

ASET response to Higher Education: A policy discussion paper

This submission was prepared by James Steele with the assistance of Andrew Greig, John Hedberg, Patricia Kelly, Alex Millar and Sue

The Commonwealth has recently released a paper entitled *Higher Education: a policy discussion paper* and invited public comment on the contents. As a result of this consultative process, and with the recommendations of others invited to respond to specific aspects of policy for higher education, the Commonwealth intends to announce its higher education policy before the 1988 Budget is brought down in August. In its own words,

The thrust of this Policy Discussion Paper is to promote further growth in the higher education system in a manner consistent with our economic, social and cultural needs. The achievement of such growth in a climate of continuing financial restraint will require close attention to the efficient use of resources in higher education and to the institutional arrangements by which those resources are provided. (Higher Education: a policy discussion paper, page 1: emphasis added)

This submission has been prepared in response to the Policy Discussion Paper by members of the Australian Society for Educational Technology who are involved in the higher education sector. These members believe that more efficient use can be made of the resources currently available for the sector, and propose some changes to the way in which these resources are provided.

Synopsis

The Australian Society for Educational Technology (ASET) proposes the following initiatives as a contribution to the development of government policy for higher education:

- Improved efficiency and expanded access could be achieved through placing greater emphasis on the development of alternative modes of education delivery using technology, particularly in view of the present cost of staffing and the increasing ease of communication.
- Support should be given to the development of "modules" and the "packaging" of education.
- The traditional "professorial" mode of higher education delivery should change to a tutorial mode, to support the successful "packaging" of education.
- The Commonwealth should establish a National Accreditation Agency to promote the development and delivery of packaged course materials of suitable content and quality, to maintain minimum levels of higher education across all institutions in Australia, and to ensure students can easily transfer credit for courses from institution to institution.
- Calls for increased access to tertiary education require responses which
 include greater institutional flexibility in the delivery of education.
 Such increased access can be achieved by using, among other things,
 the techniques of distance or open education, and by distributing
 higher education resources in different and more efficient ways.
 Educational technology is crucial to these fundamental changes in the
 way higher education is proposed to be delivered.
- Specialist staff with expertise in the technologies needed to service a
 more flexible tertiary education structure must receive government and
 institutional support if their skills are to be retained by the public
 education system.

The Australian Society for Educational Technology (ASET) is the professional organisation for people engaged in and interested in educational technology. Many members of ASET, involved in the higher education sphere, believe that insufficient importance is placed by government and tertiary institutions in Australia on the use of educational technologies as tools and techniques to increase the efficient use of already available resources.

ASET believes that the Commonwealth must develop its policy on higher education in the context of the long term reality of the society within which the system will operate. This includes an understanding of the ways in which people, including "teachers" and "students", will communicate with each other and find out information about the world in which they

live. If it is true that "the barriers to ... communication ... have been removed ... as ... technological ... revolutions have swept the globe" (*Higher Education: a policy discussion paper*, page iii), then an effective higher education policy must address the long-term implications of the removal of these communication barriers.

Educational Technology

ASET defines educational technology as the design, development, application, and evaluation of systems, methods and materials to improve the process of human learning. This involves far more than just the use of audiovisual equipment as an adjunct to traditional teaching methods - it extends to any strategy designed to promote learning.

The future of teaching

The Policy Discussion Paper contains several basic assumptions - that there is a need to increase the quality of and access to higher education, and these ends must be achieved with limited financial resources. The Paper reflects a view that different techniques of educating students will have to be developed, saying that

Traditional face-to-face methods will have to be supplemented. More students will need to be provided with remedial materials, with the opportunity to review lectures at their own pace, and other support systems. Open learning methods whereby self instructional self-paced materials of high quality are used in parallel with traditional face-to-face lecturing, tutorial and laboratorial methods will also have greater application. (*Higher Education: a policy discussion paper*, page 18)

This assumes that face-to-face teaching will remain the predominant mode of education delivery forever, whereas doing more educating with less resources will require a fundamental reassessment of overwhelmingly the most expensive recurrent cost element of higher education: staff. Developing effective *alternatives* to existing teaching practices which over the long term will provide a reduction in the costs per student - a more efficient higher education sector - is a must if the government's objective of increased return on its tertiary education dollar is to be realised.

