Despite assertions that we "learn to write by writing," the research is consistent with the view that writing does not contribute directly to language acquisition. But writing, in addition to communicating our ideas, makes profound contributions. Writing is a powerful means of helping us solve problems: Writing, in other words, makes us smarter. The field of language arts has made great progress in the last few decades in revealing strategies good writers use to do this, i.e. the composing process, discoveries that have helped us understand the problem of writer’s block. Thus, acquisition of the special language of writing comes from reading, but our ability to use writing to solve problems comes from knowledge of the composing process. I review here the “classic” components of the composing process, and nominate two more candidates.

In several publications (Krashen, 1994, 2004), I have reviewed the research showing that writing itself does not contribute to language or literacy development. The arguments are: (1) those who write more do not write better; (2) increasing student writing does not increase writing quality or any other aspect of literacy; and (3) we do not write enough to account for the complexity of the written language.

The third point is only an argument against the strong hypothesis that writing is the only way we “learn to write,” but arguments (1) and (2) destroy even a weak form of the “writing hypothesis,” the position that writing makes a contribution to literacy development.

But writing helps us in other ways. Smith (1994) tells us we write for two reasons. One is obvious: We write to communicate with others (letters, emails, reports) and ourselves (notes, lists, reminders). The second is less obvious but profound: We write to solve problems and to make ourselves smarter.

The Language Arts profession, in the last few decades, has made tremendous progress in describing how writers do this, how they use writing
to solve problems and make themselves smarter. The strategies they use are called “the composing process.”

COMPONENTS OF THE COMPOSING PROCESS

The fundamental generalization underlying the composing process is simple: Writing makes you smarter. When we write, our mind automatically helps us solve problems, and in doing so, stimulates intellectual growth. The claim has been made, in fact, that writing is the primary means by which we get new ideas: Inspiration, suggests Boice (1994), is the result of writing, not the cause, a view shared by several professional writers, as we will see later.

Revision

Perhaps the most fundamental strategy good writers use, the one that differentiates them very clearly from poor writers, is that good writers understand the importance of revision, and accept that revision is part of the composing process (Krashen, 1984). They understand that as they write, they come up with new ideas, that it is in revision that writers discover problems and solve them: “The heart of revision is the process by which writers recognize and resolve the dissonance they sense in their writing” (Sommers, 1980, p. 385).

Average and poor writers do not know this, and often regard revision as a sign of weakness, laboring under the false impression that they are supposed to get everything right in the first draft.

Interviews with writers nearly reveal that they value revision. Here are two examples, one from Neil Simon and one from Kurt Vonnegut.

"In WHO’S WHO, Simon lists his recreational activities as golf and rewriting, and clearly yet another part of the secret of Simon’s success is his willingness to write the same scene over and over again until he feels that he has at last got it right. This is the mark of the professional - mediocre writers write, good writers rewrite” (Meeham, 1978).

"Novelists have, on the average, about the same IQs as the cosmetic consultants at Bloomingdale’s department store. Our power is patience. We have discovered that writing allows even a stupid person to seem halfway intelligent, if only that person will write the same thought over and over again, improving it just a little bit each time. It is a lot like inflating a blimp with a bicycle pump. Anybody can do it. All it takes is time" (Vonnegut,
Planning/Flexible Planning

Murray (1984) points out that “experienced writers refuse to leave on a trip without a map. The map may be in the head or on paper, but the writer needs a sense of direction” (p. 223).

A number of studies confirm that good writers have a plan before they actually start writing, a road map of where they want to go (Krashen, 1984). These plans, however, are not always formal outlines, and they are not written in stone – they are flexible plans. As writers write, as they come up with new ideas, they change their plans.

Without a plan of some kind, writers run the danger of losing their way, of “wandering off” into areas they did not intend to explore. This may lead to unexpected discoveries, but it can also be counterproductive when a definite problem needs to be solved. Rose’s subject Liz, a writer who was classified as a “high blocker” “did not map out her discourse” (Rose, 1984, p. 48). According to Rose, Liz “made decisions about the direction and shape of her discourse incrementally as she proceeded. This approach led to discoveries as well as dead ends …” (p. 48).

