



A dual mode model of distance education: the university of Southern Queensland

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Established in 1967, to provide on-campus higher education opportunities primarily for residents of the Darling Downs region of Southern Queensland, the University of Southern Queensland (USQ) became a dual mode institution when it initiated distance education delivery in 1977. Twenty years later, the USQ has over 13,000 distance education students studying off-campus in over 40 countries, and almost 5,000 students studying on-campus in Toowoomba.

Student profile

The successful transition to dual mode operations is evident in the current overview of the geographical location of USQ's Australian students (Table 1) and USQ's international students off-shore (Table 2).

Region	Number
Queensland	8343
New South Wales and ACT	1462
Victoria	315
Western Australia	126
South Australia	121
Northern Territory	108
Tasmania	70
Australians living overseas	338
TOTAL	10883

Table 1: Number/Location of Australian Distance Education Students

Region/Country	As at March 1997
Malaysia	1164
Singapore	527
Hong Kong	389
Other Asia	112
South Africa	82
Pacific Islands	81
United Arab Emirates	54
Other Africa	48
USA	13
Canada	11
Other countries	23
TOTAL	2504

Table 2: International Students Offshore

USQ has more international students studying offshore than any other Australian university. Further, international students studying on-campus constitute more than 20% of enrolments.

The current ratio of off-campus to on-campus students expressed as a percentage (73% : 27%) is a manifestation of USQ's mission 'to be a leader in international and distance education'. The emphasis on distance education has had a significant impact on the student profile, with a much smaller percentage of school leavers and a larger group of mature age students (Table 3) exemplifying the trend towards lifelong learning.

Variables	Australian Based	Temporary Visa	Resident Off-shore	TOTAL
Age				
Under 20	3%	1%	2%	2%
20-24	16%	57%	39%	21%
25-29	23%	32%	28%	25%
30-34	19%	7%	14%	18%
35-39	17%	1%	8%	15%
40-49	18%	2%	8%	16%
50-59	4%	0%	1%	3%
Over 59	0%	0%	0%	0%
TOTAL	100%	100%	100%	100%
Gender				
Female	49%	52%	49%	49%
Male	51%	48%	51%	51%
TOTAL	100%	100%	100%	100%

Academic programmes

The initial transition to dual mode status in 1967 was stimulated by a move to provide professional upgrading opportunities for teachers. However, the relatively rapid transition to dual mode is now reflected in the wide range of accredited courses available via distance education by all six faculties of the University (Table 4).

