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An Exploration of the Views of Teachers Concerning the Effects of Texting on Children's Literacy Development

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Abstract

Texting, or text messaging, refers to the use of mobile phones to type and send brief, electronic messages over a telephone network. Because such messages are limited to 160 characters and are typed on a small phone keypad, texters tend to employ a great many abbreviations in conveying their messages. This has led to widespread spelling adaptations, for example, "BRB" (be right back), "LOL" (laughing out loud), and "CUL8ER" (see you later).

The research in this paper aimed to examine the views and opinions held by teachers about the impact of texting on children's literacy development. Twenty-seven primary teachers were interviewed in depth and a number of key themes emerged. These teachers did express some negative view about the impact of texting, and of technology use generally, upon their students' literacy, although many also mentioned some positive effects. A majority did feel concerned about the effects of textisms, but these feelings were tempered by a range of other factors. None of them blamed the use of textisms exclusively for declining levels of student literacy, suggesting also that the impact of student "street slang" was a significant influence as was the fact that many of their students spoke English as an additional language.

These outcomes suggest that the media portrayal of this issue has been over-simplistic at best.

Keywords: texting, mobile phones, literacy, teachers

Introduction

Technology, and especially the technology of communication, appears to be developing at an ever-increasing speed. It has become common-place (although somewhat debatable) to espouse the Prensky (2001) "digital natives" theory and suggest that it is young people and children who tend to be more abreast of this ever changing field. Interest is growing in the effects which new technology may be having on children, in particular, the effects of the widespread use of the SMS (Short Messaging System), known universally as 'texting' and available on virtually all mobile (cell) phones. This issue has been widely discussed in public media and has also stimulated a number of research studies, resulting in somewhat of a polarization of views about the effects of texting upon young people's literacy.

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There has always been a great deal of media coverage on the effects of technology on individuals, especially younger members of society. Recent themes have ranged from concerns about the increasing use of mobile devices, including tablets and smartphones, by young people (Cocozza, 2014), to worries that youngsters are not taking sufficient care over privacy settings in their use of social media (Madden et al., 2013). Text messaging first became possible on mobile devices in 1992, but did not experience rapid growth until the early 2000s. Crystal (2009) reports that, in the year 2000, 17 billion texts were sent worldwide. This had increased to 250 billion in 2001 and passed a trillion in 2005. This has been rapid growth indeed, which makes it somewhat puzzling that the volume of research into this phenomenon, especially its impact upon education, has been quite slow in developing. During that time, there has been much speculation, however, principally in the mass media, about the negative effects that text messaging may be having on language use, particularly on the language of young people. One of the first articles on the topic was published in The Guardian newspaper in 2002 (Sutherland, 2002). In 'Cn u txt?', Sutherland (2002) discussed the impact that text message abbreviations were having, he claimed, on today's generation. Sutherland suggested that the concept of texting was one which had become most popular in Europe and the UK, whereas Americans had not at that point caught on to the idea of texting. He claimed that in the UK the main group using text messaging were the 'young and minimally educated'. Sutherland criticized the use of texting quite brutally, claiming that young people had adopted texting much more readily as their generation had already been exposed to technology which encouraged the use of the opposable thumb, such as Playstations. He added the view that texting was a lazy medium and contributed to 'dyslexia, poor spelling, and mental laziness', although his evidence base for these claims was uncertain.

As text message language began to increase there was a great deal of negative press about the effects that it was apparently having on school students' literacy development and its spill over into their school work. The BBC highlighted a story in 2003 (BBC, 2003a) about a 13 year old Scottish student handing in an essay written completely in text message abbreviated language. The student's teacher was unable to interpret the essay, and this story sparked a great deal of media attention. Following this, another piece from the BBC (2003b) suggested that exam markers had raised concerns about the increasing use of text message language in exam scripts by students. Teachers have voiced opinions via the mass media (although so far there have been no reliable research surveys of these opinions) that text message language had been widely adopted by students and was becoming more and more apparent in their school work. These teachers appeared to feel that it was not acceptable for their students not to use Standard English in their written work, and the use of text abbreviations was seen as a problem. Carrington (2005) reports an analysis of the discourse used in such media reports and suggests that: "schools and curricula remain wedded to an older and increasingly inadequate view (of literacy)" (p. 172).

