Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.
ASSESSMENT AND REMEDIATION OF READING DIFFICULTIES
An Evaluation of the SPELD Approach

A thesis presented in partial fulfilment of the requirements for the degree of
MASTER OF ARTS in Psychology
at Massey University

Mary Barbara Little
1991
This thesis examines assessment and remediation of reading difficulties. A review of recent research on the skilled reading process, reading acquisition, and sources of difficulty provided the basis for listing criteria for assessing reading progress. Using this basis, the approach to assessment taken by the Specific Learning Disabilities Association of New Zealand (SPELD) was then evaluated. Five cases from the Manawatu region were then followed, to illustrate how the approach functions in designing individual remedial programmes. After a discussion of the assessment battery and the cases in terms of reading research, suggestions were made to improve the battery, so that SPELD and schools might work together for the maximum benefit of the students concerned.
Acknowledgements

First, I wish to extend warm thanks to my supervisors, Professor W. E. Tunmer and Dr. Ross St. George, for their patience, direction and assistance. Next, I would like to give heartfelt thanks to my friends and associates in SPELD: to Dr. Jean Seabrook who compiled the SPELD battery, Margaret Schumacher who trained me as a SPELD teacher, Mary Cameron Lewis who trained me as a SPELD tester, and all those in SPELD Manawatu who offered encouragement and help, particularly Lesley Greer, Elizabeth Manson, Chris Upjohn and Gillian Bell. I also wish to thank the families who kindly consented to my using data from their children as cases in the thesis. Sincere thanks also to Jim Burgmeier and Dave Dummit, for their invaluable assistance with computing.

Finally, I owe a great debt to my husband, Charles. Without his encouragement, this project would never have been completed.
# CONTENTS

Introduction .................................................................................................................. 1

Overview of the Study ................................................................................................. 8
  1.1 Approaches to Researching the SPELD Battery ..................................................... 10
  1.2 Case Study Monitoring ......................................................................................... 11

Reading and its Assessment ......................................................................................... 15
  2.1 The Skilled Reading Process ................................................................................. 16
  2.2 Emergent Literacy and Early Reading Acquisition ................................................ 23
  2.3 Sources of Reading Problems .............................................................................. 31
  2.4 Issues in the Assessment of Reading ................................................................... 42
  2.5 Standardised Tests ............................................................................................... 49
  2.6 Tasks to Sample Specific Factors in Reading ...................................................... 53
    2.6.1 Phonological Awareness Tests ........................................................................ 56
    2.6.2 Syntactic Awareness Tests ............................................................................ 57
    2.6.3 Assessment of Decoding ................................................................................ 59
    2.6.4 Assessment of Comprehension ...................................................................... 59
  2.7 Global Assessment of Reading ............................................................................ 61
  2.8 Interactive Assessment ......................................................................................... 61

Assessment of an Assessment: The SPELD Approach ................................................ 63
  3.1 Criteria for Assessing Reading Skills ................................................................... 65
  3.2 The SPELD Approach ........................................................................................ 70
  3.3 The SPELD Assessment Programme .................................................................... 75
  3.4 The History Form ................................................................................................ 79
  3.5 The SPELD Test Battery ..................................................................................... 80
    3.5.1 Psychomotor Tasks ....................................................................................... 94
    3.5.2 Auditory Tasks .......................................................................................... 103
    3.5.3 Tests of Phonological Awareness ............................................................... 114
    3.5.4 Rote Sequencing ......................................................................................... 133
    3.5.5 "Visual" Skills ........................................................................................... 135
    3.5.6 Assessment of Language Skills .................................................................... 145
    3.5.7 Assessment of Spelling Skills ...................................................................... 156
    3.5.8 Assessment of Reading Skills ....................................................................... 159
  3.6 General Discussion of the SPELD Battery ............................................................ 172
    3.6.1 Psychometric Considerations ....................................................................... 175
    3.6.2 Validity of the Battery ................................................................................ 177

Cases and Results
  Case 1: Daniel ........................................................................................................... 180  
  Case 2: Michael ......................................................................................................... 196  
  Case 3: James ............................................................................................................ 207  
  Case 4: Hayden .......................................................................................................... 216  
  Case 5: Sam ................................................................................................................ 228

Results of the Questionnaire ....................................................................................... 247