Table 3:
Nature of Off-campus Student Population

<p>Education Certificate in Staff Training and Development Associate Degree in Further Education and Training Bachelor of Education Studies Bachelor of Education (Further Education and Training) Bachelor of Further Education and Training Graduate Certificate in Vocational Education and Training Graduate Certificate in Open and Distance Learning Graduate Diploma of Education (Child Care) Graduate Diploma of Education (Educational Administration) Graduate Diploma of Education (Children's Literature) Graduate Diploma of Education (Special Education) Graduate Diploma in Further Education and Training Graduate Certificate in Teaching Second Languages Master of Applied Linguistics Master of Education Doctor of Education</p>	<p>Sciences Bachelor of Science, majors in Applied Psychology Applied Mathematics Bachelor of Information Technology, majors in Applied Computer Science Industrial Computing Bachelor of Nursing (Post-registration) Graduate Diploma of Information Technology, majors in Industrial Scientific Computing Graduate Certificate in Advanced Computing Graduate Diploma of Mathematics Graduate Diploma of Health (Rural and Remote) Graduate Diploma of Nursing Master of Nursing Master of Health (Rural and Remote)</p>
<p>Engineering & Surveying Associate Degree in Civil Engineering Associate Degree in Electrical and Electronic Engineering Associate Degree in Mechanical Engineering Associate Degree in Surveying Bachelor of Engineering, majors in Agricultural Engineering Civil Engineering Computer Systems Electrical and Electronic Engineering Environmental Engineering Instrumentation and Control Mechanical Engineering Mechatronic Engineering Bachelor of Surveying Bachelor of Technology (Engineering), majors in Civil Engineering Electrical and Electronic Engineering Mechanical Engineering Bachelor of Technology (Surveying) Bachelor of Technology (Geographic Information Systems) Graduate Certificate in Geomatic Studies Graduate Diploma in Geomatic Studies Graduate Diploma in Municipal Engineering Master of Engineering</p>	<p>Business Bachelor of Business, majors in Business Computing Economics End-User Computing Government Human Resource Management Practice Strategic Human Resource Management Logistics and Operations Management Marketing Bachelor of Information Technology, majors in Business Computing End-User Computing Graduate Diploma of Information Technology Graduate Certificate in Information Systems Graduate Diploma in Information Systems Graduate Diploma in Human Resource Management Master of Business Information Technology Master of Information Technology Graduate Certificate in Management Graduate Diploma in Management Master of Business Administration Master of Business</p>
<p>Commerce Certificate in Commerce Certificate in Banking Bachelor of Commerce, majors in Accounting Finance Banking General Commerce Accounting/Finance Banking/Finance Graduate Certificate, Business Law Graduate Diploma, Business Law Graduate Certificate, Commerce Graduate Diploma, Accounting Graduate Diploma, Banking Master of Commerce Master of Professional Accounting</p>	<p>Arts Bachelor of Arts, majors in Anthropology Asian Studies Communication Studies English Literature Indonesian Language History Journalism Mandarin Chinese Language Public Relations Graduate Certificate in Public Relations Graduate Certificate in Professional Communication Graduate Certificate in Editing and Publishing Graduate Diploma in Languages Other than English Graduate Diploma of Editing and Publishing Graduate Diploma of Arts (Journalism) Master of Professional Communication, majors in Applied Communications Multimedia Studies Public Relations Master of Editing and Publishing</p>

Table 4: Accredited Courses Available by Distance Education

Organisational infrastructure

In effect, distance education is now the 'core business' of the University. The planning, development, implementation and evaluation of distance education methodologies and technologies has been thoroughly institutionalised. The most recent example of this process was the establishment of the Flexible Delivery Committee (FDC), which aims to coordinate the cost-effective development and implementation of a wide variety of technologies, but primarily online delivery, computer mediated communication and interactive multimedia, in an institution-wide strategic manner. The FDC is chaired by the Vice-Chancellor, and comprises all the senior managers of the University, including the Deputy Vice-Chancellor, the Deans of Faculties, the Registrar, the Bursar, the Director of the Distance Education Centre, the University Librarian and the Director of Information Technology Services. In the words of the Vice-Chancellor, the USQ flexible delivery initiative embodies the philosophy of 'giving people *what they want, where they want it, when they want it* (WWW happens to be almost incidental)' (Swannell, 1997, p.17).

Through the activities of the FDC, which meets monthly, each of the Faculties maintains a rolling three year plan for the introduction of flexible delivery initiatives. Resource allocation of 'off the top' funding is also managed through this Committee. In effect, the FDC sets the corporate agenda and associated priorities for the University, which are operationalised through the standard courseware design and development processes.

The human and physical infrastructure provided by the Distance Education Centre is fundamental to courseware development, not only for flexible delivery initiatives, but also for mainstream distance education delivery. The structure and staff establishment of the DEC is illustrated in Figure 1.

A detailed description of all sections is beyond the scope of the present paper. USQ is, however, noted for its design and development services as reflected in the following comment from the Committee for Quality Assurance in Higher Education: 'An example of excellent outcomes at the