Certainly, since these initial concerns, popular media has continued to express concern about the effects of texting upon young people, with reports suggesting that too much texting can cause sleep deprivation and, hence, lower school achievement (Murray, 2013), and listing a number of negative effects ranging from driving danger and repetitive strain injuries to distraction from study (Ireland, 2014).

Lacking, until quite recently, has been scholarly research into the ways in which the use of text message abbreviations (textisms) may impact literacy development in children. The principal research in this area has been carried out by a UK team led by Plester and Wood. Plester, Wood and Bell (2008), for example, found that there was a significant positive relationship between the amounts of textisms used by youngsters and their scores on verbal reasoning tests. Children who used the most abbreviated text language scored the highest in their verbal reasoning tests. Further studies (summarized in Wood, Kemp, & Plester, 2013) have found nothing to suggest that textisms were having a negative effect on the studied children's literacy development and, indeed,

have suggested that textism use positively influenced the development of reading skills, phonological awareness, spelling, and grammar – findings which appear at first sight to be counter-intuitive and certainly contradict the messages presented by the popular media.

Similar contradictions can be found between the academic literature and the popular media in other countries beyond the United Kingdom. Freiss (2003), in a relatively early newspaper piece on this topic in the USA, gave several instances of teachers and parents who were concerned that online written communication (through texting or instant messaging) was having a negative effect on young people's abilities to write formally. Lee (2002) gave a similarly critical message, again quoting the views of teachers. Ross (2007) reviews the views of American teachers that text messaging is damaging children's language abilities and that its influence is evident in their writing assignments. Yet in a study of American college students, Drouin and Davis (2009) found no evidence of any effects of text messaging upon literacy skills. In a later study Drouin (2011) found significant, positive relationships between students' text messaging frequency and their literacy skills (spelling and reading fluency). Similar findings have emerged in countries such as Australia (see, for example, Kemp, 2010) and South Africa (see Botha, Vosloo, Kuner, & van den Berg 2009; Vosloo, 2009.

One of the features of the debate regarding the positive or negative effects of texting upon literacy development has been that critical views have largely come via mass media, very often through reports which heavily featured the opinions of teachers. Academic research has tended to reveal a more positive picture, yet there have, to our knowledge, been no studies as yet of teachers' opinions of the phenomenon, media reports having each used the views of one or two deliberately selected teachers only.

Wood, Plester, and Bowyer (2010) have suggested that there has been a slight positive shift in the way teachers view the effects that textisms were having on their students. They found that teachers were supporting the use of textism-based activities with children to help them develop their phonological awareness. This is encouraging as it is surely the case that teachers who feel negatively about the effects of textisms upon the literacy of their students are unlikely to make efforts to use such "new" literacies in their classrooms. Yet we are currently in a position where we know very little about what teachers really think about this issue. It is an attempt to begin to understand these teacher views which gave rise to the present study.

The Present Study

The aim of the present study was to explore the views held by a sample of teachers about the effects of textisms on student literacy development. Data was gathered through a series of interviews carried out with a group of 27 primary school teachers. These were analyzed and a number of themes identified, some suggesting positive dispositions of teachers towards the effects of textisms, and some negative.

