THE USE OF LABORATORY SYSTEMS IN IMPROVING UNIVERSITY TEACHING

ARYE PERLBERG
Technion, Israel Institute of Technology, Haifa, Israel

ABSTRACT

The problem of improving university teaching is reviewed and is seen as part of the process of re-education and change analysed by Lewin (1948) and others. A “teaching laboratory” is proposed including provision for feedback mechanism, self-confrontation processes, simulation and micro-teaching. Case studies of the use of micro-teaching and video recording are reported.

Improving university teaching – some general issues

“The American college teacher is the only high-level professional man on the American scene who enters upon a career with neither the prerequisite trial of competence nor experience in the use of the tools of his profession.” This much-quoted statement (Bleger and Cooper, 1950) made a quarter of a century ago in a conference convened in the United States to discuss the problems of college and university teaching, is equally true today, not only for American professors, but for professors all around the world. The Hale Committee (MacKenzie, 1970), which investigated teaching methods in British universities, made the following statement, which could also be extended far beyond the British academic context to which they referred:

A person who adopts the career of university teacher does not do so in most cases because his main object is to teach. A more usual motive is to pursue research in a subject which had engaged his attention as a student, teaching being regarded as a duty incidental to a life of scholarship. And, whatever the motive which first led him to adopt an academic career, he soon realizes that it is on his achievement as a scholar rather than as a teacher that his advancement in his profession will depend... there is certainly little to tempt anyone to give a study of teaching methods time which both inclination and self-interest would lead him to devote to his own subject.

Wilson (1967) suggests that even though teaching is one of the main functions of the university, it is not honored on the campus. He adapts Plato’s observation that, “What is honored in a country will be cultivated there,” and says, “If teaching is honored on our campuses, it will be
cultivated there and will finally be done well there. If it does not find honor, expressed in the respect and prestige granted the teacher by his colleagues and by the dollars paid him by the comptroller, it is not likely to be cultivated nor to improve.”

The problem is even more acute than lack of financial or social rewards. The threat of being ridiculed or tagged as a “teacher” creates negative motivation towards teaching improvement. Nisbet (1967) describes this feeling:

The once familiar characterization of a faculty member as a good teacher but a poor research man is very likely to be fatal in the university today . . . As one very candid assistant professor once put it to me in a letter: “I hope I never get labeled in any student or faculty evaluation as a good man with undergraduates. Until my research record is unchallengeable, I can get farther by dull teaching of undergraduates. This will at least leave open the possibility that my research promise may therefore be high.”

Although the state of affairs described above is still dominant in universities around the world, there are indications of a growing concern for the need to improve teaching in higher education. The increasing number of books and articles which have been published in recent years on this subject is one index of this concern. Another is the growing number of national and international conferences devoted to this problem. The conference we are presently attending is reminiscent of a similar conference sponsored by Unesco and IAUP, which convened in 1970 at the University of Amsterdam, and of the conference co-sponsored by Unesco and the University of Massachusetts in October, 1974. These are but a few examples and many more could be cited. However, the publications and conferences represent verbal concern, while the crux of the problem of improving university teaching is real action.

One form of such action is being carried on in instructional development agencies in higher education. The number of such agencies has increased in recent years. Alexander and Yelon (1972) discussed the role of these agencies as follows:

Instructional development agencies function as catalysts in affecting change. Their staffs consist mainly of behavioral scientists who work closely with faculty members. They assist faculty in analyzing and solving instructional problems. They help faculty apply principles of learning and motivation to the planning and practice of instruction. They conduct research studies of teaching and learning processes and help faculty to develop improved instructional procedures by applying the results of these studies. Thus, instructional development agencies seek to contribute to the improvement of undergraduate education by raising the instructional capabilities of individual faculty members.

Many of those concerned with the improvement of teaching consider the establishment of such agencies as a very important step forward.