with a vowel. The vowel is to be kept short.

hop: hopper hopping
swim: swimmer swimming

The consonant before the y must be double to keep the preceding vowel from becoming long as in mud - muddy.

If there is more than one consonant before er then no doubling of the final consonant occurs, for example, helper.

If the vowel of the first syllable is long, then there is no doubling of the final consonant before er. In ru-ler the consonant goes with the er suffix.

When ed occurs after d, t the ed forms a separate syllable as in add-ed.

(c) Forming plurals

In general, plurals are formed by adding s.

cat: cats
cap: caps
house: houses
moon: moons

Add es to words ending in s, ss, sh, ch, and x.

bus: buses
class: classes
bush: bushes
church: churches
fox: foxes

Note: When changing words ending in f or fe into plural forms usually the f changes to v when adding the plural ending s for example knife - knives.

(d) Accent generalizations

The first syllable is generally stressed or accented in a compound word.

box-wood mail-box

The first syllable of a two-syllable word is generally stressed.

mea-sles sal-ad

In words containing prefixes or suffixes, the stress generally falls on or within the root word.

fight-ing re-gret

In words that contain two like consonants, the stress usually falls on the syllable containing the first like consonant.

bat-tle mis-sive

If two vowels occur together in the last syllable of a two-syllable word, this last syllable generally contains the stress.

en-root at-tain a-void

APPENDIX D

SEQUENCE OF TEACHING WORDS

Mann et al (1992: 455-456) give an indication of the sequence in which the different words should be taught. These structures of words are arranged from simple to complex.

1. CVC words with short vowels (word families for example -at or -op words). Simple sight words, for example, a, if, did.
2. CVCC words - short vowels ending in double ff, ll, zz, or ss, for example, tiff.
3. Two consonant blends with short vowels, for example, plan.
4. Digraphs (ch, th, sh, wh) with short vowels, for example, chat.
5. Three consonant blends with short vowels, for example, string.
6. Long vowels (CVC with a silent "e", for example, cap: cape).
7. Long vowels with two-consonant blends in the beginning of the word and silent "e", for example, stove.
8. Long vowels with digraphs and silent "e", for example, shade.
9. Long vowels with three-consonant blends and silent "e", for example, stroke.
10. Alternative sounds for c and g, for example, city and garage.
11. R-controlled vowels, for example, -ar, -er, -ir, -or, -ur.
12. Vowel digraphs, for example, teen and bread.
13. Silent letter, for example:
    h in honest
    t in listen
    k in knee
14. Highly irregular words, for example, said, the, was.
15. Root words and affixes, for example, re (reread), de (decompose) and bi (bicycle).
16. Words on syntactic level of language, for example:
    bear and bare

    . The bear likes fish.
    . Her arms were bare as she wore a short sleeve dress.

    two, too and to

    . I have two hands