

CHAPTER 1. INTRODUCTION

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

This chapter seeks to establish the purpose of the study and describes how the study aligns with current research into spelling. There continues to remain a large number of poor spellers in the middle and upper primary grades (nine, ten and eleven year olds) and many teachers are requesting support in the planning, implementation and monitoring of an effective instructional approach designed to address this issue (Westwood, 1994; Winch & Blaxell, 1992). Although spelling has been extensively researched there appears to be gaps between the current research and in its application in classrooms (Bouffler, 1984; Frith, 1980; Fulk & Stormont-Spurgin, 1995; Winch, 1989; Winch & Blaxell, 1992). This study seeks to address this need by conducting the intervention in actual classrooms and by providing teachers with a method of assisting their students to become more proficient spellers.

1.2 STATEMENT OF THE PROBLEM

There is mounting evidence to support the belief that not all students learn to spell by immersion in reading and writing alone (Peters, 1985; Routman, 1993; & Winch, 1989). More recently, Westwood (1994) argues that some students who do not easily acquire spelling skills through reading and writing activities alone require more direct spelling instruction. Fulk & Stormont-Spurgin (1995) also express a doubt whether whole language approaches allow all students to acquire spelling skills. The researcher's twenty-two years of teaching experience tends to indicate

that many teachers are aware of the core of poor spellers in their classes and are aware of the need for intervention.

However, the research of Westwood (1994), Winch (1989) and Winch & Blaxell (1992) suggests that teachers are concerned as to how to organise for that instruction. Many teachers are using the process approach to writing but they have a concern as to how to teach the mechanics of writing eg. spelling within the process (Anstey & Bull, 1984). Recent observations by the researcher, as a Support Teacher, would indicate that this continues to be the case. Many frustrated teachers are endeavouring to provide spelling instruction through spelling textbooks but the researcher's observations tend to show that students fail to transfer this knowledge to real writing situations. Bouffler (1984) would argue that those teachers have no consistent language program and that they are teaching spelling and writing according to contradictory theories. The opposing view, argued by Heymsfeld (1992) is that whole language approaches and direct instruction approaches can and must be combined. "The answer is to combine the insights of the skills people with the insights from the whole language people" (Heymsfeld, 1992, 267).

The proposed study seeks to fill this perceived educational need by supporting middle and upper primary class teachers in the planning, implementation and monitoring of an instructional process designed to address the issue of poor spellers who appear to have failed to 'catch' spelling. The research problem is one of examining the effects of a particular instructional process on the spelling (in isolation and in context) behaviours, of middle and upper primary students (nine, ten and eleven year old students) who have been identified by their teachers as poor spellers.

1.3 CONTEXT OF THE PROBLEM

During the first half of the century, the behaviourist movement dominated psychology and education. However, as cognitive theory matured during the 1970s and 1980s, education psychology experienced a transition from behavioural psychology to cognitive psychology and subsequently the view of learning and instruction changed in ways that affected educational practice and research (Mayer 1992 a, b). With the

advent of whole language (Holdaway, 1979), process writing (Graves, 1983) and developmental spelling movements (Gentry, 1982), literacy instruction has shifted its focus from an over-emphasis on content to examining the inter-relationship of process and content. Researchers and educators alike became interested in cognitive strategies and cognitive strategy training and also began to recognise the fact that learners can become aware of and can exert control over their learning processes.

The wheel seems to have been reinvented many times over as theories on spelling have been refined and further refined. However, the early theories on spelling concentrated on content, and spelling was viewed as either right or wrong. An earlier theory, the rote memory theory, hinged on the notion that learning to spell was driven by rote memorisation while another theory, the generalisation theory, focused on the examination of groups of words with similar patterns (Nelson, 1989). However, the developmental theorists (Gentry, 1982) shifted the focus to the creation/process of spelling and to the consideration of the knowledge the student brings to learning to spell. The developmentalists view young children as being aware of and able to use phonetic knowledge in their early spelling attempts and who in successive stages, progress toward fuller and more abstract understandings of the English orthography (Henderson & Beers, 1980).

The whole language movement in general, and specifically the process writing and developmental spelling movements, have shifted spelling from being narrowly viewed as a skill subject which receives attention on the class timetable for thirty minutes each day. Spelling is presented as part of an integrated language arts system and it is believed, by the proponents of developmental spelling, that standard spelling will be learned through immersion in reading and writing with lots of opportunities for practice and experimentation (Bean & Bouffler, 1987 a, b; Wilde, 1990). Spelling has been de-emphasised to allow students to concentrate on other aspects of the writing task; to encourage children to put their thoughts to paper rather than simply avoiding many words because they are too difficult to spell (Bouffler, 1987; Peters, 1985); and to enable the teacher to infer the child's level of spelling development through an examination of the child's non standard spelling (Gentry & Henderson, 1980).

As Routman (1993) indicates, this process was appropriate for some students. On the other hand, some students appear not to naturally and/or automatically conceptualise the rules and regulations of English orthography. The researcher's twelve years of experience as a support teacher tends to indicate that many students and teachers continue to believe that the English spelling system 'breaks rules' and is not regular. They tend to believe that it is this irregularity that makes spelling hard.

1.31 REGULARITY OF THE SPELLING SYSTEM

Research (Henderson & Templeton, 1986; Peters, 1985; Schlagal, 1989) has established that the English spelling system is not as irregular as is often made out.

The spelling system of English could be viewed as inconsistent by those who assert that it must be mastered for the most part by serial letter association. However, Schlagal (1989) contends this narrow phoneme-grapheme correspondence view of the orthography can be easily refuted. According to Henderson & Templeton (1986), there are three "ordering" principles in the spelling system of English: alphabetic, within-word pattern and meaning. Bolton & Snowball (1985) would include both syntax and semantics as part of this last principle (meaning). They believe that both syntax and semantics add to the meaning of a word and therefore play an integral role in spelling.

On the other hand, Baker (1980, 54) argues that although these more abstract high-level regularities of English spelling may be clear to linguists, they may represent "an obstacle course for the average speller." However, as Templeton (1980, 94) suggests "emphasising the more superficial aspects of the spelling system, sound to spelling correspondences, may be a bankrupt policy." Bolton & Snowball (1985) and Templeton (1989) suggest that to learn to spell words on the higher levels that the structure of English spelling reflects, students need to study words, to make discriminations and to practise these routines of examining words.

