Choice, Voice and Process – Teaching Writing in the 21st Century: Revisiting the Influence of Donald Graves and the Process Approach to Writing¹ Dominic Wyse, UCL Institute of Education

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Abstract: The narrow teaching of writing that had been common in schools for hundreds of years was challenged in the 1980s by 'one of the most seductive writers in the history of writing pedagogy'. Donald Graves's process approach to writing, as it came to be known, was popular in Australia, New Zealand, USA and the UK. At the heart of Graves's approach was learner choice, and the development of the writer's voice, enacted in a publication process in the classroom. However, one alleged weakness was the lack of a research base for Graves's approach. Since then, more than 30 years of research gives us the opportunity to re-evaluate Graves's ideas.

In its exploration of the process approach to writing, this paper examines theory and empirical research in order to contribute to knowledge about the effective teaching of writing. The paper reports findings from a four-year multidisciplinary study, in particular the findings from a secondary data analysis of the work of expert writers compared with experimental evidence of what is effective for novice writers. Overall, the research found that the metaphor of 'the ear of the writer' represented fundamental aspects of how writing is learned and could be taught. In conclusion, some implications for national curriculum policy and the teaching of writing are considered.

Appropriate levels of literacy are vital for full engagement with modern society, and necessary for progression through all phases of education. In statistics generated by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in 2015, it was estimated that across the world, '758 million adults 15 years and older still cannot read or write a simple sentence. Roughly two-thirds of them are female' (UNESCO, 2016). The consequences of not acquiring literacy are not only an issue in low-income countries. For example, as part of the government-commissioned survey of adult skills in England, approximately 15% of the people who were interviewed and tested were assessed as attaining below level one, which meant that they 'may not [have been] able to read bus or train timetables or check the pay and deductions on a wage slip' (Department for Business Innovation & Skills, 2012). If this is extrapolated to the approximately 30 million working population in the whole of the United Kingdom (Office for National Statistics, 2015), this means that 4,500,000 people may not be able to read a timetable. 1,500,000 people at entry level one or below 'may not be able to describe a child's symptoms to a doctor or use a cash point to withdraw cash'. Concerns about numbers of people who are able to read and write lead inevitably to questions about how they can best be taught.

Debates about standards of language and literacy, and how they might be improved, have a very long history. One of the first most popular examples of a text designed to improve standards of English was published in the late 16th century, soon after the technology of printing had been developed in the West. As a new technology, printing stimulated the first books that aimed to prescribe and/or describe the English language, and hence seek to establish a standard form of the English language. One of the first printed educational guides written in English, about English, was by Richard Mulcaster, a teacher who was headmaster of Merchant Taylors' School in London.² It was called *The First Part Of The* Elementarie Which Entreateth Chefelie Of The Right Writing Of Our English Tung, Set Furth By Richard Mulcaster (Mulcaster, 1582). Mulcaster explained that the purpose of the Elementarie was to help teachers and parents of elementary school children to guide children in their learning by providing elementary educational principles. The tenth principle was that, 'Learning about language, and therefore grammar, is the height of the Elementarie.' The role of Grammar was to support understanding of the broader principles that were to be taught. The fifth principle stipulated that the curriculum should 'seasoneth the young mindes with the verie best, and swetest liquor'. Consistent with school curricula (and research) for hundreds of years to follow, reading was regarded as the most important curriculum area. Writing was mainly seen to serve reading although there was also mentions of memory and handwriting (beautifying the mind). Music was also central to the Elementarie's purpose.

