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SPELLING IN THE SECONDARY SCHOOL:

A REVIEW OF THE CURRENT SITUATION.

by

Joan Rodrigues, B.Ed.

A Thesis Submitted in Partial Fulfilment

of the Requirements for the Award of

Bachelor of Education with Honours.

At the School of Education.

Edith Cowan University.

Date of Submission: 14.5.92

USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

Abstract

The purpose of this study was to discover the strategies being employed by secondary school teachers to assist students with spelling difficulties. Teachers in the English and social studies departments of three Perth high schools were interviewed and asked to indicate the criteria they used to identify students with spelling problems and the teaching methods they employed to help those students overcome their problems. They were also asked to identify the causes of spelling difficulty. Staff at the local district offices and the Ministry of Education were interviewed to establish what support services were available for teachers who wished to improve their skills in this area.

The study found that the teachers used performance indicators to assess spelling skills. They listed nineteen different causes of poor spelling and used a variety of different methods to assist students. English teachers had a wider repertoire of methods available to them than did the social studies teachers and were more familiar with support material produced by the Ministry of Education. At ministry and school level the policy was that spelling was an important skill to be developed. It was more difficult to discern a policy at district office level. Finally, there are few support programmes available for high school students with spelling problems and it was not possible to say how great a problem poor spelling may be.

"I certify that this thesis does not incorporate, without acknowledgement, any material previously submitted for a degree or diploma in any institution of higher education and that, to the best of my knowledge and belief, it does not contain any material previously published or written by another person except where due reference is made in the text".

Signature

Date....9...September...1992.

Acknowledgements

I wish to thank all those people who gave up time to discuss their experiences of spelling in the secondary school system.

I also wish to thank my supervisor, Mr Ken Willis, for his support and patience in reading and re-reading this thesis.

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Chapter One - The Introduction

Background to This Study

Although spelling is only one aspect of literacy to be developed by teachers it is important because society at large often regards good spelling as an indication of intelligence and good education. "Spelling, perhaps more that anything else, is the benchmark of basic literacy" (Bouffler & Bean, 1987). Some sectors of the community also assume that poor spelling is an indication of an inefficient education system. For this reason schools and teachers should publicise actions that are taken to develop spelling skills.

Early in 1991 the report Educational Standards in Western Australian Government Schools, 1990 was published. This report indicated that 89% of Year 10 students met the spelling standards set by the monitoring group but made no mention of the methods used by teachers to develop spelling skills.

This study will identify the methods being employed by high school teachers to develop spelling skills.

The Significance of This Study

The study is significant because there are no other similar studies available for Western Australian high schools.

The Purpose of the Study

The research addresses a number of problems encountered when questions relating to spelling and high school students are asked: specifically, how teachers assess students as having a moderate or severe spelling problem and how they attempt to meet the needs of these students.

Research Questions

The major question to be answered was:

What criteria do staff in the English and social studies departments of three senior high schools use to assess the spelling skills of students in Years 8, 9, & 10 and what strategies do they adopt to meet the needs of these students?

The subsidiary questions that helped provide the answer to the major question were:

1. What criteria do teachers use to assess students' spelling skills and to identify those students who have either a moderate or severe spelling problem?

2. When the criteria are used, what percentage of students in selected classes in Years 8,9 & 10 are identified as having a moderate or severe spelling problem?

3. What do teachers consider to be the causes of poor spelling?

4. What policies exist at ministry, district and school level with regard to the teaching of spelling in senior high schools?

5. What programmes exist to meet the needs of students in Years 8, 9 & 10 who have either a moderate or severe spelling problem?

6. What methods do teachers use to assist students with spelling difficulties?

7. What materials do teachers find most useful?

8. Do teachers have any suggestions about actions that need to be taken, or material that needs to be provided, to assist them in this area of their work?

Chapter Two - Review of Literature

This review will be in three sections. It will:

1. Consider methods that have been used to teach spelling.

2. Attempt to define poor spelling.

3. Review what recent research has indicated about the spelling process.

Methods Used to Teach Spelling

During this century different methods have been used to try to develop good spelling skills in children. Each method has had its supporters but there has been virtually no scientific research to discover if one method is more successful than any other.

Although there are a number of spelling methods and programmes available, two approaches have achieved a higher level of acceptability and popularity than the others. It is interesting to note that they are the opposites of each other.

One method has been to encourage the development of spelling skills by concentrating on reading and the production of written work. The assumption is that children will learn to spell words as they read and write them.

The other method has been to compile lists of words to be taught in formal spelling lessons. The lists could be derived from the mistakes made by individual children; by counting the number of times children of various ages try to write each word and then teaching the words at the appropriate age; or by grading

words for difficulty and listing the easiest words first (Bennett, 1972; Horn, 1957; Peters, 1985).

Three of the other methods that have been used to help children learn to spell include: programmes designed to improve visual memory (Peters, 1985); programmes designed to develop knowledge of phonemes (sounds) and graphemes (letters used to represent sounds) (W.A.'s Spellit Programme); and morphographic programmes, which teach spelling by concentrating on the small units of meaning that combine to make words, for example un+like+ly = unlikely (Robinson & Hesse, 1981).

Spelling is usually taught as an adjunct to reading and writing. Most of the commercially available teaching and testing material is designed for younger children and ceases to be of general use for children above Grade 7 (Larsen & Hammill, 1986).

There seems to be an assumption that older children do not require continued instruction in spelling, although both Davis (1987) and Henderson (1980) have shown that teenagers benefit from continued class teaching. Additionally there is plenty of evidence available to show that some older children and adults require a great deal of remedial work (Barr, 1987; Bostock, 1989; Coggan & Foster, 1985).

What is Poor Spelling?

Before reviewing what research has shown about the process, I believe it is necessary to try to define what poor spelling is.

The first point to note is that there are no generally accepted standards to be met by good spellers. In Western Australia the current K-7 English Language Syllabus indicates that "spelling and punctuation need to be learned in the process of reading and writing". While the Primary English Syllabus (Spelling), which accompanies the My Word Book series advises teachers that "spelling ability is not necessarily revealed in a test based on a list of words, but in consistent accuracy of spelling in ... written communication" (p. 1). (This is an interesting observation as the programme followed in the books was based on lists of words derived from national and international sources, and not the child's own work. Current thinking is that teaching is more successful when it is based on the child's specific spelling needs (Peters, 1985; Bouffler, 1988). The Ministry of Education no longer recommends the use of the series but has not withdrawn the books from the publications list because of the continuing demand for them by schools. This appears to be evidence of the ministry's desire not to impose a policy on schools and counters an opposite claim made by teachers in Chapter Six.)

Within the secondary school system the Unit Curriculum in English indicates that spelling is one of the process objectives to be considered when assessments are made. This curriculum was developed from recommendations in the 1984 Report of the Committee of Inquiry into Education in Western Australia that students should be able "to write standard English sentences with correct ... word choice and spelling" (p. 125).

The fact that spelling should be assessed in the context of written work has also been recognised by education authorities overseas. In England, for example, the <u>National Curriculum in English</u> requires that children should "spell correctly, in the course of their own writing, words which display ... patterns in English spelling" (p. 17). The patterns are identified as including simple monosyllabic words (<u>see</u>, <u>car</u>, <u>man</u>), common letter strings (<u>-ing</u>, <u>-ion</u>, <u>-ous</u>) and words using prefixes and suffixes.

These definitions of spelling competence mean that teachers must make decisions about the spelling abilities of students based on a thorough knowledge of their work and on the patterns of English spelling. This would enable the teachers also to identify students who sought to disguise poor spelling by writing very little, using simpler words than would be expected of their age group and/or repeating those words that they felt confident to spell (Moseley, 1988).

Such a procedure, however, might not help teachers identify students' specific spelling problems. For this, they would need either to analyse the written work in detail, which requires specialised training, or access to diagnostic tests, many of which are only available to qualified psychologists.

Standardised tests.

A comment about standardised tests needs to be made. There are many available, either as stand alone spelling tests or as sub-

sets of general achievement tests. However, they are expensive to buy and the majority of the stand alone spelling tests were considered to be unsatisfactory by reviewers in the Ninth Mental Measurement Yearbook (because information relating to reliability and validity was not readily available). Two tests that were considered to be satisfactory are available in Australia but they would not be appropriate to use with high school students for the following reasons.

> 1. Proof Reading Test of Spelling (ages 8-13 years). The reviewers commented that this New Zealand test used some culture specific words that might not be known outside that country.
>
> 2. Australian Council for Educational Research (ACER) Spelling Test. This test is only for children in years 3-6.

