

DOCUMENT RESUME

ED 453 930

PS 029 494

AUTHOR Guha, Smita
TITLE Developing an Effective Teaching Strategy for On-Line Instruction of Early Childhood Education Course.
PUB DATE 2000-04-00
NOTE 18p.; Paper prepared for the Annual Meeting of the Association of Childhood Education International (San Diego, CA, April 3-6, 2002).
PUB TYPE Reports - Descriptive (141) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Computer Uses in Education; *Course Descriptions; Course Evaluation; Distance Education; Early Childhood Education; Higher Education; Online Courses; *Preservice Teacher Education; Teaching Methods

ABSTRACT

This paper describes an online course on curriculum development and implementation in early childhood education offered to preservice teachers at Philadelphia's Temple University. The paper describes designing the curriculum of the online course, hardware and software requirements, development of an online teaching strategy, implementation, and evaluation of the course and online instruction methods (79 percent of students expressed satisfaction). The paper concludes by asserting that online courses, with their flexibility and ability to reach students at a distance, benefit both students and universities and also enhance preservice teachers' competence with the technology they can use to teach young children. (EV)

Developing an effective teaching strategy for on-line instruction of
Early Childhood Education course

Smita Guha

Assistant Professor

Temple University

Address: 1301 Cecil B. Moore Avenue

Ritter Hall 445

Philadelphia

PA 19122

Phone #: (215) 204-6137 (work)

(215) 641-1629 (home)

e-mail: sguha@astro.temple.edu

Fax #: (215) 204-1414

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it.

Minor changes have been made to
improve reproduction quality.

• Points of view or opinions stated in this
document do not necessarily represent
official OERI position or policy.

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

Smita
Guha

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

Paper prepared for the Association of Childhood Education International (ACEI) 2002 Annual
Conference (San Diego, CA, April 3-6, 2002)

029494

Developing an effective teaching strategy for on-line instruction of Early Childhood Education course

The advancement in computer technology has brought a change in the delivery of information in our society. In the first place, inroads of personal computers in American homes gave a positive indication of our society's readiness in embracing technology. Then came the scope for people to access the Internet from home that opened a wide array of information exchange modes. The Internet offers colleges and universities new opportunities to act on a potential watershed—online learning for students. Although distance learning has been around for decades, the concept of online instruction is fairly new, but has already secured its position in the curricula of course offering among most of the universities across the nation. Learning through online instruction offers students and institutions great flexibility and thus, is increasing in number and scope. Convenience is the key, and as a matter of fact, the major factor for enrolling in online courses particularly for students who cannot take courses on the traditional college campus. For second-career college students, commuting from their place of employment, conflicting time schedules, and other professional and personal commitments pose major barriers to take courses at regular class settings. To them, online instruction constitutes an oasis for learning. For educational institutions, distance learning in its online form is the only option to cater to these students. The college educators must understand students' needs and provide the necessary resources to allow these students to take the courses that they need. There is a commercial benefit for these institutions, as online instruction provides a conduit to reach students at a distance. Hence, offering online courses is getting popular as well as being an important matter for college educators in designing the course curricula.

Temple University has been a proponent of technology based instruction. Being an instructor at CITE department (Center for Instruction and Technology in Education), in the College of Education, and having first hand knowledge and experience in education through technology, I further explored the opportunities in promoting online instruction for pre-service teachers who majored in early childhood education. I had already taught the course “Curriculum development and implementation in early childhood education” (ECH ED 107) where the instruction was in a conventional classroom setting. Knowing that many students commute from a distance and are unable to attend classes at a specific time, I took advantage of a university-wide program that provided funding to develop and offer courses online. My proposal in teaching the course online was readily accepted as it was in accord with the university’s plan to promote online courses and to be a partner institution in technological advancement.

Designing the Course Curriculum

Despite the fact that online instruction offers opportunity and flexibility in students’ learning, it has its limitations. Besides lacking the teacher-student relationship that is developed with face-to-face instruction, teaching online does not provide students the campus experience which is important for individual’s growth. Very importantly, online instruction creates a challenging environment for teachers as they have to carefully design the course to generate a considerable interest among students. Since, students are not taught in a traditional class setting, several factors may affect their learning process of which motivation and discipline are the two major ones. As the instructor of the course “Curriculum development and implementation in early childhood education” (ECH ED 107), I had to consider these factors when designing the

course material. The course contained theoretical as well as practical aspect of teaching young children.

