

WE LEARN TO WRITE BY READING, BUT WRITING CAN MAKE YOU SMARTER

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My goal in this paper is to make two points:

1. Writing style does not come from writing or from direct instruction, but from reading.
2. Actual writing can help us solve problems and can make us smarter.

Writing Style Comes from Reading

A substantial amount of research strongly suggests that we learn to write by reading. To be more precise, we acquire writing style, the special language of writing, by reading.

Hypothesizing that writing style comes from reading, not from writing or instruction, is consistent with what is known about language acquisition: Most of language acquisition takes place subconsciously, not through deliberate study, and it is a result of input (comprehension), not output (production) (Krashen, 1982).

Thus, if you write a page a day, your writing style or your command of mechanics will not improve. On the other hand, other good things may result from your writing, as we shall see in the second section of this paper.

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In support of the “reading hypothesis,” studies have shown that:

- Children who participate in free reading programs in school, such as sustained silent reading, perform better on tests of writing than children who do not participate in these programs (see Elley and Mangubhai, 1983, for a second language study, and McNeil in Fader, 1966, for a first language study), and

- Those who report they read more write better (first language studies include Kimberling, Wingale, Rosser, DiChiara, and Krashen, cited in Krashen, 1984; Applebee, 1978; Alexander, 1986; Applebee, Langer, Jenkins, Mullis, and Foertsch, 1990; second language studies include Salyer, 1967; Janopoulos, 1986; Kaplan and Palhina, 1981).¹

Can writing be directly taught?

There are good reasons to suspect that direct instruction makes, at best, a limited contribution to writing.

First, all the ways in which “formal” written language differs from more informal language are too complex to be taught and learned one rule at a time. Even though readers can recognize good writing style, researchers have not succeeded in completely describing just what it is that makes good writing good. If “good writing” cannot be described, many aspects of it obviously cannot be taught directly.

Second, there are clear cases in which good writing style was obviously acquired without any instruction. Richard Wright (Wright, 1966) grew up in an environment where reading and writing were disapproved of by family members; his grandmother actually burned the books he bought home, “branding them as wordly” (Wright, 1966, p. 142).

Wright became interested in reading and in hearing stories at an early age, thanks to a schoolteacher, a boarder at his home, who told him stories from novels. Wright struggled to gain access to reading

material. He delivered newspapers only so that he could read them, and used an associates' library card to take books out of a library that was restricted to whites.

Clearly in agreement with the research reported here, Wright credits reading, not "study," with providing his language development:

I wanted to write and I did not even know the English language. I bought English grammars and found them dull. I felt that I was getting a better sense of the language from novels than from grammars. (p. 275)

We don't learn to write by writing

According to common wisdom, we learn to write by actually writing. The reading hypothesis asserts that this is not true, at least as far as style is concerned. Smith (1988a) tells us why we do not learn to write by writing:

I thought the answer (to how we learn to write) must be that we learn to write by writing until I reflected upon how little anyone writes in school, even the eager students, and how little feedback is provided ... No one writes enough to learn more. than a small part: of what writers need to know ... (p. 19).

The research confirms Smith's reflections. Actual writing in school appears to be infrequent. Applebee, Langer and Mullis (1986) asked students how many essays and reports they had written over six weeks for any school subject. Only 18.6% of the fourth graders and only 7.8% of the 11th graders wrote more than ten. Writing outside of school is also not frequent: Applebee et. al.'s 11th grade group did the most out-of-school writing, but only 17.4% kept diaries, 37.3% said they wrote letters to friends, and 74.8% said they wrote notes and messages at least weekly. (See also Applebee et. al., 1990, for similar results.)

Research by Rice (1986) allows us to make at least a crude comparison of writing and reading frequency outside of school. Rice probed reading and writing behavior of several groups, and I present one of them (high verbal adults) as a representative example. These subjects reported 15.1 hours per week in "total reading," but only two hours per week in writing (1.9 hours for "short writing" and .1 hours for "long writing"). Assuming even a very slow reading rate (200 wpm) and a very fast writing rate (typing at 60 wpm), this still means that people deal with far more words in reading than in writing (a ratio of 25 to 1). The true ratio is probably more, like 150 to 1. Considering the complexity of the system that is to be acquired, this data severely weakens the case for writing as an important source of language acquisition. (See also Evans and Gleadow, 1983, for similar estimates of reading and writing frequency.)

The research evidence also shows, in addition, that more writing does not typically lead to better writing. While some studies show that good writers do more writing than poor writers (see Applebee et. al., 1990, and studies summarized in Krashen, 1984), increasing the amount of writing students do does not increase their writing proficiency, as illustrated in the following table:

Studies Showing Increasing Output Makes no Difference

Study	L1/L2 measure
Dressel et al., 1952	L1 composition
Sutton & Allen, 1964*	L1 composition
Arnold, 1964	L1 composition
Varble, 1990	L1 writing; mechanics, content**
Burger, 1990	L3 composition, dictation

* Described in Hunting (1967)

**No difference in mechanics in grade 2 and 6 and for content in grade 6. For grade 2, more writing resulted in better writing content.

