How can classroom spelling programs be structured and organized to fit current approaches to language? Ten major considerations can be identified: (1) spelling is a skill of writing; (2) spelling is best learned as a component of writing, and not as a result of studying isolated skills; (3) not all children will pick up spelling as a result of reading and writing—for most children, study of the meanings, uses, and structure of words is an essential part of the classroom language program; (4) words to be incorporated in a word study program must emerge from other aspects of the classroom program, but the essential feature should be their relevance to pupils' writing; (5) there is a relatively small core of high-frequency words that must be used properly and spelled conventionally, if skills of spelling and written language are to progress; (6) beyond this small common core of words, there is a rich and diverse written language, unique to each individual; (7) there is much less uniformity and regularity in the spelling errors made by a class group, than in the words they use; (8) children need to be given a procedure to help them learn to spell specific words; (9) proofreading is another aspect of spelling that is not just picked up—children can learn to detect errors; and (10) as spelling is a skill of writing, its measurement and evaluation must begin with written language and must utilize test-based information as appropriate. (S2)
The topic suggests to me that an appropriate place to begin is by describing in outline form at least, my understanding of the phrase 'current approaches to language'. This description will prove to be of some importance as this paper and the ensuing discussion progresses, as subsequent comments about spelling will be set against this backdrop. By outlining how I think written language is currently handled in many of our primary classrooms, I am sketching a framework of objectives for my comments about spelling, and as most teachers acknowledge, objectives not only come first, but dictate to a large extent, ensuing teaching and learning behaviour.

I would see most current approaches to written language in our primary classrooms, as being built around the following priorities and considerations:

- clear communication of ideas
- colourful yet accurate self expression
- diversity of vocabulary and description
- predominance of 'message over medium', particularly in the early stages of writing
- provision of opportunity to write on diverse topics
- encouragement to appreciate opposing points of view
- portrayal of personal experience
- a narrative or story-telling style
- identification and involvement with the writing
- recognition of the cognitive and affective needs of the writer
- encouragement to appreciate the needs of the audience, whether they be reader or listener.

These elements are not necessarily listed in an implied order of importance, but together they may represent a broad picture of priorities for written language programmes in many primary classrooms. On the assumption that the above picture is a valid representation of current written language programmes, how can classroom spelling programmes be structured and organised to fit this model?
Ten major considerations can, I believe, be identified:

(i) Spelling is a skill of writing.

(ii) Spelling is best learnt as a component of writing, and not as a result of studying isolated lists of words.

To me the accumulated research evidence indicates that requiring children to learn lists of words, whether organized on grounds of topic or structure is largely a waste of time and effort in terms of what is learned, transferred to writing and retained over a long period of time. I would single out the transfer of vocabulary and spelling skills from the list of words to actual writing, as being the most important outcome to dwell on. I am not aware of any sound evidence that supports list-learning as an important factor in improving written spelling. I am aware of the observations made by teachers that show instances of recently learned words being incorrect in children's writing, by virtue of both usage and spelling. The so-called semi-incidental approach whereby children learn to spell words they do not know at the time they need to write them is most economical in terms of time and effort, and also probably has the greatest potential for improving written spelling. It must be acknowledged that there are certain organizational difficulties in operating a system of personal spelling lists within most classrooms, and there is considerable professional judgement in deciding which words to include in the lists. A prerequisite of this whole approach of course, is that children must be writing freely and regularly on a wide range of topics for a variety of communication purposes. This latter condition would seem to be the single best hallmark of the current approach to written language in our primary schools.

(iii) Not all children will 'pick up' spelling as a result of reading and writing. For most children, study of the meanings, uses and structure of words, is an essential part of the classroom language programme.

(iv) Words to be incorporated in a word study programme must emerge from other aspects of the classroom programme, but the essential feature should be their relevance to pupils' writing.

There is a need, I believe, to revive the word study period, but not as a list-learning exercise. The emphasis should focus directly on the meanings, uses and structure of words, rather than concentrating solely on learning
letters in a conventional sequence - a restrictive but still popular view of spelling. The aim is to familiarize children with the words chosen for study, and help them understand how the legitimate and common patterns of English spelling develop. A study of meanings will increase the likelihood of a particular word being used, and this use will aid the retention of spelling. In addition, a study of the orthographic patterns of selected words will help children become familiar with the structures of written English and aid the process of generalization.

Despite the obvious irregularities of much English spelling, it has been shown that English is sufficiently predictable to allow a reasonable measure of generalization to occur. For example, it has been shown that most consonants have single spellings at least 80 percent of the time; the spelling of about 50 percent of the most common 17,000 words is rule-governed and hence fairly predictable; about 90 percent of the words most often written by children are phonetically regular. The point is that spelling patterns can be learnt. Spelling does not need to be learnt on a one-word-at-a-time basis.