This is a mandatory course and is offered in both a traditional and an on-line course format. ECH ED 107 in its traditional format was offered for many years but the option in taking the course online was offered since past two years. Since the new mode of instruction offers convenience and flexibility, many students opt to enroll in the on-line course.

As the instructor, I designed and developed the on-line course material bearing in mind that for most students it will be their first Web-based instruction experience. The course syllabus including the schedule is posted on the Web. All the course contents are hyper-linked. On respective on-line classes, students are supposed to click on the contents that are hyper-linked and can either download or print out the class notes. As part of the course requirements, students would meet the instructor face-to-face for the first class at the college campus so that the instructor could show the students how to access class notes. At later dates, the students would meet the instructor and the young children at the early childhood centers for firsthand experience in teaching young children. The child care center selected for the ED 107 course was close to the university campus and was an easy and convenient commute for education students. Selecting a nearby child care center, also accomplished the university's mission to build an educational partnership with the neighborhood schools. In partnering with Temple, the child care center gained recognition and furthermore, could hire from the talented student pool who were already trained in that particular setting. For student teachers, visits to the child care centers are quite important, as the hands-on experience assists in better learning and towards their professional enrichment.

Hardware and Software Requirements

In order to implement an effective online instruction, the instructor must be aware of the technology tools that are needed. He or she must have an access to either a PC or Macintosh computer and having an internet connection. A Web browser such as Netscape Navigator version 4.75 or higher, or Microsoft Internet Explorer version 5.5 or higher is needed. The minimal amount of RAM memory is 32 MB. The recommended amount is 64 MB or higher. Furthermore, the course instructor must have a thorough knowledge of technology in order to create documents that can be easily viewed and be downloaded by the students. The instructor must be able to use a Web browser to look at the Web pages in the Internet, need to know how to scan documents, save them as html files and use Front Page and Blackboard or a similar software to design and develop the course content on the Web.

Development of On-line Teaching Strategy

Although the course is focused on implementation of online instruction method, the curriculum for ECH ED 107 was designed to accommodate both on-line (60%) and face-to-face instructions (40%). Several reading and work assignments were done online, but observing and interacting with the children at day care centers were done in face-to-face sessions. The on-line instruction was Web based and allowed students to review the course materials on the Web and download the needed documents. Two software programs, FrontPage and Blackboard, were used to design the Web page and in developing the course content. The latter being an e-Learning software platform. On the first day of class, where I met with the students face to face, each student received a specific login name and a password to access to the course materials.

All class assignments are posted on the Web, and students would log on to the Web site, access the specific lesson file, retrieve the assignments which are designed like forms, and fill the same in an electronic format. For this purpose, a “digital drop box” page is used which allowed students to exchange files with the instructor in Blackboard platform. For example, students can view and download the lesson plan format, observation guides, and self-assessment forms, fill those out and submit their reports/ assignments electronically through the aforementioned “digital drop box” to send it to the instructor. The “digital drop box” page is password protected, and the “drop box” tool enable the graded assignment to be delivered electronically to students, whereby they could retrieve the said assignments at their own schedule. Another software tool that was used quite frequently was the “Listserv”, which allowed students to communicate among themselves. A listserv list is a collection of e-mail addresses, and is subscriber specific. A subscriber can exchange messages with everyone as it gets automatically distributed by the listserv software to everyone who is subscribed to the list. Thus, the instructor and students

enrolled in ECH ED 107 constituted a specific group and through “Listserv” a better communication was achieved. Besides, using “Listserv”, students can also communicate with the instructor through e-mail messages and telephone calls.

It is important that the instructor teaches the students about the ethics and developmentally appropriate practices in early childhood programs (Bredekamp & Copple, 1997), and in designing lesson plans for young children. Students utilize Web services to retrieve information on lesson plans, which they are to create on their own using the format. Once they have constructed their respective lesson plans, they use the “digital drop box” tool to submit to the instructor electronically, and await instructor’s feedback before proceeding further to implement the plans.

In order to create a closed classroom like environment, “discussion board” (already incorporated in Blackboard program) was used where I post a question each week for students to answer. Responses from students are also posted on the discussion board, whereby students can build upon each other’s answers to a specific discussion topic. For example one of the questions that I posted on the discussion board was: “Who is an early childhood teacher?” One student answered, “An early childhood teacher is one who takes care and teaches the young children”. Another replied, “In my mind an early childhood teacher teaches the children in a warm and loving environment”. Students could look at the answers written by others students and could build on the same. Thus, students’ interaction and responses make the discussion topic interesting and informative. Creating such an environment helps generate students motivation and have them engage in class participation, albeit electronically. Irrespective of the mode or place of interaction, or of the learning platform, if the outcome benefits students at large, then there is a good reason to embrace the media of interaction and broaden its scope of application.

