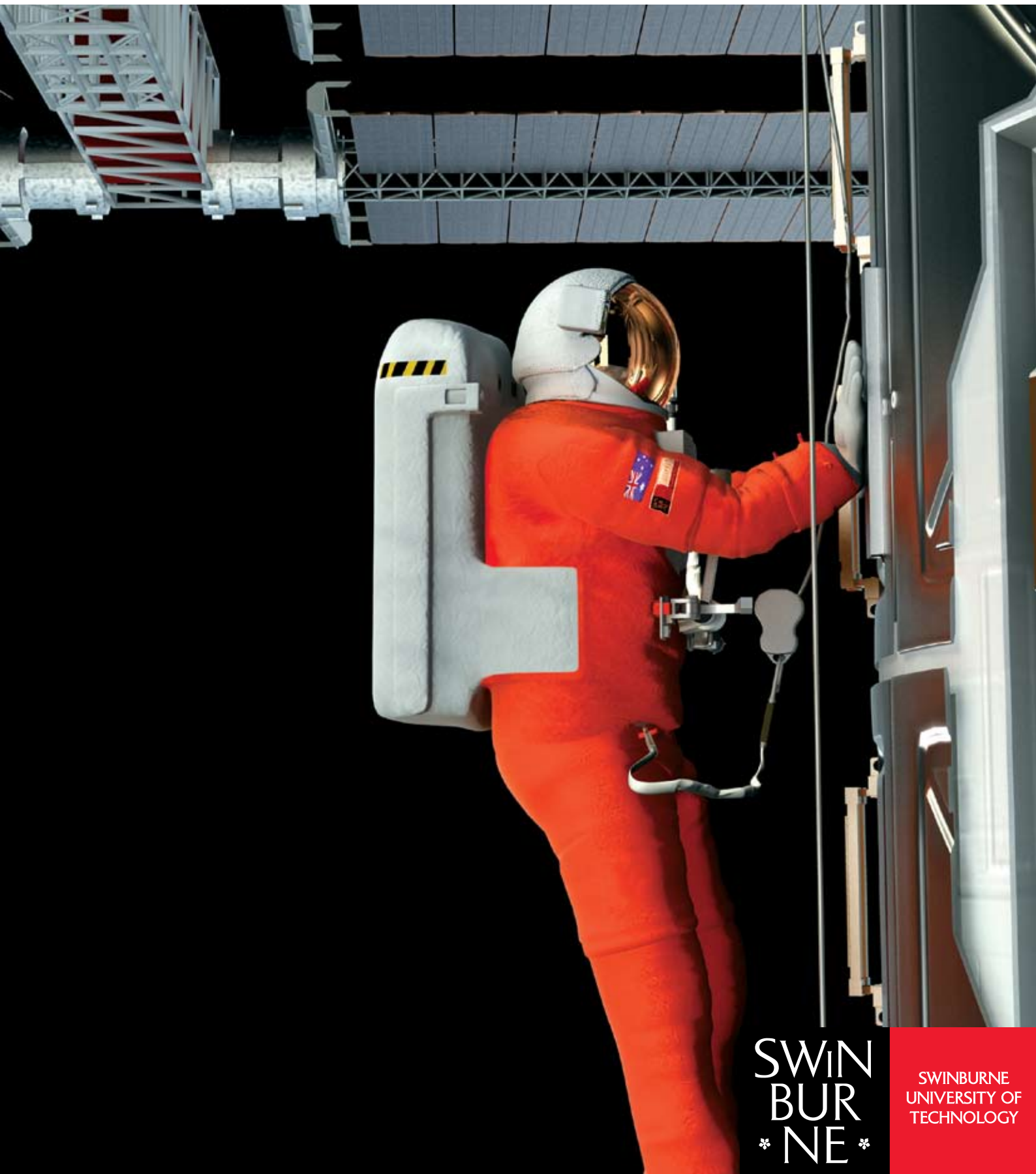


Annual Report 2005



SWIN
BUR
NE

SWINBURNE
UNIVERSITY OF
TECHNOLOGY

Contents

Transmission letter	1
From the Vice-Chancellor	2

Organisational profile

The Coat of Arms	7
Objectives	7
Relevant Minister	8
Nature and range of services	8
Teaching divisions	8
Governance	10
Council	10
Members of Swinburne Council 2005	11
Risk management	14
Profiles of senior executives	17
Swinburne at a glance	18
Financial Key Performance Indicators (KPIs)	19

2005 Organisational performance

Flexible in learning & teaching	20
Focused in research	24
Engaged with industry and community	30
International in outlook	34
Intersectoral in approach	40
Entrepreneurial in endeavours	44
Committed to sustainability	46

Statutory and financial reporting

Refer companion volume

April 2006

The Hon Lynne Kosky MLA
Minister for Education and Training
State Parliament of Victoria
Spring Street
Melbourne 3000

Dear Minister

It gives us great pleasure to submit the 2005 Annual Report, including the Report of Operations and the Audited Financial Statements for Swinburne University of Technology, in accordance with the *Financial Management Act 1994*.

