
Teaching Computer Skills in the Public Schools of North Carolina: Moving from Who to How

Carol G. Lewis

When the first computers appeared in schools, they created many different emotions: fear, anxiety, and excitement. Think back to the first computer demonstration you attended. Can you remember your emotions? We've made a great deal of progress since then. But, has it been as much as we could have expected? Are we doing what we now need to be doing? Are we asking the right questions? This article suggests that we may be asking the wrong question and offers a suggestion for a more meaningful query.

Who Should Teach Computer Skills?

A continuum of computer skills needed by all students is included in North Carolina's Information Skills program entitled "Library/Media/ and Computer Skills" and can be found in *Basic Education Program, Standard Course of Study, and Teacher Handbook*.¹

These documents form the basis for a philosophical position statement for North Carolina: Information skills should be an integral part of the curriculum; therefore, teaching those skills is the joint responsibility of teachers and the media professional. Working together as an instructional team ensures that students will be taught the skills needed now and in the future. Further, each teacher is charged with responsibility to integrate appropriately library, media, and computer skills into subject areas for which she or he is specifically assigned.²

Since the publication of the 1969 joint AASL/DAVI standards, *Standards for School Media Programs*,³ subsequent national professional guidelines have called for the media coordinator to **work actively** with teachers to support the school's curriculum: "The most effective media program depends upon the support of the school principal and upon an ongoing partnership

between teachers and media specialists."⁴ Although support for a collaborative, cooperative effort between the school media coordinator and teacher is found widely in professional literature, actual practice lags behind these calls for the team approach. Why?

Realities

First, in a rapidly changing environment, it is difficult to identify priorities. About the time we think we have an answer, the question changes. Change is unsettling and creates discomfort. For the media coordinator trained in traditional library responsibilities, rapid change and expansion of the role into unfamiliar territory can be threatening. Since the tasks of librarianship are never ending, it is safer and more comfortable for many media professionals to fill the hours at work with familiar routines. For the classroom teacher, planning with others requires more time, which often seems scarce during the course of an instructional day. Media coordinators and teachers have ever-increasing responsibilities. Thus, it is easier for both to continue operating as usual without assuming responsibility for integrating newer technologies into skills and content lessons.

Second, as noted by Ely,⁵ there is evidence of differences in the role of the media coordinator as perceived by media professionals and by teachers and administrators. These differences are reflected in the degree to which the school's media coordinator is directly involved in instructional matters. Frequently, principals do not recognize the instructional role of the media professional, and teachers often view the role only as "provider of resources."

Third, there are a number of variables unique to each school setting that influence instructional methods and content. Examples of variables include: the number of computers available, types and quantity of compatible software, presence or

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absence of a locally adopted curriculum or scope and sequence, location of computers in the building, and grade span in the school. Each set of variables will present a unique set of challenges and opportunities. Since needs are different, the way a computer skills program is implemented will vary from school to school.

Variety Typifies Practices in North Carolina

Recent school reform efforts in North Carolina have yielded a state-mandated *Course of Study* and a three-year funding program from the state legislature that has provided a computer curriculum and dollars for computer hardware, software, and staff development between 1985 and 1988. Although a straightforward philosophical answer can be given to the question of who should teach computer skills, school administrators faced the advent of microcomputers with an eye toward finding the most qualified people available to do the teaching. Across North Carolina a variety of solutions were found to answer the question; therefore, variety is the word which best describes the status of computer education in the state.

It is encouraging to see educators interested in incorporating newer technologies that enhance learning experiences for students, rather than allowing the technology to drive the curriculum.

In many cases, media coordinators have seen their role expanded to include computer coordination and teaching responsibilities. Still others continue to lobby their administrators for access to a microcomputer. Some schools chose to place computers in a lab and hire a computer teacher. Still others placed a computer in each classroom and provided varying degrees of staff development.

In 1983, the General Assembly provided special funding for one hundred teaching positions that could be used for math, science, or computer resource teachers. Approximately sixty percent of these positions have been used each year for computer resource teachers, signaling a perceived need by school administrators faced with the task of providing computer skills instruction to all students.

Changing the Question

Questions about computers have changed since their introduction as education tools. Initially, interest ran high regarding what hardware to purchase and what software was available—unfortunately, usually in that order. More recent questions focus on how to plan effective instructional applications for students. These plans may include using computers with other technologies, widening the scope of learning opportunities for students.

Three examples of meaningful learning experiences that integrate information skills into various content areas are: 1) The use of a data base management program makes it possible for students to organize, manipulate, and access information to solve problems relevant to the curriculum and to their lives; 2) Telecomputing not only provides "real audiences" for research and writing projects, but it closes geographical gaps and allows students to participate in collaborative learning activities in every curriculum area; 3) Through desktop publishing applications, students are able to communicate with others and share acquired information with peers and teachers in exciting new ways.

The shift in questions has relevance for those who would still ask WHO should teach computer skills. Perhaps a better question is HOW. How can computer skills instruction be more relevant, interesting, and effective? How can we make sure that students acquire the skills they need to be successful learners and effective adults? The examples above represent only a few of the more recent instructional applications being practiced in North Carolina schools. It is encouraging to see educators interested in incorporating newer technologies that enhance learning experiences for students, rather than allowing the technology to drive the curriculum.

With the new question comes a continued emphasis on planning and partnerships. The teacher and media coordinator, both teachers, bring different types of expertise to the learning process. They jointly need to define and implement the program that teaches computer skills most effectively to students. That is the bottom line answer to WHO should teach the skills.

The media coordinator, as resource specialist, knows where to get the needed resources and provides a variety of alternatives for lesson design. However, she or he cannot know each student's individual needs and the curriculum content as well as the classroom teacher—circumstances which call for a successful partnership.

For those who consider the needs of students first, there is a recognition that students who are interested in the lesson, are actively involved, and enjoy personal successes continue to learn no matter WHO is teaching.

Change as a Constant: The Challenge

Blink your eyes or avert your gaze and you find that another new technology is emerging over the educational horizon. In conversations, we frequently repeat the maxim: the only constant is change. As requirements for the work place continue to change, schools are called on to modify practices and learning opportunities offered students. Effective planning is necessary for survival in this rapidly changing environment. It may be that a lack of knowledge about **how to plan** and insufficient **time to do the planning** constitute the greatest barriers to cooperative curriculum design efforts.

We do not know the extent to which compu-

ters and their applications will change the school environment. But, as change occurs, media coordinators and teachers must change. The challenge is for all educators to remain resilient, adaptive, lifelong learners, and ready to rethink and revamp the curriculum as the need arises.

References

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