All students are required to submit a resource project. It is done at the end of the semester and in form of class presentation. Generally, students form their own group consisting of five members, and use a sub-listserv group to discuss their topic of presentation. Each group has a leader, and the members of the group work on a topic and prepare two sets of teacher-made materials. The guidelines for the project are posted on the course Web page and the instructor communicates with the group leader about the progress through listserv or e-mail. The students communicate with each other in the group mostly through listserv, although they have the choice in meeting face-to-face. The students are supposed to create detailed lesson plans on the topic that they are going to present in the class. Each member, besides the leader, is responsible for integrating any two subject areas of the topic with two different lesson plans and two teacher made materials. A variety of curriculum areas need to be represented. The leader, who has the important task in coordinating the entire project for the group, is supposed to present only one lesson plan, and prepare one teacher made material. Also, the leader has to place each member's lesson plans into a booklet and during the course of presentation, has to introduce and conclude the topic. Some examples of the project topics are "animals", "ocean", "community", "family" etc. For the language arts teacher made activities, examples could be "flannel board stories", "prop stories", "puppet stories", and "sound stories" to name a few. Although instruction is online , neither the instructor, nor the students must go overwhelmed with technological aspects and divert from the course guideline. They must understand that the objective of online instruction is to offer convenience in learning the subject which otherwise would have been difficult. The course content, the reading material and the class projects remain the same as offered to students enrolled in traditional class; setting; the only difference is the mode in the delivery of instruction.

Implementation

Thirty students enrolled in this ECH ED 107 on-line class, and for most of them this was the first on-line class they have ever registered for. In the first class meeting, which was held at the computer laboratory, I discussed the advantages of the on-line course and encouraged students to utilize the technology. Since this is new learning concept to them, I assured students of any help they may need to be comfortable with the new mode of instruction. At first, I discussed with them NAEYC's Code of Ethical Conduct (Feeney & Kipnis, 1992) pertaining to early childhood education, and then I explained the students about the technical aspects. First and foremost, they have to get familiar with the technology and the application tools. Students learned how to access the Web, and download and print the class materials, how to use e-mail for communication, engage in class discussion through "discussion board", how to subscribe to the class listserv, and how to use "digital drop box" for submitting class assignments. Although I emphasized that students should submit their assignments on-line, they were nervous about it and besides submitting on-line, they also placed a hard copy as a back-up in my mailbox. Some e-mailed me the same assignment several times. This further complicated the process. To avoid such complication, I gave students two choices; either they submit the assignment electronically only once, or, even if they submit a hard copy (as a back up), they must state on their copy that it is a second copy and that they have already sent the first copy electronically. In either case, I encouraged students to utilize the technology and familiarize with their usage.

Initially, some students were very nervous and quite anxious about the whole process. For some students, the entire event was a learning experience. Students with the lack of computer knowledge were seen less confident in submitting assignments on-line as compared to those who

had prior experience with computers. To show my support and also to eliminate their fear in computers, I gave them the option of hand delivering their assignments in the initial stage. After the fourth week of class all the students were supposed to submit all their assignments on-line. Only if they had any technical problem they need to contact me before the due date of the assignment. To submit their assignments, students could use the computer lab or submit from home depending upon their accessibility. Most of the students however, found it simple to access the class materials from the Web. These students would also volunteer help to those who had trouble accessing the Web through the class listserv. Overall, it was a challenging experience for the students.

Evaluation of Course and online instruction methods

As a part of the mid-term evaluation of the course, students were asked open ended question about the class in general and any changes that they would recommend. Students responded positively and placed their comments on-line. They seemed less concerned about the instruction mode or in utilizing the technology tools; however, they made some valuable suggestions that needed minor changes.

Throughout the semester, for my records, I maintained a journal where I recorded students' level of comfort in using technology tools, their ability to log on to the Web-page, getting around the Web site, retrieving course material, and submitting class assignments electronically using the "drop-box tool", ability to interact with class using the "discussion board", and how well did they perform not only from technological aspect, but in learning the subject.

