Teaching Basic Writing with Computers.

Before undertaking a computer-assisted composition class, several factors should be considered. First, there will be demands on the instructor to replan the entire course to include the effective use of computers; to teach fundamental word-processing skills in addition to writing skills; to develop enough knowledge of hardware and software to solve minor problems encountered by students; to compensate for new problems in student writing caused by the use of unfamiliar word-processing programs and machines; and to monitor, assist, and schedule out-of-class lab time in addition to class time. The use of computers also places extra demands on students by disrupting their accustomed methods of composing, placing increased demands on short-term memory and requiring additional out-of-class lab time. By careful advance planning, familiarizing themselves with the lab and the equipment, adjusting teaching and learning styles to the environment, carefully choosing a word-processing program, and enlisting the help of a lab assistant or a colleague, instructors can alleviate many of these potential problems. While computers can be used for programmed grammar instruction, they are more useful for editing and correcting papers and in the writing stages of invention, development, and organization. Computer-assisted instruction may not be successful with every student, but it does provide alternative learning strategies for some students who are resistant to conventional writing instruction. (MDB)
TEACHING BASIC WRITING WITH COMPUTERS

by

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I have taught a number of classes of remedial and/or developmental composition using computers as instructional aids. I don't pretend that this experience has made me an expert, for I still have a lot of angles to try and a lot to learn. But, I hope by sharing my experience to date, other instructors can avoid some of the problems I have had to face and will find successes more quickly. Before undertaking a computer-assisted composition class, several factors should be considered: the demands placed upon the instructors, those placed upon the students, the general objectives and goals for the course, and the purpose and use of the computers and accompanying software.

Demands on the Instructor

Computers are exciting and different tools, particularly for those of us who received our training before any such animals were available. But they, like any other major change in curriculum, involve some careful pre-thinking, evaluation, and planning. Well-taught basic writing courses are already extremely demanding on teachers' creativity, stamina, and patience, so we should all think twice about how committed we are to the use of computers. If we aren't believers, this mode of instruction probably won't work.

Major demands to consider are
1. the necessity of replanning the entire course to include effective use of the machines;
   Too often, the hardware and commercial software are allowed to dictate course content. Few working teachers have the time to develop their own software, so they feel constrained by accommodating their lesson plans to existing products. Although some compromise is undoubtedly necessary, the basic goals and objectives of the course should dictate the utilization of the computers. Computers are more likely to enhance some elements of the course than others. Teachers will probably find that they must omit some traditional syllabus material to compensate for instruction in the use of computer programs and for the slowness of some students' adjustment to using a machine.

2. the added burden of teaching fundamental word-processing skills and procedures, in addition to the processes of writing;
   The most effective approach is to devote one or two class periods at the beginning of the course to teaching word-processing, before any formal writing assignments are made. I introduce free-writing in the first class period and have the students practice this while they are learning the features of the computer and the program.
3. having enough knowledge about the hardware and the programs to at least troubleshoot minor problems; Instructors should take the time before the course starts to use the programs and machines in the same way that the students will, to insure that they can solve potential problems the students may encounter.

4. compensating for some new glitches which will occur in student papers because of student unfamiliarity with typing conventions and with the features of word-processing programs; Papers may contain word spacing errors, uncapitalized letters, letter transpositions, and strange symbols or blank sections caused by reformatting errors.

5. and monitoring/assisting/scheduling out-of-class lab time in addition to class time. Frequently, basic students aren't able to complete their assignments during the class time because they compose and type so slowly.

Demands on Students. While computers seem to break through certain students' apathy toward writing, they can dramatically increase the anxiety level of other students. Some older students, in particular, are initially afraid of the machines. Major demands placed upon the students in addition to those normally expected in high-risk writing classes are

1. disruption of their accustomed methods of composing; Although basic students eventually seem to appreciate the reflexive, recursive nature of word-processing, some are initially unable to think of writing except as a linear process. Others are distressed by the "publicity" of their work on an illuminated screen, before they are ready to share it.

2. increased demands on short-term memory; Students must remember word-processing commands and typing conventions in addition to their train of thought in developing a paper and, of course, in addition to basic grammar rules and organizational strategies.