The original question "What is poor spelling?" has not really been answered. The researchers reviewed generally selected their sample students by using either the spelling sub-sets of achievement tests or tests that they had designed. The group monitoring standards in Western Australian schools set as its standard the ability to "spell words from a wide vocabulary; make close approximations, based on knowledge of English spelling patterns, whenever non-conventional spelling is used, e.g., maintainance for maintenance" (Benchmarks for English, Year 10, p. 3).

From all of the information available it appears that teachers are expected to have a very good understanding and knowledge of the English spelling system. They also need to have a detailed

knowledge of each child's work if they are to make accurate decisions about spelling skills.

Research Findings

Since the late 1970s researchers have been working with various groups of people in an attempt to identify the differences between good and poor spellers. Many differences have been discovered but this has not made it possible to identify clearly the skills, attributes and conditions that need to be present to ensure spelling success. What has been shown is that "learning to spell is a multi-sensory, multi-motor process" (Hanna, Hodges & Hanna, 1971, p. 103).

Some researchers (Perin, 1983; Rohl & Tumner, 1985) worked with three groups of spellers in an attempt to identify the differences between them. The groups were:

good readers - good spellers,

good readers - poor spellers (mixed spellers)

poor readers - poor spellers.

Most attention was directed towards the mixed spellers because this was the group whose spelling problems were most difficult to understand. Perin worked with 14-15 year-old students who were assigned to the appropriate group on the results of reading and spelling tests. Each subject was required to undertake a number of tasks that involved creating spoonerisms from the names of pop stars and judging the number of phonemes in orally presented real and nonsense words. Both groups of poor spellers

made non-phonemic errors in the spoonerism task and also had difficulty in segmenting the words correctly. Similarly both groups of poor spellers had difficulty in correctly counting the phonemes in words. From this work the researchers concluded that different skills are required for reading and spelling and that success in one area will not lead automatically to success in the other.

The importance of reading.

Peters (1985) put forward a number of reasons to explain the special problems of mixed spellers including (p. 37):

> 1. In reading, words can be treated as a whole with meaning being established from the context.

> 2. Good readers do not have to look at every word, they allow the eye to run ahead and use guesses and approximations to fill in the resulting spaces.

Peters then repeated a suggestion of Ahlstrom's (p. 37) that one way to help mixed spellers was to require them to read out loud as this would focus their attention on the structure of each word.

More generally, reading also expands linguistic skills and helps with understanding the meaning of words. This can be valuable because an individual tends to mis-spell words if the meaning is not known (Mangieri & Scott-Baldwin, 1979), although this is a problem more likely to affect the poor reader-poor speller than the mixed speller who presumably does know the meanings of some of the words that cannot be spelt.

The importance of writing.

It is usual to consider the effect that poor spelling has on writing; but it is also useful to reverse the thinking pattern and think of writing itself as a tool to be used to develop spelling skills. When this is done there are two factors to consider. One is the actual mechanics of writing and the other is the context and content of written work.

Peters (1985) claimed that children who had untidy handwriting with poorly formed letters were likely to have spelling difficulties. She maintained that children who wrote quickly with well formed letters, generally spelt correctly, while slow untidy writers were uncertain about both letter formation and sequence (p. 21). As well, poor spellers can use untidy work, that is difficult to read, as a disguise for an uncertain spelling. Peters suggested that the best way to learn to spell a word was by writing it out; a suggestion that is a development of the hand kinesthetic method advocated by Fernald (1943). In this technique children finger trace over the hand written version of the word.

Recent computer developments and the availability of word processors have been found to be beneficial to poor spellers (Earle, 1985; Elkins, 1986; Hasselbring, 1982) possibly because the mis-spelling is more apparent and easier to match with the correct form when the effects of poor handwriting are removed. It is also possible that the mode of presentation of words on the screen makes for easier word fixations on the part of the reader (Earle, 1985).

Many investigators working to improve the skills of poor spellers stressed the importance of encouraging them to write as part of a controlled spelling programme (Barr, 1987; Bouffler & Bean, 1988; Coggan & Foster, 1985). Barr, in her work with a twelve-year old boy, found that over the period of a remedial spelling programme his written work showed a greater level of spelling improvement than would have been expected by his progress through the spelling scheme. (The words the boy needed to learn were organised into four levels of difficulty; after seven months he included the most difficult level four words in written work while still working on level three of the programme.) It was suggested that the improvement was the result of increasing confidence from being able to use new spellings in a useful way in written work.

Visualisation.

The ability to see the spelling of a word in the mind is an important skill used when children proof-read work or correct spelling mistakes. The value of visualising spellings has been extensively investigated and it has been found that good spellers have a good visual access to their internal lexicon; that is they can see the word in their mind while writing it. Poor spellers tend to rely on the sound of the word to provide spelling clues, which is often not satisfactory because of the lack of a one-to-one phoneme-grapheme relationship. It is also possible for a word to be mis-pronounced and thus mis-spelled (Barron, 1980; Harris, 1985; Peters, 1985; Sloboda, 1980). However, visualisation appears to be less important for adult spellers (Fisher, Shankweiler

& Liberman, 1985). The researchers postulated that visualisation
decreases in importance as spellers increase their skills in
other linguistic areas; for example as they gain increasing knowledge
of morphology and develop the ability to make generalisations.

The phoneme-grapheme relationship.

Two of the skills that have to be acquired before an individual
can become a good speller are:

> 1. The knowledge of which grapheme(s) can represent
> a sound, those that are acceptable in English orthography
> (spelling), and which of the alternatives are correct
> in any particular case (Bouffler, 1985; Bruck & Waters,
> 1985; Perin, 1983).
>
> 2. The ability to recognise phonemes in a word (Perin,
> 1983; Rohl & Tunner, 1988), and convert them into positionally
> acceptable graphemes (Bruck & Waters, 1985).

The major difficulty for writers of English is the fact that
a one-to-one correspondence between sounds and letters does not
exist. Table 1 provides a few examples of the problems (Fromkin,
Rodman, Collins & Blair, 1984, p. 56).

Table 1

Numerous Graphemes for One Phoneme

Phoneme	Grapheme
/k/	skin, stick, critique, ochre, exceed, asking, critic
/f/	fat, philosophy, coffee, cough
/u/	boot, who, sewer, through, to, too, two, move,

It is in the area of phoneme recognition and representation that
poor spellers are found to have the most problems. Bruck & Waters

(1988) found that "regardless of age or reading ability, poor and mixed spellers have difficulty in converting sounds into positionally appropriate graphemes" (p. 77). This finding supported Perin (1983) who reported "irrespective of reading ability, poor spellers are unable to deal efficiently with phonemes" (p. 137).

Jorm (1981) also found that mixed spellers have difficulty in selecting the correct grapheme when several are possible. Research has not shown why mixed spellers who experience problems with the phoneme-grapheme relationship do so. However, both Shaughnessy (1977) and Sterling (1983) have shown that pronunciation that differed greatly from the standard (as is the case with a strong dialect) was likely to cause initial spelling difficulty. This was because children would not be converting their phonemes into graphemes. They would need to learn standard pronunciation before the relationship between the spelling and the word could be seen.

Linguistic skills.

The term "linguistic skills" covers a range of abilities that have a bearing on spelling performance and includes such factors as knowing word meanings and understanding how to use words in context. These skills are developed when children use words in their spoken or written forms and when they read them. It is also important for them to understand the derivations of words and their relationship with each other. This leads to a knowledge of the morphology of words.

Morphographic knowledge.

Sterling & Rushby (1985/86) tested twelve-year-olds with nonsense words to see if they could spell a derived word after they had heard its root. They also tested to see if the children could make up an acceptable derivation when they were given the root word and the context. The researchers regarded the ability to undertake both of these exercises successfully as providing evidence of a child's ability to use morphemic spelling.

The significance of morphology led to a morphographic spelling programme (reviewed by Robinson & Hesse, 1981) that was found to be particularly successful for poor and mixed spellers.

The value of learning the rules of spelling.

It is often claimed that poor spellers need to be taught the rules of spelling to enable them to spell better. However, Hanna et al. (1971) reported an experiment (Project 1991) in which a computer was able to spell correctly only 49.8% of 17000 words (8483 words) even though its program included over two hundred rules of spelling (p. 94-98). They indicated that the problem with teaching spelling rules was the number of exceptions that also need to be taught if the rules are not to cause frustration and confusion for weak spellers.

Schoenheimer (1967) made the same point when he indicated that weaker or non-visual spellers would gain benefit from learning twelve generalisations (rules) that had a limited number of exceptions,

as long as they also learnt the exceptions. Beyond this group
of generalisations, the wording becomes so complex, and the exceptions
so numerous, that they are of questionable value for poor spellers.

