Understanding writing and its relationship to reading

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In this chapter Brian Cambourne shares key messages that focus on the nature of effective writing and its relationship with reading, language, and learning.

Introduction

This chapter is from *The Whole Story: Natural learning and the acquisition of literacy*, published in 1988. It is an edited version of the ninth chapter entitled, *Making Connections: Understanding Writing*. The book is no longer in print so I feel privileged to be able to share its key messages because I believe they still as important, (perhaps even more so), for understanding and teaching writing in today's classrooms. These key messages focus on the knowledge, attitudes, and professional beliefs about writing, reading, language, and learning which guided and shaped the classroom practices of the teachers whose classrooms I've been studying for nearly forty years. Some of these teachers were, in my opinion, very skilled teachers of writing. Some struggled to engage or interest students in writing. All, however, extended me the privilege of visiting and observing their writing sessions. In the chapter I outline what this research revealed about the teaching and learning of writing in a range of K-6 Australian classrooms. In the process I explore two distinctly different perspectives on the learning and teaching of writing and evaluate their effectiveness for developing effective writers. Let me begin by clarifying what I mean by an effective writer.

What is an effective writer?

How do we recognise good writing when we come across it? How can we recognise a good writer when we come across one? Such questions presuppose that some professional authority has worked out what 'good writing' actually is, and can describe it in terms of an objective, universally accepted, set of criteria. While many have tried, no one, to my knowledge, has so far been able to devise a set of value-free, objective criteria for defining good writing or describing what it looks like. The reason for this is quite simple; *writing is about the creation of meaning. How does one judge the quality of a piece of meaning?*

The research of linguists, sociolinguists, literary critics, rhetoricians, cognitive scientists, and others has shown that the quality of meaning attributed to a piece of written text depends on complex interactions between many factors including purpose, audience, topic, print layout and orientation, readers' background experience, knowledge and values, and many more. Pinning down and defining something as conceptually slippery as 'quality of meaning' is simply too difficult given the current state of linguistic science.

I've found it much more useful to reframe the question. Instead of 'what is good writing?' or 'what is an effective writer?' I find it easier to ask: *What characterises an **effective user** of writing?*

In order to answer this question, I've drawn on a number of sources of data, including:

- regular and systematic observations I've made of learner-writers

- statements made by successful authors of both fiction and non-fiction

- findings from research into the writing process

- introspective observations of myself as an author

- regular and systematic observations of, and interviews with, *ineffective* users of writing – namely, university students who were referred to my centre for help with academic writing.

When I pulled the threads from all of these sources of data together, the following four broad criteria for an effective user of writing emerged. They are:

1. Confident users of the medium. The effective writers whom I've observed have no qualms about using writing to meet a whole range of needs. One thing they have in common is that during their school careers they've had one or more teachers who convinced them that they were capable of become effective writers.

2. Positive about using writing to achieve a range of personal and social ends. While most young children are initially positive about writing, many become alienated from writing as they move through the grades. My data show that those who are not alienated had one or more teachers who convinced them that writing was learnable, and that it was an exciting, interesting, satisfying and worthwhile enterprise which could help their lives by giving them both enjoyment and access to power, equity, justice, and other accoutrements of the 'good life'.

3. Committed to their writing. This commitment manifests itself in a wide range of behaviours, including: a strong sense of ownership of one's own meanings; a willingness and/or readiness to engage with readers' responses to drafts; willingness to take risks when making decisions about meaning and form; awareness of a range of options for making such decisions; willingness to predict and/or reflect on the potential effects their written texts might have/did have on readers; readiness to accept advice and revise drafts; the linguistic and/or rhetorical knowledge necessary for justifying linguistic choices, and willingness to share their texts with members of their writing community.

4. Able to coherently explain and discuss what they know about writing. As they moved through the grades, the effective users of writing I'd identified continually seemed to be able to turn the tacit knowledge they had about writing into propositional knowledge (Polanyi, 1958) using language appropriate to their developmental stages. This manifested itself in the ability to explicitly and coherently articulate their knowledge, opinions and beliefs about different aspects of writing including: the role writing plays in our culture; the different purposes for writing; the range of processes effective writers can draw on; and ways of learning the complex knowledge and skills associated with good writing. I called this ability to explicitly and coherently articulate knowledge, opinions and beliefs, meta-textual awareness.

