JTML, Vol. 1, No. 1, 4-9

INTRODUCING THE PRACTITIONER'S VOICE THROUGH ELECTRONIC MENTORING

Jeffrey E. Bush
Arizona State University

The purpose of this project was to learn if mentoring using computer technology might promote unique and useful learning in university music education coursework. Graduate students were electronically "teamed" with three or four practicing music educators. At the end of the semester, students were asked to fill out a survey that dealt with the use of electronic correspondence for educational purposes. The instructor also electronically contacted all mentors at the end of the semester asking for feedback. Eight months after the second class was concluded, one of the graduate students contacted several of the mentors in order to gather additional information. Several benefits were discovered. This process led to a richer learning environment than would have been available in a traditional course.

The twentieth century has seen the introduction of numerous forms of technology with the potential to impact the educational field. However, most of these innovations have failed to live up to the predictions of their promoters. Although the computer is the instructional technology being suggested as the tool that will revolutionize education (Berry, 1994), there still is uncertainty regarding which educational purposes are best suited for computers (Berz & Bowman, 1994). It is imperative that educators not only investigate new uses of computer technology but also evaluate these tools to determine how they might be used effectively. The purpose of this project was to learn if mentoring using computer technology might promote both unique and useful learning in university music education coursework.

To help teachers obtain the skills they may need to use instructional technology effectively, professional education programs typically include training in computer-assisted instruction. Because this instruction frequently consists of general computer courses, few beginning teachers may experience the integrated use of technology in preservice education. Many university graduates are left without knowledge of how to use computers effectively in their own classrooms. They may be left with the message that computer technology is useful only for learning about computer technology. A recent symposium of practicing teachers, administrators, and university educators reached consensus on the need to integrate computer technology into both preservice training and classroom teaching (Wessel, 1997). In order for exploration in instructional technology to have a lasting effect, it is important that this integration occur in ways that promote sound teaching skills.

The Internet has become one of the most popular contemporary uses of computer technology. University educators must determine which topics and strategies could be better explored through the Internet rather than through traditional instruction. In particular, the use of computer telecommunications in music education is a contemporary development. Only two paragraphs in "Applications of Research in Music Technology" are devoted to telecommunications and this information deals primarily with electronic bulletin boards (Berz & Bowman, 1994). One interesting use of Internet communication may be to promote reflective practice (Bush, 1998). This may be a practical tool to promote learning that is not possible in other ways.

Mentor programs have become a popular part of beginning teacher induction programs throughout the United States (Ganser, Bainer, et al., 1998). However, most of these programs are short term (Ganser & Koskela, 1997) and frequently focus only on helping new teachers "fit in" to particular school districts (Ganser, Bainer, et al., 1998). Reiman and Edelfelt (1990) have suggested that there is a need for mentor programs to promote higher-level teaching skills, particularly after initial management concerns have been addressed. Hawkey (1998) suggests that mentors' own university teacher education experiences influence what they promote to their students. Consequently, it would be helpful for students to work with mentors from various backgrounds. If teachers are to be agents of change, it is also important that mentorship programs lead to innovation and provide teachers with opportunities to explore multiple ways of teaching (Ganser, Bainer, et al., 1998).

The use of computer telecommunications for electronic mentoring has only recently been researched in educational settings. Several investigators have indicated initial success in the use of electronic mentoring: It has been utilized to pair at-risk adolescents with preservice teachers (Lesesne, 1997), connect girls and women to computer science (Walker & Rodger, 1996), and link library and information science researchers (Gregory, 1992). Beacham and Kester (1994) discuss an initiative to help university and public school personnel become familiar with the Internet through electronic mentoring and electronic peer coaching. Likewise, Keston, Sharpe, Fullerton, and Philips (1998) have investigated the pairing of teaching practitioners with individual preservice teachers. However, no current effort has been discovered that utilizes electronic mentoring to integrate practicing teachers into university education coursework.

After reviewing the literature, it would appear that the use of computer technology for mentoring might be a worthwhile endeavor. Little work has been undertaken to determine if this is a viable and appropriate tool for university coursework. This project sought to answer the following questions: Would this use of technology provide practical and valuable information to university music education students not easily available through other methods? Is this type of program workable and practical for univer-

sity coursework? What benefits and problems would be the result of this type of activity?

The project sought to integrate technology into coursework in a way that would be meaningful and useful to the students. This activity was designed to promote dialog between graduate music education students at Arizona State University and practicing music teachers. It was hoped that this dialog would stimulate discussion about topics that were part of a graduate music education methods course. Another goal was to use comprehendible technology so that the focus would be on education and not on the manipulation of hardware and software.