Students in the middle and upper primary years who fail to 'catch' spelling at the interface of reading and writing may do so because of an inability to notice these word patterns when they read (Barnes, 1989). In many instances when they write they may not be taking the time to apply what they have learned about spelling in real writing situations. (Routman, 1993).

1.32 POOR SPELLERS

The literature tends to indicate that poor spellers seem to fall into two distinct groups:-

- . Those who appear to be average to good readers but poor spellers (Barron, 1980; Cohen, 1980 and Frith, 1980). The spelling errors of these students appear to be almost consistently phonetic (Cooksey, Freebody & Bennett, 1990 and Frith, 1980).
- . Poor spellers who present with errors, a sizeable proportion of which are inconsistent and not phonetic.

Group 1

Barnes (1989) believes that students who fail to 'catch' spelling at the interface of reading and writing may do so because of an inability to notice word patterns when they read. With the 'inside-out' theorists [sometimes called top-down theorists or those who believe that reading should be allowed to grow from within the child's already established language system (Kemp, 1987)] promoting good reading as good prediction, students are predisposed to use the least amount of visual information as possible (Cohen, 1980; Frith, 1980; Kemp, 1987; Peters, 1985). Since spelling depends in part on a process of visual recognition (Tenny, 1980) and familiarity with serial probability which is derived mainly from reading experience (Peters, 1985) good contextual readers as opposed to visual readers can thus be poor or average spellers (Barnes, 1989). Bryant & Bradley (1980) suggest that in the beginning stages of spelling the good speller uses mainly phonological cues but this specialisation tends to decline and the experienced speller begins to use visual chunks and a variety of strategies to help in the writing of words. Poor spellers, however, seem to fail to

shed the earlier habits and continue to rely on phonological cues. (Bryant & Bradley, 1980). As Frith (1980) contends, poor spellers who are good readers spell differently from the other poor spellers. The spellings of poor spellers/good readers are almost consistently phonetic (Barnes, 1989; Cohen, 1980; Cooksey, Freebody & Bennett, 1990; Frith, 1980). As Barron (1980) warns, too much emphasis by the teacher on one or other strategy may encourage children to over-rely on that particular strategy.

Group 2

Attention needs to be drawn to another group of poor spellers. Barron (1980) states that faulty instruction may not be the only reason why children do not use both visual/orthographic and phonological strategies in spelling. Other poor spellers present with misspellings of which a sizeable proportion are inconsistent and not phonetic. The researcher's twelve years of experience as a support teacher tends to show that some nine, ten and eleven year old students fail to progress past Henderson's 'Within-word Pattern Stage' because their main strategy is a phonological one which may in fact be faulty. While it has been reported that many spelling mistakes can be viewed as being developmental (Bissex, 1980; Graves, 1983 and Kemp, 1987) it is important to remember that a certain number can be attributed to processing difficulties. In such cases, spelling instruction should allow for the student to process spelling via his/her best learning modality to allow for the student to compensate for his/her disability but at the same time endeavouring to build up skills in the area of deficit.

The proposed study seeks to intervene in order to assist these poor spellers. The literature on spelling and metacognition is reviewed in an endeavour to establish a theoretical base for the instructional program.

1.33 INTERVENTION

There are two sides to the de-emphasis on the standard spelling argument. It is recognised that in the process of writing, correct spelling should not be of primary concern until the editing phase of the writing process to encourage reluctant students to write without over concern for correctness. However, a reluctance by some teachers to interfere with

students' writing has led in many cases to careless writing filled with misspellings of basic words (Routman, 1993). It is argued by this researcher that such writing cannot be classed as creative and effective.

According to Oates, Turland & Mehaffie (1989), the effectiveness and creativity of a student's writing are significantly reduced by an inability to spell. Templeton (1991, 189) argues that the "initial encoding of words will be more automatic and efficient if orthographic knowledge is more developed", and if the intricacies of the mechanics are automatic then the student can write freely, confidently and adventurously (Peters, 1985).

Many authors (Barnes, 1989; Bloodgood, 1991; Bolton & Snowball, 1985; Hodges, 1981; Rowe & Lomas, 1985; Templeton, 1991; Turner, 1984; Wilde, 1990; Routman, 1993; Zutell, 1980) argue that while the primary source of word knowledge is actual reading and the primary means by which this knowledge is exercised and developed is purposeful writing, there is considerable evidence that direct instruction in the study of words also plays a critical role in this development.

Many well executed and reported studies with relation to phonemic awareness (Clay, 1991; Cunningham & Cunningham, 1992; Foorman, Frances, Novy & Liberman, 1991; and Treiman, 1991) indicate that intervention of a direct nature can improve the spelling of at-risk writers in the early primary years. The success of such research holds promise for direct instruction in word study in order to assist poor spellers in the middle and upper primary years.

Although the advocates of formal word study may differ on how or what words are to be selected for study, few would disagree with Templeton's (1991) proposals:-

- . At all levels a common core of words should be examined;
- . The words to be studied should be in accordance with the student's level of development;

- . A variety of strategies and activities should be offered in which the words are productively examined; and
- . The philosophy that spelling is logical should be reflected.

Bloodgood (1991), Hodges (1981), Zutell (1980) and others recommend games and activities such as 'word sorts' as opposed to workbook activities to enhance a young child's growing awareness of words and how they are spelled. Games as opposed to workbook activities should not only provide enjoyment but should promote inquiry and experimentation with words in settings that are challenging, active and exciting. Word study, should help students to investigate word patterns and thereby become knowledgeable spellers who do not need to rely solely on memory. Word study should draw attention to the linguistic information represented in English spelling:- graphemic, syntactic, morphemic, semantic and etymological and encourage use of a variety of strategies available to the speller other than the over-used phonological strategy.

In advocating direct instruction of word study, the researcher is not taking sides in the whole language - direct instruction debate. Taking a one sided stance could mean 'throwing the baby out with the bath water.' As Spiegel (1992) suggests, bridges can and must be built between the two approaches to enable teachers to blend the best of both approaches to better meet individual needs. Routman (1993, 37) argues it is possible "to teach spelling and still remain true to the philosophy of whole language." We need to examine what makes sense about traditional practice and how we can modify that practice to fit in with the new theoretical insights into the way in which spelling is learned to better meet the needs of students (Morris, 1989).

