

University of Technology

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1. The idea of a university of technology

The concept of a University of Technology opens exciting possibilities of developing a form of higher education suited to the needs of a technological society. These will, however, not be realized if the new institution allows its function to be circumscribed by the narrowly bureaucratic and economic framework of the Dawkins and Cullen papers. At best, the training of students in the manipulation of technology may allow Australia, temporarily, to gain some competitive advantage in international markets. Such advantage must, however, be at the expense of another nation, and is certain in its turn to be lost as yet other countries adapt to use technology. It does not offer a way of Australia avoiding the prospect of becoming a nation increasingly divided itself between the wealthy and the others, and serving the rest of the world merely as a repository of cheap labour and expensive entertainment.

The Australian economy and society will become healthy only as we learn to live in harmony with ourselves, our neighbours and our environment. We must learn to use technology to empower the individual and produce harmony rather than domination. This requires an education which recognizes technology as a form of knowledge rather than as a means of domination. It needs to be based on an understanding of the modern world created by technology, characterized by urbanism, technologism and dehumanization, and threatened by population, pollution and authoritarian power.

A university of technology will be able to develop education of this kind to the extent that it offers courses free of the external and extrinsic constraints of governments, employers, professional accreditors and its own regulations. Such courses will not come require students to step outside the disciplines immediately relevant to their chosen career, whether through broad but shallow electives or through some kind of context curriculum, but will teach all subjects critically as a way of understanding the total environment. In turn, courses should offer students the opportunity to pursue this understanding through any disciplines they deem relevant, and not merely through subjects perceived as offering skills immediately useful to the employer.

The guarantee of the quality of this education must come from the quality of the staff and their freedom to engage in the study and research which give them the authority to teach. This teaching in turn must enable students to gain and use the professional skills to engage with the full reality of the world, and not merely with some filtered and controlled aspect of it.

2. Courses

Both elements of the title, university and technology, are equally important. The institution must therefore offer courses across the whole range of disciplines and at all levels, and at the same time ensure that all courses take regard of the nature of technology and technological change, its limitations and possibilities, and the human effects of change.

In the first place, all present courses would continue to be offered on their present sites. Growth, however, should be concentrated in areas providing new combinations, in particular combinations of science and technology or business and management with humanities, so extending the variety of opportunity to pursue courses meeting the government's objectives of enhancing vocational opportunities in business and technology. Courses should be developed in particular around information technology, communications and trade languages.

Within any new institution, FIT should maintain its strengths in computing and business science, hospitality and tourism, physical education and recreation, cultural studies, urban studies, languages, and electrical and electronic engineering. Other engineering and science courses offer the opportunity for the development of combined courses in such areas as civil engineering and urban studies or mechanical engineering and languages. The development of joint courses, leading ultimately to combined degrees, in education and science, education and arts, and arts and science, should also be encouraged.

Combined courses

There are three models for the development of combined courses:

1. A degree in one area with a major in a second -- e.g., Bachelor of Mechanical Engineering with a major strand in communication and second language studies.

2. A first year of a bridging course to enable students with strength in humanities areas to undertake basic studies in science and mathematics as well as commencing a degree in humanities. After a further three years study, these students would be able to take a first degree in Arts, Education or Science, according to their particular choice of subjects, and would be able to complete a second degree after a further three or four semesters of part-time study.

3. A three-year course with two-thirds to three-quarters in one discipline area and the balance in a second, which would enable one degree to be taken at the end of three years and a second after a fourth.

The development of such combined courses would be encouraged by the use of EFTSUnits as a measure of student load, and would require individual Departments to plan in terms of disciplinary strands which could be taken in various combinations rather than solely in terms of integrated degrees.

Combined courses could be developed between the present Faculties at FIT to meet vocational needs in the areas of Engineering, Science, Tourism, and public and private Management. In combination with RMIT and SIT there would be further opportunity for combining courses in these areas and also in psychology and cultural studies, media studies and languages, information technology and languages or cultural studies.

Complementary courses There is opportunity for developing complementary courses in all Faculties by building on present strengths. In the Arts, RMIT would continue to emphasize media studies, including journalism and public relations, Swinburne its languages, literature and psychology, and Footscray cultural studies, urban studies and languages. Within this framework there would be opportunity to offer some units in such areas as literature and history on more than one campus. SIT and FIT appear well-placed to develop a major in Developmental Studies on the basis of their existing Politics/Political Studies courses.

Co-operative courses The greatest opportunity for the development of co-operative courses would be in the area of graduate studies and fourth-year honours courses, and research specialities.