

# Liter8 Lrnrs: Is Txting Valuable or Vandalism?

Dr Clare Wood, Dr Bev Plester and Samantha Bowyer report some conclusions from their British Academy-funded research project.

THERE EXISTS a technology that costs as little as £10 to buy, and gives children regular (daily) practice at reading and spelling. Moreover, not only do they love to use these devices, but they are also indicators of status, and enable children to become creative users of language. In fact, the more creative they are with this technology, the better their literacy skills at school become. What are these devices? They are mobile phones, and specifically, we are talking about children's use of the text messaging (SMS) feature of them. This surprises most people. But something so counter-intuitive is actually a logical outcome.



Figure 1. Texting is an enjoyable activity which appears to support rather than undermine developing literacy skills in children. Photo: the authors.

## How children learn to read

One of the early developing skills associated with (and believed to underpin) successful reading and spelling development is called 'phonological awareness'. Put simply, this refers to a child's ability to detect, isolate and manipulate patterns of sound in speech. So children who can tell you which words rhyme, or what word is left if you remove the 't' sound from 'stand', have particular levels of phonological awareness. This skill is believed to be necessary if children are to progress to the key stage in learning to read – learning how speech sounds map onto written letters and words. These mappings are taught as 'phonics' programmes in primary classrooms in the UK and elsewhere, following a substantial research literature which has demonstrated their effectiveness. We know that children who struggle with learning to read have deficits in phonological awareness, and that phonological awareness training can improve literacy outcomes.

The relevance of this background becomes apparent when we consider the various forms of text message abbreviation (or 'textism') that are used when sending messages:

- Shortenings: cutting the end off a word, losing more than one letter, e.g. bro = brother.
- Contractions: cutting letters, usually vowels, out of the middle of a word, e.g. txt, plz, hmwrk.
- G Clippings: cutting off only the final g in a word, e.g. goin, comin, workin, swimmin.
- Other Clippings: cutting off other final letters, e.g. I've, hav, wil, com.
- Symbols: using symbols, including emoticons, and x used symbolically, e.g. &, @, ;-), :-p, xxx.
- Initialisms: a word or group of words is represented by its initial letter, e.g. tb = text back, lol = laughing out loud, gf = girlfriend.
- Letter/Number Homophones: a letter or number is used to take the place of a phoneme, syllable, or word of the same sound, e.g. 4, 2, l8r, u, r, c.
- Non-conventional Spellings: a word is spelled according to legitimate English phoneme-grapheme conversion rules, but not the conventional one used to spell the word, e.g. nite, cum, fone, skool.
- Accent Stylisation: a word is spelled as it is pronounced in casual speech, e.g. gonna, wiv = with, av = have, wanna, elp = help, anuva = another.
- Missing Apostrophes: left out either in possessive or traditional contraction form, e.g. dads, Im, Ive, cant.

As you can see, most forms are phonetic in nature and require either a level of phonological skill to produce/decode them, or a

combination of phonological and alphabetic knowledge. Although unconventional, relatively few abbreviations violate the rules of how to spell a word – most just exploit the high degree of alternative ways in which sounds may map onto letters in English. Other forms represent abbreviations that are used already in other contexts, or are often seen in rebus type puzzle books (and we recall no public outcry over giving these to children in years gone by). As for contractions, we can recall seeing courses advertised which promised to teach people how to ‘speed write’ in this way and reap the benefits in terms of time saved during notetaking.

In short, it would seem that the children who are heavy users of these text abbreviations, both in terms of producing them and reading them, are unlikely to be problem readers and spellers, simply because of the levels of phonological skill that they are required to apply whenever they are texting. There is also the additional contribution that reading all those text messages may have on a child’s development: we also know that ‘exposure to text’ contributes to children’s proficiency as readers. Normally this factor is understood in terms of more mundane forms of print exposure, but exposure to text through text messages – whether written in abbreviations or not – is also likely to contribute positively to a child’s development.