Procedures

Two Boroughs in the Greater London area of the UK were selected at random, and 25 schools selected at random from each Borough (one Borough had 69 schools in total, and the other 70). An email was sent to the head teacher of each of these 50 schools, asking him/her to circulate the email among the staff of the school, asking for volunteers to take part in this research study. The email explained what the research would involve and also guaranteed anonymity for participants. It also asked for one volunteer per school. The aim was not to derive a representative sample of the teachers in these 50 schools (there were over 700 eligible teachers) but rather to ensure that the final sample would vary as widely as possible across the schools. By this means, twenty seven primary school teachers were recruited, all of whom were volunteers. The participants each sub-

sequently took part in an in-depth interview which aimed to gain an insight into their views on the effects on text message abbreviation on children's literacy development. These interviews were carried out on their school premises each at a time and date which suited them. Each interview lasted approximately 20 minutes and was semi-structured in nature. The core questions were the same for each participant, and were as follows:

- Do you have your own mobile phone?
- Do you use your phone a great deal for text messaging?
- What effect do you feel text message abbreviations (textisms) have on a child's use of abbreviations in normal writing.
- How do you feel that textisms benefit children's literacy development?
- How do you feel that textisms negatively impact children's literacy development?

The approach of semi-structured interviewing is usually held to be more flexible than standardized methods such as the structured interview or the questionnaire survey (Drever, 2003). Although some initial questions were developed to prompt discussion, the method allowed for the exploration of emergent themes and ideas rather than relying only on concepts and questions defined in advance of the interview. The initial questions were asked in a similar order and format to make comparison possible between the answers given by the various respondents. However, there were also occasions when interviewee responses could be probed for deeper insights into their views. As Gomm (2004) suggests, the cooperative nature of these interviews could be described as a "fact-producing interaction". Thus, although all interviews covered similar ground, individual interviews were each very different as the flow of the conversation followed a participant's responses.

Each interview was digitally recorded and transcribed, and the resulting transcripts analyzed as outlined below. The usual ethical procedures were followed and participants assured of the confidentiality of their interview data, and of their right to cease participation in the research at any time.

Results

Following the guidelines suggested by Charmaz (2003), the following questions were asked about the data as it was being coded:

- What is going on?
- What are people doing?
- What is the person saying?
- What do these actions and statements take for granted?
- How do structure and context serve to support, maintain, impede or change these actions and statements?

Open coding was carried out on the transcripts of the 27 individual interviews, using a constant comparative approach (Strauss & Corbin, 1998) in which data and its categorization was constantly compared to what had gone before. A number of free nodes were developed using the data analysis software NVivo (http://www.qsrinternational.com/products_nvivo.aspx) and the next step in the analysis was to look for links between the codes (free nodes) employed during the initial analysis - axial coding (Strauss & Corbin, 1998). This meant attempting to inter-relate the codes already developed into categories. In the NVivo software, this was achieved by selecting and merging the existing free nodes in the Node Browser. This resulted in hierarchically arranged tree nodes, or themes (Gurdial Singh & Jones, 2007). Seven themes were apparent in the data.

Theme 1

The first theme concerned the negative impact that participants thought textisms were having on their children's literacy development. Table 1 shows examples and quotes demonstrating this theme from the transcripts of the participant's interviews.

Table 1: Exemplifications of Theme 1

Participant	Examples
P1	To be honest, I feel it has more of a negative impact than it does a positive one as you see it in their speaking as well as their writing.
P7	I think it demotes spelling a little bit because you have got all your predictive texting and there's no one there to correct it.
P13	I guess technology has its uses but I think handwriting is starting to fall behind because they do less of it, and spelling I guess as well because often they don't need to think about the words as the spellchecker is there to correct and fix these for them.
P27	Lower ability children do sometimes get these things mixed up.

Theme 2

The second theme concerned the positive impact that textisms were thought to be having on children's literacy development. Table 2 shows examples and quotes demonstrating this theme from the transcripts of the participant's interviews.

Table 2: Exemplifications of Theme 2

Participant	Examples
P3	I guess even as children they are aware that text abbreviated language isn't the way to write in their school work. I haven't ever seen it come up in their literacy.
P14	I think they can distinguish between the two, and soon it will become part of everyday life. I think it will take over really.
P15	No, I don't see any influence from the text language in their work.
P22	Like I said, the high ability children can distinguish between the two, as they can cope with different styles of language and they don't get them mixed up. So I do think that language will be influenced by the way people text. Very much so, yes. But in terms of their work, the more we talk about this in school the more aware they will be that there is a difference and how to distinguish between them.

