# Teaching Thinking by Teaching Writing

### by Peter Elbow

Intuition and rationality need not be separate and inimical in writing. Each is, in fact, a necessary component of the writing process allowing more effective development of the other.

hen I celebrate freewriting and fast exploratory writing on first drafts—the postponing of vigilance and control during the early stages of writing—it seems to many listeners as though I'm advocating irrationality. Some say, "Yes, good, we all need holidays from thinking." Others say, "Horrors! If we invite people to let down their guard, their vigilance muscles will get flabby and they'll lose their ability to think critically." But I insist that I'm teaching thinking.

Of course freewriting is not the only way I teach thinking through writing. I also teach it by emphasizing careful, conscious, critical-minded revision. Thus I teach two kinds of thinking. I'll call them first order and second order thinking.

First order thinking is intuitive and creative and does not strive for conscious direction or control. We use it when we get hunches or see gestalts. when we sense analogies or ride on metaphors or arrange the pieces in a collage. We use it when we write fast without censoring, and let the words lead us to associations and intuitions we had not foreseen. Second order thinking is conscious, directed, controlled thinking. We steer; we scrutinize each link in the chain. Second order thinking is committed to accuracy and strives for logic and control: we examine our premises and assess the validity of each inference. Second order thinking is what most people have in mind when they talk about "critical thinking."

Each kind of thinking has its own characteristic strengths and weaknesses. I like to emphasize how first order thinking often brings out people's best and most intelligent thinking. If you want to get people to seem dumber than they are, try asking them a hard question and then saying, "Now think carefully." Thinking carefully means trying to think about thinking while also thinking about something else—and it often leads people to foolishness. This is one of the main reasons why normally shrewd and sensible students often write essays asserting things they do not really believe and defending them with fake reasoning they would never fall for if they were just talking thoughtfully with a friend.

If you want to get people to be remarkably insightful, on the other hand, try asking them the hard question and then saying, "Don't do any careful thinking yet, just write three or four stories or incidents that come to mind in connection with that question and then do some fast exploratory freewriting." It turns out that such unplanned narrative and descriptive exploratory writing (or speaking) will almost invariably lead the person spontaneously to formulate conceptual insights that are remarkably shrewd. These are fresh insights which are rooted in experience and thus they usually get around the person's prejudices, stock responses, or desires for mere consistency; they are usually shrewder than the person's long held convictions. In addition (to bring up a writer's concern) these insights are usually expressed in lively, human, and experienced language.

Finally, when someone really gets going in a sustained piece of generative writing and manages to stand out of the way and relinquish planning and control—when someone lets the words and images and ideas choose more words, images, and ideas—often a more elegant shape or organization for the material is found, one more inte-

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gral than careful outlining or conscious planning can produce. It is not that the rough draft writing will itself be well organized in its totality—though that occasionally happens. What is more common is that the exploratory zigzagging leads finally to a click where the writer suddenly sees, "Yes, that's the right handle for this whole issue, I couldn't find it when I just tried to think and plan."

Yet despite my fascination with the conceptual power of intuitive thinking-of what might seem to some like careless thinking-I have learned to also tell the other side of the story. That is, we are also likely to be fooled by first order thinking. In first order thinking we do not reflect on what we are doing and hence we are more likely to be steered by our assumptions, unconscious prejudices, and unexamined points of view. And often enough no shape or organization emerges at all-just randomly ordered thoughts. We cannot count on first order thinking to give us something valuable.

Thus the two kinds of thinking have opposite virtues and vices. Second order thinking is a way to check, to be more aware, to steer instead of being steered. In particular, we must not trust the fruits of intuitive and experiential first order thinking unless we have carefully assessed them with second order critical thinking. Yet we probably will not have enough interesting ideas or hypotheses to assess if we use only our assessing muscles: we need first order thinking to generate a rich array of insights. And first order thinking does not just give us more, it is faster too. Our early steps in second order thinking are often slow backwards steps into wrongheadedness. Yet this is no argument against the need for second order thinking. Indeed I suspect that the way we enlarge the penumbra of our tacit knowledge is by searching harder and further with the beam of our focal knowledge.