Factors that do not appear to influence spelling.

Before concluding this overview it is necessary to mention briefly
some factors that have been shown to have no effect on spelling.

When Peters (a leading researcher in the field of spelling) undertook
the literature review for her thesis (1970) she was unable to
find any evidence to support the belief that left-handedness,
poor vision or impaired hearing adversely affected spelling.
Researchers since 1970 do not appear to have considered these
issues any further.

Summary

The research indicates that there may be a number of factors
that cause spelling difficulty. Table 2 on page 24 lists the
factors. Research question 3 "What do teachers consider to be
the causes of poor spelling?" will be asked to ascertain whether
teachers have an understanding of the various factors that can
give rise to spelling difficulty. The depth of a teacher's knowledge
about the causes of poor spelling will influence the method used
to help the student overcome the problem and for this reason
research question 6 "What methods do teachers use to assist students
with spelling difficulty?" will be asked.

Table 2

Factors Influencing Spelling

Reading
Writing
Ability to visualise words (picture the form of the word in the mind)
Phonemic awareness (identify different sounds occurring in words)
Knowledge of graphemes (letters used to represent sounds)
Linguistic skills (knowledge of meanings and word usage)
Knowledge of morphemes

The literature did not generally attempt to quantify the number of individuals who experience spelling problems. Research Question 2 "what percentage of students ... are identified as having a ... spelling problem?" will be asked to check of the findings published in the report Educational Standards in Western Australian Government Schools, 1990.

Chapter Three - Description of Research Method

Research Design

Methodology.

The methodology selected to address the research questions was based upon a bounded case study approach which utilised a number of data collection strategies. The majority of the data were collected in group and individual interviews.

The study was designed to obtain basic information about methods used by teachers in Western Australian high schools to develop spelling skills. Because there are no similar studies that could be consulted to provide a base-line, the use of an established valid and reliable questionnaire was precluded. Therefore a methodology involving the use of interviews was selected because interviews "can produce in-depth data not possible with a questionnaire" and are "most appropriate for asking questions which cannot effectively be structured into a multiple-choice format" (Gay, 1990, p.202).

Interviews have other advantages over questionnaires, one of which relates to the difficulty often experienced in obtaining a satisfactory return rate for questionnaires. To be able to comment on the teaching practices and attitudes towards spelling of approximately fifty individuals, as this study does, it would have been necessary to send out two hundred questionnaires

(assuming a twenty-five per cent response rate, which could not be guaranteed). This would have required the co-operation of the Ministry of Education in identifying in excess of two hundred teachers (the sample and a group for pilot testing of the questionnaire).

A literature search was undertaken to discover whether personal interviews were considered to be more valid than structured group interviews. In the absence of any literature on the subject the interviews with teachers were conducted in a structured group situation. This method was selected to encourage teachers to feel secure and therefore more willing to comment honestly on their teaching methods, attitudes towards spelling and the policies and practices of other sections of the education system.

All other staff were interviewed on an individual basis.

Data Collection

Interviews.

Six groups of teachers (three from English departments and three from social studies) and a number of other professional educators were interviewed and asked to respond to questions based upon the research questions. Table 3, on page 27, provides details of the sixty-one people interviewed and shows the range of classroom experience for the teachers currently teaching in the various English and social studies departments.

Table 3

Details of Professional Staff Interviewed

English Teachers	23
Social Studies Teachers	23
School Principals	3
Deputy Principals	2
District Education Officers	3
English Co-ordinators	1
School Development Officers - Language	2
Ministry of Education Consultants	2
Representative from SPELD	1
Representative from the SEA	1
Classroom teaching experience: 2 to 17 years	

Written material.

Although the major data collection was undertaken in the interviews additional information was obtained by collecting and analysing samples of relevant written material (both policy documents and teaching material) and by observing samples of students' work. Table 4 lists the different materials and their sources.

Table 4

Source of Materials Analysed

Material	Source
Publications	Ministry of Education
Unit Curriculum support material	Ministry Consultants
School policies	Heads of English
District Office support material	English Co-ordinators
Useful teaching aids	Teachers
Samples of work (for observation)	Teachers
SEA curriculum documents	Secondary Education Authority

Relationship Between Data Collected and Research Questions

Table 5 shows the way in which the data were used to answer the research questions.

Table 5

Data Used to Answer Each Research Question

Research Questions	A	B	C	D	E	F	G	H	I	J	K	
What criteria do teacher's use to assess student's spelling skills ...	x	x										x	A=Group exercise
... what % of students ...are selected as having a ...spelling problem	x	x	x	x		x	x						B= Group interviews
What do teachers consider to be the causes of poor spelling?		x	x	x						x			C= District office interviews
What policies exist at ministry,district &school level ...		x	x	x	x		x	x	x				D= Ministry consultants
What programmes exist to meet the needs of students ...who have ...(a) spelling problem?		x	x	x		x		x	x				E=SEA Representative
What methods do teachers use to assist students with spelling difficulties?		x	x	x					x	x	x		F= SPELD Representative
What materials do teachers find most useful?		x						x	x	x			G= Education Standards report
... teachers ... suggestions ... about actions ... or material ... to assist them ...		x											H= Published ministry documents
													I= School policies
													J=Material from teachers
													K=Student's work

Chronology of the Research

The research programme was designed to ensure that the questions asked in the group interviews obtained as much useful information as possible. Thus the following chronology was followed:

1. Literature research to identify the causes of poor spelling and the criteria that could be used to evaluate spelling was undertaken. The research questions were framed at this time.

2. Preliminary discussions with staff in the Ministry of Education to establish a background for Western Australia, to identify useful publications and obtain information about existing standards and testing programmes.

3. Identification of three sample schools (representing 5% of high schools in the Perth metropolitan area).

4. Development of group interview schedule based on the research questions. The schedule was discussed with University staff skilled in the research field. It was then sent to the Ministry of Education as part of their approval process.

5. District Office staff interviewed for each school in the sample to establish the level and type of support services ˉvailable.

6. Principals and deputy principals of the schools questioned about the school's spelling policies. They were also asked to identify any groups within the school with special language problems.

7. Group interviews conducted. School based policy and
support material collected. Samples of material used
by individual teachers also collected. Samples of students'
work observed.

8. Subject consultants at the Ministry of Education
interviewed to follow-up issues raised during group
interviews.

9. Additional Information obtained from representatives
of SPELD and the SEA.

Appendix 1 contains copies of the various interview schedules
used to obtain information.

Research Process

Group interviews.

Teachers do not often discuss spelling and it was felt that some
of the teachers in the sample might have difficulty in articulating
the criteria they used to assess a student's spelling skills.
For this reason it was planned to commence the interview session
with an exercise requiring all teachers to assess the spelling
skills of students in a class of their choosing. Teachers were
asked to consider all the students on the roll and indicate if
they had no spelling problems, moderate problems or severe problems.
As part of the exercise the teachers first had to decide how

they would differentiate moderate and severe problems. Teachers were also asked to use the information that they had just obtained to calculate the percentage of students in the class who had spelling problems. The information could then be used as a basis for answering research questions 1 and 2.

Schools were advised that the ideal group size would be six teachers from the same discipline. Teachers were to be interviewed in separate groups so that any difference in approach to spelling between English and social studies teachers would become apparent from their answers. A group size of six would allow each member time to answer the questions and express opinions, while at the same time the group would be small enough to be manageable.

Interviews were held in periods set aside for regular departmental meetings and lasted for a maximum of forty minutes each. All interviews were tape recorded and later fully transcribed.

Individual interviews.

Individual interviews were not tape recorded. Questions were designed beforehand and notes were made during the interview. Each interview was written up immediately afterwards. The consultants at the Ministry of Education were contacted twice; initially to obtain information about services, materials, policy, and testing and later to verify information given by teachers during the interviews.

Written material.

All written material was exam'ned to identify any policies contained within it and the underlying theoretical base.

The report <u>Educational Standards in Western Australian Government Schools, 1990 </u>was particularly useful because it stated the criteria used to assess students' work and the percentage of students who failed to meet the criteria. This provided a base line to be considered in the interviews.

Selection of the Sample

It was felt that some teachers might feel threatened by the topic and and so the schools in the study were not randomly selected. They were invited to participate because it was known that at least some of the staff in the English department were interested in the development of language skills.

The schools (referred to as A, B, & C) were located in three different education districts (correspondingly called A, B, & C), and varied in size from approximately 600 to 1500 students. Information obtained from school principals indicated that none of the schools contained any sizeable groups of students with language problems.