Method

The mentoring project was initiated in the fall of 1997 and was revised for use in the same class in 1998. To establish this project, a request for electronic mentors was submitted to a major music education listserv. The project was outlined on the listserv; interested parties were requested to reply by E-mail listing their current and past teaching experiences, geographic location, and years of teaching experience. The response to this request has been so overwhelming that some potential mentors have had to be turned away each year. Each graduate student was electronically "teamed" with three or four practicing music educators from different regions and centers of North America. Students selected their mentors independently; it was suggested, however, that they have a mix of teachers with both similar and different backgrounds (i.e.: instrumental teachers, general music teachers, etc.) and teachers from different geographic locations. Weekly questions were introduced to the students who presented them to their mentor teams for discussion and feedback. At weekly class meetings, the students and instructor discussed responses and reactions to the questions.

Later in the semester, a second initiative was introduced. One mentor per week was asked to suggest a question or problem for the class to discuss. Approximately 15 minutes of class time per session was devoted to discussing the mentor's questions. After the class the responses were E-mailed to the mentor. This allowed for a bountiful mix of practice and theory in each class session.

Both anecdotal and formal data were collected. Students corresponded electronically with the professor on a weekly basis. The focus of this electronic journal was left to each student; however, correspondence frequently focused on their conversations with mentors. At the end of the semester, students were asked to fill out a survey that dealt with the use of electronic correspondence for educational purposes. The instructor also electronically contacted all mentors at the end of the semester asking for feedback. Eight months after the second class was concluded, one of the graduate students contacted several of the mentors in order to gather additional information.

Results and Discussion

Many subtle and not-so-subtle benefits were discovered. When students hear a similar message coming from practitioners and faculty, they are more likely to believe the concern or response is universal. Instead of one primary source of information (the instructor), students are exposed to numerous and varied views on important issues. Frequently, because of the diversity of the mentors, opposing views are presented and discussed. Students come to realize that many issues have more than one answer due to the respondent's geographic location, experiences, methodologies, and philosophy. In addition, graduate students currently teaching and simultaneously enrolled in this graduate course were able to share lesson ideas with their mentors. Several professional friendships have developed because of this endeavor.

Benefits are not limited to the students; both the mentors and the instructor have profited by the experience. Mentors have commented that they enjoyed the opportunity to think about and discuss important professional questions; their typical work schedules seldom allowed for this type of reflection, discussion, and professional interaction. The instructor is made aware of current issues and concerns faced by the practitioners. The mentors have also been helpful in offering suggestions and ideas to make the classes stronger and more useful for all involved.

As with any initiative, many challenges were, and continue to be, faced. Students sometimes take too long to present new questions to their mentor teams. Likewise, students sometimes forget to relate the group discussion back to their mentors; instead, they frequently advance to the next topic. Consequently, new topics now are frequently presented several weeks before the live discussion. Because practitioners are sometimes too busy to reply during any given week, students will always be teamed with three or more mentors rather than the original plan for one or two mentors per student. A few students have entered the class with minimal computer skills. Since there is a practical use for these skills and the students are genuinely interested in this dialog, it has never taken more than one or two weeks for them to become comfortable with the necessary hardware and software. There was an initial concern that not all students had equal access to computers. However, most universities have numerous laboratories, computer sites, and other facilities where E-mail can be created, forwarded, and checked. Consequently, no student needs to have his or her own equipment nor home Internet access to participate in this project. None of the technological problems have proven insurmountable.

Several suggestions have been made to improve and strengthen the project. The use of a chat room and a class listserv would allow for the utilization of electronic correspondence beyond E-mail. Chat rooms, where all mentors and students can converse in periodical "live" discussions, opens the possibilities for increased communication and would allow mentors to become more active participants. Posting mentor comments to a listserv might also facilitate sharing opinions and experiences. In addition, a summary of the

class discussion posted to the listserv would provide mentors the opportunity to survey class development of the issues under discussion.

These benefits are in addition to the promotion of instructional technology. This is an example of utilizing the Internet to promote important educational goals and not simply the employment of computers to learn about computers. It is an important element in this class and allows for a worthwhile type of instruction that would not be possible without technology. It also has the advantage of being affordable, learnable, practical, and transferable to many similar projects.

The experience has served to create a richer learning environment than would have been available in a traditional course. Obviously, the future direction of educational technology is uncharted. However, this type of resource may become a valuable pedagogical tool and might help us link our most valuable educational technology: our human resources.

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