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Creativity and the Computer

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While talking to a computer-science major recently, I learned that this man composes in his head everything he intends to write and mentally edits for length and accuracy before he ever approaches the computer keyboard. Even when writing e-mail to friends, this man thinks through first what he wants to say. He virtually memorizes his texts, making the act of writing, in essence, a process of taking dictation from his mind or memory. Although he talks fluently, he has a life-long dislike of performing the act of writing. “Nate” is not unusual, as you probably know. Other students and faculty, too, can tell similar stories. Like Nate, some are computer science majors, yet others with similar experiences and feelings major in English and want to write.

These people represent a segment of the population that relies on non-referential, non-technological means, like memorization, visual imaging, and fragmentary thought, to capture ideas, instead of using the more efficient technology of writing to record ideas in words on paper or screen. They shortchange themselves if they will not take advantage of writing and especially of the computer’s potential to serve the needs of writers and, more important, to make writing fun. How do we account for their avoidance? And if we can explain it (at least partially), can we improve the situation?

Some productive writers, of course, prefer the convenience of mental writing; they get their best ideas driving to work or taking a shower. But some individuals go to extremes to avoid writing of any kind, in any space, for reasons having to do with scrutiny and surveillance. Nates of this
world appear to use mental writing to elude internalized scrutiny. Fearing that the sight of their scribbled page or rough draft will bring them shame, they think about what they want to say and play it over and over, mentally. If they rearrange any words or rewrite phrases, they shuffle them in the mind's eye (or ear), not on paper/screen, so they have no messy page or disorderly screen. It follows that these people have painful associations of scrutiny linked to copying and correction, even going back to first grade. When Nate describes early grades, he recalls models of script letters pinned above the blackboard; for him, it was almost impossible to copy them. Many students find that "penmanship" permanently scarred their motivation to write.

In the high-tech milieu of the electronic writing lab, paradoxically, people can escape feelings of censorship as they play at electronic writing, I believe, and this playfulness promotes creativity. For my part, writing in the classroom seems easier to me and I teach composing differently since I began holding electronic-writing labs in the Mackinac addition, with overhead projection equipment for one monitor. I am beginning to formulate a few ideas in progress for using computer writing creatively and want to share them here to promote further discussion.

Typically, studies of computer-assisted writing focus on revision and editing. James Strickland, for example, author of *From Disk to Hard Copy: Teaching Writing with Computers* (Boynton/Cook, 1997), encourages many forms of computer revision, like sentence outlining and call-outs, that exploit word-processing features for highlighting and moving blocks of text. Others, however, ask if it is wise to overapply technology to creative activities, including writing. As *The Chronicle of Higher Education* reported last year, educators who met to discuss "The Computer in Education: Seeking the Human Essentials" expressed concern that unrestrained use of this technology in education might short-circuit creativity (Cordes A25). Educational software rarely stimulates the imagination, according to Northwestern University's Schank, who goes on to say that many use computers because they reduce control and simplify their problems for many, while encouraging experimentation with technology. This liberty boost, the psychological research behind it, and this hunch; in a recent featured instructional tide, self-directed learning [is] more likely to produce the hushed lab atmosphere dimmed, we can talk to each other or as a group and encourage techniques that do not reduce control and is not under surveillance.

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Northwestern University Professor Roger Schank, who goes on to say that schools should use computers because they’re fun.

In electronic-writing labs, the machines let us reduce control and surveillance that cause problems for many, while encouraging free, playful experimentation with word-processing technology. This liberty boosts students’ creativity. Psychological research by Theresa Amabile confirms this hunch; in a recent book, she writes, “unstructured instructional time with individualized and self-directed learning in an informal atmosphere, [is] more likely to promote creativity” (253). In the hushed lab atmosphere, with the lights dimmed, we can talk with students individually or as a group and encourage using word processing techniques that diminish self-scrutiny. Here are some examples of activities:

The instructor, a tutor, or any student can demonstrate freewriting, using the overhead projector to display the monitor, and leave naturally occurring errors, like typos and misspellings, in place. A democratic spirit pervades the room as each computer user including the instructor sits and composes; Amabile suggests that it is motivating for students to see the instructor engaged in writing (253). As I compose, I might explain that I deliberately do not correct errors in a “zero” draft or a freewrite, so that I can concentrate on capturing my ideas.

As students start to compose, I can encourage them to change the default font from Times New Roman to a more unusual font. Recently, for example, our tutor Emilie Belanger chose PaintStroke font to write a personal piece that was projected on the overhead for the class to read. When students choose a font for electronic writing, they control the appearance of their text and can simulate real-world documents. Also, by challenging conventions and breaking academic “rules,” the personal font reduces the student’s perception of writing under surveillance.
Choosing clip art or word art to ornament a paper, inserting a dropped capital letter, and arranging text with center justification or in columns all simulate published work as well being entertaining. In Schank’s view, software should let learners simulate real-world activities, like piloting a boat, to promote learning by doing; word processing gives us that ability now.

Once in a while, students enjoy observing the effect of composing without capital letters or punctuation. If this activity begins as a violation of the “rules,” it may end by producing a free-thinking, exploratory piece.

Students’ compositions on disk can be displayed to a small group or to the entire class using the overhead projector, as in a workshop. But unlike the typical workshop, we can enter elaborations into these texts on the spot, while students’ ad lib suggestions and laughter fill the classroom.

In the course of keyboarding, a student or the teacher can model spellcheck or the undo icon. When writers know that if they tap the “undo” icon, they can miraculously restore order to a jumbled page, it builds confidence. And what a blessing for many to write without the cumbersome distraction of handwriting!

The laboratory that I propose here is not without its problems. In trying to encourage creativity by relaxing the traditional customs for preparing compositions and the form most teachers reasonably request for students’ papers, we may cause as many difficulties as we solve. Although I enjoy receiving papers in odd fonts, other instructors might not. A student who learns to produce a paper using clip art, unique fonts and unusual format might have to do intricate editing to convert that paper into acceptable form for another class. Another student whose writ-

Works Cited
Schank, Roger. Lecture. Lecture Room. Fall Lecture Series; Grand Valley State University; October 1998.
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ing was apparently unimpaired by the classroom
setting may become confused by unstructured
writing-lab sessions. These individual situations
would require individual attention. But as tech-
nology makes unique fonts and formats common-
place, we should not deify the 12-point Times-
Roman one-inch-margin double-spaced paper,
nor should we insist that writers use computers
only as super-typewriters. We do that at the
expense of creative excitement.

Works Cited
Amabile, Teresa M. Creativity in Context. Update to
The Social Psychology of Creativity. Boulder, CO:
Cordes, Colleen. “As Educators Rush To Embrace
Technology, a Coterie of Skeptics Seeks to Be
Heard.” The Chronicle of Higher Education 16
Schank, Roger. Lecture. Technology in the Class-
room. Fall Lecture Series. School of Education,
Grand Valley State Univ. Grand Rapids, MI, 15
October 1998.