Education
Endowment
Foundation

Talk for Writing
Evaluation report and Executive summary
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Independent evaluators:

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UCL
Institute of Education

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About the evaluator

The project was independently evaluated by a team from the UCL Institute of Education London: Julie Dockrell, Chloë Marshall and Dominic Wyse.

Julie Dockrell, PhD, is Professor of Psychology and Special Needs at the UCL Institute of Education, a Fellow of the Royal College of Speech and Language Therapists, and an Academician of the Academy of Social Sciences. She is an expert on language and writing development and difficulties and was a co-director of the DfE-funded Better Communication Research Programme which produced a number of tools for teachers use. She was involved in collecting and analysing the writing and questionnaire data and preparing the report.

Chloë Marshall, PhD, is Reader in Psychology and Human Development at the UCL Institute of Education, where she is Programme Leader for the MA in Special and Inclusive Education. She carries out research on a wide range of topics in language and literacy development, and was formally a Montessori teacher, nursery manager, and a teacher-trainer at the Montessori Centre International. She was involved in collecting the writing data, conducting interviews with staff and preparing the report.

Dominic Wyse is Professor of Early Childhood and Primary Education at the UCL Institute of Education. The main focus of his research is curriculum and pedagogy. Key areas of work are the teaching of English, language, literacy, and creativity. Dominic is an elected member of the Council of the British Educational Research Association. He was involved in collecting the writing data, observing the classroom process and preparing the report.

Contents

Executive summary

The project

Talk for Writing is an approach to teaching writing that emphasizes three teaching methods: '*imitation'* (where pupils learn texts by heart, so they can discuss and dissect them), '*innovation'* (where pupils adapt stories to create their own versions), and *'invention'* (where teachers help pupils to create original stories). These tasks aim to improve writing ability by giving pupils an understanding of the structure and elements of written language.

This project sought to develop Talk for Writing into a whole-school programme. The pilot programme ran for 18 months, from January 2013 to July 2014, and involved ten schools in Portsmouth. It included a series of 6 full days for school leadership teams (project teams) plus three whole school conferences ("Big Days") to train teachers and teaching assistants. It covered all primary age groups from nursery to year 6. In addition to the training and support for schools, the programme provided materials, resources, and guidance for staff development, planning and progression. Each school appointed a "literacy lead", who was responsible for implementing the programme.

This developmental pilot was subject to an evaluation, which had three aims:

- to appraise the research literature underpinning key dimensions of the Talk 4 Writing pedagogy;
- to evaluate the promise and feasibility of the programme, and provide formative recommendations to inform future evaluation and development; and
- to provide an initial quantitative assessment of the potential impact of the programme on writing skills that could be used to inform any future trial.

The evaluation took place over twelve months and involved six of the 10 intervention schools, one of which withdrew halfway through the programme following the appointment of a new headteacher, and three comparison schools. There were two comparison schools in Portsmouth and one in London.

Key conclusions
1. Most of the teachers were enthusiastic about implementing Talk for Writing within a whole school approach and felt that it provided a consistent approach to teaching writing. However, one school was withdrawn from the project by a new headteacher.
2. Features of the programme were embedded in the classrooms, and teachers generally found the programme straightforward to implement.
3. The project displayed mixed evidence of promise. Teachers reported that it had an impact on pupils' writing skills. However, the literature review found mixed support from the current research base for the principles underlying the programme.
4. Further research is required to securely estimate the impact of the approach on academic attainment. It would be valuable to undertake some additional development work to refine the approach before it undergoes a full trial.
5. Other research suggests that oral language may play a stronger role in supporting writing in the early years than in Key Stage 2. The programme might benefit from targeted support of key oral language competencies to support the production of early written text in struggling writers and those with weaker oral language skills.

What did the evaluation find?

The evaluation found that the programme was feasible. It was clear from both the interviews and the observations that the schools were enthusiastic about implementing Talk for Writing. Literacy Leads reported that they were confident that their schools were implementing Talk for Writing faithfully, and

the majority of staff in all schools were reported to be fully committed to the project. However, one school withdrew from the project in February 2014 following a change in leadership and concerns about the efficacy of the programme.

The evaluation demonstrated that the project displayed some evidence of promise. School staff reported that the project had a positive impact on pupils' writing skills and improved their confidence with teaching writing. The literature review concluded that the strength of prior research evidence that supports Talk for Writing was variable. Some elements of the approach were well-supported by evidence, but other unique features were not.

The impact evaluation estimated that after one year there were some small differences between intervention and comparison school pupils' attainment on writing tests. Where there was evidence of change in the writing measures sometimes this favoured the intervention group, and sometimes this favoured the comparison group. In all cases, the effects were small or very small. However, due to the non-random nature of the comparison and the small number of schools involved it is difficult to draw secure conclusions from these impact estimates.

How was the evaluation conducted?

The evaluation used a mixture of quantitative and qualitative methods to examine the promise and feasibility of the programme and its readiness for a full trial. The evaluators conducted a literature review of the supporting evidence for the Talk for Writing approach. Interviews, lesson observations and a survey were conducted with school staff to collect views of the project and examine fidelity to the intervention.

An impact evaluation was carried out. However, the results of this impact evaluation must not be mistaken for those of a randomised controlled trial, and causation cannot be securely identified. Five schools that were delivering the programme were compared with three matched comparison schools with similar proportions of pupils eligible for free school meals or on the SEN register. Teachers' reports of their approach to the teaching of writing were elicited prior to the start of the programme and one year later through an online questionnaire. Pupils' writing in key stage 2 was assessed at word, sentence and text level using a standardised measure of writing at three time points.

Limitations of the study

The programme was in development throughout the period of the evaluation, so this evaluation was not able to test a fully-developed version. Responses to the questionnaire at second administration were limited in the comparison schools and a significant minority of teachers in the intervention schools did not comment on the programme. Although schools had been working with the *Talk for Writing* team for a year when the second wave of questionnaires were released there was still a further five months of the programme to run. No data at pupil level were available at reception and Key Stage 1. Observations took place in a small number of settings. The self-selected nature of the intervention schools, the non-random nature of the comparison and the small number of schools involved limit the conclusions that can be drawn. Schools opted to participate in the programme and intervention schools were based in one city, which limits the generalisability of findings.

Question	Finding	Comment
Was the approach feasible?	Yes	Most schools completed the project. Teachers were very positive about the programme and embedded some features in their classroom practice.
Is there evidence of promise?	Mixed	The majority of heads and teachers reported a positive impact on pupil attitudes, progress and attainment. However, the evaluation was not able to securely estimate the impact of the programme on academic attainment, and prior research evidence provides a mixed amount of support for the principles underlying the approach.
Is the approach ready for a full trial?	No	Further work is required to develop the programme before it is subjected to a full trial.

Introduction

Intervention

Talk for Writing is a whole-school approach aimed at improving primary school children's written text production (details of the programme and materials are available at www.talk4writing - see also Corbett, 2001, Corbett & Strong, 2011, as examples). It is a universal approach to the teaching of writing, as opposed to a targeted or specialist approach. *Talk for Writing* is the core teaching and learning programme that directly relates to children's writing development within the wider *Primary Writing Project* (PWP) training and professional development package (Stannard & Corbett, 2014). Although *Talk for Writing* is well known and publicised (see for example http://www.talk4writing.co.uk/) implementation at school level was developmental. As such the evaluation was designed to look at features of the programme and teacher, school and pupil level variables.

The evaluators were commissioned to examine *Talk for Writing.* In this trial *Talk for Writing* was embedded within the PWP. The PWP included additional organisational practices designed to embed *Talk for Writing* within the schools. The PWP had five key aspects that were aimed to strengthen the impact of *Talk for Writing* in the schools. All specific details are outlined in the programme manual/background paper (Stannard and Corbett, 2014):

1. A training programme for school leadership,
2. Three training days for teachers,
3. Implementation and staff development,
4. Partnership conference,
5. Developing school to school support.

The head teacher, all teachers, and teaching assistants in a school were asked to commit to attend training days and to engage in using *Talk for Writing* within the schools. Each school identified an individual who took responsibility for implementation, a literacy lead .

Talk for Writing was the focus of the training days.

Talk for Writing was embedded within the PWP which identifies 'non-negotiables' and 'vital signs' that provided a backbone for the programme. Non-negotiables were commitments by the schools and teachers related to activities and processes (see page 7 Background paper, Stannard and Corbett, 2014). The majority of the non-negotiables were related to the *Talk for Writing* programme. The main non-negotiables contained seven elements related to written text production:

1. Adoption of the 3I's (Imitation, Innovation, Invention) framework
2. Daily shared writing activities
3. Visible common practice including story maps, boxing up, shared drafts, word walls, washing lines
4. Systematic teaching of word and sentence level skills
5. School-wide framework of texts
6. Clear emphasis on writing for audiences and purposes
7. Regular and systematic formative assessment.

Vital signs were indicators that the PWP was being implemented. Note that throughout programme implementation other non-negotiables and vital signs were introduced (see for example material for Big Day 3 BD1.3 in the manual).

Evaluation objectives

This report examines the *Talk for Writing* programme in three ways: 1. A review of research literature underpinning *Talk for Writing*; 2*.* A process evaluation of *Talk for Writing* including a comparison of teaching practices in *Talk for Writing* schools and comparison schools, and 3. An impact evaluation of the programme's effect on the writing of pupils in Years 3, 5 and 6 across six months and Years 3 and 5 across one year using a quasi-experimental design.

The mixed-methods approach to the evaluation allowed an understanding of the principles underpinning the project, its feasibility, and its impact in the classroom and on children's written text production

Project team

The programme was developed and implemented by John Stannard and Pie Corbett and supported by the school leads in the schools. The project was evaluated by Professor Julie Dockrell, Dr Chloe Marshall and Professor Dominic Wyse.

Literature review

The focus of the current literature review was to examine aspects of the *Talk for Writing* programme itself, considering the current evidence base.

This literature review does not cover all the interesting and innovative activities, such as word games, crazy sentences etc., that were provided in the materials. Firstly, such activities were not easily linked to the research literature but, more importantly, they were provided as exemplars by the programme developers, and were not core teaching as captured in the non-negotiables and vital signs. It is important to note that some of the non-negotiables and vital signs have not been the focus of previous research. It is important to note that simply because no studies have been carried out to examine a particular technique or approach does not mean that the approach is not effective. Where we found no evidence to support an aspect of the *Talk for Writing* programme we simply note that there is no current evidence base.

Our appraisal of the *Talk for Writing* materials involved two phases. First, we examined the *Talk for Writing* materials to capture specific descriptors and activities related to the core elements. Second, we used the framework we constructed to appraise the components, where possible.

We draw a distinction between evidence-informed practice and evidence-based practice. Evidence-informed practices are practices that draw on the research evidence, indicating the impact in the development of the writing such as increasing motivation. By contrast, evidence-based practices refer to practices and approaches to the teaching of writing which have been examined in research studies and demonstrated specific impacts on written text production and/or the skills which underpin writing such as morphological approaches to spelling directly improving spelling. Our evaluation draws on both sets of evidence.

Participating in the *PWP* required schools to sign up to non-negotiable components of the programme and vital signs all which were designed to link to the impact of *Talk for Writing*. There is well-documented evidence from a range of experimental studies and meta-analyses that three of the elements included in the non-negotiables are effective. These are a) clear emphasis on writing for audiences and purposes, b) regular and systematic formative assessment of writing, and c) regular and extensive shared, guided and independent writing in every class (Graham, Gillespie, & McKeown, 2013; Graham, Harris, & Hebert, 2011; Institute of Education Sciences, 2012). Given the strength of evidence shown in these meta-analyses, quasi-experimental studies, and experimental studies we have not conducted further searches to substantiate the points in relation to these components.

In summary, children's writing can be significantly improved with systematic interventions to support core writing skills (Datchuk & Kubina, 2013; Graham, Harris, & Mason, 2005; Graham & Sandmel, 2011; Rogers & Graham, 2008) in short periods of time (for example Limpo & Alves, 2013). In contrast to *Talk for Writing*, the interventions described in these analyses were not whole-school approaches offering a systematic writing curriculum across the primary years, but rather specific programmes typically devised for struggling or poor writers. In this report we note where *Talk for Writing* incorporates strategies supported by these meta analyses as part of the overriding framework.

Methods

We had access to the entire project materials disseminated in the schools including PowerPoints, hand-outs and videos. All of these were included in the final Primary Writing Project guide and the appraisal of the content of the materials drew on both the information we had been supplied throughout the project and:

The final *Primary Writing Project* guide (June 2014) (and all materials included therein)

Corbett, P. & Strong, J. (2011). *Talk for Writing across the curriculum*. Maidenhead: Open University Press.

Procedure

We identified the principles underpinning the programme, and elements that contributed to programme implementation, by examining the *Talk for Writing* materials. We focussed specifically on elements that were specified and detailed within the programme, or that were identified as essential in the implementation, in order to match elements of *Talk for Writing* with published research evidence. For each of these elements we carried out a literature search using the Web of Science, Google Scholar, Scopus, British Education Index, and ERIC.

A broad approach to the relevant literature was used. In order to identify appropriate literature we used both key terms from the programme such as 'talk' but also related terms such as 'oral language' in the search terms. We searched for studies directly related to children's development of writing. We also searched more generally, for example by extending the search terms to include literacy and learning, given the well-documented role of literacy skills in the production of written text. These broader searches provided guidance about evidence-informed practices, which, arguably, generalise to writing. We included evidence from experimental study and interventions with comparison groups which addressed the core components of *Talk for Writing*. Single case studies, anecdotal reports and classroom observations without objective measures were excluded.

Results

We reviewed all the materials that we were provided with and identified features which were deemed to be necessary within *Talk for Writing* and in ensuring its effectiveness. Figure 1 presents our overall analysis of the features of the *PWP*. Elements in hexagons and squares directly relate to the teaching of writing as detailed in *Talk for Writing*. The elements in diamonds refer to other dimensions of the *PWP* and are not the main focus of the evaluation.

This framework has been used to appraise the elements of *Talk for Writing*. Evidence related to school systems and staff training is not reviewed. The literature review focuses on written text production and the elements within the *Talk for Writing* programme that are argued to support this. We begin by examining the principles underpinning *Talk for Writing*.

Figure 1 *The Primary writing Programme: Talk for Writing components.* Elements in hexagons and rectangles directly relate to the teaching of writing as detailed in *Talk for Writing*. The elements in diamonds refer to other dimensions of the *PWP*
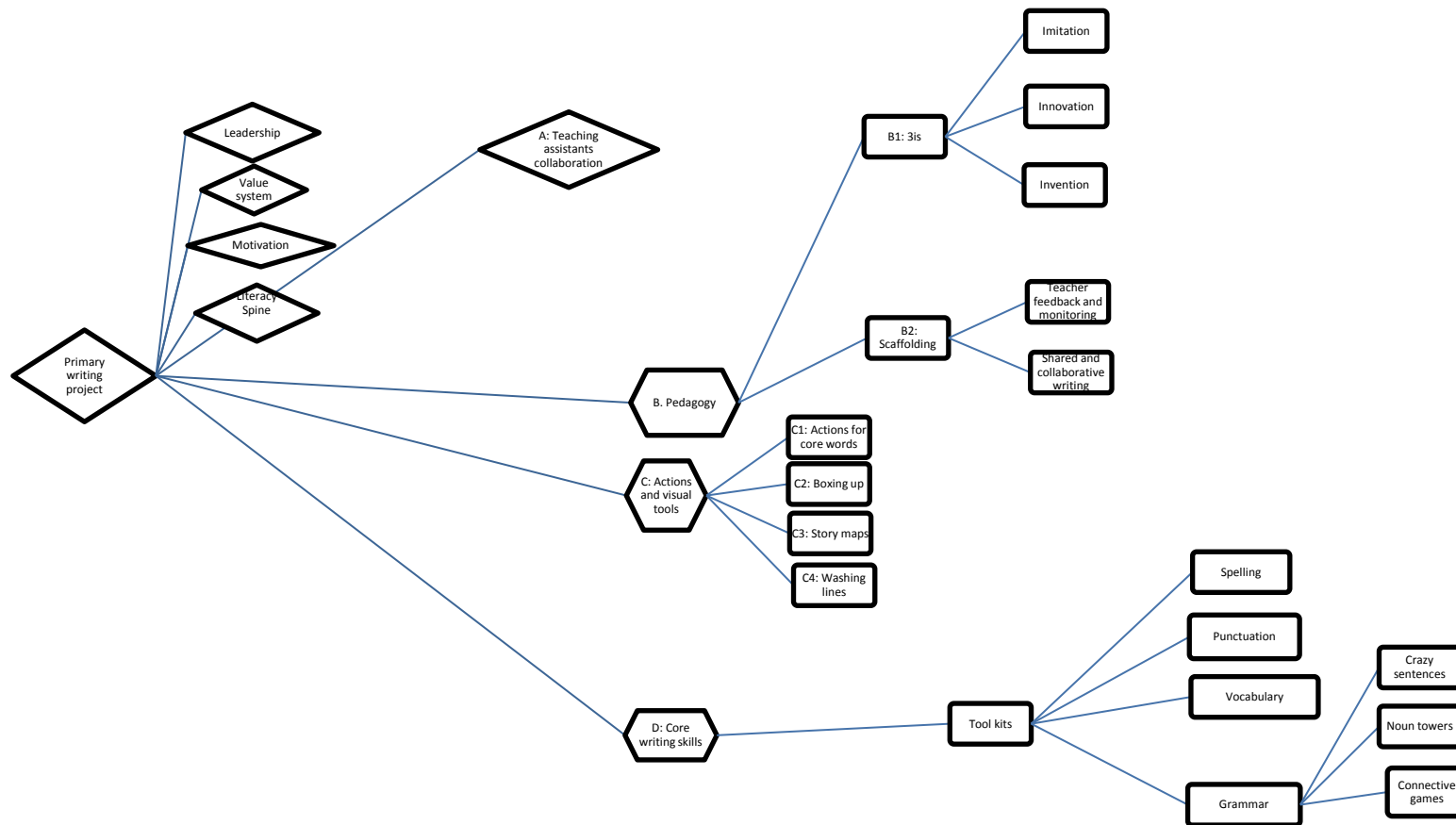
Principles underpinning *Talk for Writing*

We identified two major principles that underpin the *Talk for Writing* programme:

- The role of oral language
- Reading shaping writing.