The advocacy for ways to improve standards through better teaching of writing continued from the 16th century onwards. One of the key areas of contention was the extent to which pupils in schools were given the opportunity to compose writing, as opposed to copying, imitating or reproducing texts according to the rigid prescriptions of the teacher. Shayer's history of the teaching of English in schools from 1900 to 1970 is indicative:

'Imitation' was not simply an isolated classroom exercise, but a whole way of thinking that was taken for granted by a great many teachers, if not by the vast majority, certainly until 1920 and even beyond. Briefly, the pupil (elementary or secondary) is always expected to imitate, copy, or reproduce. (Shayer, 1972, p. 10)

However, in the 1980s, narrow teaching of writing was challenged by 'one of the most seductive writers in the history of writing pedagogy' (Czerniewska, 1992, p. 85). Donald Graves's 'process approach to writing', as it came to be known, was popular in Australia, New Zealand, the United States and the United Kingdom. His approach to writing was published in his popular book *Writing: Teachers and Children at Work* (Graves, 1983). This book was informed by Graves's qualitative case-study research as part of his doctorate, for which he won the '1974 Promising Researcher Award' of the National Council of Teachers of English (Graves, 1975).

At the heart of Graves's approach was learner choice, and the development of the writer's voice, enacted in a publication process in the classroom. Graves's approach was built on regular writing workshops carried out in primary/elementary school classrooms. Pupils were encouraged to generate ideas for writing, then work on those ideas towards a finished product, for example a short book or other 'publication'. These publications become part of the classroom literacy resources, for example, being available alongside professional published books, to be read and critiqued by the classroom community. The teacher's role was akin to that of an editor. Guidance was given orally by the teacher to individual pupils during the writing workshop. Ground rules for peer-to-peer feedback could also be developed. Teachers would initiate 'mini-lessons' with small groups, or with the whole class usually at the beginning of a writing workshop, based on their ongoing assessments of the writing of the pupils. So, if for example the teacher noted a particular issue that needed input, this would be used as the focus for the mini-lesson or whole class input.

The use of the process approach as the sole method of teaching writing was probably not common, in spite of the apparent popularity of the method. The first, and possibly only in-depth research study (albeit modest in scale) of the use of the process approach in England was published by Wyse (the author of this paper) in 1998. The study examined the research evidence and debates about the teaching of writing at the time, in particular the place of the process approach in the context of primary education policy and practice in England. In-depth case studies of the work of three teachers over the course of a school year documented the ways that the process approach was combined with other methods of teaching writing, including more traditional writing task-setting. The evidence from the case studies, combined with evidence from wider research, scholarship and policy documents suggested that in England, the combination of the process approach with other methods was more common than the use of the process approach as the main approach to teaching writing, although evidence to substantiate this was limited.

Some of the Donald Graves story is typical of many education researchers who begin their careers as teachers. His work was informed by experience as a teacher, head teacher, then teacher educator in initial teacher education programmes. Graves's method was based on his small-scale qualitative research, the kind of research that has remained popular with researchers from similar backgrounds, a methodology recently defined as *close-to-practice* research (Wyse, Brown, Oliver, & Pobleté, 2018). What is less typical of Graves's story is the popularity he achieved through his best-selling book. But with this popularity came criticism. A particularly sharp criticism alleged that Graves's approach to teaching writing was based on 'unstructured expression of personal experiences':

[Graves] uses his case study of sixteen New Hampshire children as a research base providing proof of the efficacy of this method. However, his observations from this study qualify as reportage more than research. The work of the Graves team in New Hampshire represents a demonstration of teaching ideas that work well under favourable circumstances. Because he never considers negative evidence for the hypothesis he is testing, his work does not constitute research. (Smagorinsky, 1987, p. 331)

The idea that Graves's study does not constitute proper research is extreme. This line of criticism can be seen as related to research debates that have crudely polarised research as scientific and/or experimental versus research that is qualitative, including qualitative case-study research (see Wyse, Smith, Selwyn, & Suter, 2017, for a recent review of such debates, and see later in this paper for a systematic review and meta-analysis that includes qualitative research studies).

Since the publication of Graves's work and the ensuing criticisms, we have the benefit of more than 30 years of research on writing to recontextualise the process approach to writing (or process writing as it is sometimes called). We are able to reconsider its effectiveness on the basis of experimental evidence. This paper presents and reviews research evidence in relation to the teaching of writing. The relevance and effectiveness of the process approach to writing for contemporary primary/elementary education is a key focus. The lines of argument are informed by a four-year multidisciplinary study of writing, of which two elements are presented in this paper: 1. a qualitative secondary data analysis of interviews with eminent expert writers; 2. an account focused on novice writers based on previously published experimental research on effective writing teaching. The paper concludes with reflections on the continuing relevance of Donald Graves's ideas, and the process approach to writing, in 21st century primary/elementary education.

