

Writing, Thinking, Teaching, Learning, Flying

What have you written today? Why have you written today? And what have your students been writing? In your courses, are your students' main writing tasks taking notes for their own use and producing formal papers for your eyes? Are you satisfied with their writing? See if your experience would bring you to agree with the following statement:

In every field, and at every level, students need practice formulating and critiquing ideas, articulating more clearly, capturing the vagaries of the mind and getting thoughts and concepts into words. Putting things into words, we make them ours, make them part of our own cognitive maps, make them tools we can use not just to pass a test but to call on whenever they are needed. In fact, this practice not only expands our knowledge base but gives us more flexible, more extensive cognitive maps; it expands our ability to learn.

We've talked a lot this year about new technology and how to use it as a tool for learning. What if you had fairly easy software to help your students work with writing frequently, discussing and refining their thinking, challenging each other and themselves to sharpen their thoughts?

Daedalus does that, and Daedalus came to campus this spring.

Named after the mythic Greek inventor who escaped his island prison by building a set of wings, Daedalus creates an integrated writing environment. It offers six tools in one package (note: one menu bar), combining the features of a simple word processor, a newsgroup, electronic mail, research citation, a tool for peer response to writing, and a powerful heuristic tool that carries students through the invention phase as they respond to your questions and build their evidence.

In a Daedalus classroom, you can post the prompt to get discussion started and students can respond at their own pace, posting their thoughtful answers and responding to each others' thoughtful answers. Sometimes you'll get silly responses, too, just as you do in an oral discussion, but as students get used to the idea, and as you guide them, they can move through a complex thinking and formulating process that makes the material and the ideas their own. It's writing, but it's not formal, though it can have a formal product at the end; meanwhile, it's real communicating to a real audience for a real purpose. I would call it real education, leading students from half-formed ideas to fully formed knowledge and understanding.

The guidelines for general education here and elsewhere reflect what's clear in the real world, that writing isn't just for English classes. Biologists write, mathematicians write, nurses write,

engineers write, historians and social workers and teachers write. And we don't just write to perform; we write to find out what we think, what we need to say. We write to work out a problem. It's one of the principles of "writing across the curriculum" or "writing in the disciplines." Writing can make all learning experiential, as we lay down the verbal tracks to understanding and articulate our growing knowledge.

We in the freshman English program are excited about Daedalus because it integrates writing more completely into everything we do. We spent the fall learning how to use other powerful programs for the new electronic classrooms. We were thrilled to begin making our dream of computer-integrated instruction a reality. It was sudden, demanding, and not quite what we expected, but we plunged in, worked together, and taught each other what we were learning. We had people with prior experience who helped us solve problems, and, of course, we were also relying on the Computer Center and Faculty Center, having dumped a completely unexpected load of inexperienced faculty in their laps. Miraculously, most of us got sort of up to speed and most every freshman got taught in a computer classroom and learned to write the way most writers do nowadays--as a process of continuous drafting and revising, publishing their work to each other throughout the process.

For us it's good pedagogy. Many of our students have written very little before they come to us; they need this immersion where student writing and learning become the focus. Students can see what they are doing, they can pull in research, they can revise till the paper's done and then revise again. They can even get playful in email or Daedalus Interchange and all that time they are writing--just what we want them to do. We can guide their practice because we are all present at the scene of writing and revising. We can catch and transform ideas or papers while they are still fluid, "in the electricity." We can become a writing community.

That brings us to the next big leap, on the wings of Daedalus. This spring the Summer School bought a campus-wide site license, and the Computer Center got Daedalus on the Appserver. Now we're learning to maneuver in this program. We're hopeful that the new Jay M. Robinson Distinguished Professorship in Educational Technology, made possible by the C.D. Spangler Foundation, will make these things easier as more advanced technologies and pedagogies come to all our colleges; however collegial, it's been very time-consuming for us.

And it's risky. Maybe the software won't work the way we think it's supposed to for the class we've planned. Maybe it will confuse us and push us to understand something that seems too hard. Maybe we'll have to rethink the way we teach; some of us really don't want to work in new ways any more than some students do, and probably some of us really don't want to "share the chalk." Maybe, on the other hand, this scene doesn't fit our notion of academia, of what being a professor is supposed to be. Maybe it seems like something that won't get us tenure or promotion (maybe that's a part of our system that needs to be fixed).

But the very word technology implies "tool"-- for whatever the art, the craft, the specialty we profess to our students. If we trade a mule-drawn plow for a tractor, are we not still cultivating the soil so that new things can grow?

Whatever our fields, we want new things to grow. The cultivation begins with challenging ideas, critical questioning, discussing, forcing vague suppositions into sharp and focused language.

These are the values upon which the liberal arts have always stood, and these are the values that Daedalus is designed to implement. We will be using it widely in composition this summer and fall, and we welcome people in any field to our workshops. Check it out on the Web (www.daedalus.com). Take the guided tour you'll find there. Look into the archived ideas for teaching in the Daedalus journal Wings or their listserv. Let me know if you want to be notified of opportunities to learn--we hope to have a full learning workshop before classes start in the fall.

If you've looked at a research paper lately and said, "Why won't someone teach these students to write?" then here's your chance. We've done what we could. Have you?

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