

Spelling: Enabler or Disabler?

Ros Neilson reviews the research showing that spelling difficulties disrupt the flow of writing and make it impossible for students to be the writers that they could be. She suggests that students can overcome these difficulties once teachers acquire the specialist knowledge and skill to teach their pupils to spell well.

Most of us find writing difficult, one way or another – depending, of course, on what we are writing, and why. Composing written texts is generally more difficult than reading, because writing places even greater demands on our cognitive resources than reading does. When we are writing we must garner what we generally think of as higher-order skills, such as executive function, working memory and language knowledge, in order to construct what we want to say, organise the text as a whole, choose the words, and craft the sentences. At the same time, we must execute what we generally think of as ‘mechanics’, or lower-order skills – forming (or typing) letters, spelling words, and inserting punctuation. Writing is particularly difficult when those lower-order skills have not reached automaticity, and our conscious attention has to be divided amongst several different processes at the same time (Berninger & Amtmann, 2003).

This discussion will focus on the role of spelling in the writing process.

I will be arguing that, at least in English, spelling is not a sub-skill component of writing that can be separated from the whole, and it cannot be seen as being functionally independent of the higher-order processes. Rather, the ability to spell words accurately and easily is a particularly potent force in either enabling our best efforts in writing, or acting as a hindrance to the quality of what we can express in the written modality. There is an interaction between the higher-order abilities and lower-order subskills – and this interaction has important implications for language development and for the education of young students.

A disclaimer: I’m not referring in this argument to the writing of individuals who write fluently and prolifically but notoriously make a few persistent spelling mistakes. It goes without saying that those writers are usually well aware that if they want to do justice to the quality of their written compositions – their resume, or blog, or Christmas card, or whatever - they should use a spellchecker and/or ask someone to proofread their spelling. Rather, I’m referring to those groups of people, including young learners and dyslexics, with very immature or weak spelling ability, who know that they simply can’t spell most of what they are being expected to, or would like to, write down.

Spelling competence and writing: Documenting the difficulties

There is good documentation of what tends to happen to written texts when spelling doesn’t come easily to the writer. I will focus on one particularly thought-provoking study here: Sumner, Connelly and Barnett’s (2013; 2016) report on research involving a sample of 31 upper-primary school students who were diagnosed with dyslexia; I will be focussing mainly on their 2016 report here. This was a British study, so the diagnosis of dyslexia involved recognition of significant reading

difficulties by school coordinators, as well as a significant discrepancy for each student between nonverbal cognitive abilities on the one hand, and reading and spelling performance on the other hand. The group with dyslexia were on average 9 years of age, and they were matched with two groups of typically-developing readers: a chronological age-matched group (CA) recruited from the same classes, and a spelling-ability-matched group (SA) recruited from the same schools. The SA group were on average three years younger than both the dyslexics and the CA group. Students all had spoken language and non-verbal cognitive skills within the average range, and, importantly, all scored within the average range on a standardised oral vocabulary measure.

As reported in the Sumner et al. (2016) study, the students all carried out a 15-minute written task, starting with a prompt that asked them to describe their perfect place to live. They wrote with a stylus on lined paper placed on a digital writing tablet that recorded the XY coordinates of the pen over time. This technology allowed the researchers to document pauses as the students wrote. Pauses – defined as gaps of two seconds or more – were located as occurring either within-word or between words in the writing process, and the position of the pauses relative to spelling errors was noted. Two weeks later, the students were given the same prompt and asked to give their answers orally (many expressed different content in the oral task).

The data analysis in the Sumner et al (2013) article had shown that the dyslexic group did not differ from the CA group in the number of letters written per minute in a simple alphabet letter writing task.



The oral texts were transcribed, and the written texts were also re-typed so that the quality of the texts could be analysed independently of knowledge of spelling errors and pauses. Written and oral texts were analysed for features such as productivity (number of words, and number of different words) and lexical diversity, as well as compositional quality.

