

Facilities inventories and utilization studies provide the information necessary to analyze and plan for needed changes in the nature of the existing facilities. In some instances, of course, it is more economical merely to continue to utilize existing larger classrooms with classes which could meet in much smaller areas. The point at which the cost of operating partly used facilities exceeds the cost of converting or replacing such facilities varies in different instances, and is a point which frequently is overlooked in the management of colleges and universities.

Another aspect of this problem results from the tendency for college curriculums to become more complex and to involve an increasing percentage of courses which require specialized types of facilities not readily usable on a general basis by other types of courses. One approach being tried by a few institutions is to reevaluate the requirements for specialized facilities for some of the basic courses in specialized fields. As increasing use is made of new educational technologies programmed through especially-designed and highly-automated facilities, an increasing portion of the total instructional program may appropriately be scheduled in such facilities at a very intensive rate of utilization. Existing institutions can benefit from such innovations, of course, only at the cost of a considerable investment. In some instances, the educational philosophy of the institution and the prohibitive costs involved relative to size of enrollment will mitigate against such a development.

5. *Flexibility for schedule-makers.*—Typically, if one individual has the responsibility to schedule all classes in available facilities, higher utilization ratios are obtained than in cases where certain facilities are reserved to particular departments or particular faculty members. Much is made of the resistance to effective scheduling which results from such traditions, but this problem appears to exist only in a minority of smaller, more tradition-oriented institutions. Increasing use of "systems" approaches in scheduling classes, together with the pressures of increased enrollments, should continue to break down the efficiency obstacles resulting from reservation of areas to various departments and individuals.

UTILIZATION STUDIES ARE MANAGEMENT STUDIES

Physical plant is one of the basic resources of an institution of higher education, and studies of the utilization—or management—of physical facilities are much like other types of management studies (*e.g.*, "organization" studies or "procedure" studies). A wide range of approaches may be appropriate, depending upon the purpose to be served, from comprehensive inventories of the complete campus coupled with evaluation of campus-wide utilization practices, to very limited and intensive analyses of quality and utilization of one type of facility where an immediate and acute problem may be involved. Different approaches are required in evaluating the efficiency of utilization of different types of facilities. For example, while a combination of weekly room use and percent of student station use is used for classrooms and laboratories, "utilization" of library facilities frequently is expressed in terms of square feet per full-time-equivalent student, and percentage of the student body which can be seated in the library at one time. (Innovations in the methods of instruction may well make some of these traditional approaches less applicable in the future.)

While such indicators are very useful in evaluating the effects of scheduling practices, they do not in themselves serve to improve utilization. At a fairly unsophisticated level, improved utilization may result from an inventory of existing classrooms and laboratories which, when compared with the proposed class schedule, makes possible a better matching of classes with instructional areas of the proper size.

Methods of making facilities inventories and utilization studies at this level of sophistication are amply described in the Russell-Doi manual referred to earlier, and will not be described here. In essence, the improvement of space utilization on a particular campus can come about only by the application of diagnostic management procedures to the situation on that specific campus. Factors in such a diagnosis should extend not only to what is to be done and how that can best be fitted into the existing facilities, but also to an evaluation of whether modifications of what is to be done are needed in order (where program objectives and philosophy permit) to more effectively utilize existing facilities, and to an evaluation of whether any existing facilities should be either abandoned as unsuitable or modified to make them more suitable.