THE COMPUTER CENTER'S POTENTIAL AS A COMMUNITY EDUCATIONAL RESOURCE TOOL

An Overview of the Pennsylvania State College System Computing Activities and An Introduction to the Session

by

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Approximately four years ago, the Pennsylvania Department of Education, in an effort to come up with a cost effective method for providing computer support services for all public education in the Commonwealth, formed a planning council. The council was to prepare a resource sharing plan. The council, advisory in nature, was made up of representatives from: The State Systems Council (the directors of computer centers at the colleges); the Basic Education System Council (coordinators of data processing for intermediate units, the basic subdivision of elementary and secondary educational coordination of Pennsylvania); and the Pennsylvania Department of Education.

The plan that originally evolved (1) from the group failed to come to fruition but the dialogues that were established did result in establishing a precedent in Pennsylvania for many of the State Colleges offering computer support services in their local regions.

The State Colleges in Pennsylvania have more in-house computer equipment than is available in many other state systems with comparable types of colleges. The state colleges are basically undergraduate institutions with some masters degree programs. They tend to emphasize research into providing better methods of teaching their offered degree programs than into research within the disciplines. This is not to say that other research is discouraged, it is simply not as prevalent as at a major university.

The table below illustrates the size of the colleges and the computer equipment available.

College	Size(No. of Students)	Equipment
Bloomsburg	5-5,200+	UNIVAC 70/3
California	5,100	UNIVAC 7046
Cheyney	2,600	UNIVAC 7035
Clarion	3,000	IBM 360/40
East Stroudsburg	5,100	UNIVAC 70/3
Edinboro	6-7,000	UNIVAC 70/3
Indiana	10,000	Xerox 6
Kutztown	5,000	UNIVAC 70/35
Lock Haven	2,380	IBM 370/125
Mansfield	3,000	UNIVAC 70/3
Millersville	6,000	UNIVAC 70/3
Shippensburg	6,550	UNIVAC 70/3
Slippery Rock	6,200	IBM 370/135
West Chester	7,025	Xerox 560

Most of the equipment is capable of supporting interactive time sharing, remote batch, local batch and transaction processing. As a result, small networks have been established offering diversified services.

My own college, Mansfield State, does administrative processing for a few school districts, supports terminals for instructional use in several school districts, has begun a dialogue with industry to offer training courses designed for industry - both at the College and remotely at an industrial site. We bring our undergraduate curriculum out into the community and use the computer as a resource tool. Mansfield is a small community (3,000 population) in rural Tioga County (3/4ths of the county is State Forest land).

All services offered are on a cost recovery basis and in some cases this has allowed the local campus to provide on-campus service that would not have been feasible if they were not receiving revenue for off-campus services.

Located in the western part of the Commonwealth are Slippery Rock State College and Indiana University of Pennsylvania. Both have been actively offering outside services for several years. Indiana has a Honeywell (nee Xerox) computer. Slippery Rock has an IBM 370/135 operating under VS/DOS. Both colleges report that they have been able to obtain extra hardware and software that the college needs but would be unable to obtain if they did not service the community. Procurement of computer-related equipment or systems in Pennsylvania is a problem at a State owned college, and to explain the difficulties would take an entire session.

Examples follow of extra services available at the colleges as a direct result of resource sharing: Indiana University students have access to ALGOL and a PL/1 interpreter because of development work in coordination with the Computer Science Department of the University of Florida in Gainesville. In addition, both Slippery Rock and Indiana offer services to their local school districts and both have additional hardware that they can use as a result. The school districts benefit because they could not obtain the needed services at lower costs elsewhere. Slippery Rock maintains the CVIS (counseling software) for the school districts and utilizes the software for their own students. Paul Steiman, the Director of the Computer Center at Slippery Rock, reports that without these resource sharing methods, on-campus service could not be at the level that the Computer Center can presently offer.

The Commonwealth has wanted to increase resource sharing among the colleges and there have been problems that must be addressed. Even in offering service to the local regions of the colleges, there have been problems. Pennsylvania is a large State with both rural and urban areas. The rural areas have more independent telephone companies than can be easily conceived. A telephone map of Pennsylvania showing the jurisdiction of the various telephone companies defies the four colour mapping problem. Governance problems and charges of second class citizen status do occur.

We are going to try and give you the total picture, both positive and negative today, and on that note I will introduce the two other members of the panel and their topics.

Robert Buff is the Director of the Computer Center at East Stroudsburg State College. Bob has been active in state-wide computer planning and has done a good deal of research into networking and their problems. Bob has prepared well researched position papers on the topic of resource sharing. He has agreed to present the negative side of the picture today.

John Dowling, who is our second speaker, is a professor of Physics at Mansfield State College. John was one of two Professors awarded recognition at Mansfield last year for distinguished teaching. He has developed a "Physics for Poets" course at Mansfield in which he uses the computer as a resource tool. He has taught this course on campus as well as off campus. He is particularly interested in the problems of life-long learning and bringing the knowledge of his discipline to people so that they can better address the issues of our society. He will discuss both potential and the current problems he sees with using the computer as a resource tool.

We have left 20 minutes at the end for discussion purposes and we hope our comments will provoke a discussion.

(1) Basic Recommendations for Computer Resource Sharing in Public Education - developed by The Committee on Resource Sharing, Pennsylvania Advisory Council for Educational Computing Activities, May 1974. (Unpublished)