In the proposed intervention study, spelling errors that students make in real writing situations will be used to determine the content of word study lessons designed specifically to teach the students about aspects of the English spelling system. In this way, writing, spelling and word study will be unequivocally linked. Integration of spelling and word study activities with reading and writing should provide further

reinforcement and encourage learning in all of the language arts (Bloodgood, 1991; Bolton & Snowball, 1984; Henderson & Templeton, 1986).

1.34 STRATEGY TRAINING IN THE COGNITIVE AND METACOGNITIVE ASPECTS OF SPELLING

The extensive work of Kemp (1987) and Clay (1985) provides teachers with ways of training students in strategies to access meaning from print. It is suggested that what has been done for reading can be done for spelling. Teachers can be provided with methods of explicitly training students in cognitive and metacognitive strategies to improve spelling in isolation and in context.

The author's own teaching experience tends to highlight the fact that many children may have developed or may develop useful spelling skills and strategies but that these same children may not actively use them independently in real writing situations. According to Routman (1993), many students still need strategies to be made known to them. The literature on metacognition tends to support this argument. According to researchers (Borkowski, Weyhing & Turner, 1986; Cole & Chan, 1990; Das, 1985; Kurtz & Borkowski, 1984; Meichenbaum, 1983; Sheinker, Sheinker & Stevens, 1984; Wong, 1982), deficits in the use and knowledge of metacognitive skills by less efficient learners, contribute to problems in strategy generalisation/transfer and strategy invention (Borkowski, Weyhing & Turner, 1986). These deficiencies are further compounded by the fact that less efficient learners tend to attribute failure to uncontrollable external causes (Cole & Chan, 1990).

Block & Peskowitz (1990) contend that metacognition, defined generally as being aware of one's state of knowledge, ought to be influential when trying to spell words. In contrast to previous cognitive skill training studies, those studies incorporating metacognitive training components provide durable and generalisable improvement in performance (Cole & Chan, 1990; Derry & Murphy, 1986; Perkins, Jay & Tishman, 1983; Reeve & Brown, 1985). Metacognitive skills should provide students with not only knowing what strategies to use but also how to and when to use them and why to do so together with being able to

monitor one's use of those strategies. It is proposed therefore, that developing students' metacognitive skills may provide teachers with the integrating device needed for children to transfer knowledge gained in word study to where and when it is needed in real writing situations.

According to Block & Peskowitz (1990), metacognition should affect judgments of how difficult a word will be to spell or how likely a rendered spelling is correct. They state that attempting to spell is probably accompanied by an awareness or feeling based on how much of the word is definitely known versus how much must be constructed, but more importantly an awareness of whether strategies are available to spell the unknown parts. In real life spelling, these judgments are probably made both before and after a spelling is written. What the writer says or thinks during self-checking, probably affects the cognitive process of checking. Of great importance to the proposed study is Block & Peskowitz's (1990) argument that such knowledge can undoubtedly be better developed as well as acquired by more students if teachers give explicit instruction in metacognitive spelling strategies.

A number of cognitively-oriented instructional approaches that do not separate content from thinking skills have been devised. It is proposed that the intervention study adapt the three phase SPELT approach of Mulcahy, Peat, Andrews, Darko-Yeboah, Marfo & Cho (1991) to assist teachers to teach students, within the regular classroom setting, the cognitive and metacognitive strategies required for spelling in a variety of situations. The cognitive spelling strategies will be derived from phonological, visual and semantic strategies (Block & Peskowitz, 1990) since it is believed that these strategies closely align with Henderson's (1985) ordering principles of English spelling - alphabetic (letter-sound matching), within-word pattern (visual), and meaning. In this way, word study involving a study of the English spelling system and the teaching of spelling strategies should also be linked.

It is believed that it is possible to teach spelling and still remain true to the philosophies of whole language (Holdaway, 1979), process writing (Graves, 1983) and developmental spelling (Gentry, 1982). Although spelling will not be taught formally as a separate subject, spelling will be taught and as suggested by the proponents of whole

language, there will be many opportunities for students to read, write and talk about words.

1.4 RESEARCH QUESTION

The research problem is one of examining the effects of the intervention implemented in an integrated classroom situation. It seeks to explore the spelling behaviours (in isolation and in context) of middle and upper primary students (nine, ten and eleven year olds). While the research seeks to explore the effects on the spelling behaviours of all students in the class, of particular interest will be those students who have been identified as poor spellers:-

- . Those who appear to be average to good readers but poor spellers (Barron, 1980; Cohen, 1980; Frith, 1980). Research (Cooksey, Freebody & Bennett, 1990; Frith, 1980)) indicates that the spelling errors of these students appear to be almost consistently phonetic.
- . The poor spellers who present with errors, a sizeable proportion of which are inconsistent and non phonetic.

Areas to be explored include:-

- . Students' spelling ability in isolation.
- . Students' spelling ability in context.
- . Students' knowledge and use of spelling strategies.
- . Students' ability to plan, regulate and evaluate their own use of the strategies.
- . Students' attitude (attitude towards self, self-confidence as a speller, and attitude towards the English language).

1.5 SIGNIFICANCE OF THE PROBLEM

The researcher's review of the literature indicates that spelling instruction has been previously extensively researched (Refer to Appendix A). However, there now appear to be limits in the current research (Fulk & Stormont-Spurgin, 1995) and gaps between existing research and its application to the classroom (Bouffler, 1984; Frith, 1980; Winch, 1989). It would appear that the majority of studies have been theoretical in nature rather than empirical.

Fulk & Stormont-Spurgin (1995) indicate that few studies have investigated spelling within the context of written composition and proof reading skills. Fulk & Stormont-Spurgin (1995) also suggest that another area to be examined is that of combining spelling strategy and attribution training. The proposed intervention study seeks to address a gap in the literature since one of the aims of the study will be for students to realise the reasons for accurate spelling and to encourage them to become independent in proof reading their own writing. Additionally, in keeping with the philosophy of the SPELT program, attributional training will be incorporated into the strategy training routines of the intervention study.

As noted, there continues to be a mismatch between spelling research and practice in classrooms. The researcher's twenty-two years of teaching experience tends to indicate that teachers are continuing to come to terms with the whole language movement and the developmental nature of language learning. In 1984, Anstey stated that teachers were concerned about how to teach the mechanics of writing and about how to monitor students' progress in these areas. Winch's action research in 1989, indicated that the teachers in his study repeatedly linked lack of suitable guidance with the development of new methods and in applying these approaches to the classroom. In 1993, Routman argued that, in the early stages of the movements, many teachers believed that children would learn to spell by being immersed in reading and writing activities. However, as Routman stated, this approach was appropriate for some students, but not for all. More recently in 1996, Westwood stated that teachers in South Australia were exhibiting "a growing interest in learning about the most effective methods of helping their students to become proficient spellers " (1994. 31).