ASET agrees that "no single set of solutions will be possible or appropriate; rather, experimentation and a diversity of approaches should be encouraged" (*Higher Education: a policy discussion paper*, page 22). It is, however, clear that a range of applications of educational technology can

be used to increase the efficiency of current tertiary education practices and support increased access to tertiary education for students not adequately provided for under present arrangements.

In particular, opportunities exist to use new educational technologies to improve the nature and quality of higher education.

Before this can happen, a fundamental change in thinking on education practices will be required: there must ultimately be a change from the professorial mode of instruction to the tutorial mode of learning. In addition, there must be a fundamental reassessment of existing higher education structures in Australia. Institutional autonomy can no longer be an excuse for parallel development and delivery of equivalent higher education courses in complete isolation from one another - particularly if this results in a reduction in the overall quality of and access to higher education.

ASET supports the Policy Discussion Paper's suggestion that courses should be designed in modules that are more readily transferred between institutions and courses (*Higher Education: a policy discussion paper*, page 40). To realise this idea of "packaging" courses, resources will have to be diverted from the support of person to person delivery of course materials to the development and dissemination of packaged materials, using a range of appropriate and accessible media - print, audio and video cassette, radio and television. This would make those "expert" in particular fields accessible to a broader range of students than the current face-to-face regime allows. Educational technology can provide increased access to and wider dissemination of expertise located institutions away from those in which students may be enrolled. For example, through intelligent application of educational technology, students enrolled in institutions outside Key Centres for Teaching and Research can be provided with access to some aspects of the activities carried on by the people there.

The Commonwealth accepts that the techniques of distance education have a role to play in the context of the Key Centres approach, providing for greater dissemination of educational materials to prospective students.

... the Key Centres program offers the opportunity to establish centres in science and mathematics teaching, either generally or more specifically to target various groups, including the particular needs of women and girls. .. external studies provides a mechanism for delivering short courses to teachers in schools across Australia. (*Higher Education: a policy discussion paper*, page 18)

It will also be appropriate to use these techniques to demonstrate to tertiary teachers everywhere effective alternative teaching strategies which they themselves can use in their own courses.

Courses which should be targeted for packaging at least initially are those where is there high demand, where there is a requirement for an increased number of graduates and where educational technology can be demonstrated to be an effective alternative to increasing capacity by more traditional methods of building more and larger institutions. Certain specialist areas for which there is a more limited demand, but where it is important for new techniques or ideas to be disseminated quickly and widely may also be appropriately targeted for the development of packaged materials.

Basic course structures and content will have to be developed on a suprainstitutional basis, with appropriate academic practitioners from institutions with suitable educational profiles cooperating in the development of courses, along with industry, employer and professional association representatives, where appropriate. This will, of course, require some release from teaching to give members of academic and other participating staff the time and incentive to be involved. The work done will also need to be recognised as appropriate academic activity of equal value to research and publication.

Appropriate resources must be available for the development, dissemination and maintenance of these packaged courses. Such resources will include support for communication and travel costs, for the development and dissemination of appropriate course materials and the "marketing" of a new concept of teaching (or possibly more accurately, learning) in higher education across existing institutions. Ongoing monitoring of courses would be necessary to address any unforeseen problems and to allow for inclusion of the latest information of interest in particular disciplines.

Packages developed in this way would provide the basic structure for the course - containing materials able to be delivered and supported by teaching staff on the ground. Course packages should be developed so that they can be delivered in a flexible way in terms of time and place, to allow, with minimum support, an increase in access to higher education by students from a range of backgrounds - including students who currently do not benefit from tertiary study.

Effective use of higher education resources

The Policy Discussion Paper issues a challenge: to make more effective use of higher education resources to address the community's need for a skilled population.

Institutional autonomy contributes to a number of inefficient practices, such as problems of uneconomically small class size, academics wanting to teach in their own specialities regardless of student demand and how to deal with tenured staff whose skills are no longer in demand in their particular area of expertise.

Educational technology can help increase the output and efficiency of higher education by improving its delivery in a number of areas identified in the Policy Discussion Paper, including:

- rationalisation of production of materials used for external studies courses;
- disabled and disadvantaged access to education;
- part-time students;
- support for a variety of learning styles as an example, the University
 of New England draws its students from Sydney, although it is located
 some 450 kilometres away, partly because it offers a mode of study
 students find attractive.
- Liberalisation of arrangements for the transfer of academic credit.