3. and out-of-class lab time necessary to complete some assignments or to practice using the computer. A realistic evaluation must be made of the time periods available to students for lab work both in and out of class. Students may not be able to complete a 400-500 word paper in 50 minutes if they are slow typists, so arrangements may need to be made for additional lab time. However, working students can find this additional requirement a hardship. Setting up specific appointments helps insure that students actually come to the lab for extra work.
General Plans for the Course

I have found that some careful advance planning can help alleviate many of the demands covered above and solve most of the problems encountered in computer-assisted instruction. Planning includes instructors’

1. familiarizing themselves with the lab and with the equipment;
   Obviously, it’s important to know how to turn on the machines and boot up whatever program(s) will be used. But even more important, is learning the idiosyncrasies of individual machines and programs. For example, Apple boards in IBM compatibles have interesting effects on software, and some programs and printers have different ways of receiving commands.

2. evaluating the physical layout of the room and how both teaching and learning styles can be adjusted to the environment;
   The number of computers available and their position in the room are crucial factors in considering the nature and length of assignments. Group work can be impeded if the room is composed of individual work stations, and whole class instruction is impeded if all students can not see the instructor.

3. carefully choosing a word-processing program;
   Currently, there are a number of relatively inexpensive, easy-to-use programs available. The programs which are most suited to basic classes are those whose commands are closely related to the function being performed and which contain an easily accessible pop-up-menu of basic functions. The program should contain highlighting, cut and paste functions, search and replace, underlining or italics, reformatting, and in-process saving of text files. I particularly like a program which will allow me to create a master print file which automatically sets up margins, line spacing, page lengths, and indentations, so that students don’t have to worry with these mechanical things. Of course, there are "cadillac" features beyond these: spelling checkers, style analysis programs, readability analyses, etc. Decisions should be based on what features instructors want available to the students and, of course, what is affordable.

4. enlisting the help of a lab-assistant, another instructor, or someone who can help in the first few sessions while students are becoming familiar with the machines and software;
   One instructor for every five to seven students is ideal, because most students need individual help in the first sessions. I also provide each student with a one page handout of the basic word-processing commands. This handy
reference, plus the concentrated initial instruction, prevents a lot of subsequent repetition.

5. deciding precisely what they want to accomplish with the computers in relation to course goals and student performance. The next section discusses the use of computers in areas such as invention, development, grammar skills, and peer editing.

Deciding on the Purpose and Goals of CAI

There are three possible emphases of CAI in the writing classroom:

1. Computer use in programmed grammar instruction
2. Computer use for editing or correcting
3. Computer use for invention, organization, and development

All three are valid uses, and my suggestions which follow are not intended as prescriptive; they are just a description of what has worked for me.

1. Programmed grammar instruction
   I quickly dispensed with using the computer for programmed grammar instruction during class time. The programs often have distracting noises and take up valuable supervised composing time. Most are little better than traditional workbook exercises with the exception of giving immediate feedback on the correctness of a student's response. They are better used individually or in pairs during lab time outside of class. I assign them for practice according to individual student needs.

2. Editing or correcting
   Computers as editing/correcting tools are terrific aids for some students—particularly those who are field dependent. If lab time is limited, students can compose the first draft or two on paper, then transcribe the paper into the machine. The very act of typing illuminates some errors (but of course can cause others). Once the text is inside the machine, students can run a spell checker. I prefer the ones that either simply highlight doubtful words or highlight the word and give students a choice of replacement spellings. Some programs will transform a paragraph into a list of sentences, or students can simply press "Return" or "Enter" at the end of every sentence to accomplish the same end. Listing of sentences helps in checking for fragments and some run-ons. Some programs will extract the first sentence from every paragraph to simulate an outline which helps students check for unity and logical development of ideas. Other available features are word counts, average sentence and paragraph length, and frequency of "to be" verbs.
Even without some of these features, instructors can use text-marking to illuminate problem areas or they can develop template files to assist students in editing their papers. Rodrigues and Rodrigues offer some excellent examples of template files in Teaching Writing with a Word Processor, Grades 7-13. Students first load the template file, then their own paper, renaming the file to keep it separate from the master template file. Then they can follow instructions in the template for checking and improving various parts of their paper.

The flexibility of designing templates can help instructors tailor programs suited to particular student needs. For example, Paul Hunter and Nadine Pearce point out that one handicap basic writers have is their unfamiliarity with the academic language. They write most comfortably and therefore almost solely in the reflexive mode which predominately uses first and second person pronouns. Template files could be designed to help students change a paper from the reflexive to the extensive mode; and, in addition, the search and replace function could be used to help change the pronouns to third person.

Peer editing is also facilitated by the computer. Students can read each others' papers more easily—either on screen or in hard copy form. "Editors" can type in suggestions at the end of a file for the author to consider later or make suggestions in conference with the author.

In general, students seem to be more willing to make corrections using a word-processor, but they need both encouragement and guidance in doing so. Once students discover the ease of correcting on screen as opposed to recopying papers by hand, they are usually enthusiastic converts to word-processing. Besides they like to see the text automatically changing in block movement.