These two principles are highlighted in the completed *Talk for writing* materials (June 2014). *Talk for Writing* has an explicit emphasis on oral language skills. This emphasis is not new in the UK, although the relevant research literature offers no clear evidence explaining the ways in which different aspects of oral language underpin written text production (Shanahan, 2006). Indeed the emphasis on oral language skills is inconsistent in UK government policy documents (Myhill, 2009).

Linguistic features typical of younger writers are acquired first in the spoken form, lending weight to the view that supporting oral language skills for younger children will support written skills (Donaldson & Cooper, 2013; Perera, 1984). More specifically, vocabulary has been shown to underpin writing for children at Key Stage 1 (Dunsmuir & Blatchford, 2004) and for children who experience oral language difficulties (Dockrell & Connelly, 2013). There is also a correlation between children's use of vocabulary and measures of text quality (Olinghouse & Wilson, 2013). However, these links between oral language and writing vary according to developmental phase and are moderated by reading skills. Firstly, as children get older and literacy skills are more developed, text is more linguistically complex than speaking and draws on a range of different grammatical and structural features that are not, generally, used when speaking. Secondly, there is increasing evidence indicating that the influence of oral language on writing is partly mediated through reading both in terms of word decoding and reading comprehension (Abbott, Berninger, & Fayol, 2010; McCarthy, Hogan, & Catts, 2012).

Talk for Writing emphasises reading in two ways: pupils are encouraged to 'read as a reader' and 'read as a writer'. We found no studies examining the concepts linked to 'read as a reader' or 'read as a writer', although the idea of reading like a writer (e.g. trying to 'read'/analyse fiction to identify the techniques used) is sometimes alluded to in professional writers' account of their writing processes (e.g. King, 2000). As stated above, the evidence suggests that pupils' reading skills support their writing. Further, there is strong evidence that writing skills have a positive impact on reading both in terms of word reading performance (ages 6 to 10) and reading comprehension (ages 9 to 18) (Graham & Hebert, 2010).

In sum, there is indicative evidence that oral language skills support writing in younger pupils and in those struggling with writing. The links between reading and writing are well established and the relationships between these core competencies are bidirectional. However, the concepts of 'reading as a reader' and 'reading as a writer' require further explication and research.

A: The role of teaching assistants

Teaching assistants (TAs) play an active and well-defined role within *Talk for Writing*. For example, they act as scribes at the flipchart at the front of the class when children verbally generate ideas during shared writing sessions. The unique use of TAs in *Talk for Writing* is their full integration in the planning and delivery of lessons leading to some whole class discussion. This is in contrast with the way in which TAs are usually deployed in classes.

A recent large-scale study of the deployment of TAs in English schools (Blatchford, Russell & Webster, 2012) found that the more support that children get from TAs, the less academic progress they actually make. Blatchford et al (2012) argued that this finding originates from organisational and structural factors over which TAs have little control, and they urged a fundamental rethink of how schools can best use their TAs. Blatchford et al. (2012) also reported that little or no training is

provided to teachers in how to manage TAs, and TAs are most often directed to support individual children away from the teacher and the mainstream curriculum. In contrast, in *Talk for Writing* TAs attend whole-school training days alongside teachers, and they have an explicit role within the programme supporting the teacher as he/she teaches the whole class, which is in line with recommendations made by Russell, Webster and Blatchford (2013).

B: Pedagogy

We have identified two aspects within the *Talk for Writing* programme that relate to pedagogy: "3Is framework" and "scaffolding the writer". The 3Is framework is unique to *Talk for Writing* (see B1 below) whereas instructional scaffolding is a well-established approach to teaching (see B2 below).

B1: The '3Is'

The 3Is framework entails working from (1) Imitation, to (2) Innovation, and finally to (3) Invention in children's writing. In *Talk for Writing* the 3Is framework is regarded as a way of scaffolding the process of writing. The two initial phases in *Talk for Writing* (imitation and innovation) are the unique features of the approach. The third phase (invention) is common practice for all pupils in the later years of primary schools, where pupils are expected to be able to compose writing independently. The 3Is are embedded within a belief that making learning 'visual'/visibile supports pupils' progress (see www.**talk**4**writing**.co.uk/about/; Corbett, P. Story telling into writing, Palmer & Corbett, 2003). Imitation and innovation are built developmentally into the programme and supported by a wide range of tools and resources.

In *Talk for Writing,* imitation involves *talking the text* whereby pupils repeat fiction and non-fiction texts daily so they are able to learn and retell them. We found no evidence in the research literature that daily repetition of texts supports generic oral language skills or writing skills of school age children. There is some evidence that early language acquisition might begin with the verbatim learning of phrases and word sequences in context (Bannard & Matthews, 2008), while later language performance depends on children's ability to recombine and generate novel utterances. Repeated *exposure* to texts has been shown to have beneficial effects on younger children's vocabulary acquisition. Repeated reading of the same story to young children increases incidental acquisition of vocabulary items and arguably allows the formation of more robust lexical representations (Biemiller & Boote, 2006; Horst, 2013). By corollary, use of different syntactic patterns in adult speech significantly influences the syntactic patterns in preschool children's expressive language (Huttenlocher, Waterfall, Vasilyeva, Vevea, & Hedges, 2010).

The relationship between these types of oral activities and writing is relatively unexplored. Verbal recoding has been shown to enhance writing in performance in early writers (Adams, Simmons, Willis, & Porter, 2013). Specific use of some complex grammatical features in oral text occurs prior to writing (Donaldson & Cooper, 2013). Donaldson and Cooper (2013) argued that prior experience on the less demanding task (oral) can support performance on the more demanding task (written text). Further evaluation of this hypothesis is required. Importantly, there is some evidence that rehearsal aids recall of written texts for adults (De Beni & Moe, 2003). This recall needs to involve active retrieval, not rote learning, if learning is to be promoted (Karpicke, 2012) and Talk for Writing emphasises active recall.

In sum, there is evidence for imitation being related to the oral language skills of younger children, with some indicative evidence of support for the links between oral production and writing. Active retrieval of material has been demonstrated to support deeper learning in adults, and as such the link between rehearsal and the ways in which the text is recalled is of importance (see section C). However, further evaluations of these initial studies are required and none relate(s) to writing or oracy in the primary school years.

The move from imitation to innovation involves a shift of responsibility from teacher to pupil. Innovation occurs when "the children are helped to create their own version of a well-known text" (Primary writing project, 2014). There is evidence to support the role of this type of approach for writing in the research literature. For example, teaching nine-year-old children to "play" with the narrative genre by modifying narrative texts at word-level and content-level increased their ability to produce new meanings, and was an aid to writing enjoyable and often creative texts (Boscolo, Gelati, & Galvan, 2012). Moreover making text features explicit (referred to in the literature as Cognitive Strategy Instruction), which occurs in the *Talk for Writing* innovation phase, has been shown to improve nine-year-olds' and ten-year-olds' writing (Englert, Raphael, Anderson, Anthony, & Stevens, 1991).

B2: Scaffolding

Scaffolding is the support given during the learning process that is tailored to the needs of the student with the intention of helping the student achieve his/her learning goals (Sawyer, 2006). Typically, a learning task is divided into meaningful, progressively complex chunks to support the learner. Scaffolding is built into *Talk for Writing* in a number of ways. As noted above, the 3Is can be conceptualised as scaffolding because there is built-in development from teacher responsibility to pupil responsibility. Making this move effective depends on teachers giving formative feedback and on shared and collaborative writing activities, and these are explicitly included in the programme. It should be noted, however, that the original concept of scaffolding (Wood, Bruner, & Ross, 1976; Wood, 1998) emphasises the importance of moving children towards independence and cautions against "teaching that is too directive and intrusive" (Wood, 1998, p. 100). Although it could be claimed that the different phases of *Talk for Writing* reflect the concept of scaffolding, this appears to be conceived over much longer timescales than those envisaged by Wood (for further detail about these issues in the context of classroom teaching, and others such as the nature of guided writing, see Wyse, Jones, Bradford, & Wolpert, 2013).

In the review by Andrews and colleagues (Andrews, Torgerson, Low, & McGuinn, 2009), explicit scaffolding of writing processes improved text production, self-motivation (personal targets etc.) and reasoning. They found the strongest evidence was for argumentative text. As Andrews et al. (2009) report, supporting children's writing in this way can be done using a number of different devices, but explicit contrasts and feedback are crucial. For example, effective use of compare and contrast exercises within a graduated approach has resulted in improvements in pupils' writing (Dickson, 1999), but we did not see these in the current materials. Both collaborative writing, where writers work together to plan, draft, revise and edit their compositions (Graham & Perin, 2007), and paired writing (Yarrow & Topping, 2001) are effective in supporting pupils' writing. Moreover, paired writing has a demonstrable effect on pupils' self-esteem (Yarrow & Topping, 2001). However, scaffolded tasks do not guarantee higher levels of performance. When tasks are beneath the level of the writer or constrain the writer, writing is not improved (Donovan & Smolkin, 2002). It is, therefore, essential to tailor scaffolding to the level of the individual writer, which is why formative assessment is so important.

There is robust evidence from recent meta-analyses that formative assessment is an effective tool for supporting pupils' ability to present ideas through writing (Graham, et al., 2011). This conclusion is based on the premise that assessment of writing is valid and fair, and considerable debate exists about the ways in which children's written text should be evaluated (Dockrell, Connelly, Walter & Critten, 2014). Currently *Talk for Writing* does not include guidance on the assessment of the children's writing to measure change, i.e., no objective marking frame is provided.

In sum, there is strong evidence that both scaffolding writing tasks and paired and collaborative writing activities can support children's written text production. However, this depends on both

accurate assessment of the pupils' current strengths and weakness in the production of written text, which should allow the teacher to match the writing tasks to pupils' skill level.

C: Actions and visual tools

C1: Actions

As part of *Talk for Writing,* actions for key words are used when children learn and recite texts, and actions for connectives (e.g. first, next, after that) are particularly prominent in *Talk for Writing*. The main function of these actions is to enable children to understand about text structure and cohesion and to use these in generating their own versions. Because such actions are usually referred to as "gestures" in the research literature, that is how we refer to them here. The effectiveness of gestures in word-learning has been well-researched, and there is evidence that presenting gestures alongside words can help in the learning of iconic nouns, verbs and adjectives (i.e. gestures that bear some physical resemblance to the object, action or property that they denote) (de Nooijer et al, 2013; O'Neill, 2002; Tellier, 2008). We could find no evidence that learning gestures for more abstract concepts such as connectives aids children's learning of those types of words. There is some evidence that gesture can aid word retrieval (Krauss, 1998), but the evidence for this comes from studies of spontaneous gesture, not conventionalised gesture of the sort that children are expected to learn in *Talk for Writing*. We could find no evidence that conventionalised gesture aids retrieval of spoken language at the level above the word, or that its use would have any impact on writing.

C2: Boxing up

Boxing up refers to labelling each section of text in sequence to capture its overall structure. Effectively, boxing up provides students with writing frames which they have generated themselves (as described in Lewis & Wray, 2002). Boxing up makes text features explicit and is related to planning and organising of the text. Developing planning and revising skills is effective in supporting children's writing skills (DelaPaz & Graham, 1997; Tracy, Reid, & Graham, 2009) as part of developing "typified, but flexible, classroom routines that support writers and their development" including process writing (Graham, 2010, p.130). However, weaker writers tend not to use the plans to support their text production as they fail to see the link between the plan and the text to be produced. Boxing up in relation to texts provides an explicit format to support struggling writers in making this association.

C3: Story maps

Story maps provide information of the basic elements of the story in a diagram and are designed to help pupils in the recording and reviewing of information after the reading process (Fleck, Leichtman, Pillemer, & Shanteler, 2013). Story mapping has been shown to be effective in supporting first graders' ability to identify central narrative events in authentic children's literature for pupils in Grade 1 (Baumann & Bergeron, 1993) and for supporting reading skills in children in fourth and fifth grade (Boulineau, Fore, Hagan-Burke, & Burke, 2004). This support for reading comprehension is associated with children actively processing the text with explicit instruction from the teacher. We found no evidence to support the use of story maps for children's creation of their own written texts. However, given the importance of reading in relation to writing and the role story maps can play in supporting reading comprehension, it is likely that story maps would support text organisation.

C4: Washing lines

Washing lines are a central feature of displaying the outcomes of writing activities in *Talk for Writing* classrooms. These are strung across classrooms to illustrate sequences/content of text which children can refer to when they are writing. Washing lines were introduced in *Time to Talk: A Programme to Develop Oral and Social Interaction Skills for Reception and Key Stage One*

(Schroeder, 2001). They are designed to provide a display of ongoing work that acts as a constant reminder and a resource for children's learning, a focal point for thinking, and to display what has been learned. We found no evidence to support their use in primary school classrooms.

D: Core writing skills

Students need to be taught to become fluent with handwriting, spelling, sentence construction, typing, and word processing. *Talk for Writing* does not involve the development of IT skills so this will not be considered further in this review. There is strong evidence from experimental and quasi-experimental studies that directly teaching spelling, vocabulary and sentence-level skills improves writing performance (Institute of Education Sciences, 2012). Recommendations are to write frequently (Graham, 2007). There is also strong evidence that providing children with daily opportunities to write is effective in supporting their written text production (Graham, 2007). *Talk for Writing* explicitly recommends daily writing practice and the development of core skills and, as such, is well embedded in the research literature.

However, *Talk for Writing* does not contain an explicit developmental programme of activities for spelling, punctuation and grammar. Rather they are embedded in the toolkits and linked to the texts, and they happen daily as required. The 'toolkits' provided in *Talk for Writing* include a range of vocabulary and grammatical features across the school years. It was not evident how the programme developers had decided about which core vocabulary and grammatical features to include or how they should be ordered. Neither was it explicit how a systematic summative evaluation of the competencies could be implemented. This raises significant challenges to the implementation of this aspect of the programme.

Summary

Talk for Writing is argued to be rooted in an understanding of the needs of both learners and teachers. Our review of the literature focussed on the underpinning components and found that there was indicative evidence to support the use of imitation and innovation, and strong evidence to support the role of formative assessment. We found no evidence for the role of imitation of oral scripts in supporting writing *per se*, and no evidence to support the role of actions and visual tools to support learning of the textual components. Many of the other components such as daily writing, developing spelling skills and sentence combining have been shown to be effective in controlled interventions and, while embedded in the programme, are not the main focus of the programme.

Methodology

Design

A quasi-experimental design compared schools that had agreed to take part in the *Talk for Writing* programme (target schools) with local schools that were on the waiting list to start the programme (comparison schools). The schools were those that had a similar numbers of pupils receiving free school meals and pupils on the SEN register. Baseline and follow-up writing measures were collected in both target schools and comparison schools for both pupil writing data and teachers' practices in writing instruction. Observations and interviews were carried out only in the *Talk for Writing* schools.

Writing data were collected from pupils in Years 3 and 5 at three time points: January (baseline), June (six months after the start of the project) and January of the subsequent year when pupils were in Year 4 and 6. Data from pupils in Year 6 were only collected at two time points: January (Time 1) and June (Time 2).

Eligibility

This was an opportunistic sample. Schools participating in the *Talk for Writing* were a subset of schools implementing the programme in the Portsmouth area. Schools were recruited by the *Talk for Writing* team. All schools that agreed to take part in the study were included.

The schools agreed to take part in the evaluation and complete all the aspects of the evaluation, which they were informed about in advance. Comparison schools were initially identified by the project team and drawn from the same locality but a number withdrew. As a result, one London school with a similar pupil intake and of a similar size to the *Talk for Writing* schools agreed to participate.

Intervention

Talk for Writing is a whole school approach to develop children's writing skills. Full details of the programme are provided in Stannard and Corbett (2014). In this pilot trial schools received a series of inset days provided by Pie Corbett (the author of *Talk for Writing*) and John Stannard (who was manualising the Primary Writing Project) over an 18-month time frame. Baseline data were collected in January at the beginning of the time frame. Lead teachers were identified in each school to ensure the programme was embedded in the classroom activities

Process evaluation methodology

The qualitative process evaluation was designed to ensure that *Talk for Writing* was empirically investigated in the schools during its delivery in lessons. The main aim of the process evaluation was to assess the extent to which the self-report data from interviews with Head teachers and Literacy leads reflected *Talk for Writing* classroom practice in the selection of observed lessons and in teachers' responses to the online questionnaire.

Interviews

Members of the research team conducted 30-minute interviews with the Literacy Lead (who was sometimes, but not always, the head teacher) for *Talk for Writing* in each of the intervention schools on two occasions. As well as the main interviews, two additional interviews were conducted. One school withdrew from *Talk for Writing* in February 2014, so we conducted a short face-to-face interview with the Head Teacher to investigate his reasons for withdrawing. In addition one of the research team joined a discussion session organised by John Stannard and Pie Corbett at the end of the project in May 2014, attended by all the Head Teachers of the participating schools.

The aim of the main interviews with the Literacy Leads was to understand how *Talk for Writing* was being implemented in the schools. The interview questions were designed to focus on the following:

- How the schools had been teaching writing before implementing *Talk for Writing*;
- The implementation of *Talk for Writing* across the school (including any impact on pupils' writing);
- The specific use of *Talk for Writing* materials across different year groups;
- Barriers to the implementation of *Talk for Writing*.