Accreditation

Widespread academic acceptability of packaged course modules is vital to the strategy outlined in this submission, and a process of accreditation allowing students to transfer credit easily from institution to institution is required. ASET proposes the establishment of a National Accreditation Agency, independent of any individual existing institution, which would have the responsibility of overseeing the development of packaged materials within existing institutions, assessing the modules put up for inter-institutional use and possibly offering courses itself for transferable credit.

The Agency should be given the responsibility to contract out or issue tender for modules in areas identified as being particularly relevant or appropriate' for packaged delivery. Such areas would be identified by a number of mechanisms, for example, the Australian Education Council, the Joint Planning Committees proposed in the Policy Discussion Paper or

the government itself. The products endorsed by the Agency would be made available to participating institutions (or possibly directly to students) both in Australia and overseas on agreed financial and operational bases to ensure the most effective dissemination of the materials.

The Agency would be entrepreneurial in its approach, and encourage (or even have some role in attempting to co-ordinate) the entrepreneurial activities of the various tertiary institutions selling education to full-fee paying students now. Short courses, currently not for formal credit, could also be offered or co-ordinated through the Agency, with some of the income generated by these activities supporting other non-income generating activities considered by the government and the community to be necessary in the interests of equity and access.

A National Accreditation Agency could also encourage the development of appropriate dedicated training courses for industry, at appropriate commercial rates. Income generated from this activity (which could be done by the Agency itself, contracted out to institutions or to private sector groups) could be used to cross-subsidise other, less commercial activities such as increasing the general level of mathematics and science education in the community.

Transfer of credit

If there is a common course structure across many institutions, supported by good, packaged courseware, assessment of equivalence of courses is simple: essentially the courses are the same except for regional variations in subjects such as law.

Two examples of how educational technology can help in the development of more acceptable methods of transferring credit are:

- in providing support for supplementary summer school programs where students are given a second chance to pass and therefore remain in the system and therefore not add to the attrition rate; and
- in the provision of high-quality bridging or transfer programs with credit accepted by a range of institutions.

If the Commonwealth were to implement the proposed National Accreditation Agency, facilitation of the transfer of credit between institutions would be its responsibility. It would also have to determine,

with the agreement of the institutions concerned, an appropriate form of qualification for students whose higher education experience may cover several institutions from technical and further education establishments through to universities - and determine which institution would grant the qualification.

Future of the public higher education system

ASET is concerned that the public education system will lose the opportunity to exploit any expertise it may have in high-profile areas (such as business studies and medical technology, to name two) because these areas are commercially attractive to private institutions. Private bodies have been able to move much more quickly that the public sector to capitalise on these opportunities, attracting expertise away from the public system and leaving it unable to provide a suitable alternative.

The public education system should be in a position to use its installed capital base and expertise to challenge private entrepreneurs at their own game, and use any surfeit of resources thus generated for the good of the public education system. Otherwise, the public system will be left with only those disciplines not seen to be commercially attractive, starved of resources and lacking any real selling points. The proposed Agency would have a role in promoting the sale of education by public institutions and ensure the equity and access issues are supported by these activities.

A system of packaging courses in the public system would provide opportunities to concentrate significant resources on particular fields identified as important for whatever reasons. Whereas under present organisational arrangements resources are dissipated by many people working in isolation from one another developing their own solutions to common problems, these same resources could be reallocated to provide opportunities for people to work together - with the results available to all institutions requiring them.

Retention

The Paper raises government's concern that too many people entering the higher education system fail to complete their studies, and expresses the view that

...institutions should give priority to measures to improve graduation rates further ... [including] ... bridging courses ... special courses to enable students to retrieve failed units and to undertake bridging or extension work ... and ... mid-year intakes to maintain enrolments and allow flexible starting times. (*Higher Education: a policy discussion paper*, page 17)

ASET believes that educational technology has a role to play in each of these areas, especially to the extent that basic course materials can be made available to students "off-the-shelf", as it were. Bridging courses, courses aimed at helping students with study difficulties and extension work modules could be developed in specialist institutions and packaged for delivery in other institutions when and as appropriate, with local tutorial support. Mid-year intakes could be accommodated more easily if courses offered in the first half of the year could be repeated, using materials like audio recordings of lectures or videotapes of some laboratory techniques and so on, produced when the courses were first run.

