



STUDY GROUP ON THE TRAINING AND PREPARATION OF
TEACHERS FOR SCHOOLS OF MEDICINE AND ALLIED
HEALTH SCIENCES

INDEXED



Geneva, 2-6 October 1972

TEACHER-TRAINING PROGRAMMES OF THE TERTIARY EDUCATION RESEARCH CENTRE
OF THE UNIVERSITY OF NEW SOUTH WALES, SYDNEY, AUSTRALIA

by

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Introduction

In 1961 the University of New South Wales took what was for Australia a most innovative step - namely, it established an Educational Research Unit (renamed the Tertiary Education Research Centre in 1969). As an institutional research unit, this Centre, was charged with the task of carrying out research and development projects which would lead to improvements in the functioning of the University generally, and to improvements especially in the teaching-learning process. With such a broad brief, the actual research and development projects - that is, the translation of broad institutional objectives into operational ones - will necessarily reflect the special interests and competencies of the director and staff of the Centre, as well as the special problems or needs which pertain to, or are recognized in, the institution at a particular time. In addition, the selection of projects will depend on the co-operation, interest and concern of administrators, teaching staff and students of the University. Hence, it is to be expected that the research and development activities of the Tertiary Education Research Centre (T.E.R.C.) will differ from those of other R & D (research and development) centres in other universities. It also follows that any description of R & D activities must be presented in terms of the particular context and characteristics of the institution at a given stage.

The relationship between institutional characteristics and the activities of an institutional research centre also determines the teacher-training programmes which such a centre organizes. Here especially the eventual success - the educational effects of activities designed to increase the competence of university staff as teachers - will depend considerably on the existing values, knowledge and skills of the teachers. In effect the university teacher's receptiveness to new ideas must be seen as a function of structural and cultural characteristics of the institution.

The interdependence of teacher-training programmes and institutional characteristics is emphasized as an introduction to the description of teacher-training programmes organized by T.E.R.C. It is this interdependence which, if recognized, provides the necessary framework to an understanding of what has been attempted and of what has been achieved. In other words, the teacher-training programmes that will be described were evolved partly in cognizance of requirements which were recognizable, but also in relation to the characteristics

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of the institution. Moreover, and of most importance, the teacher-training programmes as they were evolved must be seen as an integral part of a totality, namely the R & D activities of the Centre. They were developed when conditions existed or had been created which provided a focus for a training programme.

1. The University of New South Wales

Following the view expressed in the preceding section, some brief comments about the University are called for.

The University was founded in 1949 and now offers a wide range of undergraduate and graduate courses. There are approximately 14 000 students who are chosen on the basis of a faculty quota system from among applicants having passed a rigorous selection examination at the end of six years' secondary education.

The teachers are appointed and promoted on the basis of qualifications in their academic disciplines and research output. There is little evidence of real concern about the effectiveness of their teaching. Rather an adherence to traditional approaches is evident: lectures to large classes and tutorials which commonly become mini-lectures. The pressure from students for improvements is at best spasmodic, but overseas developments have stimulated the administrators and some teaching staff to be sensitive to student criticisms. During the last two to three years, moreover, many staff members - in fact the majority and particularly those in senior positions - appear to have developed a positive attitude to T.E.R.C. and its educational activities, and hence have sought assistance. This attitude, however, is more evident in some faculties than in others. Those most attuned to the possibility of improvement in education are the Faculties of Law, Medicine and Engineering.

2. Different approaches to teacher-training

Given the orientation of T.E.R.C. at the University of New South Wales, a number of different approaches have been developed. At the outset it must be stated, however, that all programmes have one thing in common: attendance is voluntary. The Centre has not been willing - sometimes against outside pressure - to hold courses at which attendance is prescribed in some way or other.

The programmes of the last two to three years fall into two broad categories:

(i) There are courses, workshops or seminars - indicating differences in duration and specificity of content - which are specifically organized as training programmes. These are offered to teachers, and others interested, as programmes which set out to develop educational "know-how". They are offered by T.E.R.C. as training programmes, and are recognized as such by the potential participants.

(ii) There are more indirect approaches to the training of teachers - namely, the involvement of members of the teaching staff in research and development projects. Here the training is implemented as a component of the actions involved in changing an educational programme, be it a curriculum change, a variation in the teaching-learning processes, or an evaluation programme. Whatever the problem under investigation, the project involves a significant and often long-term interaction between members of T.E.R.C. and individual teachers, or whole departments and even faculties. However, it must be emphasized that these indirect training programmes are often not seen by participants as teacher-training, although effectively - at least as judged by recognizable changes in attitudes, knowledge and skills - they have often led to quite spectacular improvements in the teachers' competence to facilitate learning.

In the next section, some examples of programmes, direct and indirect, are given and will further clarify this distinction, as well as providing an outline of the teacher-training programmes which have been organized or are currently being offered.

3. Examples of direct teacher-training programmes

Four examples of courses organized by T.E.R.C. as training programmes are cited below. They have been selected not because they are necessarily the most "successful" but rather as examples of programmes which differ in duration, specificity of content, i.e. of objectives, and in locale (residential/non-residential).

(i) The Indonesian University Lecturers Scheme

Background. Each year since 1970, 20 to 30 lecturers in Indonesian universities have attended the University of New South Wales for a period of one calendar year. The Scheme was developed and is being supported as a foreign aid programme by Australia in co-operation with Indonesia. It came into being because of a request by Indonesian universities for assistance in improving their educational programmes and the expressed willingness of the University of New South Wales to offer assistance in this field.

During their one-year stay at the University of New South Wales, the Indonesian lecturers are attached as supernumerary staff (effectively students) to a department relevant to their own academic discipline. In addition, the trainees spend a half-day per week at a teacher-training course offered by T.E.R.C.

Aims of the teacher-training course. The objectives of the course, developed to meet the special requirements of the Scheme, are summarized in the following general statements:

- To develop increased understanding of the structure and functions of universities and other institutions of higher education in Indonesia and elsewhere.
- To develop knowledge of the characteristics of students, teachers and administrators within institutions of higher education.
- To increase the trainees' understanding of curriculum planning.
- To promote skills in the process of instruction by developing understanding of principles of learning and evaluation.
- To develop the skills necessary for carrying out institutional research. More specifically it is intended that the trainee will be able at the end of the course to:
 - design a course of instruction capable of implementation in the trainee's school on return to Indonesia;
 - use the appropriate means of facilitating his students' learning;
 - devise and apply appropriate evaluation techniques;
 - use resources available to students and teachers, e.g. library, audio-visual aids;
 - use appropriate statistical techniques.

Procedure. The trainees meet in class for three hours a week, and also out of class in small groups on assignments. The course is organized as a project for the trainee who is required to design a course in a subject area of his choice. To do so, he must develop institutional objectives, course unit objectives, appropriate means of facilitating learning by students, and evaluation procedures. In this project he is assisted by resource material, class discussion, and demonstration.

He is also encouraged to participate in on-going research and development activities of T.E.R.C.

(ii) Staff seminars - small-group teaching

Background. Dissatisfaction with the existing organization and process of conducting "tutorials" is manifest amongst teachers in many faculties of the University. As an aside, it is noteworthy that although many senior teachers state that the small-group discussion is the most important teaching-learning situation, these meetings are usually relegated to the most junior staff and are often seen by students as a "poor relative" to formal lectures. Partly because of dissatisfaction on the part of both students and teachers, but also because T.E.R.C. has been engaged in a series of research studies in this general area (productivity of small groups), seminars on small-group teaching were offered to the teaching staff of the University.

Aims. The general aim of these seminars was to provide a stimulus for teachers responsible for small-group teaching to examine:

the objectives of small-group teaching;

the dynamics of group interaction and the barriers to productivity of groups;

the role of the tutor in this situation.

Procedure. The seminars were advertised within the University and 150 teachers were enrolled. These "volunteers" were divided into 12 groups roughly on the basis of academic discipline, and two classes of two-three hours' duration were scheduled for each group. Discussion relevant to the objectives was triggered by showing video-tapes of actual tutorials, and the discussion leader (a member of T.E.R.C. staff) attempted to be a model of a group leader.

(iii) Workshop - continuous assessment

Background. The University of New South Wales, just like most Australian educational institutions, uses end-of-year examinations to assess the achievement of students. Some dissatisfaction with these "initiation ceremonies" has recently led to a re-examination of this system.

Aims. To provide information about alternative procedures in the assessment of student performance.

Procedure. A four-hour workshop was organized, attended by some 200 staff members. Departments which were "experimenting" with alternative evaluation techniques outlined their procedure. T.E.R.C. staff introduced the discussion by challenging the functions of the present evaluation procedures.

(iv) Workshop - general practitioners

Background. The Royal Australian College of General Practitioners has been active in continuing education programmes, and for some years has been responsible for residential seminars of six days' duration, to which general practitioners, specialists, social workers and nurses are invited. T.E.R.C. has become increasingly involved in this programme by providing educational resources, personnel and background material, as well as evaluations.

Aims. To enhance the participants' ability in human interaction.

Procedure. The programme emphasizes interaction in small groups, and utilizes diverse means to challenge existing modes of behaviour, e.g. communication games, role playing, video-tapes of role playing. Emphasis is given to interpretation of difficulties arising in communication and to group dynamics generally.

4. Examples of indirect teacher-training programmes

Probably the most significant contributions of T.E.R.C. to the development of the teaching-learning process at the University of New South Wales derive from the emphasis given to developmental activities in which T.E.R.C. co-operates with teaching staff. Suffice it here to describe briefly two projects which exemplify the programmes and indicate their role in teacher-training.

(i) The educational programme in the Faculty of Law

Background. The new Faculty of Law took in its first students in 1971. Prior to that date, the Law staff - already recruited - and members of T.E.R.C. established a working relationship, developing the objectives, appropriate teaching-learning processes and discussing possible evaluation procedures for the new Law courses.

Teacher-training programme. In this context the teacher-training can be said to be a continuous process beginning at the first meeting when new staff of the Faculty discussed the Law programme with educators. More specific assistance to individual teachers, to raise their knowledge, skills and performance as teachers, was given through video-tapes of teacher/class interaction. These video-tapes were used for discussions of teaching styles, and the dynamics of learning, in groups consisting of teachers sometimes joined by students.

Classes were observed, and observation schedules and rating scales were completed by independent observers from T.E.R.C. and by the teacher concerned. The observations were later used in discussions of teaching effectiveness.

This programme is continuing and new developments are evolving to meet new needs.

(ii) Evaluation procedures

For some years one of the services provided by T.E.R.C. has been the scoring and statistical analysis of multiple choice tests used at the University of New South Wales. Teachers are offered the service of having their tests marked, of obtaining a full statistical analysis including item analysis, reliability of items, information about individual student performance on topics covered by the test, and student result lists. However, T.E.R.C. stipulates that the service is provided only if the test constructor is willing to have his tests scrutinized and to prepare the test with the assistance of T.E.R.C. staff. Each year T.E.R.C. offers workshops for present and potential test constructors, during which the principles and practices of test construction, analysis and interpretation are discussed.

The test construction workshops are held at frequent intervals every year, and provide a popular service - at least as measured by the numbers seeking to participate and by more formal evaluations which have been carried out.

5. Summary

Some examples of programmes designed to increase the effectiveness of university teachers have been cited. It has been stressed that many of the programmes, and possibly the most effective ones, are those which have some characteristics of "action research" - that is, those in which teachers are involved in the planning and execution of an education development.

At this stage, formal programmes of training, including those leading to the attainment of a formal qualification (a Master's degree or diploma) have not been developed, although they are under discussion. Certainly such programmes are viewed as having potential to develop a cadre of "experts" which could assist in further and more general improvements in the teaching process.

Again, other developments - especially the use of video-tape recording of teaching, followed by individual discussion with the teacher concerned - is proving of considerable value. Similarly, the introduction of instructional aids - tape-slide combinations and computers, etc. - can be used to raise the teacher's understanding as well as his skills.

Generally, in reviewing progress made, it is possible to cite some successes but much more needs to be done to overcome even the most cardinal sins perpetrated on the students of this University.