We are in the habit—in academe, anyway—of assuming that thinking is not thinking unless it is wholly logical or critically aware of itself at every step. But I cannot resist calling first order thinking a bona fide kind of thinking because it is a process of making sense, and putting things together. Though not consciously steered or controlled, the first order is nevertheless purposive and skillful.

#### **Enhancing Thinking**

There is an obvious link between the writing process and these two kinds of thinking. I link first order creative thinking with freewriting and first draft exploratory writing in which one best practice for critical thinking because instead of being a stale exercise unconnected to the student, it is an exercise in assessing and strengthening thinking which is embodied in one's own or someone else's live discourse. Since we are trying for the tricky goal of thinking about our subject and thinking about our thinking about it, putting our thoughts on paper gives us a fighting chance. But notice that what

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defers planning, control, organizing, and censoring. I link second order thinking with slow, thoughtful rewriting or revising where one constantly subjects everything to critical scrutiny. But I am not content merely to assert a link. The two writing processes enhance the two thinking processes.

It is obvious how careful revising enhances second order thinking. If having any language at all (any "second signalling system") gives us more power over our thinking, it is obvious that a written language vastly increases that power. By writing down our thoughts we can put them aside and come back to them with renewed critical energy and a fresh point of view. We can better criticize because writing helps us achieve the perennially difficult talk of standing outside our own thinking. Outlines are more helpful while revising than at the start of the writing process because finally there's something rich and interesting to outline. Revising is when I ask both the writer and the readers to isolate the central core of inference in a paper: What is the assertion and what premises does it rest on? This is the

most heightens this critical awareness is not so much the writing down of words in the first place, but the coming back to a text and re-seeing it from the outside (in space) instead of just hearing it from the inside (in time).

But does freewriting or uncensored, generative writing really enhance creative first order thinking? You might say that speaking is a better way to enhance creative thinking-either through creative brainstorming or through the back and forth of discussion or debate. But that only works if we have other people available, people skilled at enhancing our creative thinking. Free exploratory writing, on the other hand, though we must learn to use it, is always available. And since the goal in creative thinking is to harness intuition-to get the imagination to take the reins in its own hands-solitary writing for no audience is often more productive than speaking. Speaking is almost invariably to an audience that puts pressure on us to make sense and be able to explain inferences.

It may be argued that intuitive thinking is best enhanced by silent musing; or going for a walk or sleeping on it or any of a host of other ways to push a question away from focal attention back to the preconscious. But such attempts at nonlinguistic processing often merely postpone thinking instead of being actually productive. Freewriting and exploratory writing, on the other hand, are usually productive because they exploit the autonomous generative powers of language other and even themselves in their methods. But this notion of opposite extremes gives a constructive and specific picture of what we are looking for in good thinking and writing. Even though there are many good ways to think and write, it seems clear that excellence must involve finding *some* way to be both abundantly inventive yet toughmindedly critical. Indeed this model of conflicting goals suggests

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and syntax themselves. Once you manage to get yourself writing in an exploratory but uncensored fashion, the ongoing string of language and syntax itself becomes a lively and surprising force for generation. Words call up words, ideas call up more ideas. A momentum of language and thinking develops and one learns to nurture it by keeping the pen moving. With a bit of practice, you can usually bring yourself to the place where you can stop and say, "Look at that! I've been led by this unrolling string of words to an insight or connection or structure that I could not have proposed if I were just musing or making an outline. I wasn't steering, I was being taken for a ride." In short, by using the writing process in this two sided way I am fostering opposite extremes: an improved ability to allow ourselves to be taken on rides, yet also an improved ability to assess critically the resulting views.

#### **Practical Consequences**

There is no one right way to think or write. We all know too many good thinkers or writers who contradict each why good writers and thinkers are so varied in their techniques: if they are managing to harness opposites—in particular, opposites that tend to interfere with each other—they are doing something mysterious. Success is liable to take many forms, some of them mysterious or surprising.