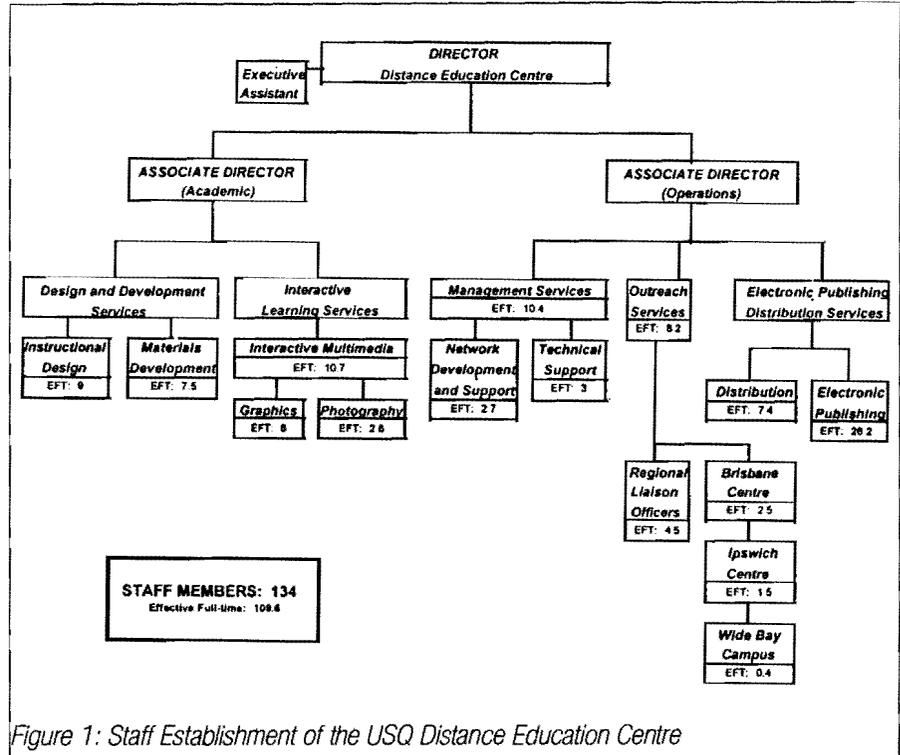


Figure 1: Staff Establishment of the USQ Distance Education Centre

University is the program in distance education which is underpinned by a solid research area in instructional design, a commitment to innovation in teaching, and effective systems to ensure the provision of high quality services to students. The performance standards for distance education students are a particular example of good practice in their area. ... The review team believes that, based on the evidence presented to it, the quality of the distance education program is

significant'.

Design and development services

The Design and Development Services section includes the roles of Instructional Designer (ID) and Materials Development Clerk (MDC). DEC has adopted a unit team approach to the design, development and production of learning materials and an ID and MDC are allocated to each unit team. An overview of the multi-disciplinary unit team approach is presented in Figure 2.