Here are examples of how these students displayed their meta-textual awareness:

- The fairy tales I've written are different from fables in the following ways . . .
- I'm writing a kind of fairy tale which has a moral like a fable does, but it's hidden; you have to work it out—I won't actually write it
- You know how the characters in The Twits appear in Boy with different names? Well, I've done something like that in this piece
- I've used similes like Colin Thiele does
- I've tried to do what E. B. White does when he describes how lonely Wilbur was
- I've tried to make word pictures like Roald Dahl does in some of his books
- I know that 'ie' can make the 'ee' sound in some words because that's how my friend Lief writes his name (from conversation with Matthew aged five years).

A summative analysis of hundreds of similar statements revealed that these effective users of writing had developed meta-textual awareness of such things as:

- how fiction differed from non-fiction, report differed from story, argument differed from description, and so on
- the similarities/differences between plots, settings, characters, they constructed in their own pieces and those used by authors they'd read
- how they learned to spell and punctuate through reading and writing
- how and where they got their ideas and models for writing
- how conversations with others helped solve reading/writing problems
- how leads, endings, and detail could improve texts
- how to draft and edit
- why conventions are important in public drafts
- how to get over writers' block, and much more.

As I synthesised these data it became obvious that these effective users of writing displayed two critical kinds of expertise that set them apart from less successful learner-writers. First, they had obviously internalised a large network of specialist knowledge about writing, learning to write, and the devices writers used to create texts. Second, there was an attitudinal dimension to this writing know-how – not only were they confident and committed users of this specialist knowledge, but they also felt positive about using writing and talking about it.

This raised a critical question for me, namely, how do learner-writers internalise such complex knowledge in ways that develop positive attitudes towards and confidence in using writing?

In what follows I shall use the sources of data listed above to address this question. First, I will explore the complexity of knowledge that writers need to internalise in order to write successful texts. Then I shall explore the issues this complexity poses for instructional practice. Along the way I will summarise and compare what my data revealed about two significantly different instructional approaches to addressing these issues. Finally, I will explore implications for the teaching and learning of writing.

The complexities of writing

It wasn't until I set out to analyse the range, depth and types of specialist knowledge my effective users of writing displayed that I became aware of just how theoretically complex learning to write is. I began by identifying the scope and range of conceptual and procedural knowledge needed to write something as simple and mundane as an invitation to a wedding or birthday. The size and complexity of what I identified surprised me. It included several categories of conceptual and procedural knowledge including: the individual spelling of a few dozen words; the appropriate conventions of grammar and punctuation; the appropriate generic structure of wedding and/or birthday invitations; the format and layout of an invitation; the stylistic devices which characterise invitations, and a multiplicity of less tangible aspects of using written language symbols to make meaning to achieve certain outcomes.

When one considers that our education system demands that students become at least moderately competent authors of a much wider range of forms of writing including letters, reports, memoranda, journals, term papers, and perhaps occasional poems or pieces of fiction suitable to the demands and opportunities of out-of-school situations (Smith, 1983, p.558), the enormity (and complexity) of the learning task increases exponentially. Even moderately effective users of writing must have knowledge of all the spelling, grammatical, structural and stylistic rules, the conventions and meta-textual awareness associated with each and every potential type of writing before they can even contemplate writing it.

The issues this complexity poses for instruction

My summaries of the relevant research literature and the data sources described above indicate that effective users of writing can (and do) internalise an astronomical amount of complex specialist knowledge about writing. These data also show that they develop positive attitudes towards, and confidence in, using writing.

How (and why) they manage to do this has intrigued education researchers and theory builders for as long as I can remember. The three most popular theories offered to explain this learning are:

- genetic differences
- 'practice makes perfect'
- effective writers need effective classroom practice

Let's briefly explore each of these theories.

1. Effective users of writing are genetically different

Are effective writers simply smarter than those who don't seem to learn to write effectively? Are they born with some unique gene that confers a special kind creativity, or love of words? Have they a genetically determined personality trait that enables them to engage with **and** enjoy mastering all the tedious spelling, formal grammar, punctuation, stylistic and rhetorical conventions listed above?