Increased access to tertiary education

As the Paper points out, "significant barriers still exist to the full participation of disadvantaged groups in higher education" (*Higher Education: a policy discussion paper*, page 3), and that

A critical factor in seeking growth in higher education in Australia is to improve the educational opportunities available to those people who have not traditionally participated in the system....

... substantial inequities in access to higher education remain for some groups in the population, particularly:

- people from financially disadvantaged backgrounds;
- people from rural and isolated areas; and
- Aboriginal people.

In addition, women's involvement ... generally remains very limited" (*Higher Education: a policy discussion paper*, page 21)

ASET believes that higher education can be made available to a broader range of clients than has been the case in the past by addressing the needs of these students when designing packaged courses. In general, all students would benefit to some degree from the increase in access provided by opportunities for flexible delivery inherent in suitably designed packaged courses.

Potential students who do not now benefit from higher education because they must work in jobs which do not provide for time off to attend classes may find the alternative mode of delivery suits them. Suitably designed packaged courses with appropriate institutional backup will help such students keep their jobs and continue their education at the same time.

Overcoming educational barriers for potential students from disadvantaged groups will require additional support programs to address their specific needs, in addition to normal teaching activity. Such support programs could be funded by reallocation of resources which would otherwise have been provided to support the teaching of courses by traditional means.

The availability of the basic course materials in a form which will allow students to deal with the content in their own way will provide an additional mechanism to keep the students in the system. Potential students who lack confidence in their ability to perform academically will also be encouraged if they feel that by using packaged materials their attempts will not be so public as they would be in more traditional classroom-based teaching situations.

Courses structured in this way would also provide greater scope to accommodate mature-age entrants in the higher education system by providing them with easier access to course materials.

The Paper itself notes the need for institutions to develop strategies to meet equity goals, including "measures to improve flexibility in matters such as timetabling, access to libraries and attendance requirements" (Higher Education: a policy discussion' paper, page 23). ASET believes that simple techniques such as audio recording of lectures can simply and cheaply increase student access to some parts of the education process. These lecture recordings, together with appropriate print materials (lecture outline, references, and visual materials used and so on), could be made available to students through library services on campus, or reproduced using high-speed tape duplicators and photocopiers for distribution to other students for whom access to the campus is limited for whatever reason.

If a student is a long way from a particular campus, support for them could be provided through TAFE colleges, in another state or just across an urban area.

Absence of appropriate child care facilities is also a difficulty for some people who might otherwise complete tertiary studies successfully. Providing courses packaged in a form where the delivery of the materials is flexible will allow such people the opportunity to complete their studies notwithstanding the responsibilities they have, by being given the opportunity to structure their study around their other commitments.

ASET is concerned that extending education to those currently not gaining access to it is not done in such a way that new students are expected to pay for services now enjoyed by others more fortunate than themselves for little or no cost. The proposed National Accreditation Agency should not be seen as a supplier of education just to those students who do not have access to education now, but it would supply services to all students in existing institutions. The economies provided by coordinating the packaging of courses would free resources for providing increased services to those disadvantaged by the present arrangements.

Participation rates

The Paper notes the need to increase the participation rate in higher education, improve the rate of graduations to entrants and to increase adult students' access to higher education, if the goal of increasing the number of tertiary graduates is to be realised.

One way to increase effective use of tertiary resources would be to promote a more effective system of career education in Years 8 through 12 in secondary schools. Students with a clearer idea of their own interests and the opportunities available to them may be in a position to make much more focused choices about the subjects they choose for the final years of secondary school, and the courses they opt for when going on to tertiary study.

A demonstration project showing how educational technology can provide support to such a concept has been developed here in Australia (the Supertext Superdisc Project, which resulted in the production of the *Ask the workers ...* package). The results of the evaluation of this Project show that the methods used and the materials produced are indeed effective alternatives to traditional practices. ASET urges government to increase its support for such projects and, more importantly, give commitment to the introduction of the resulting materials into everyday classrooms around the country.

Distance or open education?

Geographical displacement from a tertiary institution is only one of the barriers standing between potential students and completion of tertiary education. Other barriers are:

- timetabling;
- learning styles; and
- transport difficulties.