Data Analysis

Interviews.

When the transcripts of all of the interviews were available they were individually analysed. Information relating to each research question was extracted and tabulated. Much of the data obtained was common to all groups; where one or two teachers provided different information a particular note was made of the fact.

Information was extracted from the transcripts and cross referenced with material obtained from a consultant, the SEA or SPELD.

A special note was made of data that did not relate directly to the research questions. They were grouped under relevant sub-headings and are recorded in Chapter 9.

Written material.

The various assumptions about spelling detailed in Chapter 2 were listed and used as the basis for analysing the samples of written material collected. The assumption underlying each item was then noted.

Evaluation of the Research

With two exceptions the research was undertaken as planned. The two instances where it was not possible to follow the plan occurred in the group interviews.

First, because of the different sizes of the schools and the different numbers of staff employed in the departments concerned it was not possible to maintain the group size at six. The average size was seven. This did not cause any major difficulties, possibly because the interviewer had extensive experience of working with groups and in conducting interviews.

The second difficulty arose when teachers displayed an unwillingness to undertake the group exercise. Many attended the interview without bringing the necessary class roll and were reluctant to return to classrooms to collect them. They stated that they were able to identify the criteria that they used to assess spellng without needing to resort to the exercise. In the end the staff in only one school (School B) undertook the exercise. When the transcription of the interviews for this school was compared with those obtained at the schools which did not undertake the exercise, there was no discernible difference in the results.

The research results are provided in the next five chapters, commencing with data relating to policy issues.

Chapter Four - Spelling Policy

The fourth research question was "What policies exist at ministry, district and school level with regard to the teaching of spelling in senior high schools?"

Ministry Policy

A number of factors indicated that spelling is awarded a high level of importance at the ministry level. It is one of the components of literacy that high schools should be developing across the curriculum. It is also embedded in the process objectives for each English unit and is one of the factors to be considered when any assessment is being made. With regard to social studies, literacy skills were identified as important in the K-10 curriculum documents. They remain important under the Unit Curriculum because the K-10 documents have not been superseded.

The Ministry of Education has produced written material that clearly indicates that spelling is important in high schools. The In Brief Notes, numbers 1 and 2, and the Spelling Journal were written specifically for high school teachers, while the Zoom Notes 2 were originally produced for primary school teachers but are available for interested secondary teachers. These documents will be considered in greater detail in Chapter 5.

The monitoring standards in education program report, Educational Standards in Western Australian Government Schools, 1990 reports

on the spelling skills of the students who were tested which is further evidence that spelling is one of the skills that schools and teachers should be trying to develop.

District Policy

At district level the policy relating to spelling is harder to discern. All of the offices contacted for this study were able to offer training courses and support material to their primary schools but only one (District A) provided a similar service for high schools. The two offices that had no service to offer claimed they did not have the resources available. They also stated that high schools in the district had never asked for any particular support.

District A had a school development officer who was providing support services for both primary and secondary schools. This officer was able to provide details of two training courses that had been held for teachers in the English Departments of two secondary schools. Unfortunately, the courses could only be offered when schools requested assistance, and the teachers in School A were not aware that support and training services were available at the district office.

School Level Policy

From discussions with principals and their deputies it appeared that the three schools had students with similar spelling problems

but they had different approaches to the teaching of spelling. In all three schools, formulation of a literacy policy appears to have been left to the English Department and all of the principals referred queries about the school's policy to that department. It was interesting to note that the social studies staff in each school were unaware of any policy that may have existed. The greatest degree of knowledge was displayed by the social studies teacher in School C who said "We have got a literacy policy; I don't know what it is but we have got one."

School C actually had a policy of assessing the spelling proficiency of all the Year 8 cohort and placing the students with the most serious problems on remedial programmes. English teachers had been provided with some in-service training (arranged by the department using a number of private language consultants) to help them understand language development and ways to improve spelling skills. Special material had also been purchased (games, proof-reading exercises, reading material for poor readers). The English teachers in this school commented that although there was a literacy programme in place, they only received support from staff in the science and mathematics departments.

School A was producing a paper on the development of literacy skills, including spelling and provided a copy of the draft for consideration. The paper gave details of a recommended method of teaching spelling and was to be distributed to all staff members towards the end of 1991.

School B did not have a stated policy. At one time a policy document, relating to literacy across the curriculum, had been prepared by all of the staff in the school but it had not been implemented. The teachers interviewed expressed the opinion that this was because it required the provision of additional funds, which the school was unable to obtain.

Teachers' Policies

Regardless of whether or not the school had a policy about spelling, individual teachers quite clearly had their own ideas, beliefs and practices.

Seven teachers expressed a strong belief that spelling was important and that all teachers should accept a major role in developing spelling skills. They believed that teachers should indicate when a spelling was incorrect and that time should be taken to help students correct mistakes and learn from them. One social studies teacher stated that as far as she was concerned "a badly spelt essay could not be regarded as the work of an educated person".

On the other hand, five teachers expressed the opinion that spelling was no longer important because one could rely on computers with spell-checking programs to correct mistakes.

The remaining thirty-four teachers fell somewhere between the extremes. Social studies teachers generally had a policy of teaching

and correcting "key" social studies words but were less concerned with other "English" words. English staff felt that they should be concerned with all words but then disagreed over the degree of accuracy that should be required of students.

Findings About Policy

From the research it would appear that spelling is considered to be important within the education system in Western Australia and that generally the policy at the ministry and school levels is to promote the development of good spelling skills amongst high school students.

District office policy is harder to define because only one of the three offices involved in the research was also involved with spelling in high schools.

Forty=one teachers considered that spelling was an important skill to be developed in students. Only five teachers expressed the opposite view.

Chapter Five - Materials Available for Use by Teachers

It is difficult for teachers to try to develop spelling skills in the absence of resource material. In this chapter the availability of support material will be considered and an answer to the research question "What materials do teachers find most useful?" will be given.

Ministry Produced

The research indicated that although the volume of material produced by the Ministry of Education is small, the material itself is well founded on recent research, is well presented and is easy to read. When the consultant for English was asked about the availability of support material, the Spelling Journal was the first item mentioned.

Spelling Journal.

The journal is specifically aimed at secondary students. Its use is explained in the publication In Brief 2. The idea is that each student is provided with a journal which is carried from class to class and is used to record any word, subject specific or otherwise, that needs to be learned.

The journal has been designed to make use of a range of strategies. There is space for students to note the words that they have difficulty with and hints for remembering words. The booklet also provides an opportunity for students to focus on such topics

as prefixes, suffixes, homophones, homographs and Latin and Greek derivations.

Unfortunately, the majority of English teachers were highly critical of the Spelling Journal. A few had tried to use it but had found that students did not like it and refused to carry it around. Apparently the students felt that it was too big and designed for primary school children. One teacher commented that it was "grade three, you have one of those and you are a failure and these kids are not going to do it". Other teachers were less critical but felt that a journal could only work if all staff were required to use it.

Other material.

The ministry has produced three other documents which provide a theoretical framework for teaching spelling. In Brief 1 looks generally at spelling and different ways of developing the skill. It states that it is based on the premise:

> Spelling represents meaning. There are predictable patterns within words. An understanding of the relationship between sound and symbols can help in the development of students' ability.

It recommends the "Look, cover, write, check" method of learning words and reminds teachers that "words that look alike tend to mean alike" and "words with different meanings tend to look different, even if they sound alike". It also recommends writing down words to see if the spelling looks correct and stresses the importance of both reading and writing, even recommending reading out loud

to focus attention on word syllabification. In Brief 2 explains how to use the Spelling Journal. The notes do not recommend any one method of teaching spelling and so it should be possible for teachers to select the method that suits the needs of an individual student.

The other publication, Zoom Notes 2, was originally written for primary school teachers but is now being made available to secondary school staff. The notes provide a brief outline of some of the spelling theories, describe six principles to be followed when spelling is being taught, tabulate useful information about grapho-phonic relationships and conclude with an overview of spelling development.

When teachers were asked if they were aware of the existence of any of the material produced by the ministry it soon became apparent that although English teachers had seen it, the social studies teachers had not.

School Produced Material

There was little school produced material available for consideration. School B had a short document explaining how the English units were to be assessed but it did not make specific mention of the process objectives and how they should be taught or assessed.

Mention was made of School A's literacy policy in chapter four. The document was to provide advice on how to develop various literacy skills, including spelling, and should prove to be useful.

The draft of the policy statement recommended a method of teaching spelling that involves writing the word out, breaking it into syllables, discovering mnemonics to help remember it, tracing over the word and repetition.