A multidisciplinary study of How Writing Works

The overall aim of the four-year study, How Writing Works, was to contribute to knowledge about writing, and ultimately about how writing can be learned and taught more effectively. The scope of the work was broad, addressing as it did expert writers and novice writers in the context of writing in society. The research questions were as follows:

- How should we understand writing theoretically?
- How do key moments in the history of writing enable us to reflect on writing now?
- What are the relationships between the composition of meaning and the technical elements of writing such as structure, sentences, words, letters, and sounds?
- What are the relationships between oral and written language?
- How are conventions and standards of language established and applied, and in what ways do and should they impinge on writing?
- What is the nature of creativity in writing?
- And consequently, how does writing work and therefore how is writing best taught?

The multidisciplinary orientation of the work was built on philosophical, historical, socio-cultural and psychological perspectives. The historical dimensions of the research located the work particularly in four ages of the history of writing: prehuman language, the birth of the alphabet, the advent of printing, and the rise of social media. In parallel with the historical framing, the philosophical dimensions of the research took account of western philosophy's origins in Ancient Greece, and ultimately the philosophy of pragmatism, in particular Dewey's philosophy of language.

An important element of the multidisciplinary framing was the comparison of the writing of words and text with the writing of music. The rationale for the selection of this comparison was that music is the only other form that, like language, has both oral and written forms. The music versus text exploration included the following: comparison of the historical origins of alphabetic writing with the development of western musical notation; philosophers' use of examples from music to theorise language and writing; eminent writers' use of music as a means of explanation of their craft of writing; and neuroscience research on creativity showing close parallels between composition of music and composition of texts.

The empirical projects that were part of the research included a qualitative secondary data analysis of *The Paris Review Interviews* carried out with writers regarded as some of the world's best (determined by the winning of awards such as the Nobel or Pulitzer prizes). A three-year longitudinal study of young people's

creativity and writing was also carried out (not reported in this paper for reasons of space). The primary data that underpinned the secondary data analysis already existed in The Paris Review Interviews. The Paris Review Interviews are interviews with some of the world's great writers from the 1950s onwards. At the time, there were four printed volumes that represented a selection of the best of 64 interviews taken from all interviews available prior to each volume. As the editor, Philip Gourevitch made the selections for the four printed volumes. Subsequently, the resource was developed online. The interviewers were themselves writers who had read their interviewee's works. The interviews, which were undertaken over one or more visits to the writers' homes, sometimes over a period of years, were followed by writers being sent an edited transcript of the interview to review. Hence, the benefits of the oral interview, with its revealing 'on the spot' requirement for answers, was balanced against the opportunity for the writers to reflect carefully on the transcript to ensure their answers were accurate. A unique feature of the interviews is that they focus on the processes of writing, the writer's craft, much more than the outputs of writing.

The qualitative data analysis of the edited interview transcripts involved full readings of all interviews followed by qualitative data coding supported by NVivo software. At the start of the work, *The Paris Review Interviews* were only available in printed volumes, but ultimately a digital resource archive was established. Codes were allocated to selected quotes from the writers. The process included progressive focusing in order to reach sufficient depth of findings in each category, and across categories. Categories were derived from identification of significant patterns of ideas that recurred in the words of a majority of the writers. *A-priori*, the theoretical framing outlined earlier in this paper guided the establishment of categories and their dimensions, but new categories also emerged consistent with an *abductive* approach to data analysis (Atkinson & Delamont, 2005). The final main category set identified in the secondary data analysis was as follows: creating original ideas for writing; influences on writing; writing and music; writing and teaching; basic processes of writing, including the writer's workplace.