The researcher argues that this continues to be the case and would agree with Winch (1989) that teachers who do not clearly understand the philosophy and methodology behind whole language, integrated approaches and are stressed in terms of time, are beginning to lack confidence and in some cases are falling back on spelling textbooks to provide structure to their spelling program. In many cases this is not working because the students do not appear to transfer what they have learned from the spelling textbooks to real writing situations.

The proposed study seeks to overcome this problem and contribute to gaps in the literature by supporting the class teachers in applying the approach in real classroom situations. The support will include materials and instruction in both the philosophy and methodology of the approach. The study will seek to support teachers in gaining both an understanding of and the ability to apply :-

- . Methods of gaining insights into the spelling processes and stages of spelling development of students in their classrooms;
- . Methods of developing their students' understanding and use of the English spelling system; and
- . Methods of explicitly training their students in cognitive and metacognitive strategies to improve spelling in writing situations.

Although much of the research into cognitive and metacognitive strategy instruction has been promising, there continue to be problems:-

- . The induced behaviours are not always maintained after training, unless there is some external prompt to use them; and
- . It is difficult to show that once a skill is trained it generalises to other similar but not identical tasks (Cole & Chan, 1990; Rowe, 1988).

By heeding these warnings, the proposed study seeks to address these problems and therefore contribute to research in this area.

A number of cognitively-oriented instructional approaches have been specifically devised to address the issue of programming for generalisation. Meichenbaum & Asarnow's (1979) instructional program VSIT - Verbal Self-Instruction Training appears to be the approach chosen by researchers into the metacognitive aspects of spelling (Gerber, 1982 cited in Wong, 1986; Orsetti, 1985; Wong, 1986). However, it is argued that the self-questioning studies tend to be prescriptive in nature and therefore are unsuitable for the instruction of the metacognitive aspects of spelling. Although the English spelling system is largely regular, it entails as Henderson & Templeton (1986) indicate, three ordering principles: alphabetic, within-word pattern and meaning. To spell efficiently the student needs to be able to be flexible in choosing either phonological, visual or semantic strategies to suit the task at hand. A prescriptive self-questioning technique does not allow for such flexibility and is therefore not considered to be flexible enough for the needs of the proposed study, in that it tends to provide a recipe for problem solution which may not only interfere with the student's usual strategic routines (Wong, 1988) but also may limit the ways in which the student can ultimately solve the problem for him/herself.

It is argued that the SPELT approach (Mulcahy, Peat, Andrews, Darko-Yeboah, Marfo & Cho (1991) would be the most suitable of the approaches to use or modify for the proposed spelling and metacognitive strategy training study. The approach's philosophies tend to concur with the suggestions in the literature.

Derry & Murphy (1986) advocate a combination of both direct and indirect instruction in the training of cognitive and metacognitive strategies. In the SPELT (1991) approach, teachers are required to provide explicit training in the early stages of strategy instruction (Phase 1) but they are required to gradually relinquish control for the application of these strategies to the students (Phase 2 and Phase 3). The SPELT (1991) approach, as do other researchers (Cole & Chan, 1990; Derry & Murphy, 1986; Reeve & Brown, 1985) advocates that interactive teaching procedures are necessary to foster cognitive and metacognitive skills. An added advantage of the SPELT (1991) approach is that attributional (motivational) training is incorporated into strategy training routines.

Researchers (Borkowski, Weyhing & Turner, 1986 Cranstone & Baird, 1988; Derry & Murphy, 1986) argue that learning is both cognitive and affective - if students are to become more metacognitive they must be not just able to use the spelling strategies but also willing and able to use them.

Many cognitive theorists and researchers believe thinking skills cannot and should not be taught apart from content because content is inseparably linked with cognition (Anstey, 1988; Cranstone & Baird, 1988; Derry & Murphy, 1986; Marzano et al, 1988; Evans, 1991; Perkins, Jay, Tishman, 1993; Rabinowitz, Freeman & Cohen, 1992; Resnick & Klopfer, 1989; Rowe, 1988; SPELT, 1991). It is believed that Gerber's (1982) work in which he sought to obtain improvement in spelling accuracy among older learning disabled students failed to have expected results because the strategy instruction was not supported by instruction in domain specific knowledge.

The proposed intervention study, will seek to support strategy instruction with instruction in spelling (word study, mini lessons, focused learning episodes etc.). It will also seek to teach the thinking skills related to not only spelling in isolation, but to spelling in writing and proof reading situations as well. In this way, it is believed that the cognitive and metacognitive skills should transfer to where they are required in a variety of real writing situations. By adhering to the philosophies of the SPELT program, a cognitively-oriented instructional approach which has been specifically devised to address the issue of programming for generalisation of metacognitive strategies from one situation to another, it is postulated that the proposed intervention study will have a significant impact on students' spelling skills.

Metacognition might best be described as a developed general tendency which is built up over time and across many and varied instances (Rowe, 1988). However, Cranstone & Baird (1988) comment that many previous metacognitive studies have been limited in time. The proposed intervention study seeks to extend the training period over two school terms (approximately 20 to 24 weeks) in an endeavour to provide more time for the cognitive and metacognitive skills to develop. Therefore, by taking into account the nature of the underlying processes and abilities being trained, and bearing in mind the time limitations of

previous studies, the proposed study endeavours to contribute to research in this area. It should be noted, however, that the amount of time available will inevitably be determined by the nature of the school year.

Training studies by virtue of their experimental nature are not only limited in time but fail to take into account the complex nature of the classroom (Winsler, 1988). Cronbach & Associates (1980) argue that quantitative experimental designs are so focused on controlling variables that the findings are largely irrelevant beyond the controlled experimental situation. The proposed research seeks to overcome this problem and contribute to gaps in present knowledge by conducting the intervention (word study combined with spelling strategy and attribution training) within real classroom situations.

It is argued that the great majority of quantitative researchers in this researcher's review into spelling research (Appendix A) were unable to conduct what Cohen & Manion (1989) would term 'true experiments'. A similar argument could be directed towards cognitive/metacognitive training studies. By virtue of their experimental character, training studies (Wong, 1986) seek to control not only the underlying processes and abilities being trained, but the subtle and complex activity that is teaching. At best, these researchers could employ only something approaching a true experimental design.