Again, at the end of the semester, students had to fill out an on-line survey questionnaire to evaluate the course. Most students mentioned having no difficulty to log-in, and access the course on-line. Almost three-quarter of the student body remarked that they did not have any technical interference while working on-line and that they were satisfied with Temple's computer system and when they had any questions, they could get their questions answered by the technical support staff. On the course material, eighty five percent of the students seemed content with the subject matter and the way the class had been conducted. However, some of them (about twelve percent) mentioned that they would have been more happy if they had some additional class time to work with young children at day care centers, as it would enhance their practical experience with children. Since, it was new learning platform for the students, I had encouraged them to work coherently with their classmates; on which, about thirty four percent admitted seeking technical assistance from their friends and worked together in solving any minor technical difficulties they faced. Although it was a new course offering, more than seventy nine percent of the students confirmed having an idea of on-line course and the instruction process and the basic technical tools that were necessary for an effective teaching and learning process.

Students mentioned that they found the on-line course encouraging, and they spent on an average of 4 hours a week for the course, most of which was used in following instructions including student-teacher interaction process. Students also mentioned spending a considerable time in interacting with their classmates and in constructing the group projects. The students confirmed gaining an invaluable experience through this course and felt the on-line course more challenging than the ones offered in traditional class setting. Forty two percent of the students felt that having a course on-line helped them open-up in class discussion and they had more fun in class discussion as compared to their previous experience in a more conventional setting.

Students confirmed that online instruction helped them broaden their views on technology and education, even for early childhood classes and have them re-think about further possible areas that technology can be linked to in early childhood setting. Overall, seventy nine percent of the students stated that they were satisfied with the ECH ED 107 on-line instruction program that CITE department at Temple University had offered. .

Most students referred “convenience” being the major factor in enrolling for the course, and that it met their expectations in that regard. The intrinsic merit of the on-line course was established by a student who mentioned, “This was a valuable experience for me with respect to the content and technology.” One student who found a synergy in Web-based learning and technology applications in the field of education, commented, “This type of courses will benefit pre-service teachers who will learn not only the subject, but will also be conversant with technology...very helpful for a person who wants to be an early childhood teacher in the future.” Another student remarked, “By using the Web for a course, pre-service teachers are getting first hand experience with technology that will aid in teaching children.” The positive reactions from students dovetailed with hands experience in emerging technology applications made the course offering an instant success. In retrospect, I could see that offering ECH ED 107 on-line was a prudent decision that I made and it indicated a promising future with respect to technological application in learning.

Discussion and Conclusion

If the goal is to provide educational opportunities to teachers of young children who are unable to attend the required courses at a set time, then online instruction can be viewed as an effective strategy. Online instruction has become an increasingly important part of educational

programs among the colleges across the country. Institutions are utilizing their resources to be digitally linked and offer flexibility and convenience to prospective students who find learning via online instruction, the nontraditional way of education a better fit in their busy schedule. With the advancements in computer technology and the widespread use of the internet, the time is appropriate to initiate a teaching strategy that incorporates technology use and thereby not only help students fulfill their educational dream, but also add a new dimension to teaching.

Although online instruction is new, this nontraditional mode of instruction holds immense promise for the future. The on-line courses with their flexibility and ability to reach students at a distance benefit both students and universities. They also enhance pre-service teachers' competence with the technology they can use to teach the young children.

Teaching on-line was a valuable experience for me, although setting up the course material was quite time consuming. It took me almost one-half of the semester to scan my teaching notes and pertinent course materials and then place them in electronic file folders. The content of the course material was the same that I developed over two years to teach the same course in traditional class setting. If it is necessary to develop a totally new course material, it would take a much longer time. Hence, it is quite necessary to consider the time for designing and setting-up a course intended for online instruction. As a new course offering, it was expected that some students may face difficulties in the beginning, but I also believed that with some assistance, students could overcome those problems. The fact was that after few classes, not only these students eliminated any fear of using computers, they were highly motivated to utilize technology for their other classes. I was encouraged seeing the positive outcome from the students. However, not everything went smoothly without a glitch. Occasionally, technical problems, although very few, would occur that I could not solve, and I had to seek expertise from

the computer laboratory. In those cases, I directed students' calls to the university's technical service and immediate attention was given to resolve the issues.

In comparing two teaching methods, the traditional teaching method allows students in the class to interact directly with the instructor; therefore, the response time is immediate, also, students do not have to depend upon technology for materials or responses to their questions. On the other hand, in a traditional class environment if a question arises between classes, the student has to wait until the next class before seeking an answer. With the on-line course, however, a student can send questions via e-mail as they arise. This raises the very important issue of communication. An on-line course can be made successful only if the instructor sets up lines of communication with the students that are always open, and gives prompt attention to any questions or concerns. Although the course was offered on-line, there were times when I met with the students face-to-face to give them ideas about materials that could be appropriate to use with the young children. The students can then experiment with the materials provided and find out how effective will those materials be while teaching young children. For example, simple science experiments like "a paper spinner", "blowing into water", "bottle organ" (Guha & Doran, 1999). I also made it mandatory that students registering for the course needed to teach young children on specific days to have a first hand experience teaching young children. Further, the students are required to visit day care centers as it is important for students to observe the classroom teachers teaching young children. The students recognized the value of these visits: "working directly with the children was very helpful...this is the strongest aspect of the course," said a student. Nevertheless, this particular component of the course did not underestimate the effectiveness of on-line instruction, as students valued in gaining further knowledge about computers and their learning benefits.

On-line learning provides a virtual class experience. Since it does not offer students the campus experience for social interaction, or provide hands-on guidance from the course instructors, a carefully crafted teaching strategy should be adopted so that the on-line instruction is interesting. The concept of distance learning is not new; correspondence schools have been in existence for several decades. Now that so much is digital, and many people choose to surf the net as they search for information, the traditional ways may sometimes need to take a back seat.

Teaching the course on-line was definitely interesting though few challenges evolved during the course. However, the challenges decreased as the course progressed. There had been challenges at the beginning of the course when the blackboard software did not work as it was supposed to or students had trouble accessing the software. The students then contacted me via e-mail and the university technical service helped resolve the problem. The students were persistent and never gave up when encountering challenges. They enjoyed the involvement. This was my first experience with on-line instruction, and my feelings echo Smaldino's (1996) statement, "teaching at a distance is an exciting and dynamic experience". Students' views reflected the effectiveness of the on-line instruction offering. One student said, "...the course practicum were good and also the final project was good. I liked it being on-line as well." Some students will be more technology-oriented; their mind-set is technology driven, and they will try out anything new that is technology based. Others, those who are not so technology savvy may consider on-line instruction as just a more convenient way of educating themselves. To this group of people, it is the convenience that influences their decision-making process.

From educational aspect, the usage of technology has leaped far beyond the classroom boundaries, and more so with the availability and extensive usage of the Internet. Truthfully, with technological aid, online instruction has infused great enthusiasm among students and the

institutions, and has become an increasingly important part of educational programs in higher education across the U.S. colleges and universities. However, form the mode of teaching may be, we must understand that technology is a tool that we can use to explore opportunities in teaching and incorporating it in classroom instruction, but merit lies in teachers' ability to develop a course content that could be executed well and let us not forget that a good planning is necessary in all cases. Once the teaching strategy is in place, a series of steps are needed for careful implementation. A good educational program is thereby completed, benefiting students, teachers and the educators.

As teachers, our aim is to enhance students' knowledge of the subject. In an ever-changing world, the modality of learning also changes according to the needs of the people. The online instruction, which was non-existent a decade ago, is now a reality. Introduction of new concept is always challenging. Not all times situations are conducive, as it relates to varying factors. Therefore, whatever challenges or barriers we may face in promoting online instruction or online learning, as educators we should look for a positive outcome. If technology can assist students in their learning process, then we must embrace it and implementing the same towards a mutual and long term benefit.

References

- Barker, B. O. & Dickson M. W. (Nov./Dec., 1996). Distance learning technologies in K-12 schools. Past, present and future practice. *TechTrends* 41(6), 19-26.
- Bredenkamp, S. & Copple, C. (Eds.). (1997). *Developmentally appropriate practice in early childhood programs* (Rev. ed.). Washington, DC: National Association for the Education of Young Children.
- Feeney, S. & Kipnis, K. (1992). *Code of ethical conduct & statement of commitment*. Washington, DC: National Association for the Education of Young Children.
- Guha, S. & Doran, R. (October, 1999). Playful activities for young children. *Science and Children*. 37(2), 36-40.
- Morrison, G. S. (1998). *Early childhood education today*. (7th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- National Association for the Education of Young Children. (1996). *Guidelines for preparation of early childhood professionals*. Washington, DC: Author.
- Price, R. (1999). Designing a college Web-based course using a modified personalized system of Instruction (PSI) model. *TechTrends*. 43(5), 23-28.
- Smaldino, S. (1999). Instructional design for distance education. *TechTrends*. 43(5), 9-13.