(An exception is Lokke and Wykoff, 1948; very small differences were found, however, between the writing of college freshmen who wrote two themes per week and those who wrote one theme per week.)

In addition, Hillocks (1986), after an extensive review that included unpublished dissertation research, found that writing classes that emphasized free writing did not produce significantly better writing than comparison classes.

Similarly, Gradman and Hanania (1991) found that while “extracurricular reading” was a strong predictor of TOEFL scores among international students ($r = .53$), frequency of extracurricular writing did not correlate with TOEFL performance. Neither writing frequency nor speaking frequency survived a multiple regression analysis, while amount of free reading reported was the best predictor of TOEFL performance.

What writing does

While writing does not help us develop writing style, writing has other virtues. As Smith (1988a) has pointed out, we write for at least two reasons. First, and most obvious, we write to communicate with others. But perhaps more important, we write for ourselves, to clarify

and stimulate our thinking. Most of our writing, even if we are published authors, is for ourselves.

As Elbow (1973) has noted, it is difficult to hold more than one thought in mind at a time. When we write our ideas down, the vague and abstract becomes clear and concrete. When thoughts are on paper, we see the relationships between them, and come up with better thoughts. Writing, in other words, can make us smarter.

Readers who keep a diary or journal know all about this—you have a problem, you write it down, and at least 10% of the problem disappears. Sometimes, the entire problem goes away. Here is an example of this happening, a letter written to Ann Landers in 1976:

Dear Ann: I'm a 26-year-old woman and feel like a fool asking you this question, but-should I marry the guy or not? Jerry is 30, but sometimes he acts like 14

...

Jerry is a salesman and makes good money but has lost his wallet three times since I've known him and I've had to help him meet the payments on his car. The thing that bothers me most, I think, is that I have the feeling he doesn't trust me. After every date he telephones. He says it's to "say an extra goodnight," but I'm sure he is checking to see if I had a late date with someone else.

One night I was in the shower and didn't hear the phone. He came over and sat on the porch all night. I found him asleep on the swing when I went to get the paper the next morning at 6:30 a.m.. I had a hard time convincing him I had been in the house the whole time.

Now on the plus side: Jerry is very good-looking and appeals to me physically. Well-that does it. I have been sitting here with this pen in my hand for 15 minutes trying to think of something else good to say about him and nothing comes to mind.

Don't bother to answer this. You have helped more than you will ever know. -Eyes Opened. (The Miami Herald, July 22, 1978; reprinted in Linderman, 1982).

Perhaps the clearest experimental evidence showing that writing helps thinking is from a series of studies by Langer and Applebee (1987). High school students were asked to read social studies passages and then study the information in them either by writing an analytic essay

on an assigned question relating to the passage or using other study techniques (e.g. note-taking, answering comprehension questions, writing summaries, "normal" studying without writing). Students were then given a variety of tests on the material in the passages. Langer and Applebee reported that "in general, any kind of written response leads to better performance than does reading without writing" (p. 130). In their third study, they showed that essay writing did not result in greater retention of information when the reading passage was easy; when the passage was difficult, however, essay writers did much better than students using other study techniques.

Another study showing the impact of writing on thinking is Ganguli (1989). College mathematics students who devoted three minutes per period to describing an important concept conveyed in class in writing easily outperformed a comparison group on the semester final exam.²

Some issues

To improve writing, should we simply increase reading?

The relationship between amount read and writing proficiency is probably not linear; that is, it may be the case that after a certain point more reading will not always result in better writing. I have hypothesized (Krashen, 1984, p. 21), that a threshold may exist—every good writer has done a great deal of reading, enough reading to adequately acquire the "code," the language of writing. Improvement after this point may not depend on reading, but on other factors (imagination, logic, etc.).

Does it matter what is read?

No studies have been published, to my knowledge, that show a relationship between what is read and writing style. Such a relationship surely exists, since different styles have different linguistic characteristics. Smith (1988) has noted this, and advises:

To learn to write for newspapers, you must read newspapers; textbooks about them will not suffice. For magazines, browse through magazines rather than through correspondence courses on magazine writing. To write poetry, read it. For the conventional style of memoranda (schools), consult the school file.

Nevertheless, it is probably true that reading anything at all will help all writing, to at least some extent. While there are clearly different kinds of prose, there is also considerable overlap (see e.g. Biber, 1986): so-called narrative discourse, has, for example, some (but not all) of the characteristics of formal, expository discourse. Reading novels, therefore, will not make you a competent essayist; you will have to read lots of essays to fully develop the essay-type style. But reading novels will give you at least some of the features of essay writing; a novel-reader will write a much better essay, stylistically, than someone who has read very little of anything.

What are writing classes for?

In my view, the research is most consistent with this hypothesis: Reading and writing are both good for you, but they make different kinds of contributions. Writing style comes from reading, but actual writing can make a profound contribution to cognitive development. If this is true, it changes the role of the writing class.