The Annual Report was approved by Council at its meeting on 3 April 2006.

Yours sincerely



Professor Ian Young
Vice-Chancellor and President



Mr Bill Scales
Chancellor



Hawthorn Campus

John Street Hawthorn
Victoria 3122 Australia

PO Box 218 Hawthorn
Victoria 3122 Australia

Telephone +61 3 9214 8000

Facsimile +61 3 9819 5454

www.swinburne.edu.au

ABN 13 628 586 699
CRICOS Provider 00111D

From the Vice-Chancellor

Swinburne continued to strengthen its performance in 2005 as a provider of high-quality, career-oriented education and focused research, both in Australia and internationally. Some highlights of the year are outlined on the following pages.



Professor Ian Young, Vice-Chancellor



Development and dissemination of Statement of Direction 2015

The University's Executive Group developed and released *Statement of Direction 2015* during 2005, outlining a medium-term vision for the University and its stakeholders. This vision sees Swinburne staff and students as: *entrepreneurial in their endeavours; international in outlook; and intersectoral in approach.*

Through these characteristics, Swinburne will become increasingly: *flexible in learning and teaching; focused in research; and engaged with industry and the community.* This vision is underpinned by a commitment to a *sustainable Swinburne*. The *Statement of Direction 2015* is available at: <http://www.swinburne.edu.au/chance/vc/documents/statement2015.doc>

Outstanding performance in the Learning and Teaching Performance Fund rankings

Swinburne performed extremely well in the Australian Government's Learning and Teaching Performance Fund rankings. The University was ranked in the top tier, coming fourth in the nation for learning and teaching quality, and second of the eight Victorian universities. These rankings are a measure of student progression rates, success in finding employment post-graduation, and overall satisfaction with teaching and course quality – all key performance indicators for any university. As a result, Swinburne received \$3.852M in additional money from the Learning and Teaching Performance Fund. This funding will be used to enhance and build teaching quality across the University.

Notable achievement in research

Highlights of Swinburne's 2005 research program included:

- establishing two Australian Research Council "Centre of Excellence" partnerships
- winning Australian Research Council Linkage Grants totalling \$1.92 million, as well as three Linkage (Infrastructure, Equipment and Facilities) grants
- winning eleven Australian Research Council Discovery grants totalling \$3.52 million
- receiving in excess of \$15 million for selected industry-relevant research projects through the Victorian Government's Science, Technology & Innovation Grants scheme
- launching a Visiting Professor Scheme to attract high profile international researchers to the University

As well, Swinburne's Higher Education Division undertook a demanding review of its research activity, as part of the University's preparation for the Australian Government's Research Quality Framework (RQF) assessment process. Through this review, Swinburne identified a set of seven very strong "Tier 1" research centres. Further information on these is available on page 26 of the Annual Report, and at: <http://www.swin.edu.au/research/welcome.htm>

Appointment of a new Chancellor

The University appointed Mr Bill Scales AO as Chancellor. Mr Scales has had a distinguished career in the public and private sector and has a strong commitment to the provision of education to young people. Mr Scales succeeds Dr Douglas Mitchell, who contributed significantly to the shaping and development of Swinburne following his appointment in 2002.



Mr Bill Scales AO, Chancellor

From the Vice-Chancellor (continued)

Significant improvements to campus facilities

The majority of work on the \$90 million Wakefield Street development on the Hawthorn campus was completed during 2005. This very successful development incorporates student accommodation, University office space, retail and rental office space, and parking. As well, the Atrium Project was a significant accomplishment at Hawthorn in 2005. The Atrium spans the space between the BA Building and the Library, and its steel and modified co-polymer structure is the first of its type in Australia.

At Prahran, the National Institute of Circus Arts (NICA) commenced the construction of its training and performance venue, while at Wantirna the State Government made funding available for the detailed design planning for a new headquarters for the National Centre for Sustainability.

Offshore, at Swinburne's Sarawak campus, an agreement was signed to enable the construction of a new campus and student accommodation centre. The University's expansion into Sarawak has been welcomed very warmly by the State Government of Sarawak.