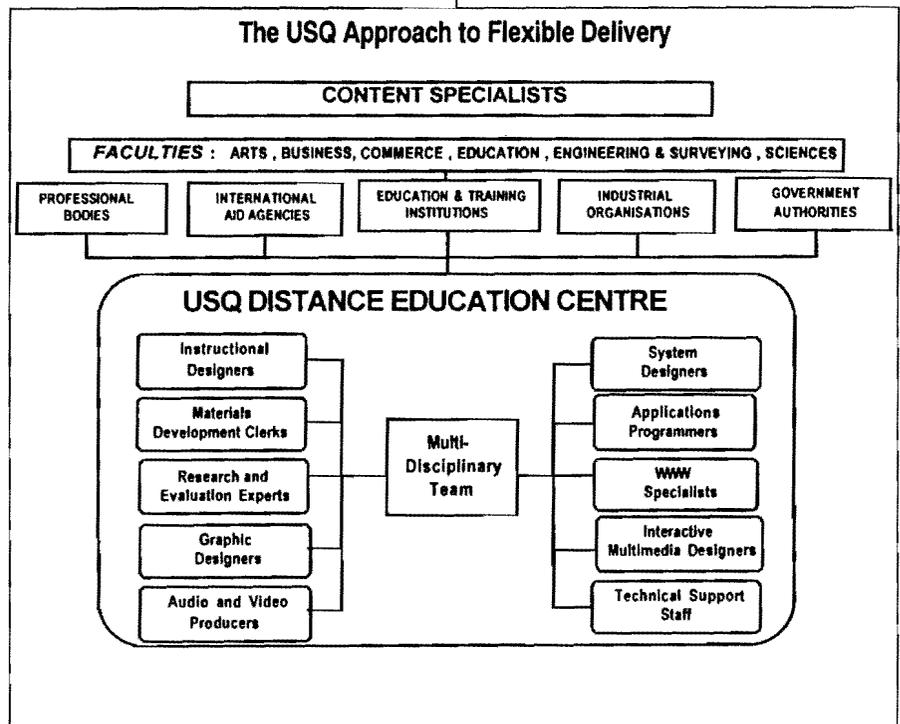


Figure 2: Unit Team Model

The ID works with the content specialists to ensure effective teaching and learning strategies are utilised in the distance education packages. Normally there is development and maintenance of a comprehensive instructional blueprint for each unit, particularly for new units and units under major revision. Advice from the ID is given on the appropriate media mix to achieve the desired learning outcomes.

Each unit team aims to provide educational materials independent of place and time and in a medium suited to the students. The range of media incorporated include:

- print
- audio tape/teletape
- video tape
- teleconferencing (audio, audiographic, video)
- computer managed learning/ computer-based exercises
- CD-ROM multimedia presentation
- computer mediated conferencing
- internet-based WWW material.

Workshops for writers/developers of distance learning materials are conducted by IDs to familiarise subject matter specialists with the range of technologies applicable to distance education and the most effective strategies to enhance achievement of the learning objectives. Workshops are followed up with individual discussions in the unit team which are more detailed and content specific.

The Materials Development Clerks (MDCs) are responsible for the facilitation of distance education materials through the production process from initial writing to dispatch to distance students. There is close liaison between the IDs, MDCs, Electronic Publishing Services staff and the subject matter specialists in unit teams. MDCs 'mark-up' materials to ensure they meet style and format specifications, and process material to be reproduced according to required copyright specifications. The quality of presentation is closely monitored and careful proofing and cross-checking is undertaken.

Detailed records are maintained as to the production status of individual pieces of material on a campus-wide database. A quality check of all printed material is undertaken before despatch to students. As more flexible delivery technologies are employed in the delivery of learning

packages closer liaison is required between design and development and other sections, especially Interactive Learning Services.

Interactive learning services

The Interactive Learning Services (ILS) section designs and delivers computer-based instructional materials for use in USQ units and by external clients. The section supports the USQ flexible delivery initiative with a service which covers design, development and evaluation. The development infrastructure incorporates highly skilled research and technical staff and the latest tools, hardware and software. The section provides a range of products and services which include: multimedia, computer-managed learning (CML) and network operations.

The USQ CML system provides students with learning activities and opportunities to test the effectiveness of their learning and obtain grades and feedback. It also enables students to monitor their own progress and knowledge which is especially useful in preparing for examinations. CML enables academic staff to develop banks of formative and summative test questions, to give immediate feedback to students, and to record and summarise the performance of each student. This service is now available via the WWW.

ILS is also responsible for the development of multimedia courseware which can be delivered using floppy disk, CD-ROM or Intranet/Internet. In addition to creating such new materials, ILS focuses on adding value to existing educational materials. For example, delivering existing print, video and audio based unit materials using new delivery formats such as CD-ROM or Internet/Intranet or other delivery platforms as they become widely available. For these reasons, USQ ensures that content is maintained in a flexible format and independent of the medium by which it will be delivered.

Although USQ invests a great deal of effort in the design and development of courseware, the increasing diversity of students means that resources must also be devoted to the provision of a range of student support services through Outreach.

Outreach student support services

The Outreach Services section manages the Regional Liaison Officer (RLO) Network, organises teleconferencing tutorials, residential schools and provides an efficient and effective student contact system.

The regional support network provides administrative and pastoral support to students in regional areas. The network consists of 26 RLOs in 21 regions throughout Eastern Australia. The RLOs are appointed to work part-time from home and are provided with an answering machine, notebook computer and printer. Regular communications with Outreach Services staff via electronic mail or telephone and an annual seminar ensure the RLOs are well trained and informed to offer support and advice to regional students.

All student enquiries received in Outreach Services are recorded, monitored and reported on a database. Student enquiries are received by telephone, fax or email directly from external students or via the RLO network. Over 50% of student enquiries relate to administrative matters and can be answered immediately by section staff. Queries of an academic nature which need to be directed to a lecturer are recorded and monitored to ensure a fast turnaround. Outreach Services also maintains an electronic noticeboard which provides up-to-date information for students on the Internet to access at any time. Information on unit troubleshooters, residential schools, telephone tutorials and general information is available in this electronic form.