On the negative side, the computer alone is no miracle worker or transformer of habits. First, students who are prone to premature editing may erase more than they save, and unlike paper where the teacher can examine the strike-throughs and help the student salvage some sentences and ideas, in word-processing the sentences have disappeared forever. Second, typing causes some uniquely distracting errors which wouldn't occur in hand-written papers. Third, a few students assume any typed copy is perfect because it looks so much better than a handwritten paper. And last—unfortunately—despite the best error trapping of program designers, some students invariably manage to lose their entire papers and are faced with the onerous job of typing them again.
3. Invention, organization, development

My personal bandwagon is the use of computers to encourage and enhance invention, development, and organization. All teachers of basic writing are caught in the tension of teaching domain skills versus enabling students to enjoy writing so that they will further their learning on their own. Rules and restrictions are basic elements of our courses, yet they are the very things which have turned off many students and made them feel incompetent and unsuccessful. Lack of experience, misunderstanding of the requirements of academic writing, and fear of failure stymie them. On the one hand, we teach a formulaic approach to writing to provide these students with a system for success, but all writers know that the fun of writing is in innovation, experimentation, word play, and the eureka of "that's what I want to say."

Many teachers encourage students to break the writing process into stages of invention, development, organization, revision, and editing. The computer is an excellent tool in facilitating all of these stages, particularly the open-endedness of writing, the right brain inventiveness that can make it fun. Students are often reluctant to do much writing, much less rewriting of the same ideas, when it involves laborious hand writing. But with the use of text-moving commands, good material can be lifted directly from prewriting strategies such as looping or brainstorming and moved directly into a first draft. Also, knowing how much easier it is to correct/edit writing on the back end, many students feel freer when composing and less concerned about writing a finished product the first time.

Using the computer as a tool for creativity and development is not a panacea for poor student writing. Students will not make full use of the flexibility of the computer without guidance from the instructor. Basic students are not proficient at following written instructions, and template files are still written instructions, even if they appear on the computer screen. So the instructor must check frequently to see that students are making full use of the computer's features and that they understand what they are asked to do in word-processing assignments.

Whatever primary use or purpose is chosen for the computer, it should be an integral part of the course. Instructors must use the machine and programs in the same way that students will use them, and some final course evaluations should be made to judge the effectiveness of the machines and software in accomplishing course objectives. Otherwise, the computer can be just an additional burden to students. Ideally, students should know in advance that a particular
course will entail CAI, and they should be aware of or help plan the overall course objectives.

Summary

Most students feel the experience of using computers in composition is positive. This was the general reaction even in my first remedial composition course, which definitely was not well-executed. One young man provides perhaps the best example. Chris was taking the course for the second time, having failed it two quarters previously. He was 19, a poor speller, who hated writing because he had a poor understanding of sentence limits and subject/verb agreement and had never experienced any success. He was interested in using the computer since computer engineering was his intended major, but he had never used the computer as a writing tool. We began the course by simply getting familiar with the computer and word-processing program. My instructions to the students were to not worry about writing a finished paper, but just to type something into the computer to become acquainted with the features. I put some general topics on the board to encourage some directed free-writing with the unannounced goal of having them develop some material for a future assignment. Chris found a real release in the computer as an invention tool. Unconcerned about correctness or composing a final paper, he found that he had some really good ideas and a real talent for developing realistic detail. In formal papers, his ideas seemed incomplete and unconnected, but in free-writing this weakness didn't matter.

When he finished, we made a hard-copy of his free-writing, and I showed him how he could select the best ideas that seemed to support a certain focus. He underlined the ideas that he liked best. Then we went back to the file and moved those sentences out into a list. He could then decide on a logical order for his examples, and it was easier for him to see his errors in sentence limits when each sentence was on a separate line. He then rearranged the corrected sentences into a paragraph headed by his topic sentence. He then ran the file through a spell checker to isolate his spelling problems. We have no program for analyzing subject/verb agreement, but I had him underline the subject and verb of each sentence to check for agreement errors. He didn't find them all, but he did find a few. This student became so excited about writing because he experienced success that he came to virtually every extra lab session and on one occasion cornered a teacher who casually entered the lab and taught her how to use the word processor.

I don't pretend that computers will be as successful with every student, but they do provide alternative learning strategies for some students who are resistant to more conventional writing instruction. As further advances in artificial intelligence are made and become available in instructional materials, we may just find that computers are indispensable tools in the writing classroom.
Materials Helpful in Planning Computer-Assisted Composition Classes