As a teacher, it helps me to have these two clear goals in mind when I come across a student about whom I must say, "She clearly is a smart person, but why is she so often wrong?" or, "She clearly thinks hard and carefully, but why is she so characteristically uninteresting or unproductive in her work?" I can ask of any person or performance, "Is there enough rich material to build from?" and "Is there a careful and critical enough assessment of the material?"

If I am careful to acknowledge to my students that there is really no single best way to think or write and that excellence in these realms is a mystery that can be mastered in surprising ways, I can turn around and stress simplicity by harping on two practical rules.

First, since creative and critical

thinking are opposite and involve mental states that conflict with each other, it helps most people to learn to work on them separately moving back and forth between them. If we are trying to think creatively or write generatively, it usually hinders us if we try at the same time to think critically or to revise: it makes us reject what we are thinking before we've really worked it out-or to cross out what we've written before we've finished the sentence or paragraph and allowed something to develop. But if we hold off criticism and revising for a while we can build a safe place for generative thinking or writing. Similarly, if we devote certain times to whole hearted critical thinking, we can be more acute and powerful in our critical assessment.

One of the main things that holds us back from being as creative as we could be is fear of looking silly or being wrong. That worry dissipates when we know we will soon turn to wholehearted criticism and revising and weed out what is foolish. Similarly, one of the main things that keeps us from being as critical as we could be is fear that we'll have to reject everything and be left with nothing at all. But that worry also dissipates when we know we have already generated an extremely rich set of materials to work on.

Secondly, it usually helps to start with creative thinking and exploratory writing and then engage in critical assessment and revising afterwardsafter there is already lots to work on. It is not that we should necessarily try to force our writing into two self-contained steps (though I aim for this when all goes smoothly). Often I cannot finish all generating or all first order thinking before I need to do some revising or criticizing. Indeed, sometimes I can force a new burst of generativity with an interlude of criticizing. And it is useful to say that we are never finished with intuitive generating even when we are criticizing and revising.

I used to think that I should try to make my students good at creative generating before I went on to revising and being critical. But I have discovered that some students will not let go and allow themselves to be creative till after we do some hard work on critical thinking and revising. They do not feel safe relaxing their vigilance till I demonstrate that I am also teaching

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heightened vigilance. Sometimes, early in the semester, I ask students to rethink and revise a paper in order to prove to them that they are not stuck with what they put down in early drafts, and that careful critical thinking can make a big difference.

However, the fact remains that it

usually hinders people to start by planning, critical thinking, and making outlines. My agenda for the beginning of a semester is always to enforce generating and brainstorming and the deferral of criticism in order to build students' confidence and show them that they can quickly learn to come up with a great quantity of words and ideas. Then gradually we progress to a back and forth movement between generating and criticizing. I find I help my own writing and thinking, and that of my students, by training a class to start with first order thinking and generating and take it on longer and longer rides-holding off longer and longer the transition to criticizing and logic. Back and forth, yes, but moving so that each mentality has more time to flourish before we go to its opposite.

#### **Mutual Reinforcement**

The history of our culture is often experienced as a battle between reason and feeling, rationality and irrationality, logic and impulse. Because intui-

## Directions for Contributors\_

tive first order thinking is indissolubly mixed up with feeling, irrationality, and impulse, we end up in an adversarial situation where disciplined critical thinking and uncensored creative thinking face each other uneasily from entrenched positions. It seems as though logic and reason have just barely and only recently won the battle to be our standard for thinking and therefore advocates of reason and logic tend to criticize all relaxations of critical vigilance. Similarly, champions of creative first order thinking sometimes feel they must criticize critical thinking, if only to win some legitimacy for themselves. But this is an unfortunate historical and developmental accident. If we would see clearly the truth about thinking and writing we would see that the situation is not either/or, it's both/and: the more first order thinking, the more second order thinking, and vice versa. It's a matter of learning to work on opposites one at a time in a spirit of mutual reinforcement rather than in a spirit of fearful combat.

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