Pauses played a different role in the writing process of the CA group, as compared to the SA group and the dyslexics. Firstly, the younger students and the dyslexics produced a relatively greater proportion of within-word hesitations. This suggests that for the younger students and the dyslexics, pauses tended to occur even when the target word had been chosen and the student knew what he or she wanted to write. The pauses were also strongly associated with the actual spelling errors for the dyslexic and SA group, with pauses tending to occur both within and after mis-spelled words. The amount of pausing was correlated with percentage of mis-spelled words for the dyslexic group: the more spelling errors that occurred, the more pauses were observed.

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The relative quality of the oral versus written texts also varied amongst the groups. Despite the fact that oral vocabulary did not correlate with the quality of the written texts, the younger SA children and the students with dyslexia both showed lower lexical diversity in their written compositions than in their oral texts - they didn't produce written texts that did justice to their oral language abilities. The opposite, however, was found in the CA group - they showed greater lexical diversity when they were writing than when they were speaking. It seemed as if writing tended to bring out the best, as it were, in the older typically-developing children's language – they were learning how to sound 'literate'.

The researchers concluded that the pattern of hesitant versus

more fluent spelling performance was reflected in the quality of the compositions for the three groups, demonstrating the link between spelling and vocabulary when writing.

I would like to take a moment to consider the implications of these findings for the three groups of students and offer some ideas for discussion. I will focus on each group separately: the older normally-developing students, the dyslexics, and the younger normally-developing students who were matched for spelling age with the dyslexics.

Older normally-developing students

First, consider the normally-developing students in Upper Primary school. Their pattern of using relatively more sophisticated language in the written modality is very heartening – a neat demonstration, perhaps, of 'the rich get richer' principle in practice. Learning to write well has the benefits of allowing opportunities for careful word choice, editing and re-wording. This suggests that the more these students are invited to extend their writing skills, the stronger their language use may become. The greater sophistication could indeed, over time, feed back into their oral language and allow them to become more effective speakers as well as competent writers.

Dyslexic Students

Second, consider the dyslexic students. The pattern of results for the students with dyslexia reported by Sumner et al. (2016) will be quite unsurprising to all professionals and parents who have worked to support students with learning difficulties. We're familiar with students who are reluctant writers. They spend a lot of time sharpening pencils or decorating borders when there is writing to be done. When they finally do get going on the writing task, they are painfully slow. Spelling seems to act as the last straw, with students inevitably choosing easier words to write, and having to stop and reinvent the spelling of the words that simply can't be avoided each time they crop up in the text. A teacher or tutor is very likely to want to say, "Just get your ideas down now – don't worry about the spelling." But that encouragement is unlikely to help very much.

I vividly remember assessing a cooperative 18-year old (I'll call him Jim) who was completing a standardised test as part of an application for

special consideration for his final school examinations. The prompt for the 15-minute writing task on the *WIAT-II* involved asking the student to present an argument for or against compulsory physical education in high school. When Jim read this prompt, he muttered an emphatic "Yes!" – he really loved getting out of the classroom to do exercises or sport. But by the end of 15 minutes Jim's composition consisted of three paltry, short, repetitive paragraphs. He was pale with exhaustion, and he handed me his effort with a look of embarrassment and apology. Amongst numerous other spelling errors, he had included the word 'environment' three times, misspelled in three different ways; he had stopped to try to sound it out each time, and said that he 'sort of' remembered that he had to add the letter N somewhere – but that didn't help.

When it comes to working with students with dyslexia, there is a good body of research that suggests that spelling support will be of help (Herbert et al. 2018). Working at the level of spelling allows student and tutor to focus on a range of useful language resources, including phonemic awareness; awareness and understanding of morphemes and root words; and awareness and understanding of spelling patterns and conventions. It would be important for a tutor to remember that fragments of rote-learned knowledge such as mnemonics and 'rules' are unlikely to help a writer like Jim in the stress of the composition process.

It is also essential to look beyond spelling, and to consider the whole writing process for individuals like Jim. All students must be given strategic plans and knowledge about the structure of various text-types, but teachers must keep in mind that dyslexic students may need extra practice to put this knowledge into practice. Teachers must also, if necessary, facilitate dyslexic students' access to compensatory options for accessing information and producing texts. It is also often an important role of the teacher to ensure that support is available for the emotional stress of coping with dyslexia in a society that takes literacy for granted.