Strengthened engagement with industry and the wider community

During 2005 the University established a new unit called Swinburne Industry Solutions, combining the roles of the Office of Industry Liaison, the Industry Consulting Services Unit and the Continuing Education Unit. The new unit will provide a focal point – a 'one-stop-shop' – for the development, promotion and coordination of the University's industry links in research, training and consultancy.

Membership of the European Consortium of Innovative Universities

Swinburne became the first Australian University to be invited to join the European Consortium of Innovative Universities (ECIU). Established in 1997, the exclusive consortium originally brought together ten of Europe's most innovative universities to form a new network and to share and build on their successes as entrepreneurial institutions. Membership of the ECIU will enable Swinburne to share ideas and expertise with other member universities, and to benchmark various aspects of its performance against organisations with similar missions and values.

Establishment of a Sustainability Covenant

During 2005, Swinburne's National Centre for Sustainability signed the first 'sustainability covenant' developed by an Australian university, working in partnership with EPA Victoria. This covenant reinforces the commitment to sustainability articulated in the University's *Statement of Direction 2015*.

Strong financial performance

As in the preceding years, Swinburne's financial results were pleasing in 2005. Within the parent entity, both the TAFE and Higher Education Divisions continued to deliver financial performance in line with sectoral standards. This was particularly satisfying given that, as a result of slow growth in fee-paying student numbers, it was necessary during 2005 to take appropriate actions to achieve expenditure reductions of the order of 2% of the budget. All staff are to be congratulated on their acceptance of this process, and their ability and willingness to deliver required operational outcomes without exceeding revised expenditure levels. As a result, there were no major changes or factors that affected the achievement of the University's operational objectives in 2005.

During the year a new Campus Master Plan was adopted and the aligned Capital Management Plan approved. This resulted in the commencement of transformational capital works to the order of \$87m during 2006 – 09, of which approximately \$38m will be sourced from accumulated reserves.

Swinburne's investment policies were also reviewed with the aim of better maintaining the real value of the financial assets. A decision was made to outsource the investment function to the Victorian Funds Management Corporation within a balanced portfolio, except for the \$38m to be held in enhanced cash products to meet the short term capital development requirements.

Executive appointments

A number of key staffing appointments were made in 2005. Associate Professor Margaret Mazzolini was appointed as Deputy Head, Higher Education Division. This role will be performed concurrently with her role as Director, Curriculum Development. Professor John Beynon, from the University of Sheffield, was appointed to the position of Dean, Faculty of Engineering & Industrial Sciences. Professor Beynon brings with him an outstanding background in research, teaching, industry interaction and senior administration. Mr Jeffrey Smart was appointed as Director, Swinburne International, Ms Louise Palmer was appointed as Executive Director, Educational Development, TAFE and Ms Helen Sabell was appointed as Director, Swinburne Industry Solutions.

Vice-Chancellor's Excellence Awards

Vice-Chancellor's Excellence Awards were awarded in various categories during 2005, as follows. Further details are available at: http://www.swinburne.edu.au/corporate/spq/excellence_awards_winners2005.html

Vice-Chancellor's Research Award

Professor Ryszard Kowalczyk, Faculty of Information & Communication Technologies

Vice-Chancellor's Early Career Research Awards

Dr Greg Murray, Faculty of Life & Social Sciences

Dr Raphael Phan, Swinburne Sarawak

Vice-Chancellor's Community Engagement Awards

Anne Langworthy, Centre for Regional Development, Lilydale

Sharon Rice, Regional Learning Networks Unit, TAFE

Vice-Chancellor's Intersectoral Collaboration Award

The Aviation Team (Joey Anca, Ken Barnes, John Bibo, Peter Bruce, Stephen Fankhauser, Diane Noel & Bruce Rogers) from the Faculty of Engineering & Industrial Sciences and the TAFE School of Engineering

Vice-Chancellor's Internationalisation Award

Laura Hougaz, Faculty of Business & Enterprise

Vice-Chancellor's Innovation Award

The First Stop Team (Trevor Bayley, Penny Corser-Hatten, Jill Slater) Regional Learning Networks Unit, TAFE

Certificates of Commendation

Student Services Team and Faculty Managers Group (Darren Cunningham, Michelle Goddard, Helen Kalaboukas, Helen Smirnios & Sumita Verma)

'Ask George' Project Team (Ray Chan, Dinesh Chandran, Bronnie Coutts, Marilyn Doughty, Siu-Ching Fong, Jan McAdam, Nikolina Kilibarda, Chez Higgins, Jodie Klooster, Aviva Minc, Dianne Sharwood, Veronica van Wessem & Travis Vinen)