On the other hand, much of the qualitative research in the review on spelling (Appendix A) would have to be referred to as 'loose' because although they may have considered the complex nature of the classroom, many have failed to address the need to carefully describe the research design. Since qualitative researchers rarely have access to even non statistical generalisations they, as a consequence, aim for comparability and translatability rather than outright transference (LeCompte & Goetz, 1982). In qualitative research, the researcher is required to delineate the characteristics of the group studied or constructs generated so clearly that they serve as a basis for comparison with other like and unlike groups (LeCompte & Goetz, 1982). According to LeCompte & Goetz (1982), for a study to be transferable, research methods, analytic categories and characteristics of the phenomena and groups need to be identified explicitly. It is argued that in many cases of qualitative research, eg. Bean

& Bouffler's 1987b study, the research is not clearly defined and the specifics of the methodology appear to be glossed over.

This poses a dilemma for the researcher. Wilson (1988) argues that it is essential for cognitive/metacognitive training studies to be conducted in actual learning situations. Further, according to Blinkhorn, Leather & Kay (1988, 147), "qualitative research can investigate complex sociological problems in greater detail and with more subtlety than many quantitative projects have been able to achieve." However, as indicated above, qualitative studies can be fraught with difficulties. The proposed intervention study seeks to contribute to gaps in the literature by approaching the research from a largely qualitative point of view. However, very careful attention will be paid to the research design and execution in an effort to satisfy the requirements of the proponents of qualitative research (LeCompte & Goetz, 1982; Marshall & Rossman, 1989; Taylor & Bogdan, 1984). The researcher will strive for credibility (How truthful are the findings?); transferability (How applicable are the findings to another setting?); dependability (Can the study be replicated?) and confirmability (Are the findings reflective of the study itself rather than the researcher's biases or prejudices?) as proposed by Lincoln & Guba (1985).

1.6 ASSUMPTIONS, LIMITATIONS AND DELIMITATIONS

Researchers (Cranstone & Baird, 1988; Rowe, 1988; Wilson, 1988; Winsler, 1988) in pointing out limitations of previous work with regard to metacognitive instruction, all identify the problem of limited time to allow for metacognitive skills to develop and to enable researchers to consider the long-term effects of teaching students new strategies. Despite an attempt to lengthen the research period, the author is aware of time limitations imposed on the study by the length of the school year.

There are some concerns with respect to the amount of quality time available for training Class Teachers. As proposed, the SPELT approach will be used/modified for the cognitive/metacognitive training study. In order to provide a greater opportunity for results to be applied in classrooms and to prevent the results of the research being contaminated by being carried out by the researcher herself, class teachers will be

supported in planning, implementing and monitoring the cognitive and metacognitive instruction in the integrated setting of the regular classroom.

Mulcahy et al (1991) argue that in the past, instruction in the area of thinking skills has usually been unconscious and/or incidental, lacking in precise goal or direction. For this reason, Mulcahy et al (1991) stress that in-service training with follow-up will be required if the teachers are to understand the philosophy and methodology of SPELT. As Anstey (1988) argues, teachers need to understand and use cognitive and metacognitive strategies themselves before they can teach students. This initial training and continual monitoring all involves time and although it is envisaged that the initial training would take place in the first term of the school year, the author is aware that next year, as in every year, school administrators and teachers will be directed, invited, implored, coerced and enticed to take part in projects, programs, curricular revisions and structural changes guaranteed by their proponents to improve this or that aspect of schooling. The picture can become one of work overload. The researcher trusts that the need and personal benefit/cost ratio will be considered favourable to enable time to be specifically set aside for teachers involved to receive the amount of training required.

There are also concerns about the length of time devoted to the implementation of the instructional approach. In the proposed study, two school terms will be devoted to the training of the cognitive and metacognitive strategies. Although this is considerably longer than the period allotted to other experimental metacognitive strategy training studies with respect to spelling eg. Wong (1986), it is not known whether this time will be long enough to determine the long-term effects of teaching students new strategies.

Limitations are also related to the researcher's role as a support teacher. Of necessity, the proposed intervention study will be conducted in the Catholic Schools in the Brisbane Archdiocese in which the researcher is a full time support teacher. This imposes limits on site (class) selection. Constraints are also imposed by the period granted for the completion of the research. The Education Officer-School Management of the Brisbane North Region has verified the feasibility of the study. The

Ethical Review Committee, Catholic Education Centre, Brisbane and the principals of the participating schools have granted permission to conduct the research. However, it should be noted that the proposed research will be competing with other projects, programs, curricula revisions etc. for time.

There are concerns about the research design itself. The results of qualitative research are often regarded as unreliable and lacking in validity and generalisability (LeCompte & Goetz, 1982). When compared with stringently controlled quantitative designs, the proposed design may appear not to be reliable/replicable. However, as LeCompte & Goetz (1982) advocate, the author will seek to precisely delineate the context of the study and identify and thoroughly describe methods of data collection and analysis in an endeavour to increase external reliability. As the author is the main researcher, threats to internal reliability may exist. Patton (1990) indicates that subjectivity of the researcher is perhaps the most common concern of qualitative methods. However, it is argued that the class teachers will be acting as participant researchers in that they will be responsible for implementing the program and collecting certain data. The researcher will also endeavour to follow the suggestion of Patton (1990, 482) "to carefully document all procedures so that others can review methods for bias, and to be open in describing the limitations of the perspective represented." In this way, such threats should be reduced.

As Cohen & Manion (1989) explain, internal validity is concerned with whether the experimental treatment does in fact make a difference. Threats to the internal validity of the design may exist in the proposed study because the groups will not be randomly selected. Biases may be introduced in the selection of classes. Selection biases may also interact with other factors such as school policy, previous spelling instruction and a particular teacher's perception as to how spelling is learned. Because of the longer period of time for the study, the researcher cannot be sure that other events eg. disruptions to the normal school timetable, will not influence the differences in treatment. This will be further compounded by the variety of teachers involved.