Material Provided by Teachers

Only one teacher had any material that had been found to be useful. It was a sheet headed "Spelling mistakes that I will never, ever make again" and was illustrated with a drawing of the devil. The teacher used it as a personal spelling list.

Games Used to Develop Spelling Skills

Teachers in School C had a selection of commercially produced spelling games available for use and indicated that the games were useful for some of the poorer spellers. Samples could not be made available for consideration by the researcher and so no conclusions as to their validity or theoretical base can be drawn.

Findings About Material Used by Teachers

From the results given above it would appear that there is a limited amount of material available to assist teachers to develop spelling skills. The material that was investigated was well founded on current research and would be useful for teachers. However, very few teachers have seen it, and even fewer use it.

The fact that only one teacher was able to provide a copy of commercially produced material that she had found to be of use in the classroom would appear to indicate that, apart from School C's games, teachers are not generally aware of, and are not using, commercial material to develop spelling skills.

From this work it has not been possible to give an answer to the research question, "What materials do teachers find most useful?" as few materials are being used.

Chapter Six - Teachers' Perceptions of Spelling Skills

and the Criteria Used to Assess Them

What Percentage of Students Are Identified as Having a Spelling Problem?

This was the second research question and was to have been answered using information obtained during the introductory exercise. As was explained in the methodology chapter, only the nine teachers in School B undertook the exercise. Their results are given in Table 6. It will be seen that their assessments of the extent of problems varied enormously. This is because the teachers were assessing different classes, using different criteria.

Table 6

Teachers' Assessments of Spelling Problems

No. in Class	Class Year	Moderate Problem	Severe Problem	Percentage with problem
19	9	4	1	26
12	10	7	5	100
22	12	4	2	27
28	8	12	3	53
15	11	8	4	80
28	9	4	2	21
25	9	7	6	52
24	9	18	4	91
23	-	4	12	69

The result at School C, where all of the 1991 Year 8 students had been tested with a standardised test was that 17% of the students had a problem.

This should be compared with the figures given by the school

development officer in District A who claimed that between 20% and 30% of all secondary students had a problem. These figures were based on experience and some testing.

It was not possible to find anyone who participated in the survey who agreed with the findings of the report <u>Educational Standards in Western Australian Government Schools,1990</u>. That report indicated that only 11% of Year 10 students did not meet the standard. Three teachers who were prepared to comment on the report felt that the standard (set at Level 4) had been too low. One English teacher in School B felt that it should have been set at Level 5 while an English teacher in School A was of the opinion that it was inappropriate to set a standard and imply that if students met it, they could spell.

Twelve of the English teachers stated that spelling was an ongoing process, the ultimate test of which was whether students could reliably spell the words they used. This belief is supported by the work of Davis, (1987). It will be seen however that this belief was not always evident in the teaching practice of these teachers.

Findings About the Percentage of Students Identified as Having a Spelling Problem

There is very little scientific evidence available to indicate how many students actually have a spelling problem. Data provided by the ministry are disputed by three teachers and not accepted by many others. When teachers use their own criteria to assess

the percentage of students with spelling problems the results
are so varied that they cannot be used for comparative purposes.
The best answer to this particular research question is that
between 11% and 20% of all high school students appear to have
a spelling problem.

What Criteria Do Teachers Use to Assess Students' Spelling Skills?

Given the fact that teachers were generally assessing spelling
skills on an individual basis (that is, schools did not have
instructions as to how spelling should be assessed) there was
a high level of correlation in the criteria used by the staff
interviewed. In the group interview situation it was not possible
to say exactly how many teachers used each of the criteria. Comments
like "I agree" or "I find that too", along with smiles, nodding
of heads and other non-verbal signs of agreement have been used
as the basis for asserting that "many" or "the majority" of teachers
held a certain view or followed a course of action. Where there
was strong disagreement, or where only one or two teachers expressed
a specific opinion, the numbers will be stated. There was no
discernible difference in the criteria adopted by staff in the
three schools or between English and social studies staff and
so the following lists combine the responses of all staff interviewed.

Severe problems.

Teachers gave this classification to students who generally:

    1. Had many errors on a page (more than five or six
    errors).

2. Had difficulty in spelling high frequency simple words such as <u>which</u>, <u>where</u>, <u>there</u> or common words like <u>bathroom</u>.

3. Tended to mis-spell the same word in different ways on the same page or in the same piece of work.

4. Produced a spelling that appeared to have no relationship to the sound of the word.

5. Had the correct letters but written in the wrong order.

6. Produced a second copy of a draft with the same mistakes as the original or with incorrect spellings for words that were originally correctly spelt.

7. Had no word attack skills that could be used to try to work out how to spell a new word.

8. Were confused by humophones. (Three teachers used this as a basis for classifying the problem as moderate.)

9. Had difficulty in using a dictionary.

Moderate problems.

Teachers awarded this classification to students who generally:

1. Made mistakes with homophones. (Three teachers.)

2. Appeared to make many mistakes, but the mistakes could be shown to result from a small number of underlying problems. For example, not understanding the use of suffixes such as <u>-ed</u>.

3. Knew that the word was written incorrectly but refused to use a dictionary because they did not regard spelling as important.

4. Needed to be taught how to spell new key words as opposed to learning how to spell them from reading.

5. Spelt the word correctly in one place and incorrectly in another.

6. Had difficulty self-correcting an incorrect word.

Findings Relating to the Criteria Used by Teachers to Assess Spelling Skills

This was the first research question asked. The criteria needed to be established because they influence how teachers assess spelling, the numbers of students considered to be poor spellers and the methods used to remedy problems.

All of the teachers were using performance indicators to assess spelling, that is they looked at written work produced rather than at how students performed in a specific spelling test. For all of the teachers interviewed a spelling was either right or wrong. They were not prepared to give a student credit for a half-right word although they would use such a word to help diagnose a problem.

Causes of Poor Spelling

During discussions relating to the third research question "What do teachers consider to be the causes of poor spelling?" teachers put forward numerous reasons for the poor spelling skills of some students. As with the criteria listed above there was a high correlation apparent between the schools and between the two disciplines. As before, the reasons have been listed in a consolidated form and the same criteria were used to establish

"most teachers" or "the majority". Where a specific teacher or group of teachers expressed a contrary opinion the actual number is given. Teachers identified the following nineteen causes of poor spelling and gave them as the reasons for students experiencing problems in high school.

1. Primary schools are not devoting enough time and effort to the teaching of spelling. This idea was expressed in a number of ways including:

> a) They do not teach lists of words any more.

> b) They do not teach the spelling demons any more.

> c) They do not have enough resources available to provide special help for the children who are exhibiting spelling problems.

2. As a counter to the point above, an English teacher in School C who had begun his career as a primary school teacher commented that in his primary schools spelling had been taught every day. In secondary schools, however, spelling was not regularly taught and so weaker students, with poorly developed spelling strategies, eventually forgot them and became increasingly poor spellers.

3. Children do not read enough to be able to recognise the correct spelling of words; they spend too much time watching television and videos. The result is that they do not see words often enough to be able to visualise them when they have to write them. (This is an indication that teachers are aware of the power of visualisation even if they are not familiar with the work of researchers such as Barron, (1980), Harris, (1985), Peters (1985) and Sloboda, (1980).)

4. The bad spelling used by advertisers (pak for pack) received a lot of criticism, as did the unusual spelling of some product names such as Weetbix. Many teachers commented that it was unreasonable to expect children to spell words properly when they only saw the incorrect spelling on the television. (Once again an acknowledgement of the importance of visualisation.)

5. Many poor spellers cannot read adequately and so cannot be expected to spell properly. (An intuitive recognition of the poor speller-poor reader relationship.)

6. Many children are reluctant to write and so their spelling doesn't have much of a chance to develop. (A·belief that is supported by the work of Barr, (1987) and Peters, (1985).)

7. The organisation of the Unit Curriculum does not help teachers who want to work to improve spelling. There were a number of different ways in which this idea was expressed:

> a)The need to teach units in ten week slots, with eight to ten assessments required for each student leaves no time for anything other than unit content (and spelling is part of the composing process, not part of the content).
>
> b)Children change every ten weeks and there is barely time to get to know their strengths and weaknesses, let alone try to deal with any problems.
>
> c)Before the introduction of the Unit Curriculum it was possible to spend time on spelling and testing spellings. That is no longer possible because spelling does not form the basis of any of the required assessments. (The subject consultants disagreed with this; they maintained that it was possible for schools to include a spelling component in the unit assessments if they so desired.)

8. All teachers blamed a lack of resources, time, money and staff. There was a feeling that nothing would be done to improve spelling because funds were not available.