I can find no empirical evidence that proves that as a group, successful authors are significantly more intelligent and/or score higher on tests of creativity than the population of non-authors. Nor do they have similar personality profiles. Neither are they expert spellers, grammarians, or punctuators. The evidence from the reflections of successful authors and/or what they reveal to biographers or researchers who interview them is *that writing is a craft-like enterprise that has to be learned like any other craft*. This evidence suggests that if anything sets them apart from non-writers it's a love of, or predisposition towards, storytelling (Young, 2014).

Roald Dahl is the prototypical successful author whose writing success was not predicted by his school reports. His old school books, reports and manuscripts displayed at the Roald Dahl Museum show that he received terrible reports for his literary (and other) skills; he was a poor speller, and was always dreadful at grammar. Despite these lacks, there is a strong consensus he was a brilliant storyteller for both children and adults. (See http://www.roalddahl.com/roald-dahl).

David Ogilvy succinctly summarises the overwhelming consensus on the issue of whether writers are born or made thus: 'Good writing is not a natural gift. You have **to learn** to write well' (Ogilvy, D, (1986) cited by Peveto, A. (2014).

2. Practice makes perfect

We're all familiar with the cliché: *Practice makes Perfect*. There's a strong consensus among educators, coaches, and the general public that mastering complex knowledge and/or skills is

simply a matter of athletes or learners demonstrating their current level of achievement for a teacher or coach who provides feedback on their attempts, with the expectation that the athlete or learner will 'learn' from this 'feedback' and adjust the level of skill and/or knowledge accordingly.

While the above may have benefits for athletes, does it for writer-learners? Is it possible to internalise all the complex knowledge and skills effective writers need by engaging in lots of writing, receiving 'feedback' from 'knowledgeable others', and adjusting one's level of skills and knowledge until competence is achieved? In other words can writers learn what they have to learn by doing lots of writing, paying attention to their readers' responses to the texts they create, and using this feedback to continually hone their writing knowledge and skills?

While it might be possible in theory, I agree with Frank Smith (1983) who asserts that it's impossible in practice:

> *I thought the answer must be that we learn to write by writing until I reflected on how little anyone writes in school, even the eager students, and how little feedback is provided. Errors may be corrected but how often are correct models provided, especially beyond the level of words? How often is such feedback consulted and acted upon, especially by those who need the correction most?* ***No one writes enough to learn more than a small part of what writers have to know.*** *Most experienced writers can produce a text that is right the first time, or at least they can edit or rewrite into conventional form, without extensive feedback, what they hurriedly produce. Besides, if we learn to write by testing hypotheses in writing, where do the hypotheses come from? Practice and feedback may help to polish writing skills, but cannot account for their acquisition in the first place. (Smith, 1983, p 560, emphasis added)*

If neither genetics nor sustained practice can explain how effective writers learn what they need to know and do, that leaves effective classroom practice as the most probable explanatory model.

3. Effective writers need effective classroom practice

The naturalistic inquiry methods I employed generated sufficiently rich data for me to identify two perspectives on effective classroom practice. One emphasised carefully sequenced, teacher-directed learning of a hierarchy of basic concepts and sub-skills. The other emphasised incidental or, natural learning.

In what follows I will summarise and evaluate the validity of each.

The carefully sequenced-lock-step-teacher-directed hierarchy of basic concepts and sub-skills approach

The majority of the K-6 classrooms I observed used variations of this approach. Many teachers who used it also thought it exemplified the 'practice makes perfect' cliché described above. Despite the variations, at the core were three basic categories of teaching-learning behaviour:

1. The fragmentation of the domain of writing instruction into series of separate subjects such as spelling, punctuation, grammar, handwriting, composition, and the further fragmentation of these subjects into sequences of basics or sub-skills with labels such as phonics, sentence structure, text types, parts of speech, word study, and many others.

2. Repetitive practice of these sub-skills and concepts till automaticity was achieved.

3. Systematic reinforcement of correct responses and/or extinguishing (through negative reinforcement) of mistakes or errors.

