

activities into the course. One of the goals in the design of the new projects will be to encourage group activities that can be shared between local and remote sites, yielding even more interaction between sites. We found the CBL to be a good tool for collecting data for use in student projects but also found that a person familiar in its operation needs to be present at both the local and remote sites. The initial offering of this course was team taught, so this did not create a problem. Since subsequent offerings will be taught by only one instructor, appropriate use of the CBL will have to be evaluated.

The scope of this project lends itself to many logical extensions. More data concerning the effectiveness of the technology needs to be collected in order to effectively evaluate the project. Faculty development must also continue, with possibilities of workshops in how to deliver a course in mathematics using hand-held technology via GSAMS, how to use the new TI-92 calculator, how to integrate the TI-92 into a calculus course, etc. We would also like to develop a web-site where

course materials from this project could be accessed for the purpose of faculty development, student class materials and tutorials, or general interest.

Additional time is needed to work on instructional materials so that they can be easily adapted by other calculus instructors in the university system who wish to teach a similar course via GSAMS. These materials should be textbook independent. When the state university system converts to the semester system in Fall 1998, the Calculus I course will cover a third more material than it presently covers. Since we foresee this to remain a popular PSO course, time must be spent to re-structure the course and develop new instructional materials. We would also like to add a course in Trigonometry to the Algebra and Calculus courses already being taught as PSO courses over GSAMS by Georgia Southern University.

Cindy Gonzalez and Susan McKinnon are Regents' Connecting Teachers and Technology Faculty Development Workshop award recipients.

Comparing Achievement in Required Health Education Classes: Between Traditional Delivery and Distance Learning

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USING TECHNOLOGY AS A MEANS OF REACHING students who cannot take classes in the traditional way has been a growing trend in the 1990s. A question that has yet to be answered satisfactorily concerns student achievement. Do students learn effectively via distance delivery? After several years of facilitating a college by cassette course, I began to sense distance students were not learning the material as well as traditional students. I decided to investigate my data to determine if this was indeed the case.

Health education courses using college by cassette delivery began in fall 1993. The *Living with Health* telecourse was chosen to be used and licensed through PBS. Instructional support includes video tapes, text, student study guide, and an instructor-produced student handbook. The students are required to meet with the instructor three times per quarter for testing and to turn in class work. Enrollment for the first year was 86.

Since that time, the course is offered twice a quarter with an average enrollment of 30 students in each section. In 1994, FCTV (Floyd College Television, serving Rome and Floyd County) began cable casting. Using production software to augment the instruction, I developed this health course for live delivery. The students watch the live sessions or tape the class and watch it as their schedules permit. Instructional support includes text and an instructor-produced interactive study guide. The class meets with the instructor two times a quarter for testing and to turn in class work. Enrollment averages 20 students per class. In 1995, this health course was developed to fit GSAMS (Georgia Statewide Academic and Medical System of two-way audio/video teleconferencing classrooms). Students must attend either the live or remote classroom site. Instructional support again includes text and an instructor-produced interactive study guide. Presentation software is used

to aid in instruction. Class size averages 22 students per quarter.

My sense was that students who did not have regular instructor support in health classes did not produce the same quality of work as those in the traditional classes. In addition, I noticed a large number of withdrawals from the distance learning classes. This evidence led to my concern that distance students were not as successful as those in my traditionally taught courses.

The study is a comparison of student achievement in traditional classes to achievement in each distance learning vehicle. A minimum grade of "C" has been set to identify successful achievement. For the first three years of the study, the traditional delivery classes have an average success rate of 83.3% and an average withdrawal rate of 8.4%. The three distance learning deliveries have an average success rate of 72.6 % with an average withdrawal rate of 19%. When the rates are compared by academic year, AY 1994-95 and 1995-96 show a statistically significant difference between achievement for traditional and distance learning classes. There is no significant difference for AY 1993-94, possibly because the data numbers are low. AY 1996-97 data is currently being compiled and statistically analyzed.

While success rates of a minimum of 70% will lead most to classify distance delivery as effective, my concerns and the result of this study have led to actions aimed at improving the potential for student achievement in distance learning. The live delivery sessions for cable TV were taped, and the College will reproduce these sessions to replace the pre-produced college by cassette. This allows greater flexibility and an internal control of content and quality with the videotaped portions of the course. The Department of Extended Learning has developed a *Student Success Guide* which contains study tips for students provided by successful distance education instructors and students from across the nation. I also have continued to modify the interactive study guide as well as my teaching techniques in an effort to improve the students achievement levels.

Student comments on course evaluations illustrate that the time and place shifts allowed by distance education are beneficial to many, and the reasons for the differences in achievement could be varied. This study will be continued through the completion of AY 1997-98. Hopefully, evidence will show that the steps taken to improve student achievement in distance learning settings will be successful.

"Let Us Go Then You and I": A Quick Primer for Tele-Teaching

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DISTANCE LEARNING IN ITS VARIOUS FORMATS is an emerging field, one which will continue to impact a greater number of students and instructors each year. As more instructors are called upon to teach in a distance learning environment, and often at a moment's notice, the need for specific and highly focused training has increased. We hope the following information will enhance the educational experience for student and instructor alike as each takes on new life in the television classroom and across the airwaves.

Essentially, your success as a distance learning instructor will depend on four factors: your preparation, your personal appearance, your teaching style, and your utilization of technology. Execute these elements effectively, and you will succeed.

Your Preparation

The quality of instruction in any class depends largely on the quality of the instructor's preparation for that

class. Preparation for distance learning classes is vital for a number of reasons. Because they are often taught in a public forum, distance learning classes are frequently seen by a much wider audience than classes taught in a traditional classroom. Consequently, the instructor becomes a representative of the institution and can impact the way the institution as a whole is perceived. The instructor may develop close relationships with his or her students over a period of time as they view the course on a regular basis, and the students will begin to overlook the instructor's idiosyncrasies. This is not the case with the casual viewer, however, who will have no such bond and be much more critical. It is therefore essential that the instructor be extraordinarily prepared for each class.

- Be focused. Take time to gather your thoughts before class. Drink a glass of juice and eat a high carbohydrate snack to help keep your energy level high.
- Know exactly what you will do in class. Time man-