The questions asked at Time 2 were identical to those asked at Time 1 apart from the removal of four background questions that were not relevant at Time 2 (the full set of interview questions, and information about at which time point they were asked, are presented in Appendix 1). Responses to interview questions were recorded as notes

Five out of the six schools participated in the interviews. At Time 1, one school did not respond to our requests to set up a phone interview, and at Time 2 a different school did not respond to our requests to set up a visit for the observation/interview. Therefore, data from both time points were only available from four schools.

Lesson Observations

Visits to five of the six intervention schools were made by members of the research team during October and November 2013 in order to carry out one lesson observation of a *Talk for Writing* lesson per school, and to interview the class teacher and the project lead. Observations were semi-structured, focusing primarily on the teachers' fidelity to the aims of the programme including to the ideas of imitation, innovation and invention, but also examining issues that arose as a result of the ways the teachers interpreted the *Talk for Writing* programme. Observations were initially recorded as field notes then the notes were edited to focus on six key areas of observation designed to capture key elements of *Talk for Writing*: 1. General lesson description; 2a. Evidence of invention and written composition; 2b. Children's choices over writing; 3a. Pupils' enjoyment of writing; 3b. Extent of children's active participation; 4. Extent to which lessons reflected the processes of writing, including use of written drafts.

Basic observation data included notes on the timing of the lesson, physical environment of the classroom, numbers of pupils present in class, and whether the session involved small group and/or individual work in addition to whole class teaching. The role of Teaching Assistants was noted. Field notes included fragments of key interaction sequences between teacher and pupils when relevant.

A checklist of key features of *Talk for Writing*, as identified in the guidance documentation supplied to the research team, was undertaken for each observed lesson/classroom. Analysis of the lesson observation data including quantifying the frequency of key features across the five schools (see Appendix 2).

The six key areas of observation were used as *a priori* categories for qualitative data analysis that identified themes for findings from the observation data (supported by NVivo analysis software). Final analysis involved identification of overarching issues relevant to the evaluation.

Teacher survey

We designed a questionnaire to capture professionals' views on the teaching of writing and the teaching practices they used in relation to writing and the frequency with which these occurred in their classrooms. Three factors informed the design of the questionnaire. Firstly we identified key activities in the teaching of writing, which reflected theoretical understanding of the development of writing during the primary school phase (Berninger & Swanson, 1994; Berninger et al., 2002). These items

were based on the 'simple view of writing' model and covered transcription (spelling and handwriting), idea generation (at word, sentence and text level) and planning and revision. Secondly we reviewed other questionnaires of the effective teaching of writing and incorporated items that were appropriate for the education system in England (Graham, 2008). Finally we ensured that elements that were regarded as core to *Talk for Writing* were included in the questionnaire and the questionnaire was finalised with agreement from the *Talk for Writing* team. Demographic information, training in the teaching of writing, and information about classroom composition were also collected. The questionnaire (available from the authors of this report) was constructed for use with Survey Monkey. It was piloted with 30 primary school teachers in a different location who did not participate in the main study. Relevant modifications and revisions were made after the pilot. If respondents did not engage in a particular practice there was a not applicable option and these choices were not included in the analyses.

Impact evaluation methodology

The impact evaluation examined the changes in children's writing at word, sentence and text level and handwriting fluency. There were no standardised measures that covered the age range and captured the potential impact of the *Talk for Writing programme*. To address this *four* subtests (handwriting fluency, word generation, sentence combining and paragraph writing) from the Weschler Individual Attainment Test II (WIAT-11, 2005) were used in all target and comparison classes. Standard quartiles were available for two measures: words generation and numbers of words produced in the written text. In addition all paragraph texts were analysed for quality (using the WIAT scoring frame), spelling errors, and correct word sequences (that is, grammatical accuracy).

Outcomes

Pupils' writing was assessed at three time points: baseline (January, 2013) prior to the start of the project, six months into the project (June 2013), and finally in January 2014 (when the project had been active in the schools for a full academic year).

We used the writing scales from the WIAT II to examine handwriting and text production and word, sentence and text level at each assessment time and compared performance on raw scores across the time periods. To provide a detailed analysis of the writing task to ensure changes resulting for the intervention were captured, we included additional assessments of texts to include grammatical accuracy (which was captured by correct word sequences) and spelling. This ensured that we were capturing the stipulated goals of the programme.

Coding and reliability

Two experienced psychologists, who were both qualified teachers, coded the data. They were aware of the objectives of the study but blind to participants and schools. The accuracy and reliability of the coding of the children's writing data was established by developing a preliminary coding frame based on the WIAT and testing the procedure on a subsample of texts. A revised coding frame was developed and this new coding frame was trialled, several minor alterations were made prior to use

To train the coders, a set of 40 scripts was anonymously coded twice at baseline. This resulted in clarification of acceptable responses for word generation and the coding of text quality . We developed a more sophisticated coding system for the sentence combining scale to ensure we were measuring the complexity of sentence levels skills in the children. Scripts from all year groups and all schools were randomly allocated to coders.

The project directors recoded a random selection of coded scripts (N = 60). The scripts were drawn equally from the three-year groups and the two coders but randomly sampled intervention and comparison schools. High levels of coding accuracy were found and all intraclass correlations are reported in the results. Throughout the subsequent waves of the project, random samples were again checked for coding accuracy.

Teachers in all schools participating in the study (Intervention schools n =6, Comparison schools n = 3) were asked to complete the online survey at baseline (January 2013) and follow-up (January 2014). The link to the questionnaire was sent to the Head teacher (or the lead teacher for literacy) who was asked to distribute the link to all teachers and provide time for the completion of the questionnaire. Responses were monitored from schools and a maximum of three reminders were sent to schools after the questionnaire had been distributed. Intervention schools were also reminded about the questionnaire when evaluation staff were in the schools.

The survey was closed one month after the link was made live and 188 staff responded (range per school 2 to 40) at baseline. Responses were received from two comparison schools and four intervention schools at follow-up (respondents N = 69).

Timeline

Interviews with the Literacy Leads were carried out on two occasions:

Time 1: June 2013, i.e. in the second term of the project, conducted over the phone. .

Time 2: October 2013, i.e. in the third term of the project, conducted face-to-face in the school. Classroom observations also took place on the same day that the interviews were carried out (in October 2013).

Questionnaires with school staff were carried out on two occasions

Time 1 January 2013 teachers in the intervention and comparison schools completed the online questionnaire.

Time 2: January 2014 teachers in the intervention and comparison schools completed the online questionnaire. At this point no responses were received from the school that had withdrawn from the *Talk for Writing* intervention and from one comparison school

Participants

At Time 1, one school did not respond to our requests to set up a phone interview. At Time 2 a different school did not respond to our requests to set up a visit for the observation/interview. Therefore, interview data from both time points were only available from four schools, and observation data were only available from five schools.

At baseline 188 staff completed the questionnaire, and 69 completed it at follow-up. All staff responses were anonymous for ethical reasons so no within participant comparisons across time are possible.

Process evaluation results

The process evaluation involved three elements: interviews with Literacy Leads, observations in classrooms and online questionnaires completed by school staff.

Implementation

It was clear from both the interviews and the observations that the schools were enthusiastic about implementing *Talk for Writing* and that some of the activities expected as part of *Talk for Writing* were taking place during lessons. However, one school did pull out of the project in February 2014. Appendix 4 contains notes from an interview with the headteacher of this school.

Schools were employing a variety of strategies for implementing *Talk for Writing* across the school, with pro-active involvement from the Literacy Lead. Strategies included observations of *Talk for Writing* lessons by the Literacy Leads, the organisation of follow-up meetings after the *Talk for Writing* whole-school training days, and the sharing of good practice between staff. A particularly welcome feature, the Literacy Leads felt, was the involvement of Teaching Assistants as part of the training and implementation.

Inducting new staff into *Talk for Writing* was identified as an issue that made implementation challenging, but the schools were tackling this: at Time 2, additional support was being given to staff who hadn't been involved in *Talk for Writing* since the start of the project. Literacy Leads reported that they were confident that their schools were implementing *Talk for Writing* faithfully, and the majority of staff in all schools (sometimes all staff) were reported to be fully committed to the project.

The Literacy Leads reported that *Talk for Writing* was being implemented throughout school, from Reception to Year 6. However, it was differentiated according to age of children, with a greater focus on imitation with younger children and on invention with older children.

Fidelity

One of the purposes of the lesson observations was to evaluate the fidelity to the *Talk for Writing* approach. A check of key physical features of the classroom environment showed that story maps were the physical feature that were both most frequently present in classrooms and used in the observed lessons (see Appendix 3). Washing lines were also most frequently present but only used in one of the observed lessons. Writing journals were the feature least often observed. In general, in the lessons that were observed, there was more attention paid by the teachers to word and sentence-level features of writing, and less attention to text-level features. The use of the 'Toolkits' from *Talk for Writing* was infrequently observed. In four out of five of the observed lessons there was evidence of forms of shared writing, guided writing, and the involvement of Teaching Assistants. Three out of five observations featured pupils engaging in tightly structured individual writing that included filling in pre-prepared tables in pupil exercise books, or developing ideas already present in a story map.

Outcomes

The Literacy Leads reported that there had been no consistent approach (if any approach) to writing across the schools before the implementation of *Talk for Writing*. Apart from the occasional teacher knowing about *Talk for Writing*, school involvement in the project started for most schools in January 2013. When asked what they thought the teachers in their school understood by *Talk for Writing*, the most common responses given by the Literacy Leads were that children are immersed in texts, that there are 3 elements (imitation, innovation and invention), and that it is a whole-school approach. When Literacy Leads were asked which elements of *Talk for Writing* are different to what teachers were doing before, they commented that *Talk for Writing* leads to greater structure, balance and

consistency compared to how writing was previously taught, and that it leads to greater enjoyment of writing for staff and pupils.

All Literacy Leads reported seeing an impact on children's writing even just six months after the start of the project, and reported positive effects with all age groups and across all types of learners. Literacy Leads also reported that teachers felt confident teaching Imitation/Innovation, but less confident teaching Invention. They had some reservations about *Talk for Writing* being suitable for Year 6 children and high attainment writers, and they thought that there was not enough independent writing in *Talk for Writing*. Indeed, one Literacy Lead expressed concerns that for Year 6 children some *Talk for Writing* writing cannot be used as evidence for SATS because it is too structured and might not count as "independent" writing. That *Talk for Writing* might not be appropriate for older children was also mentioned in our interview with the Head Teacher of the school that withdrew from the project (Appendix 4).

Formative findings from the process evaluation

Apart from one school (which withdrew before the end of the project) there was genuine enthusiasm from schools about *Talk for Writing*, and Literacy Leads were confident that *Talk for Writing* was being implemented faithfully. It was reported that *Talk for Writing* had been adopted as the whole school approach, and schools considered that *Talk for Writing* was sustainable precisely because it is a whole-school approach. An oft-mentioned benefit was the active engagement of Teaching Assistants in *Talk for Writing* classes.

Schools reported improvements in children's writing across the year groups, and with all children. They also reported improvements in children's language development. Teachers were reported to be more confident in teaching writing, and children were showing greater enjoyment of writing. Nevertheless, the lesson observations revealed that after nine months of taking part in the *Talk for Writing* programme, there was very little evidence of individual children composing extended pieces of written text with the opportunity to edit the writing, commensurate with their stage of development. The unit structure of *Talk for Writing* was designed to end with the *invention* that is a prime characteristic of independent writing but there was a danger that there is simply not enough opportunity for pupils to experience independent writing.

The use of pictures and icons, in the story/text maps, to represent text is a novel feature of the approach to writing. Their use did appear to motivate the children particularly for shared writing. However, there are questions about the extent to which this teaching of an alternative representation of meaning is better than more standard ways of summarising texts such as note form/bullet points/tables etc.

Apart from the whole-text emphasis of the story maps, the observations revealed an emphasis on word-level and sentence-level features of writing including technical grammatical meta-language. Observations of training sessions revealed that the emphasis on grammar had already been influenced by the government requirements for teaching and testing of grammar to be statutorily implemented from September 2014 as part of the new national curriculum.

The work in classrooms included the use of stimulus texts specially authored by the *Talk for Writing* authors, and texts authored by teachers. The main advantage of teacher-authored texts is that the teacher can very carefully design the text to support the teaching of particular lesson objectives. The main disadvantage is that the texts that the teachers author may not be a sufficiently accurate representation, linguistically, of real texts. As models, the use of such texts can then lead to misconceptions in the minds of pupils about key textual forms and features.

Findings of the two additional interviews not included here, with the school that withdrew and with the developers of *Talk for Writing*, are in Appendix 4.

Baseline questionnaire results

Teachers in the intervention and comparison schools completed an online questionnaires at the beginning of the project (January 2013) and again in January (2014). The data from the teacher questionnaires were used to examine the differences between intervention and control group activity as reported by the school staff.

Results of the survey are divided into three sections: descriptive information about the respondents, their training, their views about teaching writing and the profile of pupils in their classrooms at baseline; intervention and comparison schools responses to the teaching of writing at baseline; differences in responses between the intervention and comparison schools at follow up. A final section provides information on the teachers' views of *Talk for Writing* included in the online questionnaire.

One hundred and thirty nine staff in the intervention schools and 49 in the comparison schools completed the questionnaire. The majority of respondents were female (90%), 58% had been teaching for more than five years, and 13% had been teaching for less than a year. Eighty-five per cent of the respondents had been in their current school for more than one year. Thirty-one per cent of respondents were teaching assistants. Seventy per cent were working in Key stage 2. Patterns of responses did not differ significantly across target and comparison schools. The majority of respondents reported that there was a whole school approach to writing ($n = 73$, although 16 reported not knowing) and a lead teacher responsible for writing ($n = 91$). Sixty per cent of respondents had attended professional development activities related to writing and there was no significant difference between intervention and comparison schools (χ^2 (1, 175) = 2.46 *ns*). The majority of these activities were in-service sessions ($n = 47$) followed by writing workshops ($n = 37$). Only one respondent reported completing an academic course which included a module on writing.

Figure 2 presents the participants' views on their preparedness to teach writing at baseline. In general respondents viewed themselves as well prepared, enjoying teaching writing and able to deal with struggling writers. There were no significant differences or trends to indicate differences for any item between the respondents in intervention and comparison schools.

Figure 2: *Comparison of teachers' (intervention and comparison school) views on the teaching of writing (Scale: 1 strongly agree to 6 strongly disagree).* **Lines indicate one standard deviation above and below the mean**
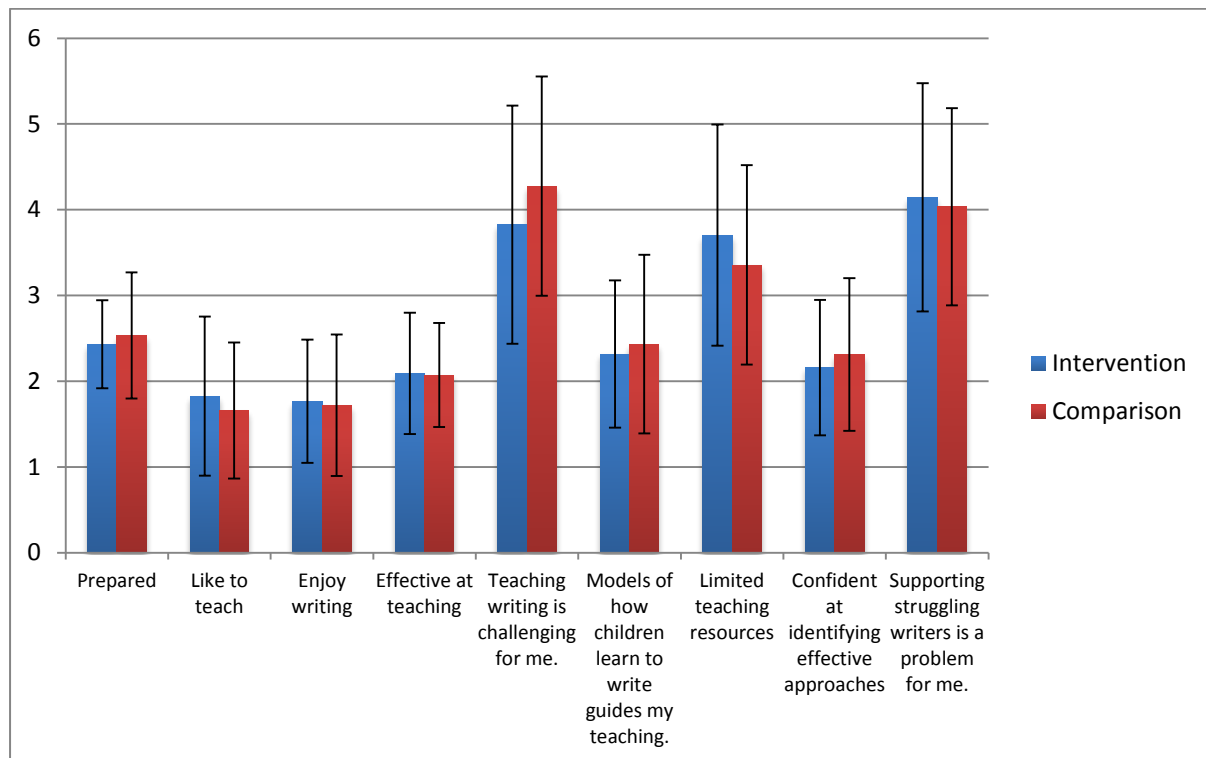
We asked teachers to report on the numbers of pupils in their class who were in receipt of free school meals (FSM) or who were recorded as having special educational needs (SEN). These data are presented in Figure 3. There were no significant differences between intervention and comparison schools in the proportion of students in receipt of free school meals or who were designated to be at school action or school action plus. There was a large and significant correlation ($r = .54$, $p < .001$) between pupils on free school meals and special educational needs (school action + or statement). Having English as an additional language (EAL) was not significantly related to SEN but was associated with free school meals ($r = .27$, $p = .02$).