However, these are not the arguments that we are presented with via the media. Anecdotes of children who have allegedly written school assignments using text abbreviation are presented in the press as evidence of declining literacy standards. Journalist John Humphrys, writing in the *Daily Mail*, went so far in 2007 to describe texters as ‘vandals who are doing to our language what Genghis Khan did to his neighbours eight hundred years ago’.

So, on the one hand we have the academic, theoretical position, which suggests that perhaps these alternative written forms have inherent value for young children learning to read. On the other, we have the popular idea that textisms are destroying children’s respect for conventional forms of literacy. What we need to inform this debate is some empirical evidence.

### Textisms: the evidence

We began research in this area initially to see whether there was any evidence of association between text abbreviation use and literacy skills at all, and if there were any, whether they were positive or negative. Our initial work found that the density with which children used textisms in their messages was associated positively with spelling performance on standard tests.<sup>1</sup> In other words, children who used a high proportion of textisms in their messages relative to the overall length of the message tended to be better at spelling than children who use more conventional spellings in their messages. We later found that this was also true in terms of children’s reading skills, and that, as suspected, much of this relationship was mediated by the children’s phonological awareness.<sup>2</sup> However, textism use was also contributing to reading ability over and above the performance explained by phonological awareness. We suggested that this might be the contribution of exposure to text, or even a motivational effect of engaging in playful language use.

A limitation of this early work was that it only looked at associations. Having demonstrated that they existed, and that they were positive in nature rather than negative, we now needed to look at the direction of causality. To do this we needed to conduct a longitudinal study, and the British Academy provided the funding for this particular, crucial project.

At the beginning of the academic year we assessed 63 eight- to twelve-year-old children on their verbal IQ, phonological awareness, reading and spelling skills. We also asked them to provide us with a sample of their text messages sent over a two-day period. We coded these messages as before, counting the number of textisms used and dividing this number by the total number of words used in the message. This gave us a number between 0 and 1, which indicated what proportion of their messages were written using textisms (0 = none, 1 = all words used were textisms). We then retested the children at the end of the year on all the same measures (except IQ) and looked at their progress.

The first thing to note was that the proportion of textisms used was observed to increase with age. The Year 4 children were using about 21% textisms, compared to 30% in Year 5 and 47% in Year 6. This observation is in line with the idea that more sophisticated literacy skills are needed for textism use.



Figure 2. *Journalist and broadcaster John Humphrys is not a fan of texting.*  
Photo: Rex Features.

In terms of the key question, we found that textism use at the beginning of the year was able to predict reading ability and phonological awareness at the end of the year, after controlling for individual differences in verbal IQ. However, when we reversed the analysis we found that literacy skills at the beginning of the academic year could not predict textism use. What this suggests is that textism use is driving the development of phonological awareness and reading skill, rather than initial literacy skill explaining the children’s ability to construct or use textisms.

So, what can we conclude from this analysis? It would seem that in a study with a very modest sample, we are detecting a causal effect of textism use on literacy skills. We are currently in the process of collecting data from a second cohort of children to increase the size of our sample which will enable us to conduct further analyses. However, we are confident that at this stage our data suggests that there is no cause for alarm.

We are starting to see a change in attitude to textisms amongst some teachers, who recognise the potential to use textism-based exercises to engage children in phonological awareness activities. In particular, such exercises have the potential to offer older children struggling with alphabetic reading age-appropriate activities for honing their phonological skills. We are also in the process of analysing data from an intervention study which is assessing the educational impact of allowing nine- to ten-year-old children access to mobile phones at the weekend. So far those data are also demonstrating the positive potential of texting to support literacy development.

In short, we suggest that children's use of textisms is far from problematic. If we are seeing a decline in literacy standards amongst young children, it is in spite of text messaging, rather than because of it.

#### Notes

- 1 B. Plester, C. Wood & V. Bell, 'Txt msg n school literacy: does mobile phone use adversely affect children's written language attainment?' *Literacy*, 42:3 (2008), 137-144.
- 2 B. Plester, C. Wood & P. Joshi, 'Exploring the Relationship between Children's Knowledge of Text Message

Abbreviations and School Literacy Outcomes'. *British Journal of Developmental Psychology*, 27:1 (2009), 145-161.

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