Theme 3

The third theme concerned the negative impact that other forms of technology were thought to be having on children's literacy development. Table 3 shows examples and quotes demonstrating this theme from the transcripts of the participant's interviews.

Table 3: Exemplifications of Theme 3

Participant	Examples
P4	It's all of it, it's Youtube, Facebook, MSN, Twitter, the whole lot. I feel quite passionately about these. I do not agree with Facebook and Twitter, especially for children. It's too much too soon. I feel that it is becoming a technological age where children can't function without some sort of screen in front of them, whether it's small or big.
P12	Well, it started with one child coming to the head and saying that they were being cyber bullied on the computer. Yes, they may be using them while mum is in the kitchen cooking or something like that. So they are not being so closely monitored.
P15	Definitely, children lack creativity. Everything is so visual in front of them: it's a computer, it's the Playstation. So very seldom do they read to stimulate their imaginations.
P26	Accessible but the negative is that they are too reliant on computers. There are so many other resources like books and libraries that they are not using. They are not being exposed to different sources like visiting museums as everything is on the computer.
P27	Children are lazier at researching information because they like to just copy and paste from the internet which is a more up to date source but they are lazier about understanding it and putting it in their own words. This, I feel, has an impact on their general knowledge. Language has been dumbed down for them. The interactive games use a simpler language and use visual techniques to engage the children.

Theme 4

The fourth theme concerned the positive impact that other forms of technology were thought to be having on children's literacy development. Table 4 shows examples and quotes demonstrating this theme from the transcripts of the participant's interviews.

Table 4: Exemplifications of Theme 4

Participant	Examples
P6	And we use it a lot more for SEN (Special Educational Needs) children because it makes a huge difference for them.
P8	It has its benefits but it has to be used carefully and it needs to be streamlined and used appropriately.
P16	The positives about that is that it's more accessible
P19	Yes, it's used quite widely across the curriculum, to teach the core subjects, English, Maths and Science. They have got some interactive programs. I do especially for the lower ability children because they don't read, say, a book, but they would read the instructions for a game on the computer, so technology is good for them.

Theme 5

The fifth theme concerned the feeling that English being a second language for children might be having more impact on children's literacy development than textisms. Table 5 shows examples and quotes demonstrating this theme from the transcripts of the participant's interviews.

Table 5: Exemplifications of Theme 5

Participant	Examples
P7	Especially this community as a lot of the children are speaking English as their second language. So I don't know if that's adding to the difficulties or it's the slang that they are using on phones and online.
P14	So it's difficult to say are they picking it up from phones and other language around them? Or is it their literacy skills that are poor at the moment because of the language they speak at home.
P17	When children have English as a second language at home their parents may tell them to use the internet to find something out if they don't understand.

Theme 6

The sixth theme concerned the possibility that street talk may be having more impact on children's literacy development than textisms. Table 6 shows examples and quotes demonstrating this theme from the transcripts of the participant's interviews.

Table 6: Exemplifications of Theme 6

Participant	Examples
P8	What I do find is that the cockney slang has an impact on them. The way they speak in this East End (of London) has more of an impact on their writing.
P12	Well, I've seen LOL and corrected it. Then I'm not sure the children in this school's grammar is always perfect because of their street conversations and they don't speak English as their first language at home. And I think there's this culture of speaking in their own way.
P16	The thing with London English is that it's always changing and it hardly ever sticks to the standard. It's influenced by all the communities here and their first languages, what their first languages are. The advent of technology is just part of the journey that language makes in a city like this.

Theme 7

The seventh theme concerned the use of technology in schools. Table 7 shows examples and quotes demonstrating this theme from the transcripts of the participant's interviews.

