Why Are Our Colleges of Education Continuing to Graduate Computer Illiterate Teachers?


This past year I have conducted a number of extensive leadership development workshops in various parts of the country. The participants were all inservice providers—precollege educators interested in how to design and implement inservice to help teachers learn about integrating tool uses of computers into the curriculum.

Inservice education is a major business, and there are a large number of educators who are inservice providers. Some are responsible for literally hundreds of schools, while others focus on a single school where they teach. Many of these educators work at least part time for a college of education, but the vast amount of the inservice they provide is sponsored by school districts. All of these educators are devoted to improving education through improving the computer-related knowledge and skills of teachers. And, essentially all of these educators ask, "Why aren't our colleges of education doing a better job? Why do we find it necessary to provide introductory level computer inservice to newly hired teachers who are recent graduates of our nation's colleges of education?"

Of course, computer illiteracy is not absolutely universal for newly graduated teachers. Some colleges of education have made significant progress in designing and implementing computer-related courses and integrating computer use into their general education programs. Also, there are many students who learned about computers while in junior high or high school and used them throughout college, and who are now entering the teaching profession.

But, by and large our colleges of education are doing a miserable job of preparing teachers to deal with the Information Age. They seem to lack a vision of how technology is changing our society or what constitutes a good education for life in our rapidly changing Information Age Society. They seem content to continue their traditional role of producing teachers who will be comfortable in Industrial Age school systems in which they will perpetuate the status quo.

This is somewhat surprising because there are many very intelligent, well-educated, hard-working faculty members in colleges of education. Many of my professional colleagues are academically active and are quite involved in working to improve our educational system. As with teachers at all levels, many are woefully underpaid, but are committed to a life of service to education. You might ask, "If we have so many good college of education faculty, why aren't they doing a better job?" While there are many possible answers, I want to address a specific one having to do with training versus education.

I have always been puzzled by the expression "teacher training" versus the expression "teacher education." It seems to me there is a vast difference between the general concepts embodied in training and those embodied in education. Training suggests that there is a specific, well-defined task to be accomplished, and that a person is being trained to accomplish that task. Training suggests to me lower-order skills, things that a machine such as a computer might be programmed to accomplish.
On the other hand, education suggests breadth of knowledge, versatility, understanding of underlying concepts, ability to respond to unusual situations, and having a foundation to attach additional learning.

It seems to me that most colleges of education consider themselves as teacher training institutions. Basically, the goal of a teacher training institution is to prepare students to cope with our current schools—to prepare teachers to get their first teaching position and to survive their first year on the job. Since computers and related technology are having only a modest impact on schools, they should have only a modest impact on teacher training. There are far more important areas in teacher training than preparing teachers to be leaders in computer-related technology in education.

This approach to teacher preparation locks a college of education into a rigid, relatively inflexible program. For example, the prospective elementary school teacher needs content courses and methods courses in an amazingly broad range of areas. Each speciality area demands a piece of the action. The current program of study is a delicate balance of compromises among the various interest groups such as social studies, math, science, reading, writing, music, art, physical education, and so on. The appearance of computers prompts the response, "What course would you have us drop from the curriculum, so we can teach about computers?"

This, of course, misses the whole idea that computers are an interdisciplinary tool, a general-purpose aid to problem solving, a new form of instructional media, and a major change agent. The problem of preparing teachers to effectively make decisions about computer use cannot be solved by having preservice teachers take one or two computer education courses.

The failure of colleges of education to effectively cope with computer technology is merely a symptom of their failure to prepare teachers for the changing needs of our society. We need teachers who are leaders, who can cope with individual and cultural diversity and a society that is changing rapidly because of technological advancements. We need teachers who are broadly educated, who are problem solvers, who are committed to lifelong learning.

Computers and related technology are not isolated topics to be considered as a course or two to be added to the curriculum. They are a major part of our changing society, a major thrust to be integrated throughout the teacher preparation curriculum. But in most colleges of education this curriculum cannot readily accommodate such change. Thus, the change has not occurred, and our colleges of education are continuing to graduate computer (and technology) illiterate teachers.

This analysis suggests that the problem of computer illiterate teachers will not immediately be solved by the colleges of education. Over the short run, graduates of our colleges of education will often be computer illiterate and will need remedial computer-related inservice education. This will gradually change mainly through the influence of computer literate students who go on to college and decide to become teachers. Over the long run there is need to restructure the program of teacher preparation, so that it can focus more on producing leaders for the educational needs of our Information Age Society.