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ABSTRACT

In summer 1993, Santa Fe Community College, New Mexico, created the External Programs Division (EPD) under its credit instruction program to serve the needs of non-traditional students. The EPD encompasses contract training, the Flex Lab, distance education, the AutoDesk Training Center, an Alternative Fuels program, and the corrections training program for prison inmates. The Flex Lab offers 29 courses in various disciplines, focusing primarily on computer operations. Students have the ontion to enroll late into the semester, work at their own pace, and work at the assignments at times and on days convenient for them. In January 1994, the Flex Lab had 99 students at the beginning of the semester, and had doubled its enrollment by the time classes closed on March 31. In spring 1995, 453 students enrolled. The contract training program has a heavy audience from state government and local business. Morging contract training with the Flex Lab provides an effective, affordable solution to business training needs. Advantages to merging these two programs include the following: (1) flexible scheduling eliminates the need for many employees to be out of the office at one time; (2) the self-paced, mastery learning courses accommodate students who can master course objectives very quickly and others who may progress more slowly, returning all students to the workplace with the needed skills; and (3) lack of competition and the ability for students to move at 'heir own pace creates a better learning situation. The college is discussing a format whereby companies could pay a flat fee and then enroll a certain number of students over time, allowing employees to pursue different topics of interest at the reduced rates of the contract courses. A list of current Flex Lab courses is appended. (KP)

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Contract Training and Computer-Assisted Instruction

Santa Fe **E** Community College Educational Research and Improvement

Presented by:

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EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

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Beverly Richards ACE 509 Workshop Eight

CONTRACT TRAINING AND COMPUTER-ASSISTED INSTRUCTION

The following presentation was made at the League of Innovation "Workforce 2000" conference in San Diego in February of 1995. As copresenters, Sheila Ortego and I addressed the issue of contract training or requested classes by businesses in the community as they can merge with self-paced instruction. My primary role in this presentation was to discuss our self-paced study center, the Flex Lab. However, having served as Division Head for External Programs in the summer of 1994, I was actively involved in the marketing, design, and production of contract courses. Although contract courses are not a new phenomena, in fact, a large portion of the "Workforce 2000" conference was focused on these type of programs, it is a novel approach to offer them through self-paced study within a college credit environment.

separate division under its credit instruction program to serve the needs of non-traditional students. The External Programs division encompasses contract training, the Flex Lab, distance education, the AutoDesk Training Center, our program for Alternative Fuels, and at that time the Corrections training program for inmates in the state. The contract training aspect of this division finds a steady stream of need from various



customers who want specific training, often in computer software, at a time and place that is convenient for their staff. This is hardly surprising since even in 1986, "about 30.5 million individuals were projected to receive formal employer-sponsored training" (Merriam, 1989). The ability to offer the courses for credit, either on our campus or at their workplace, is an added bonus to the training.

Our Flex Lab offers twenty-nine courses in various disciplines, focusing primarily on computer operations. The students have the option to enroll late into the semester, work at their own pace, and work on the assignments based on times and days convenient for them. Our lab is open 56 hours a week, including evenings and Saturdays and Sundays. The lab is staffed with instructors or instructor assistants at all times who have a working knowledge of the classes we teach. Although each instructor has different strengths, a student should be able to get help any time they come into the lab.

We started in January, 1994, with 99 students at the beginning of the semester and had doubled our enrollment by the time we closed the classes for that semester on March 31. Spring semester of 1995 has brought us 453 students. The option seems to fill a need for many students in our community.



The classes are structured around computer programs providing training, on-line tutorials, textbooks and course outline booklets that guide a student through the process of the course. Course outlines also provide extra emphasis on important concepts and guidelines for how to succeed with self-paced study. In theory, everything a student needs to complete the course is provided to them at the beginning. They may then work at home, at work, in any computer lab, or in the Flex Lab. Fred Keller's model for Personalized System of Instruction (PSI) supports the premise that "all students can master the same material when given adequate study time and assistance" (Ormrod, 1990).

In our contract training program, we have a heavy audience from state government, as Santa Fe is the state capital. There are also a number of business and public offices which find our classes affordable and able to meet their needs. Our class rates for contract classes are set at a flat rate which enables twenty students to attend. In some cases, businesses find they do not have or want to sent that many students. Smaller classes become more expensive per student, but often are still reasonable and worthwhile.