Table 7: Exemplifications of Theme 7

Participant	Examples
P2	It is sad that our teaching has become like that. We have a massive interactive white board in every class. We have to have interactive video clips and sound to try to engage the children. It saddens me that some of my best teaching is through these methods. We have the interactive white boards which I tend to use like a blackboard and write on it. I will use it for video clips if needed but not much to be honest.
P6	We are, the main thing is we have an ICT (Information and Communication Technologies) lesson once a week teaching them ICT skills and programs. In the curriculum we use a lot of laptops. We have two class sets of laptops.
P13	No, we have 60 laptops in the whole school where classes take turns in using them.
P14	We use the interactive white board. They do have ICT lessons.
P19	Yes, it's used quite widely across the curriculum, to teach the core subjects, English, Maths and Science. They have got some interactive programs.
P24	They have ICT lessons, and they have access to laptops for research work. We have flip cameras for filming, and recording.

Discussion

The findings of this study have produced some interesting insights into the views of these primary school teachers on the impact that textisms may be having on children's literacy development. Clearly, with such a small sample, it is not possible to generalize these views to a wider population of primary teachers. The outcomes are suggestive rather than generalizable. They are interesting in their own rights, nevertheless, and will be used in a subsequent study to form the basis for a much more extensive survey of teacher views.

Starting with the obvious, the majority of the participants demonstrated a negative outlook on the effects that they felt the use of textisms was having on the literacy development of the students in their classes as well as of children in general. Some participants argued that the majority of children were able to distinguish between the abbreviated language, which is commonly used in text messages, and the Standard English language, which is used in school, but most felt that there was still some form of negative influence from textism use upon children's language skills. The general opinion seemed to be that the abbreviated language used on mobile phones and computers where words are missed out and shortened was normally found more in the way the children spoke rather than in the way they wrote.

Although the participants stated that they felt textisms were having some sort of negative impact they did not have many examples to illustrate their views. This almost seemed to be simply an automatic response that the language used in text messages would have some sort of harmful result.

In contrast, the positive effects that textism use may be having on student's literacy development were also discussed by the participants. Again some participants had strong views on this. The common view seemed to be that children were able to distinguish between the two types of writing and were aware of when and when not to use each of them. The majority of the participants claimed that they had not come across the use of textisms in written work by the children they

had taught. The general view was that the higher ability children were more than capable of identifying the different styles of written languages and knew when to use Standard English, such as in their school work. They also felt that children from the lower ability groups were those that would find it difficult to recognize Standard English and when to use it. They felt this was because of the lack of literacy skills of these children.

All of the interviews led towards the topic of different forms of technology and the impact these were thought to be having on children's literacy and language development. This appeared to be of interest to all of the participants, and they all seemed to feel rather passionately about this, whether they saw it as having positive or negative effects. The most common reason given for technology having a negative influence was the fact that a large majority of the children they taught seemed to use the internet for research homework and simply printed off or copied and pasted large chunks of information from the internet. The children were not, so participants argued, engaging with the information and therefore were not actually learning a great deal from the work they were doing. Participants felt that the children were becoming much lazier about certain aspects of work due to the convenience of using computers. Examples of cyberbullying were also mentioned as well as children not being properly monitored whilst they were using computers at home which could have a detrimental effect on their safety.

Participants also voiced their views on the positive ways in which the use of technology was influencing children's literacy development. The use of technology within schools in children's work was seen as a positive use of technology by children. Examples of this included the benefits it had for children with learning difficulties, as they seemed to be able to gain a great deal from programs and activities based on the computer. Computer based activities were also perceived as having advantages for children from lower ability groups. These even included the usefulness of instructions on a screen for games which children played on the computers or on game consoles. As the instructions were written in detail the children were obliged to read them as they would need them to understand the game, therefore the children were developing their reading skills even if they were unaware of this. Another advantage was that technology was used widely across the curriculum in schools to enhance teaching methods, for example, through devices such as interactive white boards, laptops and cameras.