Thinking about Writing

The choice of philosophy as a way to theoretically orient the study was made in recognition of the seminal contribution to knowledge, and the breadth and depth of theoretical explorations, that philosophy has made. In addition, the substantive focus of the research on the English language, an alphabetic language which has origins in the development of the concept of alphabet in Ancient Greece (and prior to that, in Egypt – see Darnell et al., 2005), was relevant to the choice of western philosophy. The attention of the philosophers of Ancient Greece was not focused directly on language, this was to develop much later, particularly as part of the linguistic turn in philosophy (Potter, 2012). Prior to the linguistic turn, language itself was less the object of analysis. Instead the extent to which different meanings in language expressed broader philosophical arguments, for example in relation to how concepts like 'truth' might be defined and understood, was the focus. In addition to the philosophical orientation, the How Writing Works study was historically oriented in order to identify significant trends of thinking over time. The historical focus included analysis of the debates related to the development of 'standard English' which often hinge on conceptions of the origins of the English language, for example in linguistically prescriptive accounts claiming the importance of Latin as an influence on the language and hence the need for 'rules'.

The possibilities and challenges of combining philosophical trends in thinking with a history of writing became exemplified in two key linguistic issues: a) the neglect of writing as an object of study due to its categorisation unproblematically as an extension of oral language; b) the context principle. For the philosophers of Ancient Greece, writing was initially seen as a threat because the traditional role of the teachers to induct learners through oral language was challenged by the new possibility that writing created for more independent learning, potentially without the need for mediation by a teacher. The initial reception to the invention of alphabetic writing in Ancient Greece was hostile. In Plato's dialogue, *Phaedrus*, Socrates recounts an ancient story. The king of Egypt was the god Thamus who was visited by the god Theuth, who wanted to show some of his new inventions, including the invention of alphabetic letters. Thamus discussed the merits of each of the inventions but was completely dismissive of the letters that make up writing:

You have invented an elixir not of memory, but of reminding; and you offer your pupils the appearance of wisdom, not true wisdom, for they will read many things without instruction and will therefore seem to know many things, when they are for the most part ignorant and hard to get along with, since they are not wise, but only appear wise. (Fowler, 1925/2018, s274a)

The gradual increases in philosophical attention to language, over many hundreds of years, ultimately resulted in the linguistic turn, a phenomenon that originated in the thinking of Gottlob Frege and other seminal thinking by Bertrand Russell and Ludwig Wittgenstein (Potter, 2012). Frege's placement of language at the heart of philosophical thinking was encapsulated in the 'context principle', in particular that words can only be understood in the context of a sentence. But ultimately it was Wittgenstein's analysis of the way the words of language are the 'clothes' of thinking, and his construct of 'language games', that transformed not only thinking about language but the whole of western philosophy. For Wittgenstein the concept of language games explained not only the multiple meanings possible from reading words, including metacognitive thinking, but also from reading more generally, i.e. reading music, pictures and even people's faces. Finally, the relative neglect of the linguistic study of writing in its own right was to be challenged by Jacques Derrida. Language was a central focus of the warrant for Derrida's attack on structuralism, in his claim that the great Swiss linguist Saussure's structuralism had adopted a phono-centric orientation.

The philosophical and historical origins of the How Writing Works study were brought up-to-date through consideration of more recent socio-cultural perspectives, informed by Vygotskian mediation theory, and relevant psychological-neuroscientific work. This revealed some important points of convergence, for example in wellknown cognitive models of the writing process (e.g. Hayes, 2006) that include the *environment* in which writing takes place. However, one of the most striking examples of the connections between socio-cultural and neuroscientific research was seen in research on *creativity*, an important focus in relation to processes of writing. A significant neuroscientific empirical study of creativity based on the measurement of brain cells activity debunked the idea that cognitive functions such as creativity happen in discrete zones of the brain, arguing instead that the idea of networks of hubs in different regions of the brain is a more appropriate metaphor. *Stimulus-dependent thought* versus *stimulus-independent thought*, and attentionswitching between salient environmental stimuli, are features of such neural networks. As a consequence, it was argued that 'task-unrelated thoughts', or perhaps something akin to day-dreaming, appear to be an important part of thinking that supports creativity (Jung, Brittany, Carrasco, & Flores, 2013). But it was not just the main findings reported in Jung et. al.'s (2013) study that were relevant. The opening of their research paper had a revealing insight into multidisciplinarity. Their paper begins with the assertion that the attempt to define creativity results in 'unedifying arguments' (p.1). In a parallel made with genetics, the claim is made that the word 'gene' has no commonly accepted definition, and nor does the word 'creativity'. However, following some exploration of the assertion, the authors concluded that a 'broadly accepted definition of creativity'