Vice-Chancellor's Entrepreneurship Award

Swinburne Spaceworks Team, (Paul Bourke, Christopher Fluke, Evan Hallein, Andrew Jameson & Russell Scott) Centre for Astrophysics & Supercomputing, Faculty of Information & Communication Technologies

Certificate of Commendation

John Doyle, Department of Hospitality & Tourism, TAFE

Vice-Chancellor's Teaching Award – TAFE

Lizzy Eapen, School of Engineering

Frans de Bruijn, School of Engineering

Gregory Dickman, School of Business & eCommerce

Vice-Chancellor's Teaching Awards – Higher Education

Catherine Lang, Faculty of Information & Communication Technologies

Diane Robbie, Learning & Teaching Support Unit

Glenda Ballantyne, Swinburne Lilydale

Josie Arnold, Swinburne Lilydale

Marylou Molphy, Faculty of Life & Social Sciences

Faculty of Design Multimedia Team (Stephen Huxley, Nicole Wragg, Bill Trikojus, James Marshall & Natalie Ebenreuter)

Certificates of Commendation

Bruce Calway, Swinburne Lilydale

Faculty of Design 'Communication Design' Team (Ray Graham, Margaret Woodward, Nick Wright, Lynette Zeeng, Tony Elliott, Tony Ward, Nanette Carter, Michael Hall & Neal Haslem)

Organisational profile

The 1992 proclamation of the *Swinburne University of Technology Act* by the Parliament of Victoria marked not only recognition of Swinburne's distinguished history, but the beginning of a new period of growth and innovation. From its establishment in 1908 in Melbourne's eastern suburbs at Hawthorn, through mergers with Prahran Institute of TAFE in 1992 and Eastern Institute of TAFE in 1998, Swinburne has grown from being a local provider of technical education into a multi-disciplinary, multi-campus provider of education, training and research of national and international significance.

Swinburne was established as the Eastern Suburbs Technical College by the Honorable George Swinburne, a former Mayor of Hawthorn and member of the Parliament of Victoria. The first students were enrolled in 1909, when classes began in carpentry, plumbing and blacksmithing. In 1913, the institution changed its name to the Swinburne Technical College.

Swinburne Council was given power to grant bachelor degrees in the 1970s, with the first of these awarded at a conferring ceremony held on Thursday, 21 May 1981 at the Camberwell Civic Centre. Subsequently, Swinburne University of Technology was proclaimed on 1 July 1992. Noted Australian businessman, Mr Richard Pratt, was installed as Swinburne's Foundation Chancellor on 15 March 1993, with Professor J. G. Wallace the inaugural Vice-Chancellor.

The coat of arms

Swinburne holds a unique position among educational institutions in Australia in the link that persists between it, the founder and his family. The conferring of a modification of the family's coat of arms preserves and strengthens that link.

The arms: the basic colours of red and white, and the cinquefoils charged on the shield, commemorate the arms of the Swinburne family. The four Mulletts in the Cross symbolise the Southern Cross.

The crest: the demi-Boar and the cinquefoil perpetuate the Swinburne connection; the book is symbolic of learning.

The motto: the College of Arms' translation of the motto is "Achievement through learning".

Objectives

The University's objects and functions are detailed in Section 6 of the Swinburne University of Technology Act:

- (a) the development of an institution with excellence in teaching, training, scholarship, research, consultancy, community service and other educational services and products, with emphasis on technology and its development, impact and application,
- (b) the provision of a multi-level system of post-secondary education programs relevant to the needs of the community covering a range of fields and levels from basic trade to post-doctoral studies with provision for recognition of prior learning and flexibility of transition between programs,
- (c) the provision of high quality educational, research, residential, commercial, cultural, social, recreational, sporting and other facilities,
- (d) the advancement of knowledge and its practical application by research and other means, the dissemination by various means of the outcomes of research and the commercial exploitation of the results of such research,
- (e) the participation in commercial ventures and activities,
- (f) the fostering of the general welfare and development of all enrolled students,
- (g) the conferring of prescribed degrees and the granting of prescribed diplomas, certificates and other awards,
- (h) the provision of opportunities for development and further training for staff of the University,
- (i) the development and provision of educational, cultural, professional, technical and vocational services to the community and in particular the fostering of participation in a university of technology of persons living or working in the outer eastern region of Melbourne,
- (j) the provision of programs, products and services in ways that reflect the principles of equity and social justice,
- (k) the maintenance of close interaction with industry and the community and the development of associations or agreements with any educational, commercial, governmental or other institution,
- (l) the enhancement through the development of knowledge and skills of the ability to shape technology, social and economic processes and to recognise, understand and take account of the ethical, environmental and other implications of such processes,
- (m) the conduct of teaching, research, consultancy and development activities within and outside Australia,
- (n) generally, the development and operation of a university providing appropriate and accessible academic and other programs, courses of study, educational products and research activity such as the Council considers necessary for the attainment of the foregoing in Victoria and elsewhere.