The word-study period can draw children's attention to the regularities within our system of spelling. Some are substantially rule governed, such as 'i before e except after c'. Others are sound-centred, such as recognizing short vowels and doubling the consonant when adding a suffix. With other words, the sight pattern rather than the sound pattern should be emphasized - the 'ght' and 'tion' combinations for example. In fact, a greater focus on visual factors as an aid to learning word patterns and hence spelling, is long overdue.

By focusing on the meanings of words, progress towards the goal of developing correct spelling is being maintained too. Research has indicated that knowledge of meaning is a powerful and positive influence on spelling. Pages 15 and 16 of the Teacher's Manual for Spell-Write list a series of 18 activities designed to strengthen children's understanding of the meanings, uses and structure of word study words.

(v) There is a relatively small core of high-frequency or 'heavy duty' words that must be used properly and spelt conventionally, if skills of spelling and written language are to progress.

(vi) Beyond this small common core of words, there is a rich and diverse written language, unique to each individual.

"Among the major findings of the NZCER study of children's writing basic to the development of Spell-Write was that 25 words and their repetitions accounted for 40 percent of the 198,000 words written, 75 words accounted for
55 percent, 100 words accounted for 60 percent, and that 75 percent of all words written consisted of 300 individual words and their repetitions. On the surface, it appears that this small number of words accounted for the majority of all words written, but the important corollary is that although 75 percent of all words can be accounted for by 300 words, the total dictionary of words used was over 9,000. In other words, the 25 percent of words not accounted for by the most frequent 300 words are made up of close to 9,000 words. The main implication is that although we can identify a relatively small 'common core' of words that will be used by most children for most writing, the remaining proportion of words that a child may need to write, will be chosen from a much larger range of possibilities.

In effect, every child has a unique writing vocabulary. On the one hand, we have a relatively small common core of words that are used often. These can be adequately catered for in the spelling and word study segments of a sound classroom language programme. On the other hand, we have the diverse requirements of individuals writing about a potentially infinite set of topics. Catering for the development of this aspect of written vocabulary, and ensuring that accuracy of word-use and spelling keep pace with it, is the major challenge of every classroom spelling programme." (Teachers Manual for Spell-Write, p 10)

(vii) There is much less uniformity and regularity in the spelling errors made by a class group, than in the words they use.

"Some findings related to the incidence of spelling errors in the NZCER study of children's writing are also worth considering at this point. In the total of 198,000 words, some 8,000 spelling errors occurred. Of the 9,000 individual words used, some 2,000 were misspelt, but of this total 52 percent were wrong once only. The proportion of frequent spelling errors is not nearly as dramatic as the proportion of frequently used words. The 10 most frequently used words and their repetitions occurred 54,972 times, equalling about 25 percent of all words written. The 10 most frequently misspelt words occurred 890 times and, with their repetitions, accounted for just 11 percent of all mistakes, but, to account for 25 percent of all spelling errors, we have to include a total of 45 mistakes. Clearly, the relative frequencies and proportions of misspelt words and text words differ considerably.

It is more difficult to identify common errors from samples of children's writing, than it is to identify commonly used words. Indeed, a well-organized language programme will ensure that all children have the means at their disposal of reducing errors before the misspelt word is recorded. The message
with regard to errors in children's writing is clear. The list of typical errors for groups of children is relatively small. On a class or group basis, there is strong support for ensuring that the common core of written words can be spelt conventionally, as this will ensure that these words, which constitute the bulk of writing, can be used correctly and spelt conventionally. However, the majority of spelling errors are individual, and reflect the diversity of word use found beyond the common core of written words. The only practicable way of catering for this type of error is to isolate the personal spelling errors of each individual, and ensure that meaning and use of the word is mastered, and the sequence of letters is learnt and remembered for future use. Such a system cannot function in isolation from each individual's written language." (Teachers Manual for Spell-Write, p 11)

(viii) Children need to be given a procedure to help them learn to spell specific words.

There is nothing new about this as it has been central to our approach to the teaching of spelling for many many years now. It may be that we have failed to take account of individual children's particular strengths by teaching all children the same multi-sensory procedures. Research has demonstrated that children may have different strengths and weaknesses in recognising and reproducing words, according to sight and sound patterns. This appears to be particularly true for poor spellers and readers. In addition to teaching children a technique for learning words, we need to observe the spelling of individual children carefully in order to isolate their apparent source of difficulty and help them overcome these in their own best way.

There will be times when most children will need to learn the spelling of specific words. By equipping each child with a procedure to base this learning on, we are contributing to self-reliance and giving each learner the techniques to manage his or her own learning.