9. The above idea was re-iterated by English teachers in School A who criticised the Ministry of Education for paying lip service to the idea of literacy. As one teacher put it "to really do something about literacy means spending a hell of a lot of time and money on training of teachers, parents and students, changing attitudes. Better to produce, at finite cost, a glossy little brochure called Literacy in the School System and we've done what we need to do, it's over to you guys, we've addressed the problem." (The subject consultants disagreed with this. They stated that as far as the ministry was concerned programmes to develop literacy skills were more important than ever. The consultant for English was able to demonstrate this by producing a draft outline for a course that was designed to help teachers improve skills in the area.)

10. Eight of the social studies teachers in School C commented that the Ministry of Education would prevent their trying to do anything innovative that was not in the Unit Curriculum. (The consultants, on the other hand, felt that schools had the power to decide how they should implement the Unit Curriculum. In fact School C will be introducing an oral unit next year, an innovation that the ministry has not prohibited.)

11. Students came in for much criticism.

   a)They are too lazy to bother to correct spelling mistakes,
   even when made aware of them.

   b)They can't be bothered to proof-read drafts.

   c)They do not see· spelling as being important.

   d)They do not spend enough time or effort on essays.

   e)They do not pronounce the words correctly and so cannot
   be expected to spell them properly. (This is one of
   the problems that School C's oral unit will address.)

12. Previous teaching practices, where content and creativity
were seen as being of more importance than spelling, were blamed
for producing parents and teachers who could not spell themselves
and who did not see the mistakes made by students.

13. Seven of the English teachers in School C were critical of
requirements to keep student book purchases below a certain price
level. They commented that this had resulted in students purchasing
a very mediocre dictionary that did not really meet all needs.

14. Lack of foreign language teaching was criticised by four
teachers. They felt that when students had regularly studied
another language they had had a better understanding of how their
own operated. The staff concerned then clarified this point.
It was a lack of European language teaching, including Latin
and Greek, that was being lamented. They felt that a study of
Japanese probably would not help develop spelling skills. (Although
many good spellers attribute their skill to the fact that they
learnt Latin there does not appear to be any research to support
the claim. However, it would be valuable for students to learn
Latin and Greek roots, which would be a study of derivational
morphology.)

15. Many English teachers were critical that formal study of
the English language does not form a part of the units in the
Unit Curriculum. They felt that there was value in teaching about
word roots, suffixes, derivations and other facets of words.
(The consultant agreed that the Unit Curriculum documents were
not helpful on this point and had contributed to this erroneous
belief.)

16. Some students were seen as having a special problem (for
example, dyslexia) which could be blamed for their difficulties.
(In discussion staff also identified students with other problems
that possibly placed them in the "mixed speller" category but
did not appear to appreciate that these students could have specific

problems requiring help. For example, a Year 10 girl in School B who was a good reader but seemed unable to visualise a word and spell it correctly, and a Year 9 boy in School C who "wouldn't or couldn't" learn to spell simple words despite special efforts being made by the teacher concerned.)

17. Parents were criticised for not attaching enough importance to reading and the language skills generally. It was pointed out that if a student had problems with mathematics then parents would often obtain private tutoring. A student with similar language problems would be unlikely to be given any tutoring.

18. Lack of standards within a school or department were criticised by many. It was felt that as long as staff did not have a uniform and agreed approach to treat spelling seriously then the students would continue to ignore the efforts of those who tried to persuade them that it was important.

19. Two social studies teachers criticised the Secondary Education Authority for not taking spelling into account when marking the Tertiary Entrance Examinations. They felt that this gave a signal to students that spelling was not important and did not matter.

(The authority was asked to respond to this criticism. The spokesman agreed that poor spelling would not be taken into account when examination answers were marked. He indicated that this was because the authority regarded such answers as being in the same category as a first draft. In a first draft the ideas are important, not the style, spelling or grammar. The spokesman, however, disagreed with the assumption that spelling could not be considered when school-based assessments were awarded. The curriculum documents for social studies state that courses "should be developed in accordance with ... the need for all individuals to master literacy and number skills" (p. 6). Teachers should regard this as a clear indication that spelling does matter.)

Findings Relating to the Causes of Poor Spelling

There is a danger that the nineteen reasons for poor spelling could be dismissed as uninformed comment and belief. This is not the case. The fact that teachers were able to produce so many reasons for poor spelling shows that it is a very complex problem that does not have an easy solution. While some of the

comments may be mis-informed, for example that spelling is not taught in primary schools, others are valid and are supported to a greater or lesser extent by the research available. The findings reinforce the idea gained in the literature search that teachers need to have a number of different methods available to assist different students.

Chapter Seven - Strategies for Dealing

with Poor Spelling

Are Teachers Trained to Develop Spelling Skills?

All of the teachers interviewed were asked if they had had any training to equip them to teach spelling or if they knew anything about spelling theory.

Two of the English teachers had originally been trained as primary school teachers and had therefore done "something" about spelling in their basic training. Two other staff members, one in English, one in social studies had studied a unit in remedial reading as part of their basic training and this had included some work on spelling. Finally, two of the reading resource teachers had participated in a few in-service courses. The remaining forty teachers claimed to have had no training to assist them to teach spelling and admitted to relying on the memory of things that had been done to them at school. It should however be noted that School C had arranged for the teachers in its English Department to undertake a little, privately arranged, in-service training.

Methods Used by Teachers to Develop Spelling Skills

Although both English and social studies teachers claimed to have had no training to equip them to teach spelling many were using methods that are supported by recent research findings. There were differences in the approach of the two groups but no one was using an inappropriate method. As with previous results

the methods the teachers used have been listed in a consolidated form for each discipline. There was no obvious difference between schools. Where there was disagreement, or if only one person was using a particular method that has been noted. Generally, nods, smiles and verbal agreement were taken to indicate that the teachers present supported and used the methods under consideration.

Methods used by social studies staff.

1. Circle the word that is incorrect, have students write it out three or five times at the end of the work.

2. Underline the incorrect part of the word. Students to correct using a dictionary.

3. Underline the incorrect word to draw attention to it, write the word correctly above, bring it to the student's attention.

4. Prepare a list of key words for the unit being taught. Hand the list out to all students. (Three teachers.)

5. Teach key words by breaking them into syllables. (One teacher.)

6. Test the spelling and meaning of key words.

7. Encourage drafting and proof-reading either individually or in pairs.

8. Arrange for class reading out loud to draw attention to specific key words or difficult words. (One teacher.)

9. Encourage reading as a general activity.

10. Make a game of spelling key words. (One teacher in School B)

11. When a number of the students in the class have difficulty with the same word, teach it in a class lesson.

12. Have students produce their own list of personal spelling demons for later reference.

Methods used by English teachers.

1. Underline incorrect word; student to correct, using a dictionary. (Three or four teachers also required the student to use the correctly spelt word in another sentence to reinforce both the spelling and the meaning. One teacher asked students to write out derivations of the word.)

2. Encourage dictionary use generally. Have spot inspections to ensure that students have dictionaries in class and on the desk.

3. Use the "Look, cover, write and check" method to learn the spelling of new words.

4. Teach words that the whole class has trouble with, including strategies for remembering the spelling.

5. Have formal lessons where word roots, suffixes and prefixes are taught.

6. Have regular spelling tests. (Teachers reported that students regarded tests as a primary school activity. Half of the teachers however saw tests as a way of developing memory skills. This was important because they saw spelling primarily as a memory skill.)

7. Analyse spelling errors to identify the underlying problems for each student. Then select one problem to work on and only mark those errors until corrected.

8. Analyse spellings of Year 8 students to identify those with major problems and devise a remedial programme if necessary. (School C does this for all students while a teacher in School A did so for all students in his classes.)

9. Encourage drafting and proof-reading. (School C is using a set of commercially produced proof-reading exercises. Staff report that this is more successful than trying to develop proof-reading skills on the student's own work.)

10. Teach word recognition and spelling skills.

11. Encourage reading so that students have more opportunity to see words and visually recall them.

12. Encourage students to write more, so that they gain confidence and are more practised at spelling words.

13. Teach word strings and letter combinations to those students who require the knowledge.

14. Encourage students to use a computer and a word processing package with a good spell-checker. (The teacher in School A using this method with a group of low ability Year 10s insisted that they had to write the material out first and transcribe it onto the computer afterwards. He reported that many of them were able to pick the correct spelling from the list presented to them by the spell-checker. He also found that the quality and quantity of their written work increased with their increasing confidence. This supports the work of Hasselbring, (1982).)