My evaluation of this approach

The more I thought about the complexity of what writers had to learn the more problematic this approach becomes. Think about it. Every text involves its own set of spelling, grammatical, punctuation, stylistic, rhetorical, etc., conventions. Then there are less tangible (but equally as important) matters of style, linguistic choice (which depends on the subtle relationships between topic and the intended audience), the schemas appropriate to the medium being employed, and the context of situation. As Smith (1983, p.559) observed more than three decades ago, 'Not only must letters, telegrams, formal and informal notes, newspaper reports, magazine articles, short stories, and poems be composed differently, the format of the genre itself varies depending on its specific purpose.'

A letter inviting a close friend to attend a public meeting to discuss the ecological consequences of fracking needs to be very different from one sent inviting a politician to the same meeting. Similarly, an invitation to a royal wedding is very different in terms of spelling, grammar, word choice, and format, from an invitation to a commoner's family wedding. While it might be possible for teachers to directly, explicitly, and systematically teach students the range of grammatically acceptable sentences and the few dozen correctly spelled words which need to be retrieved from memory for producing such letters and/or invitations, much more is required to become a moderately effective user of the diverse range of texts our culture uses and values.

Furthermore, it's difficult for this approach to explain how anyone could ever learn the conventional spelling all the words that an average adult writer has to store in memory. While it is difficult to know precisely how many words an adult can spell, some researchers estimate that the average person has a vocabulary of 100,000 words (Mincova & Stockwell, 2009). If we estimate that many adults can spell around half that number (a conservative estimate) this means that they have internalised the spelling of around 50,000 words.

Some memory researchers (Anderson & Bower, 1973) have shown that it takes between 30 and 60 seconds of intense cognitive effort to get a sequence of five unrelated digits inside an adult's long-term memory. If all the words that had to be internalised were only five letters long, and if every child continuously memorised the spelling of 10 new words each week over twelve years for

typical 40-week school year, they would internalise only 4,800 words in their school careers. If we upped the ante to 10 new words a day (i.e. 50 words per week) this brings their total to 24,000 words. It still falls far short of what typical adults can spell.

The evidence I synthesised from linguistic science literature unequivocally concluded that there was simply not enough time for learners to acquire all this specialised knowledge using this kind of pedagogy. Such learning is simply too extensive, intricate, complex, subtle, and pervasive.

The incidental or natural learning approach

In my data there was a second group of classrooms in which I found an unusually high incidence of students who wrote texts in which they displayed conceptual and procedural knowledge which had **NOT** been formally taught, mentioned, introduced, or planned in any previous lessons.

These examples included the unpredicted appearance of:

- conventionally spelled words
- use of accurate punctuation conventions such as speech marks, capital letters, paragraph indentation, full stops, asterisks, formatting and captioning of illustrations, and various stylistic conventions of newspapers, magazines and diverse other text forms
- appropriate similes and metaphors

When asked how they had learned such things their responses ranged from: don't know to it just popped into my head (from a 5 year old), to I saw it in a book and it came up in a group discussion.

These students had obviously learned a multitude of facts about spelling, grammar, punctuation, and associated aspects of text organisation, formatting, the process of writing, and learning to write. What was intriguing was that they'd seemed to have learned without deliberate effort or awareness of what they were learning, or even that they were actually learning. I considered this be 'natural learning' because it seemed sufficiently effortless and bereft of conscious awareness to be an in-built natural characteristic of human learning behaviour. I also considered it to be 'incidental' because it occurred when learning was not the primary intention.

When I looked more closely at these classrooms to see what might have enabled this kind of learning I found certain common features of curriculum and classroom organisation and practice.

With respect to curriculum organisation, teachers in these classrooms didn't separate reading and writing (or spelling, grammar, punctuation) into distinct subjects. Instead, what might be called their literacy sessions were characterised by multiple, overlapping reading, writing, speaking, listening, and viewing encounters. In these encounters reading and writing were almost seamlessly integrated across different curriculum areas.

With respect to classroom organisation and practice these classrooms were characterised by,

- dedicated time for students to engage in reading and writing every day

- teachers reading aloud to children at least once a day
- multiple opportunities for students to share and discuss the meanings they created from these reading and writing opportunities
- use of real books (as distinct from 'readers' and/or basals) for reading
- student choice about what they read and/or write
- furniture arranged in ways that support collaborative learning, discussion, and sharing
- teachers roving around the room interacting with small groups or individuals
- low frequency of sustained periods of whole class teacher-centred instruction
- lots of activity, movement, noise, and
- sharing of interpretations of own and others' texts.

Unlike the teachers who used the carefully sequenced-lock-step-teacher-directed approach these teachers organised their curriculum and their classrooms in ways that allowed students to constantly shuffle between a range of different meaning making encounters, providing multiple opportunities for creating and sharing their writing, and making connections about reading, writing, and learning.

My evaluation of this approach

The data from these classrooms suggest that when it comes to supporting the learning of writing and explaining how writers learn all its complexities, natural learning is clearly more successful.

With respect to supporting the learning of writing I found that those teachers who employed the natural learning principles described above consistently had much higher numbers of students who displayed the four criteria of effective users of writing I outlined at the beginning of this chapter.

More importantly, natural learning theory offered this alternate explanation of why and how this was possible: The knowledge of all the conventions of writing get into effective writers heads in the same way the conventions of spoken language gets into effective speakers' heads.

Learning to control the oral language of the culture into which one is born is probably more complex than learning to write, given the age at which it happens. The range and extent of spoken language children learn in the first five years of their lives is astounding. They have to learn thousands of words, grammars so complex they defy linguistic analysis, idiomatic and metaphoric expressions, the subtle nuances of cohesion, intonation, and expression, and lots more. Toddlers have been doing this successfully, seemingly without conscious effort or conscious awareness for thousands of years. It's as if nature (or evolution) has worked out a fail-safe method of ensuring that new members of any culture will successfully learn how to use that culture's oral language and communication mores.

Moreover, research into learning how to talk has consistently shown that very young children are able to master all the complexities of learning to talk predominantly because of how their

caregivers treat them (Cambourne, 1988; Cambourne, 1995; Greenspan & Shanker, 2006). What they have to learn about talking **can only** be contained in the demonstrations of language-in-use their caretakers provide in the ebb and flow of social living. There is no other source from which all these complex linguistic conventions can be learned other than the language their caregivers use in interaction with them, or around them. This means they have to be able (and willing) to attend to, engage with, and inductively work out the conventions and rules for becoming an effective user of any particular oral language. According to more recent research in cognitive science they can only do this because the ecological, social and emotional conditions that support this kind of learning align closely with how the brain works (Goodman, 2014; Tomasello, 2003). Essentially, they have to listen like a prospective talker of the language in which they are immersed.

What about the conventions of written language which prospective writers have to learn? Like the conventions of speech they too only exist in one place, the different written texts that a culture values and creates. There is no other source from which the complex conventions of written language can be learned except from these texts. Like 'learner-talkers', 'learner-writers' need opportunities to interact with and respond to both the texts that more expert users of the medium have created, and other readers who have read the same texts. This means learner-writers have to be able (and willing) to attend to, engage with, and inductively work out the conventions and rules for becoming an effective user of writing from reading and talking about these texts. Smith (1983, p. 560) sums up this situation thus:

> *To learn how to write for newspapers you must read newspapers; textbooks about them will not suffice. For magazines browse through magazines rather than correspondence courses on magazine writing. To write poetry read it. For the conventional style of memoranda in your school consult your school files.*

In other words, potential writers need the same conditions for learning the complexities of the written form of language as they needed for learning the oral form. In essence they must learn how to *read like (potential) writers* (Smith, 1983).

This in turn means teachers need to use classroom language and practices which convince students that not only are they capable of learning to write, but that it's also *an exciting, interesting, satisfying and worthwhile enterprise* which gives them *both enjoyment and access to power, equity, justice, and other accoutrements of the good life.* In order to do this teachers need to organise their classrooms in ways that create *multiple, overlapping reading, writing, speaking, listening, and*

End Piece

It is my hope that teachers of writing take at least these two key messages from this chapter.

First, with respect to the human brain, oral and written language are parallel versions of the same thing (language). This means that the conditions (see details in Cambourne, 1988, 1995) that

support learning to talk should guide and shape the classroom organisation and practice we use to teach writing.

Second, everything we need to know about writing can only be learned through a special approach to our reading, namely reading like a (potential) writer. This means that if students are to read like a potential writer, they must first be convinced that becoming an effective user of writing is worthwhile, and they are capable of learning how to do it, and that the classroom culture is a risk-free community of fellow writers.

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