Threats to external validity may limit the degree to which generalisations can be made from the experimental conditions in the

study to other settings (Cohen & Manion, 1989). Research (Reeve & Brown, 1985) into metacognitive strategy training strongly advocates informing students of the purposes of the intervention if there is to be a generalisable improvement in performance. For this very compelling reason, the students in the proposed study will be informed that they are learning strategies to assist them in spelling. However, as Cohen & Manion (1989) argue, the psychological effect (Hawthorne effect) of knowing that they are part of an experiment may in fact contaminate the experimental treatment.

However, as LeCompte & Goetz (1982) indicate, although the problem of reliability may threaten much qualitative research, validity tends to be its major strength. Because of its very nature, qualitative research seeks to describe the phenomenon as it really is and all phases of the research are subject to continual questioning and monitoring.

1.7 DEFINITIONS OF TERMS

etymology	account of or facts relating to formation of word and development of its meaning.
grapheme	class of letters representing a phoneme.
homophone	word having same sound as another, but of different meaning or origin eg. <i>pair/pear</i> .
linguistics	science of language as regards nature and structure.
metacognition	one's knowledge concerning one's own cognitive processes and products or anything related to them.
morpheme	basic unit of meaning.
morphology	study of the morpheme, a basic unit of meaning, as it is derived and combined to change referential meanings eg. the addition of <i>s</i> for plural and so forth.
orthography	correct or conventional spelling.
phoneme	unit of significant sound in a specified language.
phonemic awareness	the ability to manipulate the sounds in words.
phonetic	using always same symbol for same sound.
phonology	the study of sounds in a language.
semantic	relating to meaning in language.
syntax	the grammatical arrangement of words in speech or writing to show their connection and relation.

1.8 SUMMARY

This chapter identified the purpose of the study and explained how the study fitted into current research into spelling by approaching the research from a largely qualitative point of view and by conducting the intervention within real classroom situations. The next chapter will review research into the nature of spelling.

CHAPTER 2 THE NATURE OF SPELLING

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CHAPTER 2

THE NATURE OF SPELLING

2.1 INTRODUCTION

Spelling continues to be a contentious issue. There has and might always be considerable controversy about the nature of spelling and the way good spelling can be achieved. Is accurate spelling seen as important in today's society? Should accurate spelling be de-emphasised to allow students more time to spend on other aspects of writing? Is spelling a process or skill? Is the English spelling system seen as irregular and maybe intimidating to many students? What do good spellers do? This chapter explores these issues to draw implications for a study designed to improve the spelling ability of those students who find spelling difficult.

2.2 THE IMPORTANCE OF ACCURATE SPELLING

The developmental spelling (Gentry, 1982) and process writing movements (Graves, 1983) have led to the de-emphasis on conventional spelling in first drafts of writing. However, researchers (Seda, 1991) continue to discuss the need, in our society, to improve students' spelling ability to enable them to become confident and competent writers of the English language.

Spelling serves the purpose of providing communication (Peters, 1985). Correct spelling assists the reader to reconstruct meaning and as Graves (1983) states, correct spelling is therefore a courtesy to the reader. Wilde (1990, 286) argues that it is "more a question of etiquette; employers and college professors who are appalled by misspellings may feel insulted

by a writer who appears not to take the reader's sensibilities seriously enough."

Peters (1985) refers to spelling being "petrified" in that the very fact that it is written gives it permanency. Oates, Turland and Mehaffie (1989, 139) add that "in our society, possibly because written language is a conspicuous record of our individual language habits, written language appears to be valued more highly than verbal language."

In this way, as Peters (1985) states, spelling can mark the writer as one who has achieved a certain level of education and is therefore a contributing factor to self-concept. Spelling insecurity can affect not only how children and adults view themselves, but how others view them as well. Adults who spell incorrectly are often perceived by teachers and employers as having low intelligence, or as careless. These negative consequences can affect an adult's educational attainment and even social standing (Oates, Turland and Mehaffie, 1989).

Bouffler (1983) argues that in some contexts standard spelling is important. In some circumstances non-standard spelling is likely to result in negative social reactions such as an employer refusing to interview a job applicant because of misspellings in the application. However, in others eg. personal grocery lists, correct spelling is less important. Therefore it is the contexts in which we write that shape the way we spell (Bouffler, 1983).

According to Peters (1985), correct spelling leads to a habit of care. This researcher's twenty-two years of teaching experience tends to indicate that with the de-emphasis on standard spelling some students are so busy with the many other demands involved in the complex process of writing that little time and energy is devoted to spelling. Consequently, the spelling tends to become careless and in some cases may not be a true indication of what the student can do. Some students may adopt a 'don't care' attitude.

Good spelling is connected with the freedom to write (Peters, 1985). However, Bean & Bouffler (1987b) argue that children cannot hope to tackle spelling until they are writing. It seems to be a case of which comes

first - the chicken or the egg. Peters (1985) argues that some children write simply; avoid many words because they are too difficult to spell and may be reluctant to put their thoughts to paper. Bouffler (1987) suggests a de-emphasis on the need for standard spelling as a way of helping the children who tend to shy away from writing because of poor spelling ability.

According to Oates, Turland and Mehaffie (1989) the effectiveness and creativity of a writer are significantly reduced by the inability to spell. "Although correct spelling should not be of primary concern in writing until the editing phase, the initial encoding of words will be more automatic and efficient if orthographic knowledge is more developed" (Templeton, 1991, 189). As Peters (1985) argues, if the student is secure in his/her knowledge of the mechanics of spelling, grammar and punctuation, the more time he/she can devote to the vital elements of "composition, planning sustained production, memory search structuring, knowledge-telling, expression of emotion and, of course revising, redrafting and editing." (Peters, 1985, 62). If the intricacies of the mechanics are automatic then the child can write freely confidently and adventurously.

There has been little research into the use of electronic spellers to assist in the production of error-free final drafts. However, while Gerlach, Johnson and Ouyang (1991) tentatively state that primary school students can successfully use the checker to correct words identified as incorrect, they stress that there is a need for practice in detecting misspelled words in conjunction with using the electronic speller. The researcher's twenty-two years of teaching experience tends to indicate that the use of the spelling checker on the computer is beneficial for many students to check accuracy of work. However, for the student whose misspellings are far from close approximations to the standard spelling, the spelling checker does not always find the word that the student intended. Further more, some students cannot select the word they require from those given by the checker. It would seem, therefore, that the spelling ability of those extremely poor spellers would need to improve to a standard where the spelling checker would be of help rather than a hindrance.