There are many different reasons why some students opt for external study - location, family responsibilities and demands of full-time employment making it difficult to attend on-campus courses are more of the reasons put forward. Some students simply prefer to study "externally", and others see it as an opportunity to make up for educational opportunities missed in earlier life without the fear of failing publicly among younger students.

The "distance" may not be a physical one - the term "open learning" rather than "distance education" is a more appropriate one and a better description of the style of learning that goes on not only with students learning "at a distance", but also those who might learn within institutions but without attendance at normal lectures - at summer schools, in semesters when courses are not normally offered or for the purpose of catching up on content which might otherwise have been missed or needs to be gone over again.

ASET is not suggesting that Australia take on an overseas model of open education - like the Open University - but suggests that Australia capitalise on the existing strengths of local institutions and build new structures onto them: appropriate to the Australian scene. The Federal Government's response to the Open University model has not been made clear: whether it believes a separate institution will not work in the Australian context, or that it believes that distance education would not work as a real alternative to campus-based, face-to-face teaching delivery.

Recently the Commonwealth has been seeking to rationalise the provision of distance education courses by tertiary institutions in Australia, by promoting limitations on the number of major providers of such courses. This has been done so that the number of students enrolled in any particular course rises to an economical level, and to reduce duplication of effort.

ASET believes that it would be a pity to lose whatever expertise has been developed in those institutions phasing out distance education as a result of the Commonwealth's decision to rationalise providers, and hopes that the establishment of a National Accreditation Agency will support more cooperative arrangements between institutions by promoting joint development work on open learning materials in areas of particular expertise within institutions. Funding this inter-institutional cooperation will be difficult, as will getting agreement on who will control the process. In addition, some work will need to be done through the Agency to ensure institutions no longer providing such services make the best use of resources developed elsewhere.

Discipline

One justified criticism of the use (or more accurately, overuse) of mediated course materials in education at any level is the reduced motivation to complete course work within a specified timetable. Campus-based students have the discipline of weekly tutorial and lecture appointments, and the rigour of dealing with their lecturers on a face-to-face basis.

ASET believes that mediation of teaching should not be complete - in the absence of any other discipline, the necessity to deal with someone else on a person to person basis adds significantly to the motivation to get through a course in stages. Such contact may be through a tutor in a weekly tutorial group, or over the telephone through regular contact, either individually or in telephone conferences with other students if regular attendance at a central campus is impossible. Assessment by stages will also be helpful for these students, since, structured properly, students can be helped to understand how a course can be handled in manageable portions.

Educational profiles

One of the key features of the Policy Discussion Paper is the concept of the development of educational profiles. Developed by the institutions themselves, these educational profiles will identify the institution's teaching and research strengths and the areas they wish to build on in the future. These profiles will be used by the Commonwealth in assessing the level of funding institutions will receive.

Inevitably, institutions will become even more specialised than they are now in some areas, and the Commonwealth will promote such specialisation even more through the Key Centres for Teaching and Research program. The result will be concentration of activity in specific disciplines in particular areas, in some ways increasing difficulties of access for students. ASET believes that institutions recognised as Key Centres must be required to actively disseminate information about their discipline and activities to other institutions (if not the general public) so that others not able to enjoy the experience of working with a Key Centre directly will still be able, if somewhat vicariously, to benefit from the activity there. It might be appropriate for the Commonwealth to extend this concept to education profiles generally, encouraging institutions to indicate in their profiles their proposed strategies for making available the fruits of their specialist areas to other institutions in a form which supports teaching elsewhere.

Role of educational technology in teaching development

The Commonwealth recognises that the staff within educational institutions are a major resource, and that:

Staffing issues are central to any examination of higher education policies for two main reasons. First, the implementation of Government and institutional objectives relies heavily of the abilities of academics in both teaching and research and on the performance of institutional management. Second, the funding of staff represents the largest single item of expenditure by institutions accounting for more than 80 per cent of total recurrent costs for higher education. Thus, issues relating to staffing quality, productivity and adaptability - are central to the further development of the higher education system. (*Higher Education: a policy discussion paper*, page 55)

A major barrier to the improvement of teaching is the need to deliver the same courses year after year. Packaging the basic courses removes that drudgery and allows academic staff to pursue research, publish and develop and deliver specialist courses in their area of expertise. It will allow academic staff to become more specialised.