Discussion .................................................................................................................... 253
  6.1 Skills needed/skills assessed ................................................................................. 253
  6.2 Measurement Issues ............................................................................................ 260
  6.3 Placement Considerations .................................................................................... 262
  6.4 Instructional Design ............................................................................................. 264
  6.5 Summary ................................................................................................................ 277

Conclusion .................................................................................................................... 278
  7.1 Suggested Improvements to the SPELD Assessment ........................................... 279
7.2 Suggested Improvements to SPELD Teaching Programmes .......................... 287

Appendix A. Questionnaire for SPELD Teachers ........................... 289
Appendix B. Student Progress Chart ......................................................... 292
Appendix C. SPELD History Form .............................................................. 293
Appendix D. Assessment Record Form ....................................................... 298
Appendix E. Assessment Report ................................................................. 304
Appendix F. Summary of SPELD Reassessment .......................................... 310
Appendix G. Intensive Course Report ......................................................... 311
References .................................................................................................... 313

FIGURES

2.1 Functional model of reading (Ellis & Young, 1988) .......................... 18
2.2 The Cognitive-Developmental Model (Tunmer, 1990) ...................... 26
3.1 Information-processing Components (Swanson, 1988) .................... 69
4.1 Daniel's Assessment Results ............................................................... 188
4.2 Daniel's Assessment Results ............................................................... 192
4.3 Daniel's P.A.T. Results ................................................................. 194
4.4 Michael's Assessment Results ........................................................... 205
4.5 James' Assessment Results ............................................................... 223
4.6 Hayden's Assessment Results ............................................................ 225
4.7 Sam's Assessment Results ............................................................... 243

TABLES

3.1 Components of the SPELD Battery ..................................................... 83
3.2 Basal/Ceiling Rules for Administering the SPELD Battery ............ 90
3.3 Evaluation Summary of the Language Components of the SPELD Battery .......................................................... 173
5.1 Collated results of the questionnaire ................................................. 249
6.1 Components of Reading Assessment .................................................. 259
7.1 Proposed Changes to the SPELD Battery .......................................... 283
INTRODUCTION

In New Zealand schools a lively and varied whole language approach to reading instruction encourages many children to enjoy reading (Traill, 1990). Skill in using written language (both reading and writing) is grafted onto oral language which the child has already developed. Tizard and Hughes (1984) found that children develop oral language in the home through conversations with their caregivers. Similarly, McNaughton (1987) produced a range of evidence which showed that high progress readers practise a lot in the home. As Wells (1985, 1986) also described, these children read when they want to, in the context of their interests, developing skills through interaction in an environment where reading is obvious and valued. The children are often read to, and reading and writing materials are available and used. McNaughton (1987) described the reading acquisition process as "the socializations of learning to read", showing that a good reading programme provides for "setting events" such as the prior provision of context (Wong & McNaughton, 1981) which promote learning, using an abundance of books written in language similar to the children's spoken English. McNaughton (1987) conceptualised reading as a developing skill acquired by active learners amid multifaceted socializations. While the child is actively
engaged, the environment must be responsive, or the skill will not grow. Carbo, Dunn and Dunn (1986) showed that teaching is much more effective if it relates to the learner's learning style; for example, the learner's modality strengths, and preference for global or analytical methods, formal or informal furniture, warm or cool temperature, bright or dim light, noisy or quiet conditions, moving around or sitting still, learning with peers or adults or alone, and early or late in the day. In a responsive environment, the child develops strategies which are effective in the ongoing problem-solving known as reading. McNaughton (1987) referred to this ongoing problem-solving as "performance-directed regulation". He argued that to facilitate learning, there must be greater contact and matching between school and home settings and socializations, so that groups of people are not disenfranchised by their different cultures. McNaughton (1987) also argued for a greatly reduced pupil-teacher ratio, to facilitate meaningful interaction at a one-to-one level.

In New Zealand, relatively less classroom time is spent teaching letter-sound associations explicitly (Watson, 1980), as the emphasis is on reading for meaning using contextual clues (cf. Wells, 1991). Letter-sound correspondences are mainly taught incidentally in creative "process writing" in which children use their
own invented spellings to write stories. These spellings are then corrected by the teacher or by volunteer "mother helpers", and then copied by the children when they produce their final copy of the story. The children also gradually develop a dictionary of words for which they have been provided with the correct spelling, so that they develop independence in checking their own spelling. Thus the general classroom programme is in contrast to a structured Code Emphasis or phonics programme, as described by Liberman and Liberman (1990).