15. Use commercially produced word games such as Scrabble, Spellmaster, and Swoggle.

16. Teach simple rules to show that spelling is not just random.

17. School B used its reading resource teacher to reduce class sizes generally and to provide an additional teacher in some classrooms for some lessons.

18. The other two schools used the reading resource teacher as a resource to help a few children with major problems and to give advice to staff about others.

Findings Relating to the Methods that Teachers Use to Assist Students with Spelling Difficulties

Research question six asked "What methods do teachers use ...";
the results given in this chapter need to be considered in conjunction
with the training that teachers have had for the job.

It is evident from the results that English staff generally have
access to a wider repertoire of teaching methods than do social
studies staff. This is possibly because the teaching of spelling
is regarded by many as being a necessary part of English lessons.
It could also be partly due to the fact that the literature about
spelling that has been produced by the Ministry of Education
has generally been seen by English staff but not social studies
staff. (See Chapter 5.)

Five of the six staff who had received specific training in developing
spelling skills were located in English departments. In addition
School C provided additional in-service training for its English
staff. This additional training could provide another reason
to explain why the responses of English and social studies staff
to this question were different.

Programmes Designed to Meet the Needs of High School Students With Spelling Difficulties

School C is able to offer remedial assistance to about 5% of
its poorest spellers. This programme was the only one identified

by this research which was designed to assist high school students with spelling problems.

External to the schools, SPELD (an organisation set up to assist children with Special Learning Difficulties) can offer some assistance.

This organisation is usually approached by parents of children in the upper levels of primary school but has been contacted by high school parents and, if necessary, provides a continuing service for children moving through high school. A spokesperson for SPELD said that the organisation had no diagnostic facilities and so parents were required to obtain their own testing (both psychological and physical) to show that poor spelling was not the result of intellectual or physical impairment. Once that had happened SPELD could offer tuition, which could be at a subsidised rate for low income parents.

Findings About the Programmes Available to Assist Students

For secondary students with spelling problems there are few avenues of assistance available. Teachers, parents and students have to attempt to deal with spelling difficulties by themselves, unless recourse is made to SPELD.

Chapter Eight - Teachers' Suggestions for Improving the Way Spelling is Taught.

The final research question to be answered is question seven which asked "Do teachers have any suggestions about actions that need to be taken, or material that needs to be provided, to assist them in this area of their work?" The teachers in this survey seemed to find this a difficult question to answer, possibly because spelling education is something that they had been doing without giving it a great deal of thought. The following is a list of their suggestions together with an indication of the source of the suggestion.

1. The Unit Curriculum should be modified so that spelling and word study could be taught. (All of the English teachers.)

2. The Secondary Education Authority should start to take spelling into account when marking examination papers. (Two of the social studies teachers.)

3. Schools and departments need to adopt common policies and practice with regard to spelling education. (English teachers in School B and social studies teachers in School C.)

4. The Ministry of Education should adopt a more positive approach to cross-curricular literacy programmes and provide more resources for schools. (Teachers in the English departments in School A and School B.)

5. More resources should be provided to assist primary school staff to identify and help children who are likely to develop spelling problems. (A social science teacher.)

6. Children should not be allowed to progress through primary school unless they reached acceptable standards in the basic skills. (Another social science teacher.)

7. The Spelling Journal would be more useful if it was pocket sized and indexed down the side, rather like a telephone index. (An English teacher who had used such a book at a previous school.)

8. The Ministry of Education should ensure that all material is circulated to all staff, not just the English staff. (All of the social science teachers.)

9. The community, particularly advertisers, should start to treat spelling seriously and stop using mis-spelling as an advertising tool. (All teachers interviewed.)

Findings Relating to the Suggestions

Apart from point three, all of the suggestions related to things that other people or organisations outside of the school should do. This was not a surprise because the lack of specific training for teachers in spelling and spelling theory would make it very difficult for them to identify ways of changing the system from within.

The second last suggestion (8) is the one that could be most easily carried out if staff at the Ministry of Education could be persuaded of its value. It should also be within the power of teachers to implement suggestion three (schools and departments should adopt a uniform approach to spelling) if they really felt that it was important.

Suggestion seven, relating to the size of the _Spelling Journal_ will only be followed up if teachers provide feedback about resource material provided. It is apparent that this has not occurred because the consultants appeared to be unaware of the negative reactions towards the _Journal_.

Chapter Nine – Review of Research

Summary of Research Findings

The following is a summary of the research questions and the findings for each one.

1. What criteria do teachers use to assess students' spelling skills and to identify those students who have either a moderate or severe spelling problem?

Teachers use a variety of performance indicators, they look at the written work produced by students, count the number of mistakes on a page and make an assessment as to whether the student could be expected to spell the word. They also note whether the student has spelt the word correctly elsewhere in the work and whether the student can self-correct a mistake. None of the teachers interviewed based their assessments on student performance in a test or on a list of words.

2. When the criteria are used, what percentage of students in selected classes in Years 8,9 & 10 are identified as having a moderate or severe spelling problem?

Teachers in School B (the only school to undertake the introductory exercise) identified between 21% and 100% of students in selected classes as having spelling problems. These results cannot be considered as providing any valid comment on the extent of spelling problems in Western Australia's high schools but do indicate

that this group of teachers perceived the problem to be great.

More valid findings would be the Ministry of Education's 11% and School C's 17%. Both of these percentages were based on test results, although the reliability and validity of the tests used were not examined as a part of this study.

3. What do teachers consider to be the causes of poor spelling?

Teachers have some understanding of the causes of poor spelling but it is not complete. They listed nineteen causes of poor spelling which roughly divided into criticisms of the ways in which spelling is taught, complaints about lack of interest on the part of students and parents, problems with the unit curriculum, and a lack of standards within the school and community at large. There was also a perception that some children had special problems such as dyslexia; but they revealed little knowledge of this type of difficulty.

4. What policies exist at ministry, district and school level with regard to the teaching of spelling in senior high schools?

The policies studied generally indicated that spelling is important. The ministry and two of the schools had policy documents available that stated that the development of spelling skills was important. The third school, at one time, had had such a policy, but had not implemented it.

District A had no policy statement available but had a clear

policy that high school spelling was important because it provided
assistance and in-service training for teachers who sought it.
The other two districts had no policies.

5. What programmes exist to meet the needs of students in Years
8, 9 & 10 who have either a moderate or severe spelling problem?

Generally there are no programmes in existence to help these
students. School C had a programme for about 5% of the students
identified as having problems in Year 8. Other students could
have been on the SPELD home tutoring programme.

6. What methods do teachers use to assist students with spelling
difficulties?

Teachers use a variety of methods but they are basically variations
of the same method. They aim to draw the student's attention
to the part of the word that is mis-spelt and encourage the learning
of the correct spelling.

7. What materials do teachers find most useful?

The ministry has produced some very useful material to assist
teachers but it has not been widely distributed and is not widely
used. With one exception individual teachers did not use any
special material and so it was not possible to give a positive
answer to this question.

On the negative side, some teachers who had tried to use the Spelling Journal criticised its format but this criticism does not seem to have reached the ministry.

8. Do teachers have any suggestions about actions that need to be taken, or material that needs to be provided to assist them in this area of their work?

Teachers had a number of suggestions but most were framed around other people and did not indicate that they had given the problem any great consideration. For example they suggested that the ministry should allow schools more freedom under the Unit Curriculum; that schools should have greater resources available; and students, parents and the community generally should attach more importance to spelling. The most useful suggestions came from the social studies teachers who felt that the ministry should circulate to all staff (not just English) copies of the various ministry spelling documents available, and from the English and social studies staff who felt that schools should adopt a uniform approach to spelling.

Conclusion

When this study was first discussed there were a number of individuals, including some of the teachers asked to participate, who said that the findings would indicate that secondary teachers were not assessing the spelling skills of their students and that they were doing nothing to improve spelling skills.

The results show that this is a mistaken impression. All forty-six
of the teachers interviewed were able to articulate the criteria
that they used to assess spelling and forty-one of the teachers
were attempting to improve spelling skills using a variety of
methods.

Results and Findings Not Related to the Research Questions

During the group interviews a number of issues were raised that
were not related directly to the research questions but did impinge
on a teacher's ability to assist students with spelling difficulties.
The issues are listed and discussed here.

Teachers have unrealistic expectations.

Many of the teachers interviewed stated that children should
have attained a certain standard of literacy before entering
high school. They did not expect to have to teach the basic skills,
including spelling. The majority of the teachers (40 out of 46)
went on to say that they were not trained to teach spelling.