I was approached at one time by a state agency that wanted to send 26 people to a contract training course. A problem emerged when



all 26 of them had very different ideas of what they wanted to learn. Perplexed at how to accommodate this client without trying to offer him seven or eight different classes, we discussed the idea of self-paced training within a contract environment. For that particular client, it was decided to simply enroll the students individually into the Flex Lab courses that each student wanted. Economically, this was agreeable to the agency, and it met the individual needs of the students.

structured options for self-paced study within a contract environment. In meeting with another agency, we proposed the idea of on-site training with the self-paced emphasis. The class could be conducted at a specific time with the instructor available to answer individual questions as students worked through projects at their desks. By providing course outlines to these students, they would be able to progress at the speed they were comfortable with, in the time slots they had to devote to it. The possibility of phone support rather than or in addition to an instructor being present on site was also discussed.

We offer non-computer training courses in the Flex Lab in areas such as Health Care (Medical Terminology), Accounting, Spanish Language Skills through a PBS video-based series, Intermediate Algebra, and Biology



(PBS video series entitled Race to Save the Planet). These courses are supplemented with CD-ROM computer-assisted instruction and other training tools. As we strive to meet the needs of our Flex Lab students we see an interesting parallel between contract course requests. For example, although we did not plan to offer our Medical Terminology class in the summer semester, the local hospital has requested a contract course in that area. By merging the two programs, we can provide an effective, affordable solution to their training needs.

Many businesses find it difficult to have all the employees who need to learn a skill out of the office at one time. With flexible scheduling, this problem can be eliminated. The self-paced study courses are graded on a mastery system, where the student must demonstrate he or she has mastered the objectives of the class. For some students, this can happen very quickly; employers are always delighted to have their workers back on the job without wasting time in a classroom. For others, the process may be slower, with more time being spent on unfamiliar concepts. For employers, this is also a benefit, as the option often is that a student spends the time in class, but does not return to the workplace with the needed skills. They have "been trained" so it is assumed they know the material. Increasing pressure is being felt from



the business community in general as concerns are voiced regarding the capability of American workers to compete in the workplace (Bryant, 1995). The lack of competition and the ability for students to move at their own pace can actually provide a better learning situation. Research presented by psychologists suggests that "competitive situations can impede adaptive problem solving" (Webb, 1989). With self-paced training, regardless of the time spent, the mastery level should be consistent with the course objectives.

In seeing how we could further address the needs of our business customers with the Flex Lab programs and facilities, we are discussing a format in which a company could pay a flat fee and then enroll a certain number of students in the regular Flex Lab program over a specified period of time. This would allow employees to pursue the different topics that were needed or of interest at the reduced rates of the contract courses.

some students in a self-paced study program are faced with 3 challenge in the area of self-discipline and self-imposed deadlines (King, 1984). It is interesting to consider the fact that our civilization does not embed these skills in our people. Children are sent to school where they are guided through years of education in which they are supposed to



learn. They then acquire jobs where they are often given explicit roles to play. Home life is not often more than the implementation of survival procedures: eating, sleeping, caring for children, etc. I have observed a distinct advantage in the students in the Flex Lab are self-employed or have some other aspect of their life that has developed the ability to manage self-motivated activities.

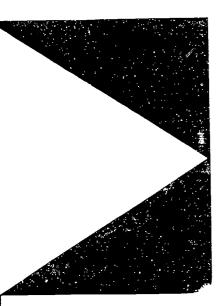
In one instance where we worked with a state agency to provide the specialized training they wanted through the Flex Lab, we saw an unusual problem develop based on the lack of understanding of what self-paced study really means. In an effort to provide the time off from work for the students, the agency developed a schedule where each student had 8 blocks of two hours to attend the Lab and work on their class. We had the most incredibly difficult time convincing the students and the agency that although that should be plenty of time to complete the class, simply showing up at the college did not mean they completed the class. The head of the agency even sent out a memo guaranteeing that if the students attended twice, I had promised they would pass!! Obviously, there was a grave misunderstanding we needed to rectify.

As viable alternatives to traditional study, both contract training and self-paced study are growing options in the world of education. The



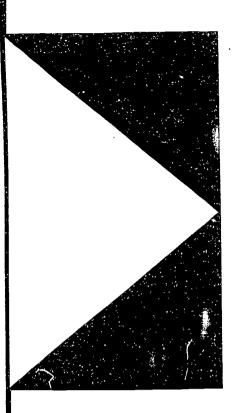
challenge to combine these or other options to meet the needs of the communities we serve is unending. In presenting the programs that we are developing, it was rewarding to not only have the information received well by our colleagues, but also to gain extensive knowledge from their comments and experiences. In the short time since the presentation was made, we have already made changes to our program and continue to seek ways to improve and expand it. By the time next year's conference is held, we may have a completely new approach to present!





Why Do Contract Training?

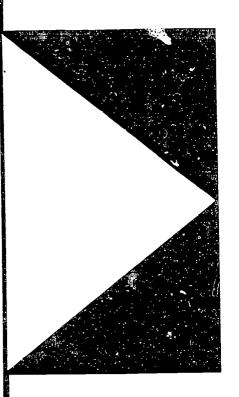
- ▲ The business community understands that it needs customized training programs, and employers are willing to pay for them;
- Contract training is one of the largest educational markets today. Traditional college programs provide only 14 percent of the education and training programs for businesses; and
- ▲ Community colleges have the capacity and the mission to meet these training needs.



At Santa Fe Community College, we meet the training needs of a wide variety of businesses and agencies, including:

- ▲ Small to Medium-Sized Businesses
- ▲ Large Corporations
- National Laboratories
- ▲ City Government
- ▲ State Government
- ▲ Public Schools
- ▲ Local Industry





The most frequently requested programs are in basic skills:

- Writing
- Management
- Accounting
- **A** Computer Literacy



SFCC makes sure that its courses are:







- Customized to meet the client's unique needs
- Priced at affordable rates
- Offered at convenient times, dates and locations



Convenience is often the most important factor.

SFCC'S FLEX LAB ADDRESSES THIS THROUGH:

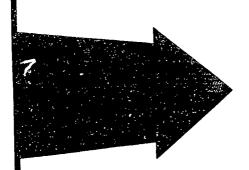
- Flexible scheduling
- ▲ Opportunities for self-paced learning
- On-site support from instructors and tutors
- ▲ Opportunities to work at home or in the office



Current SFCC Flex Lab courses:

- Introduction to Microcomputers
- ▲ Introduction to Lotus 1-2-3
- ▲ Intermediate Lotus 1-2-3
- ▲ Advanced Lotus 1-2-3
- Introduction to dBASE
- ▲ Intermediate dBASE
- **▲** Advanced dBASE
- Introduction to DOS
- ▲ Intermediate DOS
- ▲ Microcomputers in Business on the IBM PC
- Introduction to Quicken on the IBM PC
- Introduction to Windows
- ▲ Introduction to Keyboarding
- Keyboarding II
- Keyboarding Speed and Accuracy I
- Keyboarding Speed and Accuracy II
- Keyboarding Speed and Accuracy III
- Keyboarding Speed and Accuracy IV
- Introduction to WordPerfect
- Intermediate WordPerfect
- Advanced WordPerfect
- Document Production

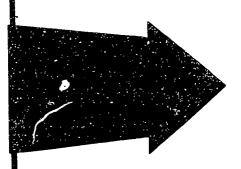
SFCC's Flex Lab Allows You to



Work Where You Want

"I chose a class in the Flex Lab so I could do the work on the computer in my office, which is 70 miles away from campus. I can get 'long distance' help by calling in to the Flex Lab, and when I need to, I can come into the lab at times convenient for me."

"I liked being able to do most of the work on my home computer. When I did need help, I went into the Flex Lab, and instructors were always available to help me." SFCC's Flex Lab Allows You to ...



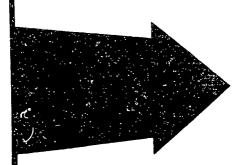
Work at Your Own Pace and in Your Own Style

"I liked being able to spend less time listening to lectures and more time working on practical applications."

"I appreciate the convenience of working when I have time and the ability to work on a subject as fast as I want, without being held back for the rest of the class."

"I liked the Flex Lab because it helps to have a chance to slow down and concentrate on materials you're having trouble with. All students have different learning styles, so learning at your own pace is very beneficial."

SFCC's Flex Lab Allows You to ...



Work When You Want

"This is the only way I could take a class at all. I could not go to regularly scheduled classes because of required out-of-town business trips."

"The Flex Lab format allowed me to work within my own schedule."

"I work two jobs, so I need the scheduling flexibility."

"The Flex Lab works well for my busy schedule."



OTHER BENEFITS

SFCC's Flex Lab provides:

A quality educational experience

A high level of instructor support

An alternative to regular, on-campus study

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