Spelling Ability Matched Group

The third group I would like to consider in some detail is the younger, spelling-age matched group in the Sumner et al.

(2016) article – children who showed the same patterns of hesitations and spelling errors as the dyslexic students but who were still learning about the English alphabetic code. What strategies do educators have to ensure that students like these will follow the path of the good spellers in the Sumner et al. (2016) study, extending their own language as they write, rather than remaining ‘disabled’ in their writing by lack of spelling automaticity?

Whole Language and Reading Recovery trained educators, and their re-incarnation in L3 Classrooms (Neilson & Howell, 2015), are clear on their approach to this group of students: children learn to be literate by being immersed in authentic literature. Students are therefore encouraged to write meaningful texts from their first entry into formal schooling, and are shown how to do so in modelled writing sessions in L3 classrooms. To support spelling in the modelled writing sessions the teacher does odd bits of sounding out or syllable clapping as a gesture towards phonemic awareness; this is only programmed as suggested by the words that happen to crop up in the meaningful texts. The teacher will also point out the odd whole grammatical inflection such as ‘-ed’, but once again only as the inflections crop up in meaningful texts. Apart from that, students are told to consult whole words that are available on the wall or on desk charts. There are no formal phonics lessons or spelling lessons out of the context of meaningful texts. As a concession to ‘Balanced Literacy’, some Whole Language teachers might choose to hand out pages copied from phonics lesson books for students to complete at their desks, and might give spelling lists as homework, to be learned by rote at home using an ill-defined ‘Look-Cover-Say-Write-Check’ mantra as a learning strategy. In independent writing composition – which students are expected to attempt almost from the first day of school – invented spelling or copying from the wall is the norm. Mistakes are not corrected in case the student’s creativity gets stifled – although spelling errors might make their way onto homework spelling lists or get entered into a nicely-decorated booklet called ‘My Spelling Book’ that sits in the bottom of the student’s classroom tub.

There is no research at all that suggests that this is an effective way to teach English spelling to those students who don’t pick it up on their own.

Programs that start with a systematic

phonics approach will typically start off only asking students to write words that the teacher knows the students should be able to spell successfully – words that are phonically regular and use patterns that have been taught, or ‘tricky’ words that have been taught as whole sequences. Requiring students to compose their own written texts independently will tend to be postponed until students have achieved good phonemic awareness and have been taught strategies for using a dictionary on their own.

Is it fair if Whole Language or Balanced Literacy advocates argue that an approach that uses systematic phonics programs undervalues the language-learning opportunities afforded to young students in the ‘authentic’ writing process? I think that the answer is clearly ‘no’. Systematic phonics teachers are likely to keep in mind that literate language styles, with diverse vocabulary and challenging lexical density, can be absorbed via listening to books read aloud and in serious oral conversation. It is also perhaps more likely, especially for the less confident students, that the eventual mastery of those literate styles in independent writing will be more secure if students have not been thrown prematurely into the more challenging context of writing down their own ideas. It can be unsettling when ‘immersion’ involves being thrown into the deep end before you can swim.

Accurate spelling is more likely to be explicitly valued in systematic phonics classrooms than in Whole Language classrooms, and this positive attitude towards spelling can potentially become part of more general language study. That is, most good phonics programs include the study of morphemes and complex spelling patterns, and this material can be used systematically by teachers as they invite students to value spelling – or even to celebrate the idiosyncratic English spelling system – by making connections with morphemes and spelling patterns in other words in their vocabulary.

Conclusion

In conclusion: spelling is not merely a cosmetic feature of writing, and it is much more than mechanical subskill that may never need to be taught if electronic spell-checkers take over. It is a very important challenge for teachers to ensure that they help all students to reach the stage where their spelling ability enables, rather than disables,

their ability to write what they want to say. For teachers to achieve this, however, they themselves have to be comfortable with and knowledgeable about the English spelling system – and this is unlikely to be the case for many teachers who themselves were taught in Whole Language classrooms. Some serious changes in our educational systems may be needed if our students’ writing skills are to improve.

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