Many of the participants felt that there were other external factors which had more of an impact of the children's literacy development than the use of technology or textisms. One of the most common was the fact that the majority of the children from the schools in which these interviewed teachers taught had English as their second language. A lot of the participants felt that this had a much stronger influence on their students' literacy development as they were still developing their language skills. Linking to this was another concept which the participants felt fairly strongly about, which was the street talk/slang that was spoken by children. The participants claimed that this form of street talk appeared more in children's written work than did textisms. It was felt by some that although street talk and slang was an influential factor on the lack of literacy development in some children, this was linked to the use of text message language.

One of the remaining themes which occurred throughout the interviews was the growing use of technology within schools from interactive white boards to laptops and cameras for children. The majority of the participants felt that the use of technology was useful in school in many aspects. Technology seemed to be used throughout the school years as well as for the majority of subjects. Examples included children watching a scientific experiment on the white board rather than carrying out the experiment themselves. Another example given was students watching a clip of an individual from another country talking about their country rather than simply reading about it from a book.

Implications

The study reported in this paper is a small scale study of the views of a group of primary teachers of the impact of the use of texting on the literacy development of their students. It has revealed some interesting patterns in these views, which appear to be rather more sophisticated than those often reported in the mass media. Yet this was a study of a sample of only 27 teachers, and its outcomes can be considered only as suggestive. An obvious implication of the study for future research is that further, larger scale studies need to be carried out to explore the ways in which teachers conceptualize the impact of technology in general, and text messaging in particular, on the literacy of their students. Research findings are beginning to coalesce around the idea that texting is a positive contributing factor in literacy development (Verheijen, 2013), yet there are still dissenting voices (Myhra, 2010) whose critiques tend to be reported in the media. Teachers, naturally, will be influenced by what they read and watch in newspapers and on TV programs, perhaps more than by the academic research. Charting and exploring teachers' views seems particularly important as we strive to understand the effects of technology on learning and school achievement.

There are also some important implications for the development of pedagogy which takes into consideration the possibilities and problems of new technologies. There are a number of studies (Andrews et al., 2005; Harrison et al., 2002) which suggest that technology has not yet fulfilled its potential in terms of positively developing pedagogy and learning in schools. If one of the causes of this is that teachers have hitherto been more influenced by mass media views of technology in schools, then an implication of this, and other, studies may well be that researchers need to find ways of ensuring that teachers are aware of the outcomes of their studies and do not simply rely on media accounts of fears and concerns.

Conclusion

Overall the study was able to gain an in-depth understanding of the views of a small number of primary teachers on what effects textisms were having on their children's literacy development. The general picture was that a majority of these teachers did feel concerned about the effects of textisms, but these feelings were tempered by a range of other factors. None of these teachers blamed the use of textisms exclusively for declining levels of student literacy, suggesting that the media portrayal of this issue had been over-simplistic at best.

Clearly, this was a small scale study and its outcomes have to be considered as indicative rather than definitive. Yet it is encouraging to learn that primary teachers may hold rather more sophisticated views about the impact of a technological innovation on their students' literacy than do the headline writers in the popular media.

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Biography

David Wray taught in primary schools in the United Kingdom for 10 years and is currently Professor Emeritus at the University of Warwick. He has served as President of the United Kingdom Reading Association, and edited the journal of that Association for 8 years. He has published over 50 books and over 150 chapters and articles on aspects of literacy teaching and is best known for his work on developing teaching strategies to help students access the curriculum through literacy. His major publications include: *Extending Literacy* (Routledge); *Developing Children's Non-Fiction Writing* (Scholastic); *Literacy in the Secondary School* (Fulton) and *Teaching Literacy Effectively* (Routledge Falmer). More recently he has begun new research programs exploring the importance and teaching of handwriting, renewing the concept of readability and evaluating the educational use of mobile learning devices.