Further, the Outreach Services section has four studios equipped for teleconferencing. Audio, audiographic and video tutorials provide direct contact between groups of students in regional study centres and the lecturer on-campus. Student attendance at the tutorials is voluntary and all costs are incurred by the DEC. The audio tutorials are scheduled at 5pm, 6pm and 7pm, Monday to Thursday nights. Multiple connections can be made to any or all of the 41 Open Learning Centres throughout Queensland, and in Lismore and Canberra. Students unable to participate in tutorials can receive a copy of an audiotape of the telephone tutorial or

borrow a videotape of the audiographics tutorial. For those units with very small enrolments, the lecturer can record an audiotape which is posted to all students enrolled in the unit.

The section also organises the residential school requirements of the faculties. The majority of residential schools are voluntary. Distance education students have the opportunity to attend campus for face-to-face lectures and tutorials, use of the facilities and to meet staff and other students. A residential school book is included in the study package and provides all the information students require to attend, i.e. timetables, unit information, registration, accommodation etc. Various informal social functions are organised to ensure that the residential school is an enjoyable social, as well as learning experience.

Concluding comment

The strategic move to become a dual mode institution in 1977 has meant that during the past twenty years, USQ has evolved into a University, which is regional, flexible and international (<http://www.usq.edu.au>). Further, the adoption and subsequent institutionalisation of a multi-disciplinary approach to courseware development has provided an appropriate platform for USQ to move quickly and effectively into online delivery. Indeed USQ's Graduate Certificate in Open and Distance Learning has been described as 'State-of-the-art in international delivery, curriculum content and form' (IDP, 1996), and was recently selected as part of a 'Best Practice Showcase' to coincide with the Meeting of the Commonwealth Ministers of Education in Botswana, July 1997. Details of the GradCert (ODL) course and certain aspects of the courseware are available for perusal online at the following URL (<http://www.usq.edu.au/material/course/us59>). In retrospect, the USQ experience of distance education over the past twenty years tends to support the validity of the claim made in a 1997 UNESCO document that in the future, all universities will, to some degree, become dual mode as a result of the growing influence of internet-based delivery of education and training.

'Lok Siksha Samsad' (Council for People's Education)

**A distance education model developed by
Rabindranath Tagore in Visva-Bharati University,
Santiniketan, West Bengal, India.**

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In 1901, Tagore started a school in Santiniketan named 'Brahmacharyashram' which was different from contemporary formal schools in colonial Bengal. Its objectives were primarily based on the principles of 'Tapovana' (Learning centres in the hermitages of ancient India) and curriculum was framed to foster the all round development of children, bodily and mental. In 1921 the 'Visva-Bharati' emerged as a natural outcome of the educational endeavours in Santiniketan. According to Tagore, Visva-Bharati would be a meeting place for East and West, unimpeded by the diversities of culture, religion, nationality and the like, and at the same time, a centre of Indian culture and cultures of the East. As a true University, it would not only propagate knowledge among its students, adding a scientific temper to the surrounding villages, it would also generate knowledge to emancipate Man from the bondages of superstition, parochialism, communalism, and casteism caused mostly by illiteracy and ignorance.

With such lofty ideals and, of course, some specific objectives in view, the functioning of Visva-Bharati gathered momentum, and carved out a prestigious niche in the complex edifice of Indian education. This was thanks to the galaxy of scholars assembled there from many parts of India and abroad, and the able stewardship of an educationalist like Tagore.

Tagore went on expressing his thoughts on education, its cognitive and affective dimensions, its anticipated role in a developing society, and the defects of the system through which it was being presented to the people. Throughout his educational experiments in Santiniketan, he attempted to implement a balanced curriculum by elaborating methodological exercises to develop: creative learning; the teachers' role; the preparation and compilation of reading materials; and students' motivation and participation.

In his lectures and writings he perceptively assessed the role played by the then traditional universities - particularly the University of Calcutta

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