Despite the fact, that in the last decade, there has been a shift to de-emphasise the need for correct spelling in first drafts of writing, it would seem that correct spelling is necessary for effective communication in today's society. It continues to be labelled as a social virtue (Cotton, 1982) and "society often uses spelling to make judgements about levels of literacy" (Education Department of Western Australia, 1994, 13). It is therefore important that the proposed intervention study, designed to improve spelling ability, should endeavour to develop in the students a spelling conscience and the need to strive for independence in achieving spelling accuracy in final drafts of writing.

2.3 SPELLING - A SKILL OR A PROCESS?

The literature indicates that spelling should no longer be narrowly viewed as a skill subject which receives attention on the class timetable for thirty minutes each day. Spelling, according to Henderson and Templeton (1986, 305)," is not a peripheral skill but is central to literacy." Many researchers, (Bouffler, 1984) and (Education Department of Western Australia, 1994), view spelling as part of the writing process and strongly believe that spelling should be considered within the context of writing.

However, some researchers, (Peters, 1985) and (Education Department of Queensland, 1994) continue to refer to spelling as a skill. In the Queensland Education Department's English Program, spelling, along with punctuation, grammar etc. is referred to as a skill or textual feature. Students are required to "deploy" textual language features appropriate to the genre.

Other researchers view spelling as a process. According to Hodges (1982), spelling is a multi-sensory process involving visual, auditory and kinaesthetic processes. Both Fernald (1943) and Frith (1980) refer to the visual processing involved in spelling. For spelling, the full letter-by-letter sequence must be produced, whereas a partial analysis of visual orthographic structure is often sufficient for word recognition in the reading process (Frith, 1980).

According to Fernald (1943), Hodges (1982), Peters (1985) and Winch (1989) , spelling draws on the message that the brain gives to the

hand and vice versa. Thus handwriting provides a sensory cue to spelling. This subtle synchronisation is evident when physical movements of the pen automatically produce the correct sequences of letters.

The developmental theorists, (Gentry, 1982) and (Henderson & Templeton, 1986), bring a new perspective to spelling. Spelling errors are no longer viewed simply as being a result of difficulties with visual and/or auditory processing. Some difficulties arise because children are not developmentally ready for a certain aspect of word knowledge. Hodges (1981) states that there is a high degree of similarity between the process of acquiring spoken language and that used to master written language. "Children learn to talk by active involvement with the speech environment, an involvement that engages them in identifying, classifying and applying concepts about the 'rule' of the spoken language" (Hodges, 1981, 8). In a similar fashion, students internalise the spelling of words through repeated use, through exploring and testing the underlying "rules" of how words work (Bloodgood, 1991). Learning to spell, then, is an active process.

This process, according to (Bolton and Snowball, 1985, 2), is "gradually mastered over a period of time as an individual becomes acquainted with the properties and purposes of written language ". In Wilde's (1990) view, spelling can be seen as a series of increasingly sophisticated steps on the way to adult practice, steps that can be supported by adults but that ultimately proceed at their own pace.

Bean & Bouffler (1987), Bolton & Snowball (1985), Peters (1985) and Wilde (1990) suggest that the majority of children learn a good deal tacitly and unconsciously and 'catch' spelling in the process of the natural learning environment provided by concerned and perceiving adults. However, Bolton & Snowball (1985), Peters (1985), Henderson & Templeton (1986), contend that not all children 'catch' it naturally. Winch (1989) argues strongly for the case that spelling should be 'taught' not 'caught'. According to Winch (1989,1) "there are relatively few who 'catch' it.....by some subtle osmosis during which the mysterious operation of acquiring the English orthography seeps through the skin."

It would seem that there is some consensus of opinion that spelling is an active developmental process that is dependent on both maturation and experience. However, there appears to be some disagreement among researchers as to how students gain this experience - naturally or through planned teaching. This researcher closely aligns with the growing body of evidence which supports the belief that not all students learn to spell naturally through an immersion in reading and writing. Some students require more direct spelling instruction (Fulk & Stormont-Spurgin, 1995; Peters, 1985; Routman, 1993; Westwood, 1994; and Winch (1989). For this reason, the proposed intervention study would need to incorporate planned direct teaching episodes.

2.4 THE ORTHOGRAPHIC SYSTEM - REGULAR OR IRREGULAR

It is evident from the researcher's twenty-two years of teaching experience that Classroom Teachers continue to refer to words that "do not obey rules" or "irregular words". In fact, the English orthographic system has long been viewed as irregular and/or confusing. Because the alphabet used in the English spelling system contains only twenty-six letters while the spoken language contains more than forty speech sounds, it may seem confusing. However, an examination of the literature indicates that the English spelling system may appear to be erratic and irregular on the surface, but at higher more abstract levels is in fact quite logical. In fact, research workers into the English language, eg Chomsky & Halle (1968), argue that our orthography is nearly optimal when viewed with respect to meaning relations instead of surface relations among sounds.

Most speakers of English tend to think about the spelling system as merely representing the sounds of language. Although the English spelling system was historically phonetic, the effects of extensive borrowing from foreign languages, linguistic changes and attempts to standardise spelling with the advent of the printing press, it has moved further and further away from this level. The result is "an orthographic system with an intimidating range of surface inconsistency" (Schlagal, 1989, 208). The spelling system could be viewed as inconsistent by those who assert that it must be mastered for the most part by serial letter association. However, Schlagal (1989) contends that this narrow

phoneme-grapheme correspondence view of the orthography can be easily refuted. According to Henderson and Templeton (1986) there are three "ordering" principles in the spelling system of English: alphabetic, within-word pattern and meaning.

English is *alphabetic (spelling by sound)* in that letters match sounds in almost a serial manner from left to right. Bolton & Snowball (1985) add that within this phoneme - grapheme relationship, certain constraints exist. In order to make letter strings pronounceable there is at least one vowel in every syllable and because of articulation limitations, certain sound sequences eg. *sdim* are difficult to produce and therefore do not appear in the English orthography. Frith (1980) and Peters (1985) refer to these sequences not as sound sequences, but as the probability of letter sequences occurring in the spelling system. The logic according to which letters are sequenced becomes apparent when Henderson's & Templeton's (1986) next two principles are considered.