I have argued (Krashen, 1984) that writing classes also need to be reading classes, places in which students get interested in books and in pleasure reading. The payoff of this interest will not be immediate; it takes some time, a considerable amount of reading, before improvement in writing becomes evident.

The fact that reading takes some time to sink in, however, should not tempt us to place more emphasis on direct instruction. First, I have argued that direct instruction is of very limited value—it simply doesn't work that well. Second, even if reading were only just as effective or even somewhat less effective than instruction, it would still be

preferable, since it is so much more pleasant, and readers gain much more than writing style.

Nevertheless, writing classes can include some direct instruction on those few aspects of writing that even well-read people have not acquired.³ Such instruction can help writers avoid errors on those aspects of punctuation, grammar, and spelling that do not interfere with communication but may cause reader irritation.

Direct teaching and the use of grammar handbooks and dictionaries can help writers with spelling demons, and small gaps in punctuation and grammar. Writing teachers need to point out these (such conscious learning of language is very limited, however, and needs to be used with caution-an excessive concern with form, or "correctness," while trying to work out new ideas in writing, can be very disruptive. Experienced writers know this, and limit their "editing" to the final draft, after their ideas have been worked out on the page (see e.g. Sommers, 1980).

Most important, writing classes should be places in which students learn that writing can make them smarter, places in which they learn to appreciate the "composing process." Langer and Applebee's results cited earlier, suggest that for this to happen, students need to use writing to solve challenging problems, a result that supports the current trend of combining writing classes with subject matter teaching.

Instruction can help with the composing process in several concrete ways, including encouragement and constructive feedback on ideas, and with what Smith (1988a) calls the "technicalities" of the composing process, the use of index cards, word processors, ways of organizing materials, use of the library, etc., "none of which is apparent in published texts and none of which, therefore, the author can demonstrate" (p. 25- 26).

Classes can also help writers overcome "superstitions," false beliefs about writing that prevent them from using writing to help thinking. Superstitions include the belief that each essay must contain three major points, the belief that writers need to develop complete outlines before writing, the belief that first drafts should be error-free, and the most pervasive and dangerous belief, the belief that there is no

composing process, that writers should get everything right the first time (Rose, 1980; Shaughnessy, 1977). As Smith (1982) has pointed out, the fact that writers plan and revise, and produce many drafts, is "one of the best kept secrets in school" (p. 196).

Writing in a second language

The research cited in the first section of this paper supports the view that reading in the second language will help second language writing. In addition, there is good reason to suspect that reading in the primary language, whether it is done before or after second language acquisition has begun, can help second language writing. This occurs in several ways.

First, reading in the first language results in a great deal of knowledge (Ravitch and Finn, 1987). This knowledge can make second language reading more comprehensible, and can thus help the writer develop good writing in the second language. For example, someone who knows physics from reading about it in the first language will have a better chance of understanding physics written in the second language, and will thus acquire "the language of physics" more rapidly.

Second, even though there are certainly differences among discourses in different languages (e.g. Kaplan, 1972), there are also profound similarities. Someone who has mastered scientific writing in one language, for example, has acquired a good deal of the discourse of scientific writing in another language.

There is also reason to suspect that actual writing in the primary language can help, that if writers develop the composing process in one language, if they discover how writing can help them solve problems, this knowledge will transfer to their second language.

The idea that development of the first language can help the second has been confirmed by the success of properly organized bilingual education programs in the United States. Children in these programs develop both literacy and subject matter knowledge in the primary language while they are acquiring English. Research has

consistently shown that these children acquire English just as quickly and usually more quickly than children in all-day English programs (see e.g. Cummins, 1981; Willig, 1985; Krashen and Biber, 1988; Krashen, 1991).⁵

We thus arrive at a satisfying conclusion: Second language writing profits from first language reading and writing, as well as from second language reading and writing. The contributions these activities make is somewhat different; second language reading gives us the "code," while first language reading provides background knowledge that aids second language reading, as well as providing some aspects of the code. Actual writing practice in either the first or second language can help writers discover how writing helps thinking.

Endnotes

- 1 For evidence that vocabulary and spelling are acquired by reading, see Krashen (1989).
- 2 For reviews of other, but less compelling, evidence that writing impacts cognitive development, see Applebee (1984), Kraslicn (1990)
- 3 Readers may not fully acquire all the conventions of writing because successful reading does not require full attention to every detail on the page (see Goodman, 1982, Smith, 1988b, for evidence).
- 4 Janopolous (1936) is an apparent counter example. In his study of university students of English as a second language, he reported that reading in English was related to second language writing proficiency, but reading in the first language was not. I suspect that this result occurred because of a lack of variation in first language reading experience in his subjects: as college students, they had probably all done considerable reading in their primary language. In other words, they had all reached the threshold discussed earlier in the text.
- 5 Not all kinds of bilingual education are effective. In Krashen and Biber (1988), we hypothesize that successful bilingual programs have these characteristics: (1) comprehensible input in the second language, (2) development of literacy in the primary language, (3) subject matter teaching in the primary language without translation.

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