A copy of the Act is available at the following website: http://www.austlii.edu.au/au/legis/vic/consol_act/suota1992422/

7

Organisational profile (continued)

Relevant Minister

Swinburne University was established under the *Swinburne University of Technology Act* 1992. The relevant Minister in 2005 was the Victorian Minister for Education and Training.

For funding purposes and some aspects of strategic planning, the relevant Minister in 2005 was the Federal Minister for Education, Science and Training.

Nature and range of services

As a dual-sector, multi-campus educational institution, Swinburne offers a range of programs from apprenticeships to PhDs across the broad fields of:

- applied sciences
- business
- design
- engineering
- multimedia
- information technology and communications
- psychology and social sciences
- performing arts
- humanities

The University operates across six campuses in Australia – Croydon, Hawthorn, Healesville, Lilydale, Prahran and Wantirna – and at one international campus, in Kuching, Sarawak, Malaysia.

Swinburne provides career oriented education and is strongly committed to focused research. Its robust technology base and effective links with industry are supported by a number of cutting-edge, internationally recognised research centres. Learning and Teaching is a strategic priority, reflecting Swinburne's commitment to Life Long Learning.

Industry-based learning (IBL)

programs are a feature of Swinburne undergraduate programs, reflecting their applied vocational emphasis and industry relevance. Swinburne was a pioneer of IBL, which places students directly in industry for vocational employment as an integral part of the course structure.

As one of Australia's leading intersectoral universities, Swinburne continues to create new approaches to integration between higher education and TAFE. The concept of Pathways has a high profile at Swinburne, and is seen as one of the institution's strengths.

Pathways allow students to move between TAFE and higher education, or TAFE based VCE studies into TAFE programs. Movement between higher education degrees and TAFE studies is also possible, and likely to increase in the future. A number of credit transfer arrangements for credit in higher education courses based on TAFE study are also in place and regularly reviewed. Pathways and credit transfer provide students with more flexibility and increased opportunities to complete tertiary qualifications.

Swinburne also offers dual qualifications that enable students to enrol in both TAFE and higher education courses at the same time. Through the use of cross-credits, students can attain a balance of theoretical and vocational learning during the course.

Teaching Divisions

Swinburne has two teaching sectors under the control of the Council: Higher Education and TAFE. There are two higher education divisions, and one TAFE division, with each headed by a Deputy Vice-Chancellor. However, late in 2005 a decision was taken to merge the two higher education divisions.

Programs offered in the Higher Education sector include undergraduate degrees, graduate certificates, graduate diplomas, masters (by research and coursework), professional doctorates, and PhDs. The Academic Board oversees higher education academic matters, including quality assurance matters.

The TAFE sector offers courses at professional, para-professional and technical levels covering advanced diploma, diploma, certificate, apprenticeship, VCE, access and graduate certificate qualifications. A number of specialist courses are also provided for industry and the community. Academic issues are overseen by the Board of TAFE Studies.

Higher Education Divisions

Hawthorn/Prahran

<http://www.swin.edu.au/hed>

There are five faculties within the Division offering a range of undergraduate and postgraduate coursework and research programs focused around the themes of: professional engineering; information technology; business innovation and management; design; multimedia; and health and human services. The five faculties are:

- Faculty of Business and Enterprise
- Faculty of Design
- Faculty of Engineering and Industrial Sciences
- Faculty of Information and Communication Technologies
- Faculty of Life and Social Sciences

In addition, the University has the National Institute of Circus Arts (NICA), which conducts both TAFE and higher education level courses.

Lilydale

<http://www.ld.swin.edu.au/>

Within the context of the University's mission, Swinburne Lilydale's mission is to:

- inspire and assist individuals to develop their capabilities to the highest potential for personal growth and fulfilment, and for effective participation in the community, and
- advance, and to further the application of, knowledge and understanding for the benefit of society.

Swinburne Lilydale offers degree and other undergraduate and postgraduate programs in Business, Social Science and Applied Science. Major studies are available in economics, management, human resource management, information technology, accounting, computing, enterprise management, marketing, psychology, sociology, media and tourism. As noted earlier, late in 2005 a decision was taken to merge the two higher education divisions.

TAFE Division

<http://www.tafe.swin.edu.au/>

Swinburne's TAFE Division is a major provider of technical and vocational education in business, engineering, industrial science, social science, arts and community services.