The second ordering principle in English spelling proposed by Henderson & Templeton (1986) is the *within-word pattern (spelling by pattern)* principle. This principle illustrates why the sound a letter/letters represents within a syllable depends on the position and on the other letters that surround it. For example, the digraph *gh* represents an *f* sound at the end the word *rough*, but it represents a *g* sound at the beginning of the word *ghost*. Bolton & Snowball (1985) also refer to the fact that not only will the position of the grapheme influence what sound it makes, a phoneme may be represented by a variety of graphemes, eg. the phoneme *f* may be represented by the letters *f, ff, ph* and *gh*.

The third ordering principle in English spelling, proposed by Henderson & Templeton (1986), is that of *meaning (spelling by meaning)*. As Chomsky & Halle (1968) argue, English spelling is not an adequate system for representing sounds but, rather, a highly efficient system for representing meaning. In the case of homophones, meaning affects the spelling eg. *meat meet*. Bolton & Snowball (1985) speak of morphemic relationships which provide powerful ways of gaining insight into the word-building properties of the English orthography, which in turn facilitate competency in spelling. They list prefixes, suffixes, compound words, verb tenses, plural forms, comparative and superlative forms and

derivatives as ways in which meaning relationships between words can assist spelling. Further, these authors indicate that in many instances morphology assists the spelling of a word much more than pronunciation does eg. *magic, magician*.

Semantic and syntactic influences upon words are also considered by Bolton and Snowball (1985). They argue that as both syntax and semantics add to the meaning of a word they play an integral role in spelling. eg. 'Over *there* is *their* house.' Bouffler (1984) agrees that the way we use and understand spelling depends on the context in which it is imbedded.

Baker (1980) is not persuaded by the arguments of those proposing that the English spelling system is syntactically and semantically uniform. Baker (1980, 54) argues whether these more abstract high-level regularities of English spelling, which may be clear to linguists, "represent anything other than an obstacle course for the average speller." However, as Templeton (1980, 94) suggests "emphasising the more superficial aspects of the spelling system, sound to spelling correspondences, may be a bankrupt policy." Templeton (1989, 248) asserts that by "emphasising word structure or orthography more deliberately than we do at present, we may hope to develop in students the curiosity, the interest, and the tools for abstracting the logic and the regularity represented in the system."

In order to remove any of the mysteries or misconceptions students may have about English spelling, the proposed intervention study would need to develop in the students an understanding of the three ordering principles of the English spelling system. In this way, an awareness of a more regular spelling system should consequently be achieved and spelling should be substantially enhanced.

2.5 WHAT GOOD SPELLERS DO.

It is argued that by teaching all students that which good spellers acquire naturally in a supportive learning environment, the poor spellers will stand a better chance of getting spelling 'right' where it counts, in writing. From her research, Peters (1985) identified three main elements,

that she felt were essential to learning to spell successfully: verbal ability, visual perception and percepto-motor ability.

Visual perception of the word form, according to Peters (1985) entails more than simply a visual image of the word. It is not so much the visual appearance of the word that is important but the letter by letter structure which is referred to by Peters (1985) as the serial probability of letter sequences. It includes being able to 'read' the word; being able to recall the 'read' word; having recalled the first letter/string of letters, to reconstruct the rest, letter after letter or letter sequence after letter sequence; and being able to encode graphemically. The importance of being able to internalise certain sequential features of the language is noted by other authors [Frith (1980); McLeod & Greenough (1980); Radebaugh (1985) & Sloboda (1980)]. Bryant and Bradley (1980, 370) propose the possibility that a child develops spelling "chunks" in much the same way as he/she develops reading "chunks". In other words the child writes so as to speak, in "sequences of letters."

Percepto-motor ability is considered to contribute to good spelling. According to Hodges (1982), illegible letters cause words to appear misspelled to be misunderstood or not to be understood at all. Peters (1985) would agree with Fernald (1943) and Winch (1989) that writing would seem to be a contributory sub-skill of spelling. As Winch (1989) contends we write and spell at the tips of our fingers. Automatic well co-ordinated physical movements produce the correct sequences of letters on the page. The researcher's twenty-two years of teaching experience tends to indicate that many students with learning difficulties who are poor at spelling also experience handwriting problems.

Bolton and Snowball (1985) include these elements in their list and make additions. They (1985, 11) suggest that competent spellers tend to "draw on a variety of knowledge that reflects their awareness of the patterns and structure of words. This knowledge appears to be applied in a systematic manner and usually involves the use of various strategies." According to Bolton and Snowball (1985, 11,12 and 1986, 11) such strategies/abilities would include:

- . The knowledge of the morphological structure of words and the consequent relationships between words;
- . The knowledge of grapho-phonetic relationships; that is the variety of sound/symbol relationships, the probability of letter sequences, the likely position of letters in a word and possible letter patterns;
- . The ability to use visual memory to determine whether a word looks correct;
- . The ability to apply a large number of generalisations;
- . The ability to develop and use mnemonics, or memory aids;
- . The ability to use resources such as other people, word lists and dictionaries for a variety of purposes;
- . The ability to use clear handwriting which assists visual memory;
- . The ability to articulate words clearly;
- . The ability to transfer knowledge of other language modes into spelling; and
- . The ability to recognise and correct errors - proofreading.

Further, according to Bolton and Snowball (1986), competent spellers have a positive attitude towards themselves as spellers. They are confident in their ability to experiment with words; have an interest in words and enjoy using them; have a spelling conscience and consequently want to use spelling appropriately.

The proposed intervention study would need to investigate ways of assisting the poor spellers to acquire that which appears to come naturally to the good spellers through exposure in a supportive environment.

2.6 SUMMARY

This chapter examined the nature of spelling and its relevance in today's society. It also explored the strategies used by competent spellers who appear to 'catch' spelling naturally in a supportive learning environment.

While issues surrounding the nature of spelling continue to be debated in educational circles, the work of developmental theorists (Gentry, 1982) and (Henderson & Templeton, 1986) and others is beginning to change some long held perceptions about spelling. Spelling is viewed as a highly complex never-ending process, the acquisition of which remains a very worthwhile goal in today's society. The orthographic system is now seen by many researchers as regular at the higher more abstract levels and therefore need no longer be shrouded in mystery for the poor spellers.

The proposed invention study would need to investigate ways of ensuring that all students, including the problem spellers, are allowed to 'catch' what good spellers do naturally. The proposed study would need to strive to develop in all students:-

- . The knowledge that the English spelling system is logical, systematic and patterned when examined according to the ordering principles of Henderson & Templeton (1986);
- . The ability to use that knowledge in a systematic manner; and
- . A positive attitude towards spelling and its use in today's society .