Academic staff wanting to improve their teaching need ready access to up-to-date information about alternatives to traditional lecture-based methods. A national program to improve tertiary teaching could provide examples of innovative and effective approaches to teaching in a number of ways:

- by example through the dissemination of materials which use new approaches to teaching;
- by providing specific teaching strategy development materials aimed at those tertiary teachers interested enough to seek out information to help them improve their teaching;
- by raising the level of awareness about the issue of teaching quality through promoting debate on the subject in mainstream media and the established networks of professional associations; and
- by demonstrating how teachers may be able to diversify or upgrade their own teaching skills.

The role of service personnel, such as media and materials producers and instructional designers is crucial to the continued improvement of educational delivery. Associated needs such as tenure and morale of service staff must be primary considerations if teaching and education in tertiary institutions are to improve.

A national educational television network

One particularly effective way of disseminating information rapidly across Australia is the use of networked television. Although by no means the complete answer, network television could provide a part of a concerted effort to communicate directly to academic staff across the country: providing them with up to date materials to support their teaching and keeping them in touch with current debate on issue which affect them directly and have some impact on their professions.

15

Networked television is an extremely cheap and effective way of delivering of information - technically it can be available in every home where ABC television is received now. The unit cost of making television-based course materials available is therefore minimal compared with the alternative of delivery on videocassette by mail. ASET is not suggesting that there is the capacity nor the need for the rapid and widespread dissemination of program material in all courses, but it is an appropriate method of delivery to support courses in some disciplines where for example expertise in not widespread, or where up-to-the-minute information is crucial to learning in rapidly developing disciplines like computing and biotechnology.

A national educational television network can also provide a critical assessment of the sorts of activities that go on in various institutions through current affairs type programs produced within institutions themselves.

Such a network could grow from local educational television stations like that proposed for trial in Sydney. Initially, networking between these stations could be realised using down-time on the Australian Broadcasting Corporation and Special Broadcasting Service television networks for program distribution, and eventually local educational television stations serving all areas of the country could be networked through a dedicated terrestrial or satellite distribution system.

Television broadcasts of learning materials would be provided as part of formal coursework, where viewers would be required to be enrolled in individual institutions before credit could be gained for participation in a course. Individual institutions would supply print and other materials, tutorial support and examinations which the television broadcasts would supplement, and additional enrichment materials already existing on the shelves of audiovisual units in tertiary institutions would also be available for broadcast.

The existence of an educational television network will also serve to increase general community awareness of tertiary education, and provide support to individual students who may otherwise be lost from the system through attrition.

Australian content

It is true that pre-packaged courses are available from suppliers overseas for example from the Open University. The Learning Network has been broadcasting materials produced in the United States in support of some courses run through the Continuing Education Unit at the University of New South Wales.

While ASET accepts that these materials can be of a very high quality, there is no reason why Australian institutions, given the appropriate resources and encouragement, cannot produce Australian materials of an equally high or higher quality than those from other countries. It is essential than any packages distributed around Australia are developed locally, even to the extent of taking regional variations into account (windows) where appropriate.

With the potential for wider distribution, particularly in the Asian and Pacific educational markets, the development of Australian educational product in higher education is a significant consideration in the development of a policy for tertiary education in Australia.

In this context, the proposed abolition of the binary system will facilitate the wider distribution of higher education as an Australian export product in the Asian and Pacific region, if the title "College of Advanced Education" is replaced by "University". Experience has shown that the existing distinction has proved confusing to potential consumers in the region, and so ASET supports the proposed change.

Autonomy and cooperation

The major pivot on which the ideas expressed in this submission rest is interinstitutional cooperation, mainly for reasons of critical mass. No institution is large enough by itself to countenance the development and operation of an effective tertiary teaching unit merely to serve its own staff. The quality of the materials cannot be sufficient for the staff to take them seriously, and the scope of materials available will not be sufficient to satisfy the demands of all disciplines. The expertise certainly exists, although in times of financial stringency, "peripheral" activities like

tertiary teaching units tend to suffer more than most, and the sector is in some danger of losing what expertise it has, as in the case of the then New South Wales Institute of Technology when it closed down activities in its Educational Development and Educational Technology areas between 1982 and 1987.