There are four teaching schools in the TAFE Division:

- School of Arts, Hospitality and Sciences
- School of Business and eCommerce
- School of Engineering
- School of Social Sciences

TAFE at Swinburne also includes the Educational Development Group and the Strategic and Business Development Group.

Programs are delivered off campus and through outreach, in the workplace and on campus at the Hawthorn, Healesville, Lilydale, Croydon, Prahran and Wantirna campuses.

Corporate groups

Corporate groups provide a range of services to support the University's educational mission.

Resources Group

http://www.swin.edu.au/corporate/ovp_resources/

The Resources Group provides strategic and executive management of the physical, human, and information resources of the University through the following departments:

- Facilities and Services
- Human Resources
- Information Resources
- Information Technology Services
- Security

Student Affairs Group

http://www.swin.edu.au/corporate/student_affairs/

The Student Affairs Group leads and manages the activities of a number of departments focused on meeting the needs of students (prospective, current and past) and on supporting teaching units:

- Alumni and Development
- Careers and Employment
- Marketing
- Student Recruitment
- Student Operations
- Student Services
- Swinburne Press
- University Secretariat

Organisational profile (continued)

The Pro Vice-Chancellor, International coordinates and leads the development of the University's international operations.

<http://www.swin.edu.au/chance/international/>

The Pro Vice-Chancellor, Research coordinates the University's research function and industry links, and leads the Graduate Research School and Office of Research and Graduate Studies. <http://www.swin.edu.au/research/welcome.htm>

Governance

<http://www.swin.edu.au/chance/GovernIntro.htm>

Swinburne is committed to implementing best practice in organisational governance. A review of the University's governance framework was completed in 2003, with recommendations implemented in 2004. Improvements included:

- more systematic follow-up of Council decisions through watch lists and action lists required for Council and all committees
- reform of procedure for nominating members of Council committees
- various improvements to governance-related statutes and regulations
- progressing University compliance with National Protocols on University Governance, and hence payment of 2.5% increase in operating grant approved in November 2004

Council

Deriving its powers from the Swinburne University of Technology Act (1992), the Council is the governing body of the University and has responsibility for the direction and superintendence of the University. The Act also allows the Council to make statutes relating to "all matters relating to the organisation, management and good government of the University..."

In a general sense, Council acts on behalf of the community in overseeing the affairs of the University and, as such, is accountable to the community. As the governing authority, the University Council accepts particular responsibilities such as:

- ensuring that long term and short term planning is undertaken, endorsed and implemented
- establishing proper authority and accounting for expenditure, and assessing the effectiveness with which resources are used
- making such delegations as will enhance Swinburne's efficiency without diminishing the responsibility of Council
- overseeing the maintenance and enhancement of the quality of teaching, research and learning within Swinburne

Council's role focuses upon policy and strategic issues concerning the University. It receives specialist advice through a series of committees designated to carry out certain functions.

Chancellery

The Chancellery comprises the offices of the Vice-Chancellor, the Deputy Vice-Chancellors, the Pro Vice-Chancellors, and the Vice-Presidents. The Council Secretariat, Finance Department, Strategic Planning & Quality Unit, Internal Audit and Swinburne Legal are also part of the Chancellery.

The Chancellery, responsible to the University Council, has a range of individual and collective responsibilities and is concerned with policy development and matters affecting the University as a whole. Its principal functions include strategy development and strategic planning of the University, the distribution of resources to meet both operational and strategic requirements, the monitoring of progress towards the achievement of institutional objectives and ensuring an effective interface between the University, State and Federal Governments, business, industry and the wider community.

