Letter to Curriculum Coordinators


Dear Curriculum Coordinator:

Individualized instruction, cooperative learning, interdisciplinary and multidisciplinary studies, multimedia, hypermedia, computer-assisted instruction, and distance education—these are but a few of the combinations of new ideas in educational theory and educational technology that are challenging curriculum coordinators. These ideas could lead to substantial improvement in our school system.

This letter focuses specifically on computer-related technology in education. Perhaps the very essence of educational technology is that it empowers. Access to appropriate computer facilities and instruction in their use opens up new horizons to both students and teachers. This empowerment of students and teachers is perhaps best seen in classrooms where students and teachers work together in a hypermedia environment where they are supported by good access to information stored in a wide variety of formats, good access to tools that help process such information, and a cooperative, interdisciplinary approach to learning. The educational potential of computers suggests three specific questions for you, the curriculum coordinator.

1. Computers are a new field of study. What should students be learning about the field of computer and information science?

2. Computers are a powerful aid to problem solving in every academic discipline. One example is the storage, processing, and retrieval of information. What should students be learning about computers as an aid to problem solving?

3. Computers and other electronic technology lie at the core of hypermedia, computer-assisted instruction, intelligent computer-assisted instruction, and distance education systems that can be used to help deliver instruction. How can these instructional delivery systems be effectively used to help improve education?

Each of these is a very difficult question. You might say that it is the teachers’ responsibility to answer them. However, each question is district-wide in scope, and no individual teacher can hope to cope with such questions alone. You might say that it is the superintendent’s and the school board’s responsibility to answer these questions. However, they lack time, detailed knowledge, and involvement with the daily content and pedagogy of the curriculum. The truth of the matter is that the curriculum coordinator bears major leadership responsibility in answering these questions.

So how well are you fulfilling your responsibility? Do you have a good understanding of what students should be learning about the field of computer and information science? A statement that all students should become computer literate hardly suffices. Does your school
district offer the scope and sequence of the key knowledge and skills that all students should gain and well-thought-out options for students who want to go into this field in more depth?

The very fabric of many disciplines has been changed as computer tools have been woven in. Musical composition and performance, writing and publishing, graphics artwork, laboratory science, accounting and office practices, information retrieval, and a host of other vital activities in our society have all been drastically changed by computers. Are these changes reflected in the content of your school district’s curriculum?

Computer-assisted instruction and distance education are new instructional delivery systems. There is a substantial body of research literature supporting their effectiveness in a wide variety of settings. Their use can have a major impact on both the students and the teachers in your district. Is your school district systematically exploring these aspects of instruction and making use of the findings to improve students’ education?

Each of the three areas that I have discussed represents a major trend for change in education. Each of these trends requires careful planning, curriculum revision, teacher training, and changes in our instructional delivery system. Each school district needs a long-term plan specifying goals in this area and the steps to be taken to achieve these goals.

You, the curriculum coordinator, must play a key leadership role in developing and implementing these plans. I’d like to hear what you are doing. Please write to me and share your ideas and experiences.

Sincerely yours,