Figure 3: Proportion of pupils receiving free school meals or with designated special educational needs
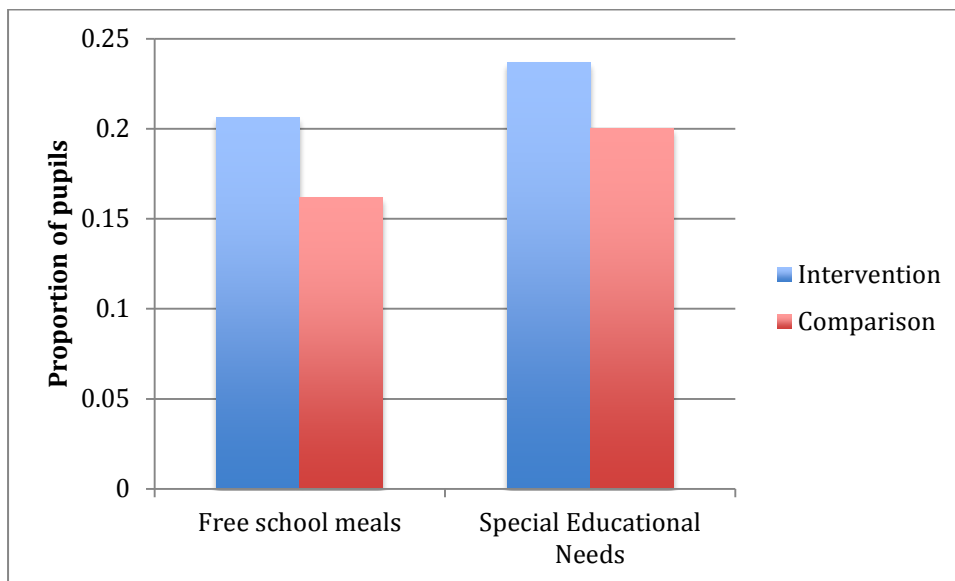
There was a mean of 27 pupils (*SD* = 5.5) in each class. Class teachers were asked to report the performance of pupils in their class in relation to expected national targets for writing reading and speaking and listening.

As Figure 4 shows the proportion of pupils in the sample that reached national curriculum target levels in writing is generally lower than those that reached target levels for reading and oral language. A repeated measures ANOVA confirmed this ($F_{(2,142)}$ = 12.38, $p < .001$, partial eta squared = .15). Post hoc tests revealed that reading performance was reported to be significantly better than speaking and listening ($p = .03$) and writing ($p < .001$) and speaking and listening was reported to be significantly better than writing ($p = .03$). Reading, speaking and writing levels were not significantly correlated with reported SEN status, EAL status or FSM status.

Figure 4: Mean proportion (SD) of pupils reported to be performing at national curriculum levels
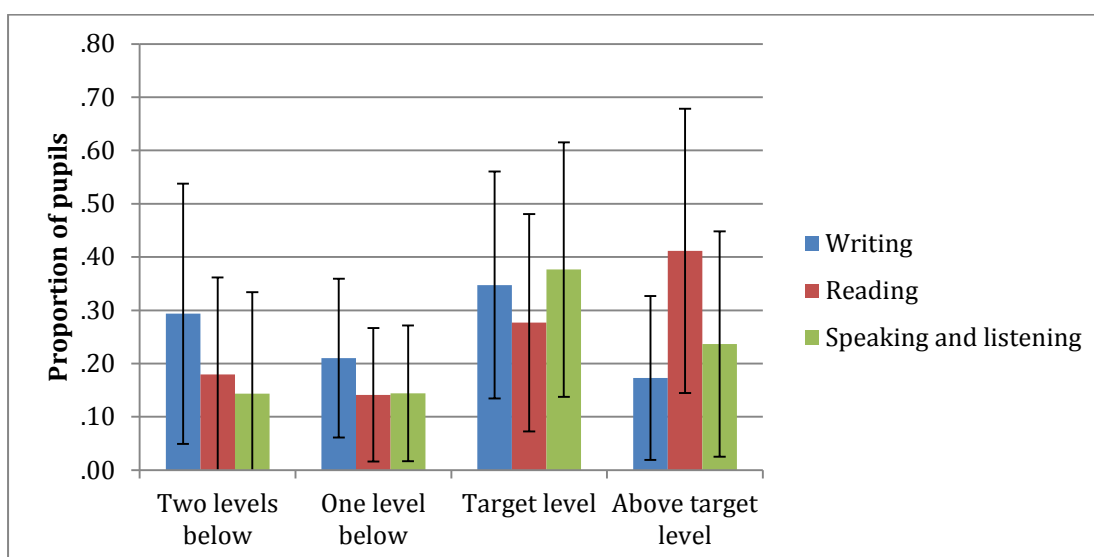
Approaches to the teaching of writing

In this section we compare the mean responses between the comparison and intervention schools. A Likert scale was used where a high score indicated more frequent use (6 = daily) and a low score (1) that the activity was never used or only happened occasionally during the year. Mean scores in frequency of the activities for each item are presented in Appendix 5.

Our focus was the average occurrence of the teaching activities and the extent to which the intervention and comparison schools varied at baseline in their reported use of the teaching activities. Mean scores and standard deviations are presented in Table 1. On average activities happened weekly but as Table 6 shows there were significant differences across items. Spelling and word level activities were reported to be more common than sentence level, text level and planning and revising and generic activities ($F(5,415) = 56.423$, $p < .001$, partial eta squared = .41).

Intervention and comparison schools differed on their reported use in 11 of the 50 different activities. These differences indicate that at baseline different approaches were being taken to the teaching of writing. Comparison schools reported focussing more regularly on explicit approaches to word level work, which included: analysing words into subcomponents (Hedge's G =.46), work on apostrophes (Hedge's G =.54) and drafting on a computer (Hedge's G =.98) and revising (Hedge's G =.57). Comparison schools also reported a greater use of interactive whiteboards (Hedge's G =.45). By contrast the intervention schools reported focussing more regularly on handwriting (Hedge's G =.65), on phoneme level work (sounding out phonemes, Hedge's G =.65), and generic activities such as writing with learners (Hedge's G =.52) and teachers reading aloud their own writing (Hedge's G =.44).

Table 1: Mean reported use of teaching activities between intervention and comparison schools at baseline

Skills and approaches	Target Domain M(SD)	Item focus	Intervention school M (SD)	Comparison school M (SD)
Transcription	Handwriting 3.59 (1.86)	Practice in printed handwriting	3.20 (2.04)	2.86 (1.76)
		Practice in Joined/cursive handwriting**	4.31 (1.74)	3.16 (1.81)
	Typing	Training in touch typing	1.64 (1.24)	2.06 (1.43)
	Spelling 3.95 (1.08)	Sound out phonemes**	5.35 (1.15)	4.65 (1.54)
		Analyse words into subcomponents**	3.75 (1.78)	4.50 (1.05)
		Apply knowledge of spelling conventions	4.27 (1.74)	4.60 (.89)
		Use knowledge of common letter strings, visual patterns and analogies	4.34 (1.66)	4.23 (1.23)
		Check spelling using word banks & dictionaries	4.45 (1.57)	4.74 (1.29)
		Explicit instruction of word families	3.40 (1.71)	3.43 (1.17)
		Explicit instruction in the use appropriate terminology***	3.60 (1.91)	4.55 (1.12)
		Explicit instruction in the use of suffixes and prefixes*	2.95(1.58)	3.68 (1.28)
		Explore the meaning, use and spelling of common prefixes /suffixes*	3.14 (1.65)	3.76 (1.27)
Idea generation	Word level 3.94 (.80)	Encourage pupils to use a wide range of vocabulary	4.14 (1.03)	4.23 (1.15)
		Use lexical contrasts	3.22 (1.18)	3.50 (1.35)
		Expand vocabulary in written tasks by connecting to their prior knowledge	4.03 (1.08)	3.86 (.83)
		Model a piece of writing, explaining and verbalising your vocabulary choices	4.24 (.92)	4.00 (.96)
	Sentence level 3.77 (1.08)	Highlight differences in meaning between specific grammatical structures	3.19 (1.16)	3.37 (1.15)
		Teach word classes and the grammatical function of words	3.62(1.36)	3.83 (.99)
		Highlight features of different types of sentence	3.21 (1.39)	3.31 (1.17)
		Explicit instruction in complex sentence grammar	3.42 (1.43)	3.41 (1.21)
		Practice in sentence combining	3.81 (1.18)	3.64 (1.14)
		Explicit instruction punctuation at the end of sentences	5.31 (1.25)	5.53 (.88)
		Explicit instruction on commas, semi-colons and colons	3.49 (1.74)	4.16 (1.57)
		Explicit instruction on apostrophes**	3.04 (1.74)	3.97 (1.60)
		Explicit instruction on the use of speech marks	3.50 (1.63)	3.73 (1.45)
	Text level 3.47 (.74)	Model writing strategies	4.18 (.91)	4.00 (.73)
		Use drama to support pupils'	2.74 (1.08)	2.72 (1.13)

		generation of ideas for writing		
		Teach choices in relation to topics and ideas for their writing	3.75 (1.13)	3.38 (1.28)
		Analyse the forms of texts they read as a stimulus for their writing	3.25 (1.21)	3.46 (1.17)
Planning and revising	2.72 (.79)	Develop ideas from the plan into written text	2.89 (1.19)	2.55 (1.15)
		Create a handwritten draft before a word processed draft	1.71 (1.15)	2.00 (1.06)
		Create a draft on computer before a hand written version[**]	1.27 (.67)	2.13 (1.29)
		Revise[**]	2.71 (1.27)	3.45 (1.35)
		Proofread	3.45 (1.42)	3.13 (1.38)
		Present clear final copy.	2.40 (1.22)	2.40 (1.27)
		Brainstorming and creating a visual representation	3.78 (1.04)	3.68 (1.17)
		Prepare neat and correct version	2.40 ((1.22)	2.40 (1.27)
Generic activities	3.60 (.67)	Discuss and evaluate own and/or others writing	3.95 (1.07)	4.00 (.84)
		Model writing strategies with small groups of children	4.26 (1.04)	3.97 (1.0)
		Write with learners, constructing the texts together[*]	4.14 (1.00)	3.62 (1.21)
		Learn and rehearse specific texts	3.22 (1.18)	3.27 (1.34)
		Pupils assess each other's work	3.26 (1.27)	3.77 (1.19)
		Teacher reads own writing aloud to class[*]	3.89 (1.19)	3.37 (1.1)
		Activities that vary the formality of written language	2.57 (1.16)	2.47 (1.11)
Resources		Visual aids	4.61 (0.89)	4.71 (.72)
		Use interactive white boards[***]	4.48 (1.21)	4.95 (.22)
		Use small white boards	4.51 (.96)	4.73 (.55)
		Use writing prompts	3.70 (1.15)	3.77 (.87)
		Structured worksheets	3.18 (1.13)	3.48 (1.25)

Significance levels [*] p <.05, [**] p <.01, [***] p <.001

Post-test questionnaire results

The follow-up questionnaire was completed by 69 respondents of whom 64 responded to the questions related to teaching (Intervention schools *n* = 52; comparison schools *n*= 12).

The demographic pattern of respondents was similar to baseline data. The majority of responses were female (65), 25 of the respondents had been teaching for more than five years, and 9 had been teaching for less than a year. Fifty respondents had been in their current school for more than one year. Seventeen of the respondents were higher level teaching assistants. Fifty-five of the respondents were working in Key Stage 2. Patterns of responses did not differ significantly across intervention and comparison schools. The majority of respondents reported that there was a whole school approach to writing (48, although 3 in the intervention schools reported not knowing) and a lead teacher responsible for writing (49 cases) however two participants in intervention schools reported that there was no lead teacher for writing.

Figure 5 presents the participants' views on their preparedness to teach writing. In general, respondents viewed themselves as well prepared, enjoying teaching of writing and able to deal with struggling writers. There were no significant differences or trends to indicate difference for any item between the respondents in intervention and comparison schools.

Figure 5: Post-test comparisons of respondents in *Talk for Writing* and comparison schools (from 1 strongly agree to 6 strongly disagree)
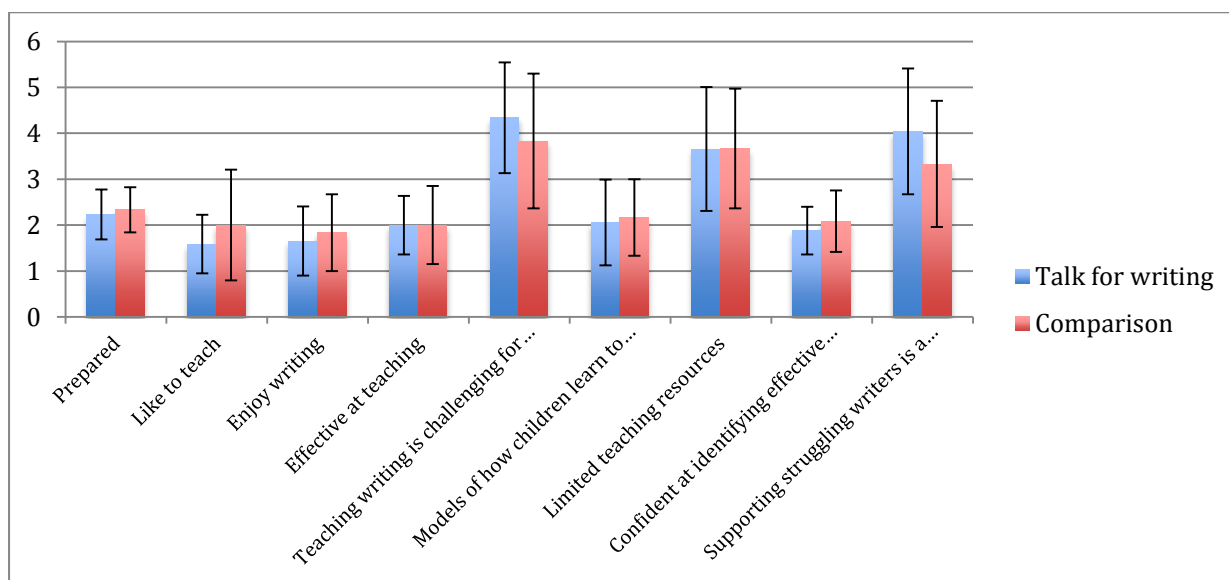
Virtually all the respondents from the intervention schools reported attending a professional development activity related to writing, which we assume reflects the *Talk for Writing* activities (95%, *n* =45). Reports were significantly lower for the comparison school (58%, *n* = 7; χ^2 (1, 64) = 11.49, p < .001).

Table 2 provides post-test questionnaire results for the intervention and comparison teacher responses. Items that differed significantly at baseline are highlighted in yellow. Where significant differences exist between respondents at follow up they are marked with an * to denote level of significance. A + indicates a trend towards significance.

Given wider changes in the teaching of writing (e.g. the introduction of the spelling, grammar and punctuation test) and to provide the most comprehensive assessment of *Talk for Writing* we focus on three aspects of the questionnaire results: significant differences between intervention and comparison schools at post-test, changes in patterns of responses over time and differences which would be predicted given the *Talk for Writing* programme.

At follow-up the two groups of respondents differed in their ratings of four items. Participants in the intervention schools continued to report more sounding out of phonemes in relation to spelling but in contrast to baseline, now reported significantly more use of learning and rehearsing texts. The latter was occurring on average once a week. By contrast the comparison respondents reported greater proofreading activities and by corollary more assessment of pupils' writing by their peers. Neither of these differences was evident at baseline and they reflect an increase in this reported activity in the comparison schools but no change in the intervention schools.

At baseline we had noted a greater reliance on explicit teaching activities in the comparison schools. This was no longer evident at follow up and reflects in some cases a small increase in the intervention

schools (analysing words into subcomponents, revision) but in other cases a relative decrease in the comparison schools (explicit instruction in the use of appropriate terminology, suffixes and prefixes). The intervention schools maintained their greater focus on phoneme level work (Hedge's G = 1.80) and the comparison schools continued to report a greater focus on planning and revising (developing ideas from a plan; Hedge's G =.53) and proof reading (Hedge's G =.86) and pupils assessing each other's work (Hedge's G =1.0). By contrast the intervention schools reported a much greater use of learning and rehearsing specific texts (Hedge's G = 1.43)

Table 2: Post-test results of the teacher questionnaire

Skills and approaches	Target Domain M(SD)	Item focus	Intervention school M (SD)	Comparison school M (SD)
Transcription	Handwriting	Practice in printed handwriting	2.5 (2.09)	2.09 (1.92)
		Practice in Joined/cursive handwriting	5.11 (1.12)	4.09 (1.92)
	Typing	Training in touch typing	1.85 (1.23)	2.40 (1.71)
	Spelling	Sound out phonemes[**]	5.16 (1.09)	3.09 (1.30)
		Analyse words into subcomponents	4.11(1.26)	3.90 (1.33)
		Apply knowledge of spelling conventions	4.75 (1.46)	4.09 (1.3)
		Use knowledge of common letter strings, visual patterns and analogies	4.58 (1.27)	4.40 (.84)
		Check spelling using word banks & dictionaries	4.89 (1.00)	4.72 (1.27)
		Explicit instruction of word families	3.83 (1.31)	3.90 (.74)
		Explicit instruction in the use appropriate terminology	3.97 (1.23)	3.50 (1.58)
		Explicit instruction in the use of suffixes and prefixes	3.42 (1.48)	2.60 (1.35)
		Explore the meaning, use and spelling of common prefixes /suffixes	3.46 (1.50)	3.50 (1.35)
Idea generation	Word level	Encourage pupils to use a wide range of vocabulary	4.35 (.68)	4.11 (1.36)
		Use lexical contrasts	3.31 (1.18)	2.78 (.83)
		Expand vocabulary in written tasks by connecting to their prior knowledge	4.03 (.77)	4.11 (.93)
		Model a piece of writing, explaining and verbalising your vocabulary choices	4.41 (.66)	4.33 (.71)
	Sentence level	Highlight differences in meaning between specific grammatical structures	3.13 (1.74)	3.00 (.93)
		Teach word classes and the grammatical function of words	3.68 (1.08)	3.60 (.84)
		Highlight features of different types of sentence	3.00 (1.12)	3.11 (1.05)
		Explicit instruction in complex sentence grammar	3.02 (1.05)	3.33 (.70)
		Practice in sentence combining	4.05 (.91)	4.22 (.44)
		Explicit instruction punctuation at the end of sentences	5.51 (.93)	5.23 (.90)
		Explicit instruction on commas,	3.92 (1.36)	3.90 (1.91)

		semi-colons and colons		
		Explicit instruction on apostrophes	3.51 (1.46)	3.60 (1.50)
		Explicit instruction on the use of speech marks	3.58 (1.59)	3.67 (1.12)
	Text level	Model writing strategies	4.33 (.63)	3.89 (1.67)
		Use drama to support pupils' generation of ideas for writing	2.67 (1.20)	2.67 (.71)
		Teach choices in relation to topics and ideas for their writing	3.81 (1.12)	3.67 (1.12)
		Instruction in paragraph construction	3.49 (1.07)	3.33 (.71)
		Analyse the forms of texts they read as a stimulus for their writing	3.12 (1.06)	3.22 (.67)
Planning and revising		Develop ideas from the plan into written text[+]	3.01 (1.01)	3.56 (1.13.)
		Create a handwritten draft before a word processed draft	2.00 (.95)	1.67 (1.00)
		Create a draft on computer before a hand written version	1.25 (.59)	1.38 (.52)
		Revise	3.09 (1.09)	3.55 (.88)
		Proofread [**]	3.52 (.97)	4.33 (.71)
		Present clear final copy.	2.45 (1.14)	1.89 (1.27)
		Brainstorming and creating a visual representation	3.89 (.92)	4.00 (.87)
		Prepare neat and correct version	2.40 ((1.22)	2.40 (1.27)
Generic activities		Discuss and evaluate own and/or others writing	4.10 (.89)	4.30 (1.25)
		Model writing strategies with small groups of children	4.40 (.80)	4.50 (.33)
		Write with learners, constructing the texts together	4.39 (.55)	4.22 (.67)
		Learn and rehearse specific texts [***]	4.20 (.90)	2.78 (1.30)
		Pupils assess each other's work [**]	3.29 (1.23)	4.44 (.52)
		Teacher reads own writing aloud to class	3.99 (1.09)	3.44 (.88)
		Activities that vary the formality of written language	2.67 (1.10)	3.00 (.67)
Resources		Visual aids	4.81 (0.71)	4.50 (.52)
		Use interactive white boards	4.50 (1.08)	4.44 (1.33)
		Use small white boards	4.59 (1.96)	4.11 (1.05)
		Use writing prompts	3.85 (1.10)	3.56 (.73)
		Structured worksheets	3.29 (1.27)	3.55 (.29)

Significance levels [*] p <.05, [**] p <.01, [***] p <.001

Talk for Writing – perspective of the school staff

Six intervention schools were asked to complete questions related to *Talk for Writing* at the final evaluation point. Fifty-five intervention school staff completed the questionnaire, of whom 15 did not respond to the questions about *Talk for Writing*. Non-respondents to this section came from all four schools.

All staff who responded to the questionnaire had been involved in the project and were using *Talk for Writing* in their classrooms. Thirty-three (82%) had attended a training day (see Stannard & Corbett). Six staff were Literacy Leads for the *Talk for Writing* project. Table 3 provides the teachers responses to the Likert scale questions. As the table shows staff were positive about the project, reported few problems and virtually no negative impact on other teaching activities.

Table 3 Teachers comments about *Talk for Writing*

Questions relating to Talk for Writing	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Straight forward to implement	15	21	2	1	0
Appropriate materials	24	12	3	0	0
Materials easy for staff to use	21	16	3	0	0
Pupils enjoy sessions	23	15	1	1	0
Writing has improved	19	17	4	0	0
Appropriate for all year groups	25	9	5	1	0
Enhanced ways of teaching writing	26	12	2	0	0
Recommend to other schools	29	9	2	0	0
Well supported by the management team	27	13	0	0	0
Problems in following programme	1	5	3	16	15
Not suitable for competent writers	2	0	9	13	16
Suitable for struggling writers	28	11	1	0	0
Programme negative impact on other teaching activities	1	2	3	12	22

Respondents were also asked to identify key benefits and key challenges of the programme. Twenty-six different challenges were identified. Seven reflected challenges with differentiation across year and ability groups. For example "Adapting for different levels of ability in upper key stage 2". A further seven referred to problems related with implementation including getting the students to do the actions "encouraging reluctant participants in story actions and finding relevant texts" and "knowing how to use it for non-fiction". A further five focussed on lack of resources or the time consuming element of resources and text familiarisation "ensuring the learnt text is appropriate and suitable and having to spend time creating these".

Twenty-two respondents commented on the benefits of *Talk for Writing*. Confidence in writing was seen as a major benefit (N=6) and this confidence was often reported to be associated with engagement and learning about the structure of texts:

"Children find it fun and are excited to learn. They enjoy acting out the stories to the class and parents. Quiet and reluctant children become confident in joining in the actions of the story. It helps with vocab. It helps with the layout of writing (how to write a sentence etc.)"

Conclusions – teacher questionnaires

Response rates from both Talk for Writing schools and comparison schools were lower at follow-up resulting in response bias. It is not possible to ascertain the direction of the bias. Twelve professionals responded from comparison schools, which limits the power of comparisons. However, their pattern of responses were in line with responses at baseline.

There were few differences in the respondents' reported practices in the teaching of writing between comparison and intervention schools at follow up. Respondents in the intervention schools were more likely to report reading their own writing out loud in the classroom. However there were no reported differences between intervention and comparison schools for other specific targets addressed by *Talk for Writing,* which staff had now experienced for 12 months such as greater use of word level activities, text planning and visual aids. As at baseline the responses from the two groups did not differ statistically significantly.

Where staff responded to the evaluation questions about *Talk for Writing* they were generally positive. The programme was seen as enjoyable, appropriate for all year groups and particularly struggling writers. Challenges were identified in differentiating materials for different ability groups in upper key stage 2, "encouraging reluctant participants in story actions and finding relevant texts" and "ensuring the learnt text is appropriate and suitable and having to spend time creating these".

These positive responses need to be considered in the light of no responses from staff from the school that withdrew from the programme and 15 of the teachers (27%) who did not respond to the questions about the *Talk for Writing* programme.

Impact evaluation results

Participants and pupil characteristics

Five intervention schools completed all three phases of the project which involved collection of writing data from the pupils, where pupils in Years 3, 5 and 6 completed assessments in January and June, and Years 3 and 5 repeated the assessments in the following January. Collection of the comparison data was more complicated. A school in another locality replaced the junior school that dropped out prior to the data collection; however, this school later withdrew after the first two phases of the study. Therefore, three comparison schools completed the first two phases of the study and two schools completed all three phases of the study. Numbers of pupils who participated at each phase of the writing data collection are presented in Table 4. Data were not available for all children on all measures across the time points.

Table 4: Pupil data for three project phases

Number of pupils	Data collection Point		
	January 13	June 13	January 14
Intervention	633	549	347
Comparison	571	509	245
Total	1211	1058	592

There was no significant difference in the gender distribution between intervention and comparison schools $(X^2 (1, 1205) = .004, p = .95)$ or in the numbers of pupils claiming free school meals $(X^2 (1, 1206) = .378, p = .34)$. However, there was a significant difference in SEN status $(X^2 (1, 1206) = 19.04, p < .001)$, where the intervention schools had more pupils with a statement of special educational needs at baseline.

The intervention and comparison pupils did not differ significantly in age at baseline (Intervention M = 113.75 SD = 15.77; Comparison M = 114.52, SD = 16.34: $t (1, 1205) = -.832, p = .41$).

After six months of the programme pupils in the comparison schools scored significantly higher in national curriculum levels for writing at the end of the summer term in the first year of the study (Intervention M = 7.90 SD = 2.51; Comparison M =8.65, SD = 3.0: $t (1, 1042) = - 4.39, p < .001$, Cohen's d= .27). No national curriculum data were available from the schools at the end of the project.

There were also some differences in baseline writing measures. These data are shown in Tables 5 and 6. Standardised quartiles for word fluency showed no significant differences $(X^2 (4, 1205) = 9.11, p = .06)$. For number of words written the distributions differed significantly $(X^2 (3, 1205) = 20.28, p < .001)$, where children in the comparison schools were performing better. Twenty-nine per cent of the pupils in the intervention schools were in the bottom quartile for numbers of words written compared with 20 per cent in the comparison schools. All subsequent analyses control for performance at baseline.

Table 5: Pupils in quartiles for word fluency at baseline (N = 1205)

	Too low to score	First quartile	Second quartile	Third quartile	Fourth (top) quartile
Intervention	23	174	202	109	125
Comparison	21	143	187	74	147

Table 6: Pupils in quartiles for numbers of words written at baseline (N = 1205)

	First quartile	Second quartile	Third quartile	Fourth (top) quartile
Intervention	183	101	100	249
Comparison	112	81	88	291

Outcomes and analysis

Reliability and validity of the writing measures

Given the wide range of different measures used to capture the potential impact of *Talk for Writing* and the lack of standardised measures across the various dimensions, we established a) whether our coding was reliable and b) whether the variables were sensitive to developmental differences and could capture change. Finally, to examine validity within the current school based assessments of writing, we compared scores on the writing measures and teacher rated NC levels.

A 5% sample of the scripts (n= 60) was evaluated by two independent coders at baseline. As shown in Table 7 agreement was very high across the coding of all writing dimensions. Quality rating and incorrect word sequences achieved the lowest agreement, but both were acceptable and higher than those typically obtained for the assessment of writing.

Table 7: Coding reliability

Code		Intra class coefficient	Confidence intervals
Alphabet letters	Produced	.99	.99-1.0
	Correct	.99	.99-.99
Word generation	items produced	.96	.94-.98
	items correct	.96	.93-.98
Sentence combining	Total score	.91	.86-.95
Text Measures			
	Quality rating	.87	.79-.92
	Total words in text	.95	.92-.97
	Numbers of words spelled correctly	.99	.99-.1.0
	Correct word sequences	.99	.98-1.0
	Incorrect word sequences	.84	.74-.90

To ensure that the measures used were sensitive to development, and therefore to change, separate ANOVAs for each measure were computed. As shown in Table 8, at baseline measures at word, sentence and text level differentiated between the three year groups.

Table 8: Year group differences on target skills at baseline

Writing dimension	School year group Mean (SD)			Significance
	3	5	6	
Alphabet correct letters	27.06 (13.83)	32.32 (14.52)	41.58 (19.21)	$F_{(2,1203)}= 90.05$, $p <.001$, $\eta_p^2 = .13$
Word generation – items correct	4.01 (2.31)	4.89 (2.19)	5.69 (2.47)	$F_{(2,1203)}= 56.90$, $p <.001$, $\eta_p^2 = .09$
Sentence combining	13.27 (7.85)	19.58 (8.55)	24.18 (7.73)	$F_{(2,1200)}= 203.15$, $p <.001$, $\eta_p^2 = .25$
Quality rating	1.55 (0.92)	2.32 (1.16)	3.19 (1.25)	$F_{(2,1170)}= 239.16$, $p <.001$, $\eta_p^2 = .29$
Total number of words	47.27 (29.25)	68.85 (37.34)	84.98 (37.24)	$F_{(2,1171)}= 130.90$, $p <.001$, $\eta_p^2 = .18$
Words spelled correctly	41.94 (27.94)	64.6 (35.59)	80.8 (36.16)	$F_{(2,1166)}= 151.20$, $p <.001$, $\eta_p^2 = .20$
Correct word sequences	45.88 (30.05)	67.88 (37.90)	84.46 (38.94)	$F_{(2,1161)}= 128.24$, $p <.001$, $\eta_p^2 = .18$

Gain scores for the variables also demonstrated significant changes over time for all seven measures over a six-month period (Appendix 6 presents the developmental trajectories over the one year period for the intervention and comparison participants).

Key stage writing levels were provided by the schools for the majority of the participants (n = 1044) at the end of June 2013. The writing levels were converted to a numerical score to distinguish sublevels. We examined correlations between the writing measures and these results. We found significant concurrent correlations between all our measures and KS2 writing SATS at $p<.005$, with the highest correlations for the quality rating r = .60, the total sentence combining score r = .55, and for correct word sequences and alphabet fluency r = .51. All measures were therefore included in our analyses examining the impact of *Talk for Writing* given their reliability and validity.

Six month impact January (baseline) to June

Data at six months included three year groups, Years 3, 5, and 6, a total of 1,058 pupils (Y3 n = 464, Y5 n = 333 and Y6 n = 437). Data at the one-year follow-up comprised of data for pupils who had been in Years 3 and 5 during the January baseline, a total of 592pupils.

Results of these analyses are presented in Table 4. In all analyses baseline score and year group were included as covariates and were significant and effect sizes are presented as partial eta square (η_p^2).

Table 9: Six-month effect of the intervention

Writing dimension Point 24	Intervention Effect (Trend between comparison C and intervention I)	ANCOVA	Significance of covariate
Alphabet correct letters	η_p^2=.003 (C>I)	F(1,1053)= 3.51, p =.06	Baseline measure p<.001 Year group p<.001
Word generation –items correct	η_p^2=.001	F(1,1045)= .60 p = .43	Baseline measure p<.001 Year group p<.001
Sentence combining	η_p^2=.002	F(1,1048)= 1.80, p = .18	Baseline measure p<.001 Year group p<.001
Quality rating	η_p^2=.001	F(1,1021)= 1.23, p = .27	Baseline measure p<.001 Year group p<.001
Total number of words	η_p^2=.002	F(1,1020)= 1.77, p = .18	Baseline measure p<.001 Year group p< .001
Proportion of words spelled correctly	η_p^2 = .01 C>I	F(1,1014)= 6.32,p = .01	Baseline measure p<.001 Year group p<.001
Proportion of correct word sequences	η_p^2 = .01 C>I	F(1,1005)= 4.79, p = .03	Baseline measure p<.001 Year group p<.001

In summary on no variable were the pupils in the *Talk for Writing* intervention showing greater improvement than the comparison pupils. Where statistically significant differences were evident they were in favour of the comparison pupils, although effect sizes were very low or demonstrated no visible effects.

One year impact

A series of ANCOVAs on the writing measures were computed at one-year follow-up. Note that at this point we had lost one comparison school to the study and all year six pupils.

Both baseline performance and year group were entered as covariates, with intervention as the between groups measure. Results of these analyses are presented in Table 10. Baseline measures were always significant. Year group was not significant for the quality rating.

Table 10: Twelve-month effect of the intervention[1]

Writing dimension	Intervention effect (Trend between comparison C and Intervention I)	ANCOVA	Significance of covariate
Alphabet correct letters	$\eta_p^2 = .05$ C>I	F(1,589)= 28.22, p= .001	Baseline measure p<.001 Year group p<.001
Word generation – items correct	$\eta_p^2 = .01$ C>I	F(1,589)= 4.37, p=.04	Baseline measure p<.001 Year group p<.001
Sentence combining	$\eta_p^2 = .02$ C>I	F(1,587)= 9.73, p=.002	Baseline measure p<.001 Year group p<.001
Quality rating	$\eta_p^2 = .01$ I>C	F(1,561)= 4.66, p=.03	Baseline measure p<.001 Year group ns
Total number of words	$\eta_p^2 = .04$ I>C	F(1,561)= 29.92, p<.001.	Baseline measure p<.001 Year group ns
Proportion of words spelled correctly	$\eta_p^2 = .001$	F(1,558)= .48, p=.49	Baseline measure p<.001 Year group p<.001
Proportion of correct word sequences	$\eta_p^2 = .01$ (C>I)	F(1,554)= 2.86, p=.09	Baseline measure p<.001 Year group p<.001

Results were identical when analyses were carried out separately by year group.

Differential gains at the final test point provided an uneven pattern where differences between comparison and intervention pupils were evident on five of the seven measures and a trend for the sixth measure (proportion of correct word sequences).

All measures were sensitive to development and year group but there were only very small and mixed differences between the intervention and comparison pupils. In three cases these differences reflected greater improvement in the comparison pupils and in two cases greater improvement in the pupils in the *Talk for Writing* classes, although effect sizes were very small accounting for no more than 4-5% of the variance in writing products.

The sample included a minority of pupils (*n* = 80) who were reported to receive free school meals. We examined whether a differential effect for *Talk for Writing* was evident for these pupils. There were similar trends in the data there, and no statistically significant effects.

Formative findings - impact evaluation

The writing measures used were sensitive to developmental differences and change over time. We found no positive impact of *Talk for Writing* on the writing measures over the first six months of the intervention. In contrast, after one year of the programme pupils in *Talk for Writing* classrooms wrote significantly more words and had texts of higher quality, although in both cases effect sizes were very small. However, pupils in the comparison group produced more fluent handwriting, generated more single words, were more effective at combining sentences and showed a trend for producing more correct grammatical sequences in their written text. Again, effect sizes were very small.

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[1] The differential change in raw writing scores was confirmed with the standardised quartile scores F(1,591) = 11.834, p <.001, partial eta squared = .02, and for word generation scores F(1,591) = 5.08, p = .03, partial eta squared = .01.

As outlined in the methods, writing quality was scored on a scale from 0 to 6. Despite the differences noted at follow-up between the comparison and intervention groups this reflects very little change in the quality of the children's writing. On average writing quality was still at the lowest end of the scale (Intervention M = 2.07, SD =1.15; Comparison M = 2.10, SD = 1.2). In terms of the texts pupils produced this meant that pupils moved from simply producing a list of activities at baseline e.g. *play with my Xbox, eat popcorn* to texts which included some of information about why the list was relevant e.g. *it was raining so I play with my Xbox and eat popcorn.*

Conclusion

Talk for Writing was implemented as a whole school approach. Teachers reported attending and being actively engaged in the training. *Talk for Writing* contains some features identified in research studies to promote effective learning, including formative assessment, the use of Teaching Assistants, and the emphasis on the links between reading and writing. A number of the key features of the programme have not, to date, been evaluated in the current research literature: gestures for connectives, washing lines, learning and rehearsing texts. We found little ancillary evidence to suggest that these activities would promote writing development.

Subjective perceptions from the school staff in the interviews and the online questionnaire were very favourable about *Talk for Writing,* commenting on improved engagement and writing performance*.* The questionnaire data revealed that few differences in the approach of the teachers in the intervention and comparison schools were evident after one year of the *Talk for Writing* project, and where differences were found the effects were small and not consistently in 'favour' of the *Talk for Writing* schools.

The objective writing data provided a less positive view of changes in pupils' writing performance, controlling for initial writing performance on the tasks. There was no differential improvement in the first six months between comparison and intervention schools on the writing measures. After a year, children in the *Talk for Writing* schools wrote more words and had marginally higher quality texts, although comparison schools showed greater gains in other measures. In all cases effect sizes were low or very low.

Limitations of the study

This was an opportunistic sample. Schools in the intervention had already agreed to participate in the study prior to the start of the evaluation. Given that all participating schools came from one city further limits the generalizability of the results. Comparison schools were difficult to recruit and were not matched for National Curriculum levels. Thus participation in the study and matching did not meet best standards for research. We were able to control for the failure to match on writing levels by using initial writing performance as a covariate in all analyses. However these analyses were only at pupil level, not class or school level, thereby limiting the generalisability of the findings.

These limitations impacted more directly on the staff questionnaires. Staff questionnaire data were collected over an academic year and were not repeated measures for the same teachers but were reports of teaching of writing in the intervention and comparison schools at a set point in time. We were not able to estimate the proportion of teachers who responded either at baseline or follow up to the request to complete the staff questionnaire. There were a number of further limitations with the sample of respondents at follow up. At this point no teachers from reception or KS 1 completed the questionnaire and few teachers from the comparison schools completed the questionnaire. In addition the second phase of the questionnaire place took place one year into the project; at this point teachers had covered six elements of the programme but still had a further five elements to cover in the next five months. During the second questionnaire administration 27% of the respondents in *Talk for writing* schools did not respond to the questions about the *Talk for Writing* programme. Therefore it was not possible to ascertain their views on the project and their views of the programme may be biased. Repeated systematic observation measures would be needed for a more robust evaluation of fidelity of classroom practices to the programme

The lessons that were observed reflect only a fraction of the teaching of writing throughout the school. Observation data suggested that different teachers were engaging in the materials with different degrees of commitment. Similarly engagement across schools differed and it was not possible to identify these differential effects. It is possible that other practices, such as more attention to the

composition of whole texts, were taking place and were not observed. Nevertheless there was nothing in the observation and interview data to suggest significant attention to composition of whole texts by individual children. Any further evaluations would require a sufficient sample size to evaluate both school and teacher effects across the teaching day.

The guidance materials and resources were under continuous development during the year of the project. A first draft of the trainer's guide and supporting materials was not available for scrutiny before the evaluation period was over, but according to the grantee implementation of the *Talk for Writing* programme followed the anticipated trajectory, and teachers and schools completed a significant proportion of training in the first 6 months.

Interpretation

The review of the literature indicated that there was mixed evidence to support some of the key components of the *Talk for Writing* programme. There was a clear enthusiasm by schools and staff for the programme. This enthusiasm by staff was not mirrored by changes in the pupils' writing or by teacher reported practice. Any positive effects that were evident in pupil's writing were small and took an extended period of time in the programme to be evident. The largest effect was for the number of words that the children produced but this may reflect more time writing in the classrooms, perhaps as a result of the reported more systematic approach to writing, rather than the intervention per se. The evaluation did not find any evidence that the programme was specifically beneficial for pupils from disadvantaged backgrounds.

Future research and publications

Future research needs to triangulate what teachers report they are doing with observations and diaries about what is happening in the classrooms for all pupils.

The opportunity to sample pupils' writing, and to observe teaching and learning in classrooms in the current study, suggested that different key skills are prominent in the development of the writing process at different phases of development. In addition to more generic/universal approaches to writing, our data suggest that targeting different elements of writing at different phases of primary schools and with different levels of written language ability would provide a firmer cognitive structure to support writing.

Our observations of the programme in action suggested that oral language may play a stronger role in supporting writing in the early years rather than in Key Stage 2, a position that is consistent with the current research literature. Our prediction is that **targeted** time-limited support of key oral language competencies skills, both in terms of vocabulary and narrative, would support the production of early written text in struggling writers and those with weaker oral language skills.

More changes were evident in progression at the sentence level for Year 4 and 5. We predict that time limited **targeted** work on sentence combining and sentence formulation at this point in development would enhance written narrative and expository texts.

We envisage publishing one paper on the teachers' approaches to writing instruction, differentiating by year group. There has not been a comprehensive study of teachers' reported views on writing instruction and their views on their preparedness to teaching writing in a UK sample and the data collected from this study at baseline will be an initial step in addressing this gap.

We also plan to publish papers on the pupils' writing data. To the best of our knowledge this is the largest longitudinal data set of primary school writing. Our initial aim is to examine whether different factors can be identified in the data tapping spelling, grammar, and written vocabulary. Sentence level skills appear to be particularly important Years 4 and 5 in and we intend to examine this statistically

looking at both grammatical and semantic accuracy. Finally, we envisage carrying out further more detailed coding of a sample of the data to test current dimensional views of the writing product.

References

Abbott, R. D., Berninger, V. W., & Fayol, M. (2010). Longitudinal relationships of levels of language in writing and between writing and reading in Grades 1 to 7. *Journal of Educational Psychology, 102*(2), 281-298. doi: 10.1037/a0019318

Adams, A. M., Simmons, F. R., Willis, C. S., & Porter, S. (2013). The impact of the development of verbal recoding on children's early writing skills. *British Journal of Educational Psychology, 83*(1), 76-97. doi: 10.1111/j.2044-8279.2011.02056.x

Andrews, R., Torgerson, C., Low, G., & McGuinn, N. (2009). Teaching argument writing to 7- to 14-year-olds: an international review of the evidence of successful practice. *Cambridge Journal of Education, 39*(3), 19.

Bannard, C., & Matthews, D. (2008). Stored word sequences in language learning - The effect of familiarity on children's repetition of four-word combinations. *Psychological Science, 19*(3), 241-248. doi: 10.1111/j.1467-9280.2008.02075.x

Baumann, J. F., & Bergeron, B. S. (1993). Story map instruction using children's literature –Effects on 1st- graders comprhension of central narrative elements. *Journal of Reading Behavior, 25*(4), 407-437.

Berninger, V. W., & Swanson, H. L. (1994). Modifying Hayes and Flowers' model of skilled writing to explain developing writing. In E. C. Butterfield (Ed.), *Advances in cognition and educational practice. Children's writing: Toward a process theory of the development of skilled writing* (Vol. 2, pp. 1-30). Greenwich: JAI Press.

Berninger, V. W., Vaughan, K., Abbott, R. D., Begay, K., Coleman, K. B., Curtin, G., . . . Graham, S. (2002). Teaching spelling and composition alone and together: Implications for the simple view of writing. *Journal of Educational Psychology, 94*(2). doi: 10.1037//0022-0663.94.2.291

Biemiller, A., & Boote, C. (2006). An effective method for building meaning vocabulary in primary grades. *Journal of Educational Psychology, 98*(1), 44-62. doi: 10.1037/0022-0663.98.1.44

Blatchford, P., Russell, A. and Webster, R. (2012) Reassessing the impact of teaching assistants: How research challenges practice and policy. Oxon: Routledge.

Boscolo, P., Gelati, C., & Galvan, N. (2012). Teaching elementary school students to play with meanings and genre. *Reading & Writing Quarterly, 28*(1), 29-50. doi: 10.1080/10573569.2012.632730

Boulineau, T., Fore, C., Hagan-Burke, S., & Burke, M. D. (2004). Use of story-mapping to increase the story-grammar text comprehension of elementary students with learning disabilities. *Learning Disability Quarterly, 27*(2), 105-121. doi: 10.2307/1593645

Corbett, P. (2001). *How to teach fiction writing at Key Stage 2*. London: David Fulton.

Corbett, P., & Strong, J. (2011). *Talk for Writing across the Curriculum: How to teach non-fiction writing 5-12 years*. London: David Fulton.

Corbett, P Story telling into writing. retrieved 6.6.15 http://webfronter.com/lewisham/primarycommunity/other/Pie%20Corbett_Story%20telling%20into%20Writing%20220906.pdf

Datchuk, S. M., & Kubina, R. M. (2013). A Review of Teaching Sentence-Level Writing Skills to Students With Writing Difficulties and Learning Disabilities. *Remedial and Special Education, 34*(3), 180-192.

De Beni, R., & Moe, A. (2003). Imagery and rehearsal as study strategies for written or orally presented passages. *Psychonomic Bulletin & Review, 10*(4), 975-980.

De Nooijer, J. A., van Gog, T., Paas, F., & Zwaan, R. A. (2013). Effects of imitating gestures during encoding or during retrieval of novel verbs on children's test performance. *Acta Psychologica*, 144(1), 173-179.

DelaPaz, S., & Graham, S. (1997). Effects of dictation and advanced planning instruction on the composing of students with writing and learning problems. *Journal of Educational Psychology, 89*(2), 203-222. doi: 10.1037/0022-0663.89.2.203

Dickson, S. (1999). Integrating reading and writing to teach compare-contrast text structure: a research based methodology. *Reading & Writing Quarterly, 15*(1), 49-79. doi: 10.1080/105735699278297

Dockrell, J. E., & Connelly, V. (2013). The role of oral language in -underpinning the text generation -difficulties in children with specific -language impairment. *Journal of Research in Reading.* doi: 10.1111/j.1467-9817.2012.01550.x

Dockrell, J.E., Connelly, V., Walter, K. & Critten, S. (2014). Curriculum based measures of assessing writing. *British Educational Research Journal*

Donaldson, M. L., & Cooper, L. S. M. (2013). Developmental relationships between speech and writing: Is verb-phrase anaphora production a special case? *British Journal of Educational Psychology, 83*(3), 521-534. doi: 10.1111/j.2044-8279.2012.02078.x

Donovan, C. A., & Smolkin, L. B. (2002). Children's genre knowledge: An examination of K-5 students' performance on multiple tasks providing differing levels of scaffolding. *Reading Research Quarterly, 37*(4), 428-465. doi: 10.1598/rrq.37.4.5

Dunsmuir, S., & Blatchford, P. (2004). Predictors of writing competence in 4-to 7-year-old children. *British Journal of Educational Psychology, 74*, 461-483. doi: 10.1348/0007099041552323

Englert, C. S., Raphael, T. E., Anderson, L. M., Anthony, H. M., & Stevens, D. D. (1991). Making strategies and self-talk visibile – writing instruction in regular and special education classrooms. *American Educational Research Journal, 28*(2), 337-372. doi: 10.3102/00028312028002337

Fleck, B. K. B., Leichtman, M. D., Pillemer, D. B., & Shanteler, L. (2013). The effects of documentation on young children's memory. *Early Childhood Research Quarterly, 28*(3), 568-577.

Graham, S. (2010). Facilitating writing development. In *The Routledge International Handbook of English, Language and Literacy Teaching*, edited by D Wyse, R. Andrews and J. Hoffman, 125-36. London: Routledge.

Graham, S., & Hebert, M. (2010). Learning to read, Evidence on how writing can improve reading. Washington D.C.: Carnegie Trust.

Graham, S., & Perin, D. (2007). A meta-analysis of writing instruction for adolescent students. *Journal of Educational Psychology, 99*(3).

Graham, S., & Sandmel, K. (2011). The Process Writing Approach: A Meta-analysis. *Journal of Educational Research, 104*(6).

Graham, S., Gillespie, A., & McKeown, D. (2013). Writing: importance, development, and instruction. *Reading and Writing, 26*(1), 1-15. doi: 10.1007/s11145-012-9395-2

Graham, S., Harris, K. R., & Mason, L. (2005). Improving the writing performance, knowledge, and self-efficacy of struggling young writers: The effects of self-regulated strategy development. *Contemporary Educational Psychology, 30*(2), 207-241.

Graham, S., Harris, K., & Hebert, M. (2011). *Informing writing: The benefits of formative assessment. A Carnegie Corporation Time to Act report*. Washington, D.C.: Alliance for Excellent Education.

Graham, S., Harris, K., Mason, L., Fink-Chorzempa, B., Moran, S., & Saddler, B. (2008). How do primary grade teachers teach handwriting? A national survey. *Reading and Writing, 21*(1-2), 49-69. doi: 10.1007/s11145-007-9064-z

Horst, J. S. (2013). Context and repetition in word learning. *Frontiers in Psychology, 4*. doi: 10.3389/fpsyg.2013.00149

Huttenlocher, J., Waterfall, H., Vasilyeva, M., Vevea, J., & Hedges, L. V. (2010). Sources of variability in children's language growth. *Cognitive Psychology, 61*(4), 343-365. doi: 10.1016/j.cogpsych.2010.08.002

Institute of Education Sciences. (2012). Teaching elementary school students to be effective writers. *National Center for Educational Evaluation and Regional Assistance*.

Karpicke, J. D. (2012). Retrieval-based learning: Active retrieval promotes meaningful learning. *Current Directions in Psychological Science, 21*(3), 157-163. doi: 10.1177/0963721412443552

King, S. (2000). *On Writing: A Memoir of the Craft.* London: Hodder and Stoughton.

Krauss, R.M. (1998). Why do we gesture when we speak? *Current Directions in Psychological Science* **7**, 54-59.

Lewis, M., & Wray, D. (2002). Writing frames: Scaffolding children's non-fiction writing in a range of genres. In B. C. National Centre for Language and Literacy, Earley, University of Reading (Ed.).

Limpo, T., & Alves, R. A. (2013). Modeling writing development: Contribution of transcription and self-regulation to Portuguese students' text generation quality. *Journal of Educational Psychology, 105*(2), 401-413. doi: 10.1037/a0031391

McCarthy, J. H., Hogan, T. P., & Catts, H. W. (2012). Is weak oral language associated with poor spelling in school-age children with specific language impairment, dyslexia or both? *Clinical Linguistics & Phonetics, 26*(9), 791-805. doi: 10.3109/02699206.2012.702185

Myhill, D., & Jones, S. (2009). How talk becomes text: Investigating the concept of oral rehearsal in early years' classrooms. *British Journal of Educational Studies, 57*(3), 265-284.

O'Neill, D.K., Topolovec, J. & Stern-Cavalcante W. (2002). Feeling sponginess: The importance of descriptive gestures in 2- and 3-year-old children's acquisition of adjectives. *Journal of Cognition and Development*, **3**, 243-277.

Olinghouse, N. G., & Wilson, J. (2013). The relationship between vocabulary and writing quality in three genres. *Reading and Writing, 26*(1), 45-65. doi: 10.1007/s11145-012-9392-5

Palmer, S & Corbett, P. (2003). Literacy what works. Nelson Thornes

Perera, K. (1984). *Children's Writing and Reading: Analysing Classroom Language*. Oxford: Basil Blackwell.

Rogers, L., & Graham, S. (2008). A meta-analysis of single subject design writing intervention research. *Journal of Educational Psychology, 100*(4).

Rooke, J. (2013) Transforming Writing Final Evaluation Report, National Literacy Trust

Russell, A., Webster, R. and Blatchford, P. (2013) Maximising the impact of teaching assistants: Guidance for school leaders and teachers, Oxon: Routledge.

Sawyer, R. K (2006). The Cambridge Handbook of the Learning Sciences. New York: Cambridge University Press.

Stannard, J & Corbett, P (2014) CHECK HOW IT IS TO BE CITED

Tellier, M. (2008) The effect of gestures on second language memorisation by young children. *Gesture*, **8**, 219-235

Tracy, B., Reid, R., & Graham, S. (2009). Teaching young students strategies for planning and drafting stories. The impact of self-regulated strategy development. *Journal of Educational Research, 102*(5), 323-331.

Wood, D. (1998). *How Children Think and Learn*. Oxford: Blackwell.

Wood, D., Bruner, J., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry, 17*, 89-100.

Wyse, D., Jones, R., Bradford, H., & Wolpert, M. A. (2013). *Teaching English, language and literacy* (Third Edition). London: Routledge.

Yarrow, F., & Topping, K. J. (2001). Collaborative writing: The effects of metacognitive prompting and structured peer interaction. *British Journal of Educational Psychology, 71*, 261-282. doi: 10.1348/000709901158514

Appendix 1: Questions asked during interviews

No.	Question	Interview 1	Interview 2
Q1	To what extent has the school engaged with writing initiatives in the last five years? [For example have elements of *Talk for Writing* been tried before, such as using drama as a stimulus for writing?]	✓	
Q2	What was the approximate date of the school's first involvement in *Talk for Writing*?	✓	
Q3	What is the teachers' understanding of what *Talk for Writing* is?	✓	
Q4	In broad terms what has happened practically in relation to implementation of *Talk for Writing*? [e.g. numbers and types of staff meetings; time from first training to teachers working in classrooms, etc. Check what evidence of practice the team leader has, e.g. classroom observations]	✓	✓
Q5	What elements of *Talk for Writing* are different to what teachers were doing before?	✓	
Q6	What are the similarities and differences between the ways different year groups implement *Talk for Writing*?	✓	✓
Q7	Which aspects of *Talk for Writing* are proving easy to implement, and why?	✓	✓
Q8	Which aspects of *Talk for Writing* are proving more difficult to implement, and why? [i.e. what are the barriers?]	✓	✓
Q9	What are the similarities and differences between the *Talk for Writing* approach explained by Pie and John and the ways that the school is implementing *Talk for Writing*?	✓	✓
Q10	How many teachers and teaching assistants out of the whole school staff would you say are fully committed to *Talk for Writing*? [Probe for why some people are not fully committed if this is the case]	✓	✓
Q11	To what extent would you say *Talk for Writing* has had an impact on pupils' learning? [Check for any special impact on particular ages of pupils and/or groups. Probe for the kind of assessment evidence is supporting this judgement including teachers' daily interactions with pupils.]	✓	✓
Q12	Is there any other key information about *Talk for Writing* that you think we should know?	✓	✓

Appendix 2: Responses to interview questions

School background for the teaching of writing (Time 1)

No.	Question	Summary of responses
Q1	To what extent has the school engaged with writing initiatives in the last five years?	A variety of responses: T4W is the first writing initiative the school has used (**4P, 5P**[2]) Shirley Clarke's *Talk Partner Work* and *ReadWriteInc* (**1J**) Intensive Support Programme for writing from national strategies and local authority (**3P**) *Assessment for Learning* and *Every Child a Reader* (**6P**) 4 schools responded that at least one of their teachers had attended a training day with Pie Corbett within the past 5 years (**1J, 3P, 4P, 6P**), but none were using T4W as a whole school approach before the start of this project.
Q2	What was the approximate date of the school's first involvement in T4W?	For one school, September 2012 (**6P**); for the others, January 2013.
Q3	What is the teachers' understanding of what T4W is?	A variety of responses: Children being immersed in texts, learning/remembering texts (**1J, 3P, 4P, 6P**) Imitation, innovation, invention (**4P**, **5P, 6P**) Whole-school approach (**4P, 5P**) Giving children time to write (**6P**) Access to a rich oral storytelling tradition (**4P**) Kinaesthetic (**3P**)
Q5	What elements of T4W are different to what teachers were doing before?	A variety of responses: Shared writing is now daily/done consistently (**1J, 4P, 5P**) Completely different! (**4P, 5P**)

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[2] The six schools were coded 1-6 in order to maintain anonymity. "P" stands for Primary, "I" for Infant, and "J" for Junior school. T4W = *Talk for Writing*.

		Improved enthusiasm for writing amongst teachers and children (**1J, 6P**)
		Previously there was no consistency across the school in teaching writing (**5P**)
		Yrs 3 and 4 hadn't done actions before, Yrs 1 and 2 are now doing non-fiction (**3P**)
		Modelling of writing is now done in a more structured fashion (**5P**)
		Careful selection of texts and a balance of different types of literature (**6P**)
		Lots of displays of the writing process – washing lines show writing in every classroom (**4P**)
		Teachers are identifying language features and honing in on those (**4P**)

Implementation of T4W across the school

No.	Question	Summary of responses
Q4	What has happened practically in relation to implementation of T4W?	*At Time 1:*
		Observations of literacy lessons by the Literacy Leads with a specific focus on T4W features (**1J, 5P, 6P**)
		Following up Big Days/Project Team days with staff meetings (**4P, 5P**)
		Extra support/training for teachers/TAs outside regular staff meetings (**1J, 4P**)
		Teachers who are particularly confident at particular aspects, e.g. boxing up, sentence-level work, encouraged to share their expertise with other teachers (**1J**)
		Planning format has changed to fit T4W (**1J**)
		Literacy Lead has created an "environment checklist" for teachers to check that physical features of T4W are being used in each class (**1J**)
		Literacy Lead is making a video in order to share good practice, particularly for staff who join the school after the project started (**1J**)
		Proforma created for staff to use when planning and to write down the language features (**4P**)
		Notes from Project Team/Big Day meetings placed on a shared hard drive for all staff to access (**4P**)
		At Time 2:
		Checking progression of books throughout the school (**1J, 2I, 3P**)
		Observations of classes by the Literacy Leads (**1J, 2I**)
		Training for new staff who joined since project started (**5P, 6P**)

		Literacy lead feeding back to all staff following the Project Team Days (**1J**)
		Monitoring of the environment, e.g. washing lines (**2I**)
		Pairing new staff with experienced staff (**5P**)
		Additional training sessions for TAs (**1J**)
		Literacy Lead has made a video of one teacher leading a T4W lesson in order to share good practice with other staff (**1J**)
		Considering creating a checklist for teachers to tick which aspects of T4W they feel most comfortable with so other teachers can observe (**1J**)
		Rolling out elements of T4W to other areas of the curriculum, e.g. maths (**6P**)
		Literacy Lead has been to a training day at Penn Wood (school in Berkshire that has been using T4W for several years) (**6P**)
		Literacy Lead going to other schools to observe T4W lessons (**1J, 3P**)
Q9	What are the similarities and differences between the T4W approach explained by Pie and John and the ways that the school is implementing T4W?	*At Time 1:*
		No differences (**4P**, **5P, 6P**)
		Trying to implement the same way, but still trying to integrate grammar with whole text work – still in development phase with respect to T4W (**3P**)
		Currently teaching in 3-week bocks, but need to adopt the T4W structure of 7 weeks (week 1 – poetry; weeks 2-4 – fiction; weeks 5-7 – non-fiction) (**1J**)
		At Time 2:
		Following very closely (4/5 schools **2I**, **3P, 5P, 6P**)
		Following closely but need to look at how to best tailor it for Yrs 5 and 6 (**1J**)
		Very good TAs in Years 3 and 4 have made story boxes (instead of story maps) for the children with SEN, and these have helped them to remember the story (**6P**)
Q10	How many teachers and teaching assistants out of the whole school staff would you say are fully committed to T4W?	*At Time 1:*
		Fully committed: 3 schools (**3P, 4P, 6P**)
		The majority: 2 schools (**1J, 5P**)
		4 schools (**1J, 3P, 5P, 6P**) mentioned the commitment of the Teaching Assistants and their enjoyment at being involved.
		At Time 2:

		Fully committed: 2/5 schools (**2I, 6P**)
		The majority: 3/5 (**1J; 3P, 5P**)
		Reasons given, across both time points, for some teachers not being committed:
		Old staff who are set in their ways (Time 1: **1J**)
		New staff who arrived since project started and who therefore haven't been involved since the beginning (Time 2: **3P, 5P**)
		Staff who feel themselves under other pressures (T4W is not the only thing they have to plan for) (Time 2: **1J, 3P**)
		Year 6 staff (Time 2: **1J**)
Q11	To what extent would you say T4W has had an impact on pupils' learning?	*At Time 1:*
		Biggest impact in Key Stage 1 (**3P, 4P, 6P**)
		Increased motivation for writing and improved attitude towards learning (**3P, 4P**)
		Parents have noted that children are telling stories and writing at home (**4P**)
		Normally Yr. 3 pupils' writing plateaus, but not finding that now (**1J**)
		Big impact on EAL children (**3P**) and children with SEN (**4P**)
		Comment in recent OFSTED report about school demonstrating a clear improvement in writing (**5P**)
		At Time 2:
		Yr. 2 writing SATS best ever, Yr. 6 also significantly higher (**6P**)
		Objective evidence from pupil tracking showed improvement by end of last year (**2I**)
		The majority of children across the school have gone up an extra sublevel (**5P**)
		School didn't do T4W with Yr. 6 last year, but all other year groups made better than-expected progress (**1J**)
		Yr. 1 confidence higher (tell you the story, fill the page with writing) (**6P**)
		Boys are keen to write now (**6P**)
		Positive progress with SEN children (**2I, 5P**)
		EAL children really enjoy T4W (**2I**)

The specific use of T4W materials across different year groups

Q6	What are the similarities and differences between the ways different year groups implement T4W?	*At Time 1:*
		Very similar implementation across age groups BUT more independent writing/invention for Year 6 (**4P, 5P**)
		More focus on imitation at Foundation Stage, more focus on innovation/invention in Yrs 5/6 (**6P**)
		Washing lines used with Key Stage 1, but not Year 5/6 (**3P**)
		All classes up to Year 5 are using the structure of T4W, but there's not yet consistency in its implementation. Yr. 6 will do T4W next year, but are not doing it this year because Head thinks that they already teach writing well to this group and they don't want to change mid-year (**1J**).
		At Time 2:
		All year groups follow same structure, but younger year groups spend more time on imitation/games, and Yr1 don't use toolkits/magpie books (**2I, 6P**)
		All year groups are using it how it's intended to be used, but Reception are still getting used to it because children come in with very low levels of oral language (**3P**)
		All classes have story maps, but these are simpler at KS1 (**1J**)
		Whole school progression is planned (**5P**)

Barriers to the implementation of T4W

Q7	Which aspects of T4W are proving easy to implement, and why?	*At Time 1:*
		Oral retelling/imitation (**1J, 4P, 6P**)
		Narrative, teachers already familiar with teaching this, children already exposed to at home (**3P**)
		Non-fiction surprisingly easier than fiction, perhaps because texts are shorter (**1J**)
		Creating washing lines and the environment (**1J**)
		Story mapping (**4P**)
		Pie's personal involvement helps – no difficulties in implementing (**5P**)
		At Time 2:
		Easy to implement for KS1 (**1J, 3P**)
		Generally works well for children with SEN (**5P**), BUT not for blind child who uses Braille, and questions why BSL actions not used given that the school has a resource base for Hearing Impaired children (**1J**)

		Fiction easier than non-fiction (**5P**)
		The interactive, visual and kinaesthetic elements work well (**5P**)
		Teachers confident with imitation/innovation (**2I**)
Q8	Which aspects of T4W are proving more difficult to implement, and why?	*At Time 1:*
		No difficulties in implementing (**5P,6P**)
		Yr. 5/6 biggest issue - don't get as much out of T4W (**3P, 4P**)
		Verbatim learning doesn't lead to individuality in writing (**3P**)
		Staff less confident with teaching non-fiction (**4P**)
		Shared writing, boxing up and toolkits (**1J**)
		Finding texts that fit all genres within the topic (**1J**)
		Time – taking longer than expected to cover each genre (**3P**)
		KS1 find that differentiation is inhibited by recall/imitation of stories (**3P**)
		Role play (e.g. use of "throne area") not fully achieved yet (**3P**)
		At time 2:
		No difficulties in implementing (**3P**)
		Teachers are less secure with invention (**1J, 2I**)
		It's KS1/KS2 driven, so needs some thought for adaption to the Foundation Stage (**2I**)
		The key is to find the right text (**1J**)
		Not enough independent writing (**1J**)
		Particular concerns over Yr6 and T4W being too structured to count as evidence for moderation (**3P**)
		Some children rely too much on the learned text (**5P**)
		A lot of carpet time is expected – teachers need to adapt for their own classes (**3P**)
		Non-fiction is less straightforward than fiction (**5P**)
		Some teachers are more skilled than others, depending on their background (**6P**)
		Organisation of Project Team days can be difficult – organisation not always shared equally between schools, expected John and Pie to do more (**2I**)
		Schools supposed to be working as part of a cluster, but not always easy to share ideas – schools are bit "cliquey" (**2I**)

Appendix 3: Key Features Checklist for Lesson Observations

Physical Features of Classroom Environment:			
	O&L*	**O&NL**	**N.O.**
a) Washing line with (Hand-out PT4.1):	1	4	
· Story map	4	1	
· Co-constructed texts	3		2
· Boxing up (i.e. labelling each section of text in sequence to capture its overall structure)	2		3
· Toolkit (i.e. focussing on how writers create an effect, not a 'level' checklist of tickable 'criteria')	1	1	3
· Sentence patterns	2	1	2
· Word bank	3		2
b) Story corner (from videos shown on Big Days)		5	
c) Evidence of children's work being published/ displayed/ performed (Hand-out PT4.1)	1	2	2
d) Children's Writing books with:			
· Cold writing task and hot writing task, on different colour pages		3	2
· Daily writing [quick read of some children's exercise books]	3	1	1
· Daily formative feedback (Hand-outs BD2.3; PT4.1)	3	1	1
e) Writing journals (containing different sections for the different writing genres; Hand-out BD2.3)		1	4
f) Magpie books (Hand-out BD2.3)	1	2	2
Lesson Features			
Shared writing including paired work/some independent writing e.g. using mini-whiteboards (Hand-out PT4.1) [Originally whole class teacher-led input]	4		1
Guided writing (Hand-out PT4.1) [Originally small ability grouped tasks: independent groups plus one teacher-supported group]	4	1	

Individual writing (Hand-out PT4.1) [check in particular for opportunity for 'invention']	3		2
Involvement of TA with clearly-defined role (Hand-out BD2.3)	4		1
* O&L= Observed & used in Lesson. O&NL = Observed & Not used in Lesson. N.O. = Not Observed			

Appendix 4: Additional Interviews

Additional Interview: with Head Teacher of School 5P

School 5P withdrew from the project in February 2014. The Head Teacher was interviewed to find out the reasons for this decision.

The school had joined *Talk for Writing* before a new Head Teacher was appointed in autumn 2013. The new Head Teacher considered that *Talk for Writing* was in some ways a good solution to the school's poor writing standards because one criticism of the way that the school had been teaching writing was the lack of consistency in teaching: *Talk for Writing* offered consistency and it got children writing. However, the Head Teacher identified four problems with *Talk for Writing* and its implementation in the school:

(1) A large number of staff left at the end of the summer term 2013, and many of the newly appointed staff came from agencies, making it difficult to maintain high standards of teaching writing. Indeed, the staff with the greatest enthusiasm for *Talk for Writing* had left in the summer.

(2) The school's results for writing did improve last year but were still very poor, the lowest in Portsmouth.

(3) The new Head Teacher was concerned that *Talk for Writing* puts a ceiling on achievement and does not meet the needs of able children. In his view, it is too story based, and the different genres are not there e.g. there is little opportunity for children to write from first-hand experience. He did not think that it links with reading. He thought it is dull and that some children were getting bored. He was not sure how effective it is for children of low writing ability. He thought it is good for them to learn to tell stories but that *Talk for Writing* did not meet their needs for writing. He did, however, think that it is good for pupils in the Language Unit, and the school would retain parts of *Talk for Writing*. He thought that learning to tell stories and building a bank of stories is a good thing, and that learning through actions is also a good thing, but that pupils cannot keep on doing this until Year 6. Story maps were not, in his view, appropriate for older children, i.e. Years 4, 5 and 6. The "hot and cold write" is a good idea, but he considered that these would be part of normal good practice anyway.

 (4) There are lots of different views from moderators as to what constitutes independent writing work and what does not.

Additional Interview: Discussion session at the end of the project

This 3-hour session was organised and led by John Stannard and Pie Corbett, and included all the Head Teachers of the schools taking part in *Talk for Writing* in Portsmouth, including schools 1J, 2I, 3P, 4P, 6P who participated in the evaluation, and other schools which were not part of the evaluation. The attending member of the evaluation team made notes during the session, and asked contributors to clarify their contributions if necessary, but otherwise played no role in the discussion.

The discussion was organised around four questions:

1. What are the most valuable aspects of *Talk for Writing*?

2. What is the impact on standards, teaching quality, and children's enjoyment of writing?

3. How sustainable do you think *Talk for Writing* is, and what ideas do you have for keeping it going and improving?

4. When the project runs again, what should be retained, and what should be discarded?

Below are representative comments from Head Teachers addressing each of these points.

1. What are the most valuable aspects of *Talk for Writing*?

- "It's more child focused. You walk into class and see story maps, toolkits etc. It's not just about polished finished writing on display."
- "The language progression materials have been really helpful - this is driving our curriculum."(General agreement from the group that the language progression materials and the toolkits are very helpful.)
- "Some staff found the boxing up and toolkits difficult to use at first. Some texts lend themselves easily, but for some genres it is difficult to find the right text. But it does become easier though."
- "Getting the Teaching Assistants to bank words and have things displayed around the room is very important so that can always go back to the ideas that have been generated."
- General agreement from the group that children love the editing process with the polishing pens. One Head Teacher cautioned, "It's time-consuming. Teachers are marking every night during the Innovation stage. Teachers understand the value of it and they want to give feedback everyday if children are writing everyday, but it takes time."
- "Initially children were doing Imitation and Innovation for too long, and not getting quickly enough to Invention."
- "We're having to provide evidence of independent unaided writing, that's why we worry about it."
- "Initially in Years 5 and 6 the teachers were doing too much scaffolding, so that's why now we do a lot of unpicking of texts. We do more unpicking of texts, using toolkits, rather than lots of imitation."
- "Shared and guided writing is still an area that some teachers are lacking in confidence."

2. What is the impact on standards, teaching quality, and children's enjoyment of writing?

- General agreement that there has been an improvement in writing standards, quality of teaching, teachers' confidence in teaching writing, and children's enjoyment of writing, plus in children's oral language development.
- "Those children who were probably not getting consistently good teaching are now getting better teaching and achieving more."

- "We've seen an improvement in teaching at word and sentence level, and a particularly big impact at Reception, Year 1 and Year 2, including boys!"
- "The brighter kids benefited least at the beginning but now we have got better at moving the brighter kids on, our differentiation is better. The children with Special Educational Needs have always benefitted."
- "It is really beneficial for children with English as an Additional Language."
- "Some children still need to enjoy writing more, but all children believe they can write."
- "Shared writing initially producing a lot of work that was very similar, but in the last six months we're getting real innovation from the children."
- "We see children using language across their learning."
- "We're seeing a real improvement in children's language development, particularly amongst the very low language kids in the language unit. They haven't yet moved on in their writing, but their language is amazing."
- "We are finding that the cold write is having an impact on how we set targets. We look at the cold write, set targets, and then at end of unit we do a hot write and assess work against the hot write, so our targets are more specific – they arise directly from the child's writing."
- "Teaching Assistants are really enthusiastic."
- "Teachers' use of meta language and their modelling are much better"
- "There is an increased workload on marking, but more freedom for teachers in terms of the activities they organise."
- "We're seeing outstanding progress in APS in Year 6."
- "We're still below national expectations, but progress is faster."
- "Our children are achieving better consistency across genres."

3. How sustainable do you think *Talk for Writing* is?

- "The long and whole-school approach of *Talk for Writing* training makes it sustainable. Teachers won't go back to teaching writing another way. Why go back to an unstructured, inconsistent way of teaching writing?"

4. When the project runs again, what should be retained, and what should be discarded?

- "We were slow at getting children to work independently. For the next training, give suggestions to staff about how to do Invention work more quickly so that they are not scaffolding children for too young. Perhaps when Pie is demonstrating a particular story type, give ideas for Invention". Another Head Teacher agrees: "We need to see the cycle from the beginning so that we can move Year 5 and 6 children on more quickly. Show the structure early on so all staff see where they are heading."
- General agreement that Teaching Assistants should still be included in Big Days, but that perhaps the groups should be smaller, perhaps with breakout sessions.
- "Have a year group representative at each Project Team meeting so that *Talk for Writing* can be disseminated more easily."

Appendix 5: Baseline responses to approaches to teaching and assessment of writing

Table 11: Supporting spelling and handwriting (percentages)

	Never	Several times a year	Monthly	Weekly	Several times a week	Daily
Practice printed handwriting	40	6	4	17	19	15
Practice cursive handwriting	18	6	5	20	24	27
Touch typing	72	9	2	14	2	2
Sound out phonemes	4	1	3	14	18	60
Subcomponents e.g. syllables	16	5	11	26	22	20
Spelling conventions	11	6	4	25	26	29
Common patterns	12	3	8	24	29	26
Resources	9	3	8	19	30	31
Explicit - word families	19	13	15	27	18	10
Explicit - terminology	21	6	11	17	25	20
Explicit - suffixes and prefixes	25	11	18	27	16	4
Explore meaning of suffixes and prefixes	22	11	16	25	20	6

Table 10: Supporting Punctuation (percentages)

Explicit instruction	I never do this with my current class	Several times a year	Monthly	Weekly	Several times a week	Daily
End of sentence punctuation	3	1	3	7	30	66
Commas, semi-colons and colons	18	13	12	16	28	14
Apostrophes to mark possession and omission	23	16	17	13	17	13
Use of speech marks	14	15	18	22	18	13

Table 11: Use of language (percentages)

	Several times a year	Monthly	Weekly	Several times a week	Daily
Encourage pupils to use a wide range of vocabulary in inventive ways	3	5	16	26	50
Use contrasts that highlight differences/similarities between words	10	17	26	30	17
Encourage pupils to expand and extend their vocabulary in written tasks by connecting vocabulary to their prior knowledge	2	4	27	26	41
Teach pupils to analyse the forms of texts they read as a stimulus for their writing	10	13	31	29	17
Teacher reads own writing aloud to class	7	6	23	31	34
Set activities that require pupils to vary the formality of written language	20	32	25	18	5
Draw pupils' attention to differences in meaning between specific grammatical structures	16	11	23	32	17
Set activities that use drama to support pupils' generation of ideas for writing	13	30	36	14	7
Teach pupils to make choices in relation to topics and ideas for their writing	6	10	24	31	30
Model writing strategies	2	0	23	33	43

Table 12: Instruction for Grammar

Instruction in	Several times a year	Monthly	Weekly	Several times a week	Daily
Word classes and the grammatical function of words	11	7	17	34	31
Features of different types of sentence and how to use them	14	19	19	28	21
Complex sentence grammar	15	10	18	30	26
Paragraph construction	19	14	18	34	15

Table 13: Planning (percentages)

	Several times a year	Monthly	Weekly	Several times a week	Daily
Plan, note and develop initial ideas on paper	14	15	36	21	13
Rough draft on computer prior to a handwritten version	76	10	9	5	1
Draft - develop ideas from the plan into structured written text	18	19	33	24	7
Handwritten draft before a word processed draft	60	16	13	7	3
Revise - change and improve the draft	22	14	30	22	12
Proofread -	15	13	19	23	29
Prepare a clean final copy	30	26	25	12	7

Table 12: Tools to support writing

	Never	Daily	Weekly	Monthly	Occasionally
Learn and rehearse specific texts	8	16	30	21	24
Pupils assess each other's work	12	15	48	8	18
Model a piece of writing, explaining and verbalising your vocabulary choices	1	44	40	7	8
Write with learners, constructing the texts together	4	39	42	8	9
Model writing strategies with small groups of children	4	48	37	5	6
Activate prior knowledge e.g. brainstorming	3	25	46	13	14
Discuss and evaluate own and/or others writing	4	30	52	5	9
Visual aids to used	1	79	13	1	7
Interactive white boards	6	83	7	0	5
Small white boards	2	72	20	2	5
Writing prompts	3	26	40	16	15
Structured worksheets to support written composition	4	15	31	20	31
Practice sentence combining	4	33	36	13	15

Appendix 6: Trajectories of writing development intervention and comparison groups

Figure 6: Mean trajectories for handwriting fluency for Intervention and Comparison groups (SE)
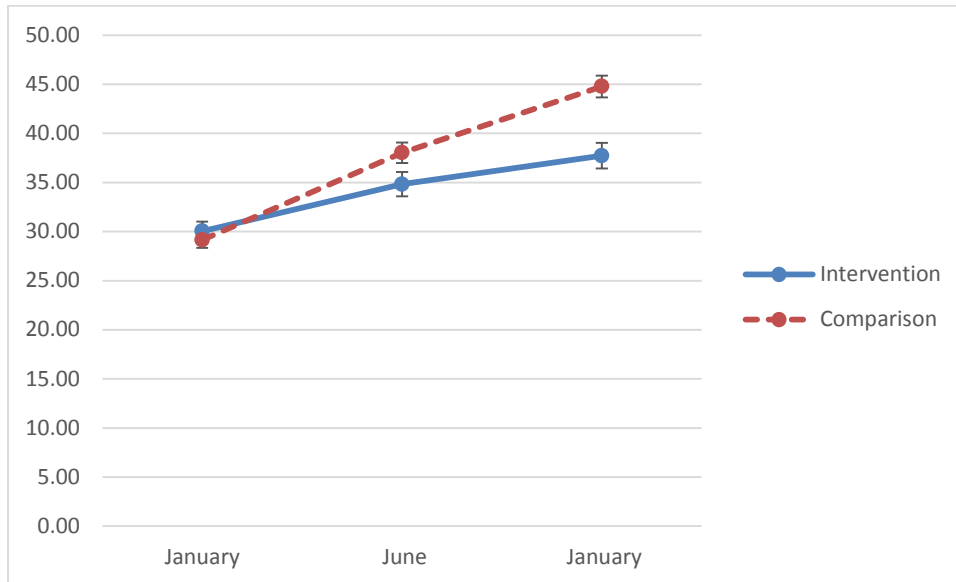
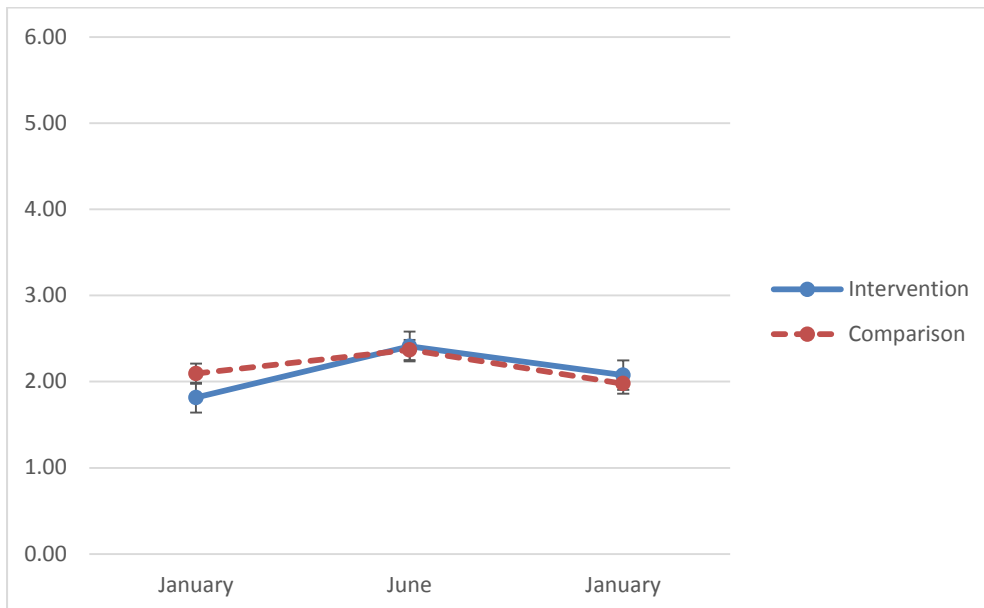**Figure 7: Mean trajectories of numbers of words generated for Intervention and Comparison group (SE)**
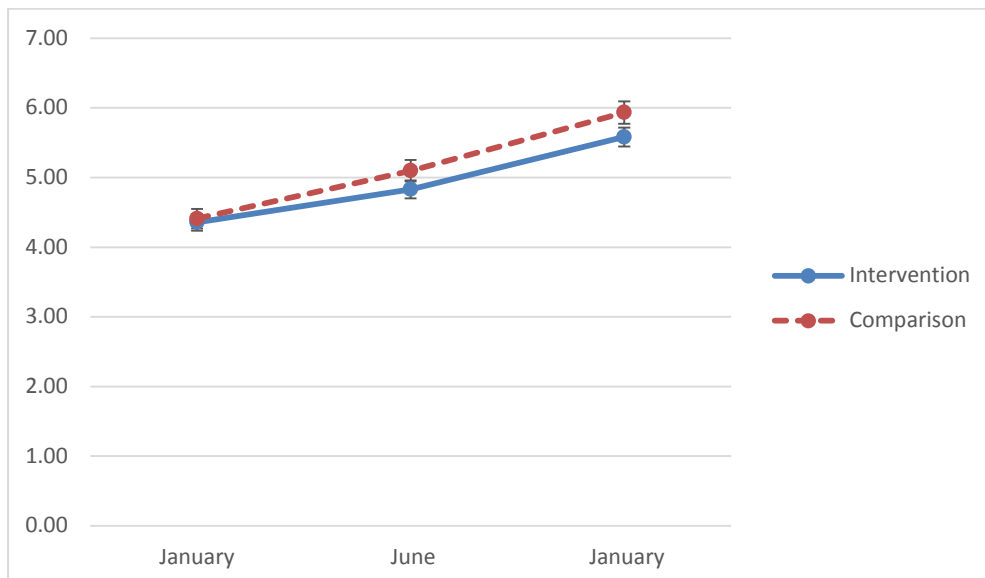
Figure 8: Mean trajectories for sentence combining for Intervention and Comparison group (SE)
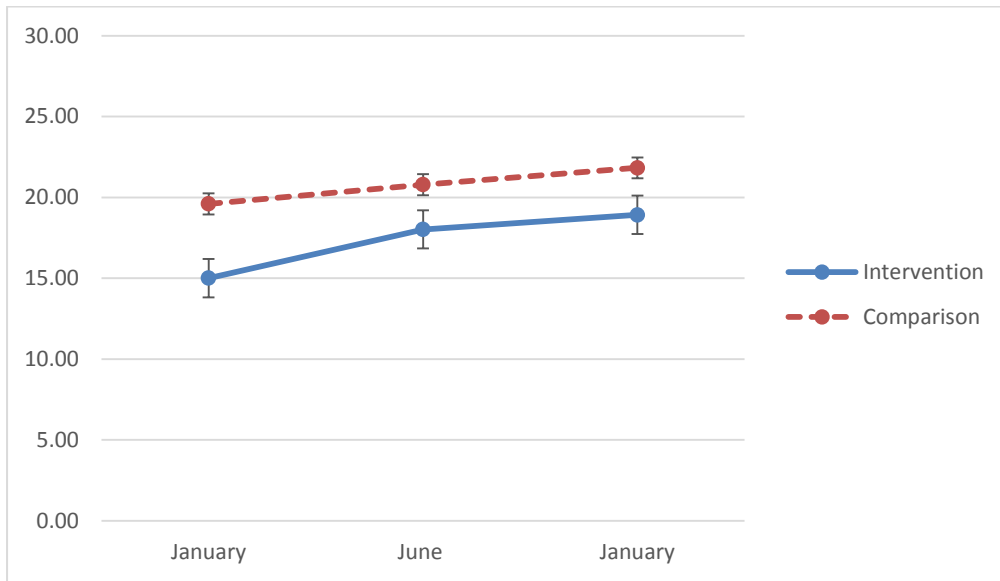
Figure 9: Mean trajectories for quality rating for Intervention and Comparison (max = 6, M SE)

Figure 10: Mean trajectories of number of words produced in narrative texts for Intervention and Comparison groups (SE)
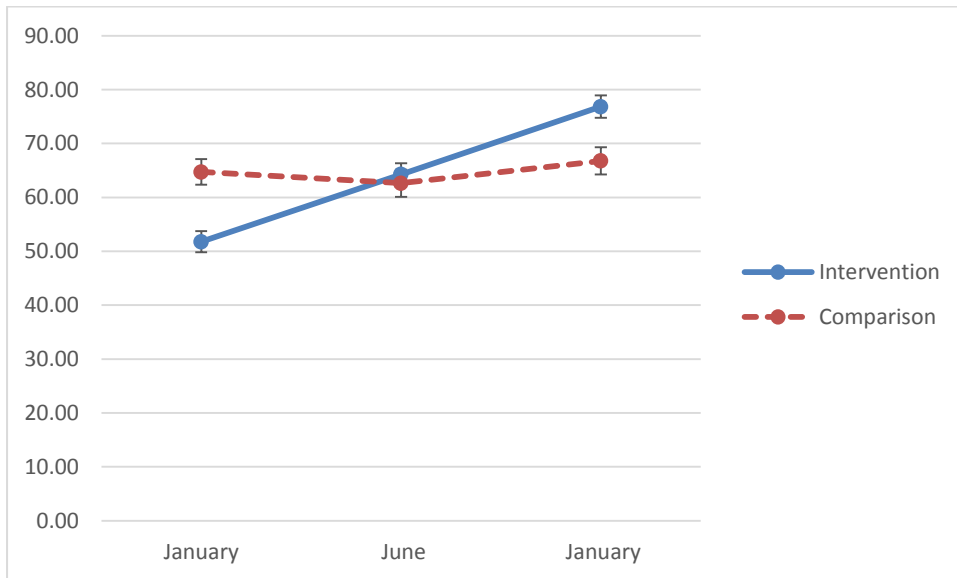
Figure 11: Mean trajectories for the proportion of words spelled correctly for Intervention and Comparison groups (SE)
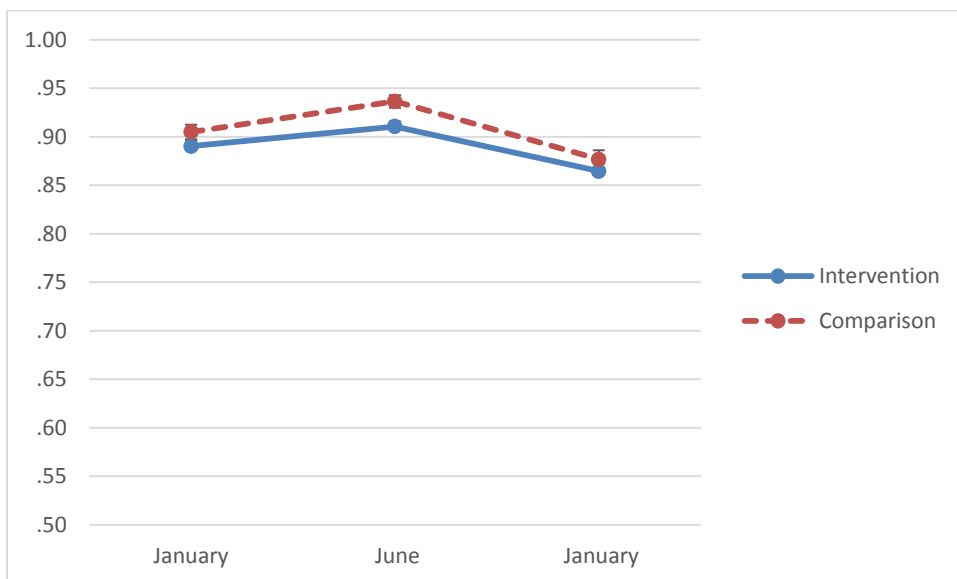
Figure 12: Mean trajectories for the proportion of incorrect word sequences for Intervention and Comparison groups (SE)