No institution can hope to provide packaged courses covering the full range of disciplines - even if the resources were channeled in that direction, the expertise would not be there. Institutions must cooperate to share the expertise, and to share the financial burdens associated with initial packaging and distribution of courses. Once the initial investment is made, the returns in increased staff efficiency will more than return the original investment, and maintenance costs associated with keeping the packages up-to-date and effective will be much less than the original investment. The proposed National Accreditation Agency would have a central role in promoting the necessary cooperation among institutions.

Funding

Unless State and Federal governments are able and willing to provide additional resources to fund the development of alternatives to traditional teaching outlined in this paper, funds will have to be diverted from existing activities. The Commonwealth might consider channeling funds from institutions' general funding to the National Accreditation Agency, to be used to support projects proposed by individual institutions or consortia to package course materials in target areas for general dissemination.

Recommendations about target area would be developed by the Joint Planning Committees proposed in the Policy Discussion Paper (pp. 48-59), with agreed programs to be supported by the Commonwealth. A condition of the funding of programs through this channel will be that materials would be available to all appropriate institutions at cost.

The Agency would "audit" the content and structure of the materials throughout their design and development, so that the final product will be acceptable to the widest target audiences.

Summary

ASET is not suggesting that instruction mediated by new technology delivery systems replace the current face-to-face professorial mode of tertiary education, although in time it will be more appropriate to move more to a tutorial mode. There are, however, significant financial and

community benefits possible if appropriate elements of the learning process are supported through alternative means. The appropriateness or otherwise of particular alternatives will vary from discipline to discipline, from time to time, from student to student, from institution to institution and so on - each situation will have to be assessed uniquely - but the economies of scale afforded by judicious use of new technologies and techniques should not be disregarded.

In particular, new technologies can be a part of the answer to a number of the issues raised in the Policy Discussion Paper, as follows:

- The unmet demand in 1987 from between 13,000 and 20,000 qualified applicants for higher education places noted on page 15 of the Paper can be provided for by increasing the capacity of institutions through mediating aspects of courses and thereby freeing up staff members for tutorial support for an increased number of students.
- By a more efficient use of resources currently provided to support distance education activities and a rationalisation of course providers, access could be improved not only to distance education but campus based learning as well.
- The need to concentrate higher education resources in particular disciplines where graduates are needed to satisfy community demand could be supported by increased inter-institutional cooperation and the sharing of knowledge across different campuses using media such as telephone conferencing, radio broadcasting, audiotape, videocassette and television, in addition to appropriate use of print-based media.
- Retention rates can be improved by providing students with increased and alternative learning opportunities through the production of packages or modules of learning materials with tutorial support from academic staff on campus.
- Targeted populations can be supported with programs and materials designed specifically to satisfy their needs, wherever the students may be located.
- Disciplines in critical areas not able to increase the output of graduates because of shortages of potential students with appropriate prerequisite skills or interest in the area can be overcome by developing suitable promotional materials and packaged bridging courses which institutions can deliver in summer schools or during normal semester time.

ASET agrees with the Report when it says that "what is important is the flexibility to capitalise on new opportunities as they arise and to accept the need for continuing change and adjustment" (*Higher Education: a policy discussion paper*, page 2). We hope to see the Commonwealth itself adopt such a flexible approach and to see it support those within institutions who demonstrate a commitment to change - their institutions notwithstanding - not just "in principle" but actively with resources, policy and structural support.

Please cite as: ASET (1988). ASET response to *Higher Education: A policy discussion paper. Australian Journal of Educational Technology, 4*(1), 1-19. http://www.ascilite.org.au/ajet/ajet4/steele.html

Australian Society for Educational Technology

The Australian Society for Educational Technology (ASET) is the professional organisation for people engaged in and interested in educational technology which it defines as the design, development, application and evaluation of systems, methods and materials to improve the process of human learning. For further details, contact your State Secretary.

ASET (ACT Chapter) ASET (Victorian Chapter)

PO Box 772 PO Box 372

Belconnen ACT 2616 Hawthorn VIC 3122

ASET (New South Wales Chapter)

Television Service

ASET (SA Chapter)

ACUE Video Services

University of Adelaide

University of Sydney PO Box 498 Sydney NSW 2006 Adelaide SA 5000

ASET (Queensland ASET (WA Chapter)

Chapter) PO Box 271 PO Box 275 Leederville

Chermside QLD 4032 Western Australia 6007