(ix) Proofreading is another aspect of spelling that is not just 'picked up' - children can learn to detect errors.

Proofreading for correct spelling is not a skill that children just 'pick up' somehow, it is a definite skill that can be learnt. The visual discrimination that partially underlies proofreading can be improved, as any printer's proofreader will testify, but it does require the opportunity to learn. Proofreading games and competitions as suggested by Schell (1975),
should help develop these skills. As these activities emphasise words in context, rather than spelling in isolation, they are consistent with classroom approaches promoting spelling as a skill of writing. There are also NZCER's Proof Reading Tests of Spelling which, among other things, are measures of error recognition.

Skills of visual discrimination are obviously important in the proofreading process, but so is the accumulated knowledge we build up of English spelling. This 'internal lexicon' as it is called, provides a base against which we check potential misspellings. This accumulated knowledge is built up as we become mature language users, so for young writers, the lack of a well developed 'internal lexicon' may hamper the recognition of spelling errors. There is more to proofreading than good visual discrimination.

(x) As spelling is a skill of writing, its measurement and evaluation must begin with written language and utilize test-based information as appropriate.

There are four aspects of spelling that may be measured as part of the process of evaluation:
- spelling as an aspect of writing
- speller's achievement in relation to peers
- spelling of individual words identified for study
- spelling weaknesses before starting remedial instruction.

My comments here are restricted to the first of these four categories, as this is most in keeping with the emphasis that has been placed on spelling as a writing skill, throughout this paper. Interested readers are referred to the Teachers Manual for Spell-Write, pp 18-24, for a fuller discussion of the topic of evaluation.

Few teachers would disagree that the ultimate measure of each individual's spelling is found in his or her writing. There are undoubted advantages of measuring spelling in the context of writing, but these are accompanied by a host of problems which place severe limitations on the process of measuring spelling this way. For example, there are problems relating to the words being sampled, criteria for marking, conditions under which the writing was done, influence of the topics on choice of vocabulary, and hence the difficulty of the spelling. There is also the unknown influence of the relative difficulty of words, in relation to the writer's knowledge, background, and experience. The writer's personality is a factor too. How can the writing of a 'risk taker', who may have an extensive and colourful vocabulary with a high incidence of spelling errors, be compared with that of a more conforming pupil?
who may use simple, mundane, easy-to-spell words? Granted, then, that measuring spelling within the context of each person's writing is desirable, it must be admitted that procedures displaying even minimum standards of validity and reliability are a long way off.

Although the objectivity of measurements made in context is thereby reduced, there are approaches that may isolate some objective information about spelling and writing. The procedure that follows does not overcome the measurement problems outlined above, but begins to bridge the gap between totally subjective judgements and objective measurements. However, one could not expect to apply this procedure profitably to children's writing on a regular basis. It should be used sparingly, when there is a need for information to be incorporated in an evaluation of written spelling.

To make an assessment of the proportions of misspellings, against the quality of the vocabulary in the writing sample being judged, in relation to the writer's age, the following 5-point scale may be used:

1 = A 'superior' vocabulary; up to 3 percent of misspellings are basic words; up to 5 percent errors.

2(a) = A 'superior' vocabulary; more than 3 percent of misspellings are basic words; more than 5 percent errors.

(b) = A 'well-developed' vocabulary; up to 3 percent of misspellings are basic words; up to 5 percent errors.

3(a) = A 'well-developed' vocabulary; more than 3 percent of misspellings are basic words; more than 5 percent errors.

(b) = An 'adequate' vocabulary; up to 3 percent of misspellings are basic words; up to 5 percent total errors.

4(a) = An 'adequate' vocabulary; more than 3 percent of misspellings are basic words; more than 5 percent total errors.

(b) = A 'limited' vocabulary; up to 3 percent of misspellings are basic words; up to 5 percent total errors.

5 = A 'limited' vocabulary; more than 3 percent of misspellings are basic words; more than 5 percent total errors.

The crucial factor in implementing this scale of spelling accuracy is the judgement made about the quality of the written vocabulary. The data related to spelling accuracy have been determined objectively, but there is no information of a manageable nature, that can be used to make objective judgements of the quality of children's vocabularies. It seems reasonable to assume that by using their professional judgement teachers will be able to classify the vocabulary in a writing sample as either 'superior', 'well-developed', 'adequate', or 'limited' in relation to children of a similar age-group, and that the assessment of
spelling, in relation to the quality of word-use, can than proceed objectively. This illustrates a measurement that may be made of spelling in the context of writing. Such measurements are the building blocks from which subsequent evaluations are made.

References

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