The teachers, however, also acknowledged that many children were
not at the required standard and that they did have to consider
ways of developing the skills. In the face of this dilemma it
might be appropriate for schools, teachers and training establishments
to recognise that there will be children entering secondary school
with poorly developed spelling skills. Teachers should then be
required to develop the necessary teaching skills, either in

their initial teacher education, or by way of in-service or extra-curricular courses.

Training courses are not always advertised.

The work of the school development officer in District A has been mentioned. However, it was also stated that she is only able to assist schools and teachers when requested to do so and that, as a result, there are staff in that district who do not know of the availability of the service. The development phase of any training course is expensive in resource terms and can only be justified if the course is then run for a number of different groups. Therefore courses need to be widely advertised in the schools of the district. Such action would have the added advantage of alerting teachers to the skills that they might need to develop.

Spelling in Unit Curriculum not understood.

Although Unit Curriculum documents indicate that in English the process objectives, which include spelling, are to account for 60% to 70% of the assessment, many English teachers seemed to feel that they are wasting time if they devote lessons to the study of language. Those who did spend time studying words and their spellings usually prefaced their information with a remark like "I know that it's not part of the curriculum but...".

The subject consultants both acknowledged that up to the present time the Unit Curriculum documents have not provided much help

for teachers confused about the position of spelling and other basic literacy skills. Now, however, a number of additional support documents are being prepared to clarify the situation. If the ministry was also to issue a policy statement clearly indicating that all secondary teachers had responsibilities with regard to the teaching of spelling it would assist those teachers who appear to have difficulty reconciling the time that they spend developing spelling skills with the other teaching activities that they feel they should be undertaking.

Unit Curriculum rules are not understood.

All of the teachers interviewed complained that the requirement to teach all children four units a year and to undertake eight to ten assessments for each unit made it difficult to find time to develop spelling skills. However, the consultants stated that schools could decide to organise the timetable in a different way and teach fewer than four units a year and also choose to reduce the number of assessments undertaken. Schools could also decide to include direct assessment of spelling skills, as part of the assessment of assignments. This information needs to be disseminated more widely amongst teachers.

Resource material is not widely distributed.

This study has shown that much of the material produced to assist teachers is not regularly circulated outside a school's English department and is not seen by teachers of other subjects. It is a waste of resources for material to be produced if it is

not seen by all relevant staff. To prevent this, the consultants should liaise with schools to devise an acceptable method of advertising the availability of resource material.

Spelling Journal needs to be revised.

The researcher felt that the Spelling Journal could be a particularly useful document which could be used by all students and teachers (not just poor spellers) to develop a language programme. It is unfortunate that some students do not like to use it. There would perhaps be value in commissioning someone to revise the layout so that it appears to be a more adult document which is likely to find favour with students. Consideration could also be given to reducing its size.

SEA should explain the significance of spelling.

In Chapter 6 two teachers were quoted as claiming that students did not have to be able to spell the key words because they would not be marked down in the Tertiary Entrance Examination if they could not spell. It is apparent that these teachers see the examination, and not the syllabus objectives, as a major factor determining classroom practice. The limited nature of this study makes it difficult to assess how many teachers hold this view but it could be widespread. The response of the Secondary Education Authority to this criticism has already been reported. The authority's spokesperson indicated that if teachers raised this point at moderators' meetings the situation (that spelling should be considered

when assessing school work) would be explained to them. It would possibly be more useful for the Secondary Education Authority to issue a statement clearly stating the position. Alternatively there could be a clear statement in the examination syllabus that should be seen by all relevant teachers.

School decision making powers not understood.

This study indicates that teachers are not aware of the fact that schools have the power to make decisions about course content and structure. They seem to assume that all power eventually resides with the ministry. Comments about the ministry tending to veto innovative activities and criticisms of the ministry for failing to provide adequate resources or to support literacy programmes are a clear indication of their perception of the situation.

To counteract this perception ministry staff should do more to ensure that teachers understand the lines of authority and know where decision-making power lies. This study did not investigate how much work has been undertaken in this area but it is apparent that it has failed to make all teachers aware of the situation.

Students do not think spelling is important.

Most of the teachers interviewed were critical of students and their attitude towards spelling. Remarks like "they don't care", "they don't see it as being important", "they are too lazy to

correct a word that they know is wrong", were frequently made. Teachers acknowledged, however, that many departments did not have a coherent policy with regard to spelling. If students are receiving mixed messages from staff about spelling it is not surprising to discover that they are not sure whether or not they should regard it as being important.

Need for a uniform spelling policy.

To achieve a coherent approach towards spelling it is necessary for all staff in a department and a school to decide on a spelling policy and to enforce it.

The policy adopted should clearly indicate how teachers should treat spelling when assessing work and the effect of poor spelling on any assessment made. If this were to be done in every school, students would be more likely to regard spelling as important.

Teachers need to increase knowledge.

In this research many of the teachers showed that they have very little understanding of how their students have been taught before they reached the high school. They should therefore become familiar with the activities of their feeder primary schools and discover how spelling is being taught in them. This knowledge would give them a greater understanding of the problems experienced by some students and help them to cope with them.

Final Comment

This research set out to ask some very basic questions about high school spelling. It has generated much data that could be used as a baseline for future studies and it has identified some areas where action could be taken to improve the development of spelling skills in high school students. Finally, it has answered the major research question **What criteria do staff in the English and social studies departments of three senior high schools use to assess the spelling skills of students in Years 8, 9 & 10 and what strategies do they adopt to meet the needs of these students?** by showing that teachers use performance indicators derived from a student's written work to assess spelling skills. They then adopt a strategy which tries to make the student aware of the incorrect spelling and learn the correct one.

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Interview Schedule

Group Interviews

1. Introduction to group activity, ask question "How many of your existing students have a spelling difficulty?" Please determine this by considering each student on your class roll. Mark the roll with an M (moderate problem) or S (severe problem). If there is no problem, make no notation.

2. What criteria did you use to decide that a student had a moderate or a severe problem?'

3. What percentage of students had a problem in your selected class? In your opinion, what percentage of students in all of your classes would have a spelling problem? (Refer to the Educational Standards ... report. Check on teacher reaction to information about spelling skills contained in it.)

4. Why do some students experience spelling difficulty?

5. How do you try to assist students with spelling problems?

6. Does your school have a policy about the development of spelling skills?

7. To your knowledge does the Ministry of Education have a policy about spelling?

8. Does your district office have a policy regarding spelling? Does it have any materials, programmes or other assistance that you could call on?

9. The ministry has published some material on spelling to help teachers. (Show examples of _Zoom Notes_, _Spelling Journal_, _In Brief Notes 1 & 2._) Have you seen them? Have you used them? If so what is your reaction to them? Were they useful?

10. Do you have examples of any material that you have found to be particularly useful?

11. What training have you had to help you to develop spelling skills?

12. What changes would you like to see introduced to improve spelling teaching?

District Office Staff

1. Who is responsible for the development of language skills in the district?

2. What services could be offered to high school teachers who indicated that they were having problems with the spelling skills of students?

3. Are there any training courses available for high school teachers?

4. Does the office have any materials available (either testing or teaching material) that could be used by high school teachers?

5. What advice or assistance could be offered to a school with a spelling problem?

6. Do high school teachers ever ask for assistance with spelling?

7. Do you consider spelling to be a problem in the high schools in your district? What percentage of students have a problem. (Refer to report Educational Standards ... What do district office staff know about the findings reported? Do they agree?)

English Consultant

1. Many teachers complained that they cannot teach about spelling or undertake a study of words under the Unit Curriculum because spelling is not formally assessed. Is this the case?

2. Some teachers complain that the need to teach four units a year and undertake eight to ten assessments for each unit means that it is impossible to find the time to teach spelling skills. How do you respond to this?

3. Many teachers claim that there is no support available for teachers who do not know how to help students with a spelling problem. Two out of the three District Offices approached as part of this study had no support services available. Are there any proposals to rectify this situation?

4. Teachers felt that the Ministry would not allow them to undertake innovative teaching. What is your reaction to this claim?

5. Some teachers commented adversely about the Spelling Journal, many had not seen the other publications produced to assist them. Does the Ministry have any plans to alter material or to change the method of distribution?

Social Studies Consultant

1. Many teachers complained that they cannot teach about spelling under the Unit Curriculum because spelling is not formally assessed. Is this the case?

2. Some teachers complain that the need to teach four units a year and undertake eight to ten assessments for each unit means that it is impossible to find the time to develop spelling skills. How do you respond to this?

3. A number of social science teachers were confused about their role as language teachers. They were prepared to help students learn to spell subject oriented words but were not sure if they should also correct other words. What is your response to this difficulty?