Members of Swinburne Council 2005

External Members					
Category of Membership	Name	Expertise (as appropriate)	Other Boards	Qualifications, Honours and Awards	Years of Service
Ex Officio	Mr B (Bill) SCALES (Chancellor) (from 1 Oct 05)	Senior management, telecommunications and automotive sectors, public administration	Port of Melbourne Corporation (Chair); Australian Safety & Compensation Council (Chair); Safety, Rehabilitation & Compensation Commission Previously: Secretary, Department of Premier & Cabinet, Victoria; Chair & CEO, Productivity Commission; Chair & CEO, Automotive Industry Authority	BEC (Mon), AO	1
Appointed by the Governor-in-Council	Ms K (Kathy) BOWLEN	Media	Australian Sustainable Industry Research Centre	BA (SUT)	3
	M D J (David) EYNON	TAFE experience and industrial relations	Previously: Victorian TAFE Association (President); Outer Eastern Institute of TAFE	BEC (Monash), MA (Melb)	8
	Ms H (Heather) GRAY	Superannuation, trusts and commercial law	La Trobe University Law School Advisory Board	BA (Hons), LLB (Hons)	6
	Mr D (David) LOADER	Secondary education management	ICA Independent Colleges of Australia	BSc (Hons), Dip Ed, MEd (Syd) James Darling Medal, Centenary Medal	1
	Dr S (Stephen) van der MYE	General management, banking & financial services, mining and mineral processing, infrastructure and utilities	Bank of Cyprus; Queensland Paulownia Forests; Previously: Western Power Corporation; Warmambool Co-operative Society; Association of Power Exchanges; NEMMCO; QNI; Queensland Generation Corporation; Council of University of Southern Queensland (including Deputy Chancellor and Acting Chancellor); Queensland Dairy Authority	BComm (Hons), PhD (UNSW), FCPA, FAICD, FCIS, FAIM, FFSIA	1
	Ms K (Kathleen) TOWNSEND	Public administration, executive recruitment	Previously: Melbourne Port Corporation; Oxfam CAA; Ethical Investment Trust Fund (Chair); VECCI; Melbourne Girls College (President)	BA, DipEd, MEdStud (Monash)	1
Appointed by the Minister for Tertiary Education and Training	Ms J (Jan) TREWHELLA	Public administration, VET sector		BA (Hons) (ANU)	2
Appointed by the University Council	Mr T W (Trevor) BROWN (Deputy Chancellor)	Chartered accountant – financial expertise	Swinburne Ltd, Swinburne Ventures Ltd; Swinburne Sarawak Sdn Bhd; Swinburne Sarawak Holdings Sdn Bhd; Warstegar Pty Ltd & Warstegar Investments Pty Ltd.	FCA	15
	Mr B (Ben) COHEN (from 1 Sep 05)	Business management, accountancy	cvMail; Quantum Change Consultants; Bureau Veritas Quality International Certification Council; Previously: CPA Australia; Methodist Ladies College; Potter Warburg; Elders Finance	BComm (Hons) (UNSW), FCPA	1
	Mr R G (Robert) HODGES	Senior management, International engineering	Previously: Ingersoll Rand Australia Ltd; Ingersoll Rand Superannuation Pty. Ltd.; Nanjing Ingersoll-Rand Compressor Co.Ltd (PRC); Outer Eastern Institute of TAFE	DipEng (Aero) (RMIT)	7
	Ms J (Judith) KING (resigned 30 Jun 05)	Business management	Northern Territory Power and Water Corporation; Federation Square Management Ltd; Information City Victoria (Chair); National Ageing Research Institute; Australian Volunteers International Previously: AXA Health; Melbourne Water Corporation; Citipower Ltd, Citadel Securix; MITS Ltd	BA (Murdoch), FAICD	13
	Mr S (Sam) LIPSKI	Humanities, social services and media	State Library of Victoria (President)	BA (Melb), AM	11
	Mr D (Doug) WATSON	Senior management, banking, finance, investment banking & international sectors	Yarra Valley Grammar School (Deputy Chair); Combined Schools Superannuation Fund (trustee); Design Institute of Australia (CEO). Previously: Institute of Chartered Secretaries (Australian President); Box Hill Hospital; Outer Eastern Institute of TAFE; Esanda LtdANZ Trustees Ltd	DipMS (London), FCIS, FAICD, FAIBF	8
Internal Members					
Ex Officio Vice-Chancellor	Professor I (Ian) YOUNG		Swinburne Limited; Swinburne Sarawak Holdings Sdn Bhd; Swinburne Graduate School of Integrative Medicine Pty Ltd; Business-Higher Education Round Table; Open Universities Australia Pty Ltd; Victorian Partnership for Advanced Computing	BE (Hons), MEngSc, PhD (James Cook), FIEAust, FTSE	3
Ex Officio Chair of the Academic Board	Professor H (Helmut) LUECKENHAUSEN	Higher education programs	International Craft Design Association; Craft Australia; Design Institute of Australia	GradDip (Industrial Design) (RMIT), DipEd (Hawthorn), MDA, AADM	8
Ex Officio Chair of the Board of TAFE Studies	Mr C (Carlo) de MARTINIS (1 Jan 05 – 20 Jun 05)	TAFE programs		BSc (Hons), MSc, DipEd, BEd, GradDip Occupational Hygiene, Dip Frontline Management, Cert IV in Assessment & Workplace Training	2
Ex Officio Chair of the Board of TAFE Studies	Ms L (Louise) PALMER (20 Jun 05 –)	TAFE programs		GradCertAppSci (Instructional Design) (Deakin), DipTeach (UniSA), (Ass Dip Arts (Health Ed) (WACAE), CertDentalTher (SA School of Dental Therapy)	1
Elected by Higher Education Academic Staff	Mr G (Geoff) LEONARD	Higher Education staff	National Tertiary Education Union (Swinburne Branch President, State Executive, National Council)	BSc(Melb), MACS	4
Elected by TAFE Academic Staff	Mr D (Duncan) STREET	TAFE staff		BA (Hons) (Otago), DipEd (Christchurch)	4
Elected by General Staff	Ms V (Vicki) RYAN	General staff		Grad Dip Acc (SUT)	1
Elected by Higher Education Students	Mr J (Jason) NGAM	Student representation	Previously: Swinburne Student Union		1
Elected by TAFE Students	Ms S (Samantha) DESMOND	Student representation	Previously: Swinburne Student Union		2