While some poor writers have no plan, others overplan. Their plans are often rigid, and they are unwilling to change them. Such writers are unprepared for new ideas that emerge while they write, and even regard them as annoyances. This is a tragedy.

“For all the planning, writers are surprised at what they write” (Murray, 1990, p. 91).

Rereading

“I rise at first light and I start by rereading and editing everything I have written to the point I left off” (Hemingway, in Winokur, 1990, p. 247).

Good writers frequently reread what they have already written, a strategy that not only helps them keep their place, but allows them to re-evaluate what they have done and come up with improvements. Rescanning and rereading appears to help the writer maintain a sense of the whole composition, or “conceptual blueprint” (Beach, 1976).
In addition to Hemingway, other writers who report starting each workday by reading include Jonathon Kellerman, who uses this practice to “segue into new material” (Perry, 1999, p. 178), and Octavia Butler, who typically rewrites the last page she wrote at her last session, as a “lead-in” to the current session (Perry, p. 177).

**Delay Editing**

An important way in which good writers differ from poor writers is that good writers do not stop to consider small aspects of form while they are working on their ideas (Krashen, 1984). They delay editing until after an acceptable draft has been written. There are good reasons to do this. One obvious reason is that the current draft may not be the final one. Another is that stopping for editing disturbs the flow of writing and coming up with ideas Perl (1979) studied college level remedial writers. One of her subjects, “Tony,” had a concern with form “that actually inhibited the development of ideas. In none of his writing sessions did he ever write more than two sentences before he began to edit” (Perl, 1979, p. 324).

Also, when writers think about form while creating meaning, they can easily lose their place, or “lose the gist” of what they are trying to say (Jones, 1985). Rose (1984) and Lee and Krashen (2002) provide empirical evidence that premature editing and writing blocks are related.

Peter Elbow advises writers to “Treat grammar as a matter of very late editorial correcting: never think about while you are writing. Pretend you have an editor who will fix everything for you, then don’t hire yourself for this job until the very end” (Elbow, 1973, p. 137).

I now present two additional components of the composting process to add to the four "classical" components described above.

**Incubation**

"Composition is not enhanced by grim determination" (Frank Smith, 1994, p. 131).

Creativity research has revealed that problem-solving often requires “an interval free from conscious thought” to allow the free working of the subconscious mind (Wallas, 1926, p. 95). This is "incubation."

Wallas reports that he first heard of the idea of incubation from the
physicist Helmholz. In a speech delivered in 1891, Helmholz described how new thoughts came to him: After previous investigation, "in all directions," "happy ideas come unexpectedly without effort, like an inspiration ... they have never come to me when my mind was fatigued, or when I was at my working table ... They came particularly readily during the slow ascent of wooded hills on a sunny day" (Wallas, p. 91).

Tolle (1999) is clearly referring to incubation when he notes that “All true artists, whether they know it or not, create from a place of no-mind, from inner stillness … Even the great scientists have reported that their creative breakthroughs came at a time of mental quietude” (p. 20).

Einstein’s biographer, Clark, reports that "Whenever he felt that he had come to the end of the road or into a difficult situation in his work,' his eldest son said, 'he would take refuge in music, and that would resolve all his difficulties.'" (Clark, 1971 p. 106). Clark notes that for Einstein, "with relaxation, there would often come the solution" (p. 106).

Of course, these moments of insight are preceded by hard work, by what Wallas (1926) refers to as “preparation.” The mathematician Poincaré (1924) agrees, stating that there must be a "preliminary period of conscious work which also precedes all fruitful unconscious labor" (Poincaré, 1924).

Periods of incubation can be very short, lasting just a few minutes, of medium length, or can be quite long. Piaget told Gruber (1995) that after he worked for a few hours, "he would go for a walk, not think about very much, and when he went back to his desk his ideas would be clearer ..." (p. 526). The physicist Feynman mentions longer breaks: "You have to do six months of very hard work first and get all the components bumping around in your head, and then you have to be idle for a couple of weeks, and then - ping - it suddenly falls into place ..." (Csikszentmihalyi & Sawyer, 1995).

