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AN INTEGRATED APPROACH TO COMPUTERIZING THE BUSINESS CURRICULUM

Diane M. Hamilton, Glassboro State College Robert D. Lynch, Glassboro State College Linda W. Ross, Glassboro State College

ABSTRACT

The New Jersey Challenge Grant program gave business school an unprecedented opportunity (and \$850,000) to design an ideal, integrated approach to "computerizing" the business curriculum. This project includes 1) computing facilities; 2) faculty training and development; 3) curriculum revision; 4) a comprehensive database and case study environment: and 5) computer integration into courses. This paper describes the components, their relationship, and the rationale underlying the project.

BACKGROUND

Glassboro State College Adopted an ambitious plan "to create a learning climate that simulates a technologically advanced business firm and its information rich environment." Our short-range objectives were to redesign curriculum around the concept of the management and use of information through an integrated decision-support system, and to provide intensive hands-on computer experience in all courses. While strengthening students' quantitative, analytical and reasoning skills, we aimed to heighten awareness of the organizational and interpersonal context for decision-making and to enhance communication skills.

COMPUTING FACILITIES

Five state-of-the-art facilities were designed. In 1988, we opened an complex of three computer facilities, two of which can be used for scheduled classes. Eighty IBM PS/2 model 50 microcomputers and Proprinters are housed in these three labs. A network carries a set of basic business application software and allows restricted access to course-specific software and data. Faculty offices are equipped with a workstation connected to the LAN. Two more computerized facilities will be completed in 1990: an auditorium equipped for video and film, and a simulation lab and breakout rooms equipped with microcomputers.

FACULTY TRAINING AND DEVELOPMENT

Faculty training offered one of the biggest obstacles of our efforts. Installation of computers in faculty offices provided privacy and convenient self-paced learning. LAN enables faculty communication from office-based computers. Funding is earmarked for travel to professional conferences or off-campus training and to conduct on-campus training programs.

CURRICULUM REVISION

Faculty agreed that core business courses should emphasize higher-order analysis. Familiarity with computer operating systems, advanced work processing, electronic spreadsheet are prerequisites for entering business students. We require a course in Computer Literacy and offer three elective one-credit end-user computing courses. We developed a systematic plan to incorporate specific computer exercises in each core course and within the specializations.

COMPREHENSIVE DATABASE AND CASE STUDY ENVIRONMENT

We wanted students to see the relationship of functional areas within a business. We recognized that a computer is best able to help students develop independent thinking, problem-solving and integrative skills when it acts as a simulator. Faculty designed a complex case study which using an imaginary firm we call "Glassboro, Inc.". Underlying the case is a database composed of functional data sets (production, marketing and sales, accounting and finance, and human resources) for this multinational enterprise. Course-specific case studies that use the Glassbro, Inc. data base are developed by faculty.

The narrative uses the southern New Jersey region and the history of its glass-making economy as a context for the firm's evolution. The authors provided the opportunity for the development of cases within both large and small organization environments by giving Glassbro Inc. the structure of a conglomerate. This allows case writers the flexibility of basing their cases upon a variety of real world business organizations and situations. Cases are fictionalized within one of the divisions of Glassbro Inc.

All students entering the School of Business Administration purchase a copy of a 30 page Annual Report for Glassbro Inc. Students are introduced to the Glassbro Inc. financial data in introductory accounting classes. The scenario is explored in more depth as they advance through other business courses. Exercises and case studies are still being designed.

COMPUTER INTEGRATION INTO COURSES

At the heart of our project is the integration of computer assignments within most courses offered by the School of Business. A key concern of faculty was finding appropriate teaching materials to implement computer integration. A member of the MIS faculty worked with all faculty members to help them develop effective integration plans. Formal course embedded computer integration began during fall 1988, and both student and faculty feedback on the effectiveness of the computer activities was collected. During this semester ten classes were evaluated. Overwhelmingly students reported that the activities helped them learn how to use a computer, as well as understand the way computers are used in the business world. Seventeen classes were evaluated during the spring 1989 semester. These evaluations revealed that an increasing number of students had computer skills at the beginning of the semester.

CONCLUSION

Inclusion of all faculty, regardless of their expertise, has been an important key to our success in generating faculty commitment. During the first week of our grant project, we held a two-day planning retreat attended by all but one of the school's full-time faculty. Project coordinators presented options and called for votes regarding hardware and software purchases, curriculum and academic policy, the nature and design of the Glassbro, Inc. simulation, and faculty development. A steering committee, is responsible for guiding the plan's implementation.