refers to the production of something both novel and useful ... This definition is plausible, is broadly applicable, and would appear to hold true across much of evolutionary time. As such, it also refers to the workings of the brain. (Jung et al., 2013, p.1)

The concepts of originality ('novel') and value ('useful') can be seen as broadly accepted definitional qualities of creativity from a range of disciplinary perspectives (for an overview, see Wyse and Ferrari, 2014).

Having framed writing philosophically and historically, and accommodated relevant thinking from socio-cultural and neuro-scientific perspectives, the final part of establishing the theoretical framing was to link philosophical ideas from the past with more recent philosophy. In particular, there is the idea of language as not simply a vehicle for meaning but language as more actively endowing meaning (or essence), including giving meaning to the nature of physical objects. An important aspect of this pragmatist view, inspired by John Dewey's philosophy, was the distinction between language as instrumental versus language as 'consummatory' (Dewey, 1925). Language as consummatory is exemplified in direct participation, for example, in performing arts. As the literary forms of such arts develop, direct participation is enriched through *imaginative identification*, by readers, viewers or audience. Dewey argued that literary forms are an essential part of how human life is judged: forms such as poetry are appreciated not only by individual readers but also at the level of appreciation by society. Here, there are echoes with the Ancient Greek philosophers' understanding of the rhetoric of different forms of oral and written 'texts', for example, the differences between oral and written manifestations of the rhetoric of poetry versus the rhetoric of legal arguments.

Dewey built on the philosophical canon, including work from Ancient Greece, as would be expected from a philosopher of his stature. But less typically for mainstream philosophy, he paid significant explicit attention to education, including developing an applied educational approach based on this philosophy (in the University of Chicago Laboratory School). Of particular significance to the research reported in this paper was the way that philosophy of language was central to Dewey's philosophy more generally: Dewey regarded communication, language and discourse as a natural bridge between existence and essence (Biesta, 2013). A crux for the theoretical orientation of the How Writing Works research was recognition that Dewey's philosophy of language appeared to extend even Wittgenstein's and Vygotsky's powerful arguments related to the centrality of language to human understanding, and therefore that understanding human processes such as writing was to be found in the nature of language as inseperable from essence and existence.

Findings

Interviews with expert writers

The fundamental starting point, in the process of writing, that faced the expert writers was developing their own original ideas. This starting point is similar to children who experience Donald Graves's process approach to writing. When Louise Erdrich was asked by her interviewer about original ideas for writing, or how her books came into being and where they started, her answer was metaphorical, and also noted the sheer emptiness of not having an original idea:

I have little pieces of writing that sit around collecting dust, or whatever they're collecting. They are drawn to other bits of narrative like iron filings. I hate looking for something to write about. I try to have several things going before I end a book. Sometimes I don't have something immediately and I suffer for it. (Erdich, as cited in Editors of the Paris Review, 1998)

Nothing short of immortality drove Ernest Hemingway's search for originality:

From things that have happened and from things as they exist and from all things that you know and all those you cannot know, you make something through your invention that is not a representation but a whole new thing truer than anything true and alive, and you make it alive, and if you make it well enough, *you give it immortality* [emphasis added]. That is why you write and for no other reason that you know of. But what about all the reasons that no one knows? (Hemingway, as cited in Gourevitch, 2009, p. 61)

The essential referents for these eminent writers' reflections on originality included comparison with music. William Faulkner referred to the expressive possibilities of music versus words:

A writer is trying to create believable people in credible moving situations in the most moving way he can. Obviously he must use the tools of his environment that he knows. I would say that music is the easiest means in which to express oneself, since it came first in man's experience and history. But since words are my talent, I must try to express clumsily in words what the pure music would have done better. That is, music would express better and simpler, but I prefer to use words, as I prefer to read rather than listen. I prefer silence to sound, and the image produced by words occurs in silence. That is, the thunder and the music of the prose take place in silence. (Faulkner, as cited in Gourevitch, 2007b, p. 48)

As part of the data analysis it became clear that in most cases the writers engaged in teaching. For some, this was only in the broad context of invitations to talk about their work. But many of the selected writers had paid employment teaching writing, typically creative writing in universities, although the poet Ted Hughes was an

important and rare example of a writer who not only worked with school-age writers but also published a book about teaching poetry (Hughes, 1967). The reflections on teaching and learning were fascinating, and particularly whether the writers thought that creativity in writing could be taught. Paradoxically, some writers taught creative writing classes but doubted that the creative aspects of writing could be taught. Part of this paradox was their occasional reticence, faux or real, to explain their craft of writing.

Another part of the paradox was that the writers who were doubtful that creativity could be taught still sought to provide ideal conditions for creativity in writing to flourish. For example, the actor and writer Robert Stone was dubious about whether students could learn from creative writing classes, yet he taught such classes. His philosophy was that 'You know, you throw the rock and you get the splash' (Gourevitch, 2007a, p. 331), by which he meant that the teacher sets up experiences, such as going to visit bars and race tracks, to listen carefully to people's dialogue in order to try and bring a sense of realism to the enactment of fictional characters in writing.

Knowledge, including knowledge from different disciplines, was also part of the account of teaching that these great writers gave. In a memorable example, the writer Richard Price linked his view that knowledge was important for all writing, including fiction writing, with a particular student he was struggling to support. The seemingly simple question 'what do you know that I don't know?' produced powerful authentic writing about a sub-culture experience of graffiti signers, their aerosol-can techniques, their 'tags', and details such as 'the smell of spray-paint mixing with that rush of tunnel air when someone jerked open the connecting door on a moving train that you were 'decorating' (Gourevitch 2007a, p. 403).

In summary of what these great writers said about writing, and drawing the music versus text comparison together, Al Alvarez's thoughts, from a writer who had succeeded in multiple forms of writing, were profound:

I sometimes feel about my profession much the same as Vladimir Mayakovsky felt about suicide: 'I do not recommend it to others', he wrote, and then put a gun to his head ... The art of poetry is altogether different from writing nonfiction, and literary criticism is different from them all. Fifty years of writing for a living have taught me that there is only one thing the four disciplines have in common: in order to write well you must first learn how to listen. And that, in turn, is something writers have in common with their readers. Reading well means opening your ears to the presence behind the words and knowing which notes are true and which are false. It is as much an art as writing well and almost as hard to acquire. (Alvarez, 2005, p. 12)

The experiences of some of the world's most eminent writers reflect a range of important parallels with the process approach to writing: the starting point of creating ideas for writing; the hard work required to turn those ideas into workable text; the demanding skills of editing; and finally, satisfactory publication, were all aspects of Graves's approach. The authentic accounts of these great writers seemed to provide an important corrective to more dubious claims about how writing should be taught, for example, approaches that assume an undue emphasis on imitation, copying and reproduction.

Experimental evidence in relation to novice writers

The perspectives of expert writers provide an important insight to those who have achieved highly in their craft. However, education in early years settings and schools is concerned with the development of writing from humans' earliest stages onwards. There is now a considerable amount of robust research evidence on the most effective ways to teach young students to write, as this section will outline. Experimental trial evidence about process writing was not available when Graves's original work was published. Not only are there now examples of robust experimental work, including randomised controlled trials (RCTs), but in recent years these studies have also been combined in systematic reviews and meta-analyses. In addition to the attention to young people's writing, a smaller body of work has been carried out with novice writers who are adults, and who therefore have not learned to write sufficiently during their years in school.

A recent systematic review and meta-analysis of true experiments (i.e., including random allocation to experimental and control groups such as in RCTs), quasi-experiments, and participants as own controls studies (where participants experience both intervention *and* control conditions in a sequential order), categorised sets of studies and their findings into four key areas: 1. emphasis on students' writing, including doing more writing; 2. supporting students' writing – emphases in teaching, including the process writing approach; 3. explicit writing instruction – including strategy instruction; 4. writing assessment – including self-assessment, peer assessment and teacher assessment (Graham, Harris, & Chambers, 2016). Unusually the systematic review also took account of qualitative research studies and single subject design studies.

Under category 2, supporting students' writing, 33 experimental studies were found which had compared a process writing approach to a control condition ('business as usual' or a different approach to teaching writing). The meta-analysis of these studies found a statistically significant effect for the process writing approach (see Table 1), with an effect size of 0.34 overall, when carried out in primary/elementary or secondary classes. *Effect sizes* go beyond simply establishing whether an approach has worked or not. They indicate how well it worked, through their measure of the *extent of difference* between comparison groups in experimental studies. An effect size from 0.26 to 0.44, equivalent to a range of three to six months' progress, is considered moderate (Higgins, Kokotsaki, & Coe, 2012). The statistic for the 95% confidence interval for the effect on writing ranged from 0.24–0.44. Although the process writing approach was effective with both primary and secondary students, it was more effective with elementary/primary students (Grades 1–5), with an effect size of 0.48 as opposed to an effect size of 0.25 for secondary students.

(Informed by Granam, Harris, & Chambers, 2010, p. 211)*				
Interventions	Studies	Effect size	95% confidence interval	Grade levels
Process writing	33	0.34***	0.24 to 0.44	1–12
Elementary/primary	18	0.48***	0.34 to 0.65	1–5
Secondary	14	0.25***	0.12 to 0.39	6–12

Table 1: Meta-analysis of experimental studies of the process writing approach (informed by Graham, Harris, & Chambers, 2016, p. 211)³

There is much less research on what kind of teaching is effective for adult novice writers compared with that for school-age learners. One of very few studies to focus on writing, as opposed to literacy more generally, studied 199 learners, in 40 classrooms, in 20 organisations who were working to improve adults' writing in the UK. Small but significant improvements in writing were attributed to a range of theories and practices. Consistent with experimental trial evidence with younger learners, having plenty of opportunity to write was vital, and for the learners in this study it was estimated that 150 to 200 hours of teaching and learning was required in order to progress one level (assessment levels for adult learning determined by a national policy). The research found that if meaningful contexts for writing activities using a range of different forms of writing were provided, and if these were clearly linked with the learners' experiences in their lives, then adults' writing improved. In addition, time was needed for discussion between teachers and learners about writing and the tasks, and individual feedback and support was needed while learners were writing, through teachers who were responsive to their learners' needs and flexible to adapt the planned session according to those needs. Overall, the findings emphasised that 'teaching should approach the technical aspects of writing: spelling, grammatical correctness and punctuation, within the contexts of meaningful writing tasks rather than through decontextualised exercises' (Grief, Meyer, & Burgess, 2007. p. 11).

It appears, then, that the key elements of the process approach to writing that work for young writers may also work for adult learners.

The evidence in relation to expert writers and novice writers, the historical and philosophical analyses, the range of empirical findings, and the comparisons of music composition with text composition that were part of the How Writing Works study (a full account is published in Wyse, 2017) ultimately became focused in the metaphor of 'the ear of the writer'. The writer's ear is developed in part through inhabiting the worlds of the work of other writers that they read. In relation to the attributes, knowledge and skills that writers most need, the author Maya Angelou was perceptive in her observation that 'ears ears', (Gourevitch, 2009. p. 255) and the 'courage' to take risks, are essential attributes necessary for successful writing.

Discussion and conclusions

Donald Graves's process approach to writing was an example of an approach developed by someone whose early experience was as a teacher, then head teacher, and whose subsequent research was 'close-to-practice' research. However, Graves's PhD research, which was the basis for his approach, was criticised for being small-scale case-study research. From the 1990s onwards, Graves's approach fell out of favour. Yet more than 30 years later there is compelling experimental evidence that process approaches to teaching writing are effective. One important aspect of Graves's approach that perhaps has not been subject to robust experimental research is whether pupil choice, and hence ownership of their writing over time, is beneficial compared to process writing tasks which are planned and controlled by teachers.

Overall, there is then compelling research evidence about how to teach writing effectively. This brings into question the extent to which education policies, including national curricula, reflect research evidence, an increasingly important question for practitioners and researchers. As far as the teaching of writing is concerned, there is much variation internationally. For example, a comparison of the national curriculum texts for subject English/language in New Zealand with, say, Queensland Australia reveals notable differences in the extent to which either of their curricula emphasises the process approach to writing versus products of writing, and in the extent to which pupils are encouraged to make choices in their writing. Another example of a national curriculum, and what is perhaps a unique perspective worldwide, is Scotland's *Curriculum for Excellence* that includes in its programme of study for writing an explicit strand called 'Enjoyment and Choice'. Within this strand the requirements for the First and Second Level (Grade) programmes of study include this: 'I enjoy creating texts of my choice and I regularly select subject, purpose, format and resources to suit the needs of my audience' (Scottish Government, 2011).

In the country where the English language originated, it might be reasonable to expect an evidence-informed and enlightened approach to teaching the English language and writing in its national curriculum. While there are some elements of England's national curriculum that could be seen as emphasising process elements, such as aspects of the emphasis on writing 'composition', at the same time the heavy emphasis on formal grammar is not in line with research evidence on what supports the teaching of writing (Wyse & Torgerson, 2017). Research on writing, some of which has been featured in this paper, provides ample evidence that could inform future developments of national curricula, including in England, and not least the pedagogical practices to avoid.

Perhaps surprisingly to some, the practical manifestation of a more evidenceinformed national curriculum for writing might be found in a different subject area. If the subject specification for music in England's national curriculum was only slightly modified, for example to replace the word 'music' with the word 'language' (as can be seen in Table 2) we may be closer to a more appropriate curriculum for writing.

	Language/English
Purposes	one of the highest forms of creativity;
	increase [pupils'] self-confidence, creativity and sense of achievement.
Aims	to create and compose <i>writing</i> on their own and with others;
	understand and explore how <i>writing</i> is created.
Key Stage 1 Programme of Study	experiment with, create, select and combine <i>words</i> using the interrelated dimensions of <i>language</i> .
Key Stage 2 Programme of Study	improvise and compose <i>texts</i> for a range of purposes using the interrelated dimensions of <i>language</i> ;

Table 2: A proposed Language/English curriculum derived from the
music curriculum of England's national curriculum.

listen with attention to detail and recall *text* with increasing aural memory.

A possible rationale for music's place in understanding the writing of words is that writing is a compositional process first and foremost that also requires the acquisition of skills and knowledge. The intonation for pitch in music is akin to intonation for the language of writing. The concept of musical melody can be seen in the themes or lines of argument of writing. Chords and harmonies are like the layers of textual meaning. We can make sense of the craft of writing through musical metaphors such as Jack Kerouac's notion of blowing like the tenor man: the saxophonists' control of breathing and musical phrases akin to Kerouac's writing of sentences (see Wyse, 2017). And when the ear of the writer is well developed it enables analytic precision, compositional fluency, and the technical skills that are necessary to create and craft writing.

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² Mulcaster also published what may be the first theory of primary education: Mulcaster, R. (1903). The educational writings of Richard Mulcaster (1532–1611) (J. Oliphant, Ed.). Glasgow: Glasgow University Press/James Maclehose and Sons.

³ 'Note. All average-weighted effect sizes are for writing quality except effects for Writing about Content Material (content learning measured) and Writing about Material Read (reading comprehension measured) ... *** p < .001' (Graham, Harris, & Chambers, 2016, p. 211).