Bryant and Bradley (1980) found that children beginning to acquire reading appeared to use separate skills for reading and spelling. Further research by Goswami and Bryant (1990) showed that for approximately the first two years, children appear to use global strategies for reading and analytical strategies for spelling. They are thus able to read words which they cannot spell, and spell words which they cannot read. Early reading appears to use onset (beginning) and rime (the remaining sounds of the word) (Goswami & Bryant, 1990), while early invented spelling appears to use a detailed analysis of the individual sounds in the word. Because this research was conducted in England, where reading instruction emphasises phonics, additional research is needed in other countries, where a different approach is taken.
Carbo et al. (1986) emphasised the need to tailor teaching to the learner's modality strengths. No one method works well for everyone. In fact, some methods are best avoided with certain learners. The following statement from Carbo et al. (1986) about phonics could just as easily be applied to any method:

"There are some students who must learn with phonics, some who cannot learn with phonics, some who need only a small amount of it, and still others who are capable of becoming excellent readers without learning any phonics at all" (p.54).

Skilled reading requires both decoding and listening comprehension skills (Gough & Tunmer, 1986). As McNaughton (1987) observed, successive research evidence has shown that high progress readers go beyond the teaching received, to build a set of strategies which will enable them to read a variety of material.

For the child in New Zealand who has difficulty reading, the main source of help is the Reading Recovery programme instituted by Clay (1979). It is not however the intention of this thesis to examine in detail this programme, which has already been evaluated (e.g. Glynn, Crooks, Bethune, Ballard & Smith, 1989). Although many children are assisted by this programme and by other remedial help offered in schools, there still remain children who have not been helped, or alternatively, they
or their parents may consider that they need further help.

Some of these people turn to the New Zealand Federation of Specific Learning Disabilities Associations (henceforth referred to as SPELD) for assistance. SPELD is a private organisation which offers assistance to people who are experiencing problems with learning. The nature and extent of the client's skills and learning difficulties are examined by using a history form and a SPELD assessment battery (known as the SPELD test). Based on this assessment, individual tuition is given (if required) by a trained teacher, either at the teacher's home or at the school.

This thesis examines the question of reading difficulties, and how best to develop a remedial programme to improve a person's reading skills. Many approaches have been developed, but the main concern in this study is to examine current theories of reading development and assessment and sources of reading difficulty, and to relate these theories to the programme of assessment and remediation which is conducted by SPELD. Although the programmes offered by this organisation are broader than just reading or other academic skills, the main thrust of this thesis will be to examine their approach to the assessment and remediation of reading difficulties. Because the
assessment forms an integral unit, all the components will be reviewed, to assist in clarifying the SPELD approach.

Although the initial SPELD assessment battery is one set package, reassessments during the course of a case are tailored to the client's progress. SPELD teachers are trained in a variety of methods which they choose to employ according to the needs and strengths of the client, as identified by the assessments.

Hammill (1987) listed four issues to consider in assessment. These issues are also appropriate to consider in the course of this thesis:

1. **Purpose**: Is the assessment intended to diagnose students, monitor progress, or lead to instructional decisions?

2. **Domains for measurement**: What are the appropriate domains, given the progress made recently in research on reading?

3. **Techniques**: Which techniques are appropriate? Should we use tests, interviews, direct observation, analysis of what the student produces ... ?

4. **Interpretation**: How can the measures and techniques be interpreted? What is the reliability and validity of
the measures? How can we evaluate results from norm-referenced or nonreferenced, process measures?

The following chapter (1) provides an overview of the study. Chapter 2 reviews current theories of reading acquisition, skilled reading, reading difficulties, reading assessment and remediation. Chapter 3 describes the SPELD approach to assessment and remediation, and considers it in the light of current research. By way of illustration, several cases are described in Chapter 4. Chapter 5 discusses the results of a questionnaire which was given to practising SPELD teachers, to gauge their attitudes towards the SPELD assessment battery. Chapter 6 reviews the cases, focussing on their progress in reading in the light of current theories, to determine to what degree the SPELD approach provides a sound basis for instructional decisions. This analysis also provides an opportunity for reviewing all the assessments which are produced during each case. Finally in Chapter 7, this thesis considers how the SPELD programme of assessment and remediation might be improved, to provide better service to the clients, and how service delivery might best be effected. Consideration is also given as to what SPELD assessment and remediation has to offer to the New Zealand schools, and how SPELD and schools might work together for the maximum benefit of the learner.