Allowing time for incubation is clearly a part of the successful composing process: Writing requires time off-task as well as on-task. Forcing writers to sit without a break and write nonstop, as we do in school, and as we require on examinations, denies the possibility of incubation. These practices teach students that incubation is not a part of writing.

**Daily Regular Writing**

Successful authors are in near-universal agreement that writing requires regularity, and that ideas and inspiration are the result of writing, not the cause.

Author Rosellen Brown tells us that writing “is a job, not a hobby … you have to sit down and work, to schedule your time and stick to it …”
Walker Percy agrees: “You've got to sit down and follow a schedule. Unless you do that, punch the time clock - you won't ever do anything” (Murray, 1990, p. 60). Irving Wallace was a regular worker, and investigated the writing habits of other writers. He concluded, … the vast majority of published authors have kept, and do keep, some semblance of regular daily hours..." (Wallace and Pear, 1971, pp. 518-9).

Of course, we see some variability in when writers work, but regularity seems to be nearly universal. Michael Chabon works at night, from 10 pm to 4 am, Maya Angelou in the morning, from 6:30 am to 12:30 or 1:30 pm. (Nickell, 2002).

Irving Wallace (Wallace and Pear, 1971) informs us that some writers made sure they worked a certain amount of time each day (Balzac, Flaubert, Conrad, Maugham, Huxley, Hemingway). Other writers counted pages (Updike, West, Bradbury) and others counted words (Haley, Wambaugh) (Murray, 1990, pp. 48-65). But all did daily regular writing. All came to the same conclusion that children’s book author Kate DiCamillo did: “When I turned 29, I had an epiphany: I’d never get published if I didn’t actually write” (Cruger, 2004, p. 35). She began a two-page per day routine, which resulted in success.

Successful writers also agree that inspiration comes from writing, not vice-versa: Stephen King advises writers not to “wait for the Muse. Your job is to make sure the muse knows where you are going to be every day from nine 'till noon or seven 'till three” (King, 2000, p. 157). Susan Sontag says the same thing: "Any productive writer learns that you can't wait for inspiration. That's the recipe for writer's block” (Brodie, 1997, p. 38), as does Madeleine L’Engle: "Inspiration usually comes during work, rather than before it” (Brodie, 1997, p. 35).

Successful writers also tell us that a modest amount of daily regular writing is much more efficient than “binging,” that is, occasional long sessions of intensive effort. According to Woody Allen, "If you work only three to four hours per day, you become quite productive. It's the steadiness that counts” (Murray, 1990, p. 46).

A series of studies by Robert Boice provides strong empirical confirmation for the value of daily regular writing (see especially Boice, 1994). In one study (Boice, 1982), junior faculty members who had a “regular, moderate habit of writing,” were compared to those who were “binge” writers (“… more than ninety minutes of intensive, uninterrupted work”) over a six year period. The differences in productivity were amazing: The regular writers produced more than five times as much, and all got tenure or promotion. Only two of the binge writers got tenure.
The regular writers were clearly more relaxed as well as more productive: The binge writers showed three times as many signs of "blocking": When binge writers actually wrote, "they more commonly did nothing or very little (for example, recasting a first sentence or paragraph for an hour; staring at a blank screen).” Also, binge writers "were three times more likely to be rushing at their work... during scheduled writing periods" (p. 68), and were three times more likely to put off scheduled writing in favor of "seemingly urgent, no more important activities.”

Despite the failure of their approach, binge writers still believed in it. One subject, for example, said: "You can't get enough good writing done in little pieces; you need big, undisturbed block of time.”

In another study, Boice (1983) asked writers to write under different degrees of regimentation. He compared those who were asked to do no writing at all, writing whenever the writer felt like it, daily regular writing, and what can be called “forced writing.” In forced writing, writers were required to write at least three pages per day. If they did not meet this quota, they agreed to donate money to a “despised charity.”

Boice reported that tightening the restrictions resulted in more writing, as well as the production of more new ideas, with forced writers producing the most writing and the most new ideas. The forced writers, however, did only as much as they had to in order to avoid punishment, averaging 3.1 pages per day. In my analysis of Boice’s data (Krashen, 2002), I concluded that those who did daily regular writing were the most efficient, producing the most new ideas per page, about double the number per page of the forced writers.

REFERENCES