SWINBURNE UNIVERSITY OF TECHNOLOGY > ANNUAL REPORT 2005

Organisational profile (continued)

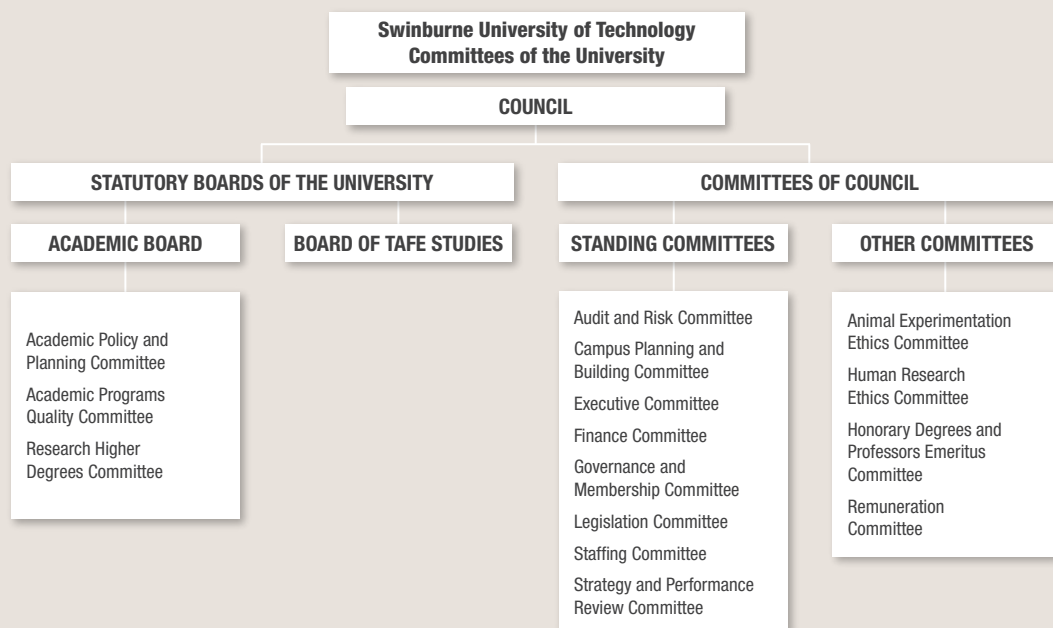
Attendance record of Council members

Member	Meetings Held	Meetings Eligible to Attend	Meetings Attended
Bill Scales	8	2	2
Kathy Bowlen	8	8	6
Trevor Brown	8	8	8
Ben Cohen	8	2	1
Samantha Desmond	8	8	8
David Eynon	8	8	7
Heather Gray	8	8	7
Robert Hodges	8	8	8
Judith King	8	4	4
Sam Lipski	8	8	3
Geoff Leonard	8	8	7
David Loader	8	7	6
Helmut Lueckenhausen	8	8	6
Carlo de Marttnis	8	3	3
Doug Mitchell	8	1	1
Stephen van der Mye	8	8	7
Jason Ngam	8	8	8
Louise Palmer	8	5	5
Vicki Ryan	8	8	7
Duncan Street	8	8	6
Kathleen Townsend	8	8	6
Jan Trehwella	8	8	7
Douglas Watson	8	8	6
Ian Young	8	8	8

Professional development for Council members

Council members have access to a number of professional development programs, provided by the University and by external organisations. Programs include:

- briefing seminars for Council members from all Victorian universities organised by the Office of Higher Education in the Victorian Department of Education and Training
- a Swinburne Induction Program for Council Members, which covers roles and responsibilities of members, conflicts of role and of interest, the University governance framework and management structure, Council committees, meeting procedures, University strategic directