Dr. Todd said during the last four years three major changes had occurred in computational services at Portland State University, all of which have been very important to the academic community. The number and variety of computers were reduced significantly but at the same time the computing hardware has been upgraded to meet requirements of the academic and administrative community. As a direct result, computing is becoming an integral part of the instructional activities and reflects a commitment to provide adequate computational services for meeting educational and research responsibilities at the institution. These changes have been accomplished with the support and encouragement of the Office of Educational Systems and through a reallocation of University resources with some support from improvement money under the jurisdiction of the Board.

Dr. Todd then described the present computer installation and the changes which have occurred in the last few years. He said the consolidation of the computing equipment and the upgrading of the hardware has had a dramatic impact upon academic and administrative activities. Within the academic area, student usage has increased significantly in the last three months. Terminals are accessible to most areas of the campus. Jobs processed have doubled during the past year. Dr. Todd said the demands of students and the needs of the instructional program remain the highest priority for computing services at Portland State University. Terminal access, development of software capability, and maximizing the utility of the very powerful and sophisticated equipment now available for the instructional and research programs, are also of high priority.

Mr. Wyss asked whether the main computer system would have adequate capacity for remote access if it is presently working at 93-94% capacity. Dr. Todd said his comment on total availability had referred to the amount of time the machine itself was available, not to the capacity of the machine that is being used at any one time. The use of disk capability is in excess of 95%, and a request is being submitted for significant expansion of the disk capability.

Mr. Wyss asked about the current allocation between the academic and the administrative and accounting usage of the computing system. It was indicated in the total resource allocation within the computing services center at Portland State University, 57% is committed to academic computing and 43% is committed to administrative computing. As economies are realized in administrative computing, there should be a greater differential. Dr. Krueger said with the State System, 47% is spent for administrative uses, 31% for academic, and 22% is categorized as other, which includes health sciences patient care, which is administrative.

Mrs. Carpenter asked whether aids were available to assist faculty in retooling for computer activities. Dr. Krueger said there was constant pressure from the institutions to assist faculty in utilizing the computing capabilities that are available. The computing centers have service organizations which have technical people available to consult with faculty and assist with program development for courses or for research.

At the request of Mr. Wyss, Dr. Krueger explained some of the applications of the computers to academic programs. Computers are often used as a problem-solving device in a manner which permits the student to concentrate on the problem rather than on the arithmetic associated with the problem. The computer is used by many departments and the program may be written by the student or programs already available may be integrated as a part of classroom material. Scientific departments have generally made greater use of the computers than have the social science areas. It is necessary for the Office of Educational Systems to be available and knowledgeable in order to be responsive to the program needs of the various disciplines.

Mr. John Clyde, Research Associate with the Career Information System at the University of Oregon, indicated the Career Information System is an on-line computer-based information system which addresses the special need students have for updated and localized labor market information. It is designed to be used
easily by people of all ages who are planning or changing careers. The individual receives information concerning the training requirements, employment projects, and other pertinent matters with respect to their career interest.

Mr. Clyde also indicated the scope of the operation and subsequently demonstrated the system using career inquiries suggested by members of the Committee. It is estimated the Career Information System has a user base of more than 200,000 people in Oregon in a variety of situations. The Career Information System is in operation in several other states and as these other states become more active, it is anticipated the potential user base in the nation will be very great. Mr. Clyde also stated that the information is revised and loaded in the computer bank continuously. The system was established with federal money on a diminishing basis on the assumption that it would become self-supporting after two and a half years.

Dr. Mads Ledet, Director of Academic Systems, reviewed the activities of the academic systems division, primarily in four areas. First, the State System computer network has needed computer hardware to connect users to remote host computers in a convenient fashion. Consequently, funds for upgrading of network communications were included in the 1977-1979 biennial budget. A digital switch is to be installed in August. A second area is that of development of network brokerage policies, pricing guidelines, and pricing policies. These policies have been reviewed by the Executive Department and they are compatible with their forthcoming report.

A third topic is computer-based instructional delivery systems and the Board has seen a presentation on one of these systems. There are other possible alternatives. A fourth project, the computer science internship project, offers on-the-job experience through the computer science departments.

Dr. Ledet said future plans involve a reassessment of the 6-year plan for academic computing. It is expected that it will be necessary to have a major effort to justify new program improvement moneys for academic computing.

Dr. Krueger said he would appreciate comments concerning the information which the Committee and the Board would like to receive on a regular basis. Mrs. Carpenter said she would like to be kept well-informed and suggested a demonstration at the computer center when the Board is at Portland State University in July. Mr. Wyss expressed an interest in reports on the increased utilization, particularly in new areas or for new instructional programs.

The Committee recommended that the Board receive the report as presented.

Board Discussion and Action

Mr. Wyss distributed a list of questions about data processing in the State System which might be addressed to Vice Chancellor Krueger for future response. Mr. Wyss said the goal for the biennium had been to establish a systemwide network for academic computing and a guideline for efficient management of the facilities. He reviewed the equipment installations in the development of the network and indicated that network policies were established and defined for information exchange and payment by the computer users. Mr. Wyss also summarized the equipment, personnel, and student usage at the various institutions.

Dr. Krueger said the 1974-80 plan is currently being revised. It is anticipated the revised plan will be brought to the Board in the spring of 1978 and that it will have some impact on the budget request process.

In response to a question concerning obsolescence, Dr. Krueger said that most of the machines which have been announced within the last two or three years will be usable at least over a 10-year period even though technology continues to change in the sense of the circuits becoming more miniaturized and the speeds increased.

The Board received the report as presented.

Adjournment & The Board adjourned the meeting at 2:30 P.M., July 29, 1977, until 11:30 A.M.,
Reconvening Date August 26, 1977.