

FUTURE ROLES FOR EDUCATIONAL RESEARCH

AT THE TERTIARY LEVEL

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"The impact to date of educational research on tertiary education in Australia has been rather limited. It would therefore be rash to predict that the position will change dramatically in the next decade. However it would not only be pessimistic but also neglecting trends to believe that no effect will occur at all."

This statement was made by Sid Dunn, Chairman of the Education Research and Development Committee, as the opening to a chapter on educational research for our study on the future of higher education in Australia. His argument is that the relative inefficiency of implementing educational research is no basis for ignoring it. Indeed, I believe it provides a stronger reason for increasing the emphasis on research, though it may take some time for the results of that research to take effect. With this in mind I would like to discuss some of the future needs for research in higher education arising from the issues already mentioned by Karmel last night and by West, Hore and Hall this morning.

There are three types of research that are important to consider. The first of these is fundamental research. We need to understand more about how adults learn and how that process may be different from the ways in which children and adolescents learn. It is the latter area in which most educational research has been done in the past. We need also to know more about factors that influence adult learning in tertiary institutions - and these institutions are very different from those in which children and adolescents are taught. Implicit in this is the question of how we can measure their learning - and that is not as simple as the exercise of looking at examination results. One example of the complexity of this issue is the often claimed ability of new courses to influence life-long learning - that is, to develop in students an approach toward learning which remains long after the course is completed. At present such claims are just wishful thinking, and if they are ever to be substantiated we are going to need detailed information on the long-term effects of tertiary courses.

The changing nature of the tertiary student population provides another important argument for fundamental research. There is already evident an increase in the heterogeneity of students in tertiary institutions in age (what was once a group of 17-22 year olds is now a group of 17-60 year olds), ethnic and socio-economic backgrounds, and so on. For that reason alone we need to know a great deal more about the composition of the new student group, their academic abilities and the nature and adequacy of their learning backgrounds. Dunn points out that there are possibilities here for disciplinary research which has an educational focus but is not necessarily conducted by educationists - certainly they ought to be involved, but it is perhaps the sociologists and psychologists whose work will be vital to our understanding of these issues. The function of HERDSA in this type of research is one of providing resources and guidance through its individual members. There seems little that HERDSA as an organisation can do by way of direct influence or involvement in projects of this type, partly because of the long-term nature of the research and partly because of its narrow academic focus. Nevertheless, while this area of fundamental research may not be the most immediate problem for higher education in the future, its importance should not be underestimated.

The second area is that of applied research, which relates to educational problems of a more practical nature that have already been identified. It is clear that in the universities and colleges of advanced education (less so in the technical and further education sector) there will be little chance in the future for educational innovation - or at least there will be little finance to support it. That means we must be prepared with better arguments both to establish new courses and to maintain existing ones. For example in attempting to establish new courses, especially in professional areas, there will increasingly be the need for some sort of market research. The importance of manpower planning has already been mentioned by others, and it may be possible to provide evidence from such studies to support the case for a new course. It may also be necessary to provide evidence against manpower planning studies predicting oversupply in order to maintain some other course. In either case there will be data required and methods to be developed for collecting it.

Interdisciplinary courses provide another important area for applied research. An argument often used for introducing these courses is that they help students to integrate information from different disciplines in solving problems of a more general nature. The obvious question is: "Do they really?" At a time of scarce resources the conservative pressure to retain the less expensive, less demanding and "proven" course structures of the past will predominate unless substantial evidence can be provided that the new type of course structure can actually provide some advantage in learning outcomes. This evidence will require the development of more sophisticated measures to determine the adequacy (or otherwise) of existing course structures and to evaluate the effects of the new. Research on course evaluation is relatively new in Australia, and it will have to be increased and its credibility improved if it is to support a continuing climate of educational change.

The increasing pressures for academic as well as financial accountability, which have been mentioned by earlier speakers, will also force tertiary institutions into a more conservative mould unless evidence can be provided to resist them. Better cases will need to be provided even to maintain the existing courses. Two types of courses recently introduced provide examples of the questions that are likely to arise. The first involves courses on study skills - i.e. teaching students how to learn for themselves. Do these courses really lead to greater achievement or motivation, or do they simply create an additional cost in formalising principles that are in any case self-learned? The second involves bridging courses, which are established for students with inappropriate academic backgrounds (often mature age students) to introduce them to different areas of tertiary level studies. Is there some characteristic of the tertiary environment that is important in these courses, or would they be provided as well or better in the secondary school system?

A further problem in the applied research area concerns the need to attract students to tertiary institutions and to guide them in selecting appropriate courses. A question which often arises is: "To what extent are the expectations of students being met in the courses or programmes they enter?" By this I do not mean whether students enjoyed the courses or whether they thought the instructors knew what they were

talking about and spoke clearly. The question concerns the extent to which courses are able to prepare students for their subsequent professional life and how far the students are aware on entering such courses of their value and limitations in providing the qualifications or experience they require. There is clearly an increasing need for instruments to measure student interests and aptitudes for particular academic and professional areas, and for procedures whereby they can be given better information on the range of courses open to them.

The third area of research is that of policy oriented research. I do not want to draw the distinction too emphatically between applied and policy oriented research, because they are obviously closely related, but I want to use the latter term for research looking specifically towards future policies and providing data on which we can make more informed judgements about future developments. It was pointed out earlier by Hore that there is not much point in looking to the future simply to predict random events. But there is a purpose in evaluating present trends with a view to influencing what may happen in the future - to increase the likelihood of some development which seems a good one and to change the direction of those trends which do not seem worthwhile. A further comment from Dunn seems appropriate here:

Policy makers in the tertiary sphere will need information during the next decade on the progress of students through the various types of tertiary institutions, and on relative costs. Do we have adequate information concerning outputs on which to base decisions in the tertiary sphere? Policy makers will be concerned with cost-effectiveness studies despite the difficulties of deciding on appropriate criteria of effectiveness. This requires educationists as well as economists to ensure that educational outcomes, as distinct from monetary outcomes, are not overlooked.

Here again there is a need for disciplinary research - not just for educationists but for all of those researchers whose work influences the field of education. I believe that the sort of research which needs to be done cannot be done solely by educationists, nor can it be done without them.

The function of HERDSA in this area seems a difficult one to make pronouncements about. HERDSA is a large and varied group of people with different areas of expertise, different professional interests, different resources, and so on: therefore as an association its opportunities for direct involvement in this sort of research are limited. But in its heterogeneity lies a different potential for contributing to this research - it provides a wide range of experience and resources from which individuals or small groups of people involved in particular research studies can be supported. In this respect I believe that the most important function of HERDSA in the future is one of coordination. Because of the increasing importance, opportunities and diversity of tertiary education research in the future it is more critical than ever that the resources within a large and diverse association such as HERDSA should be available to those who need them. There will be no shortage of willing and able researchers in tertiary education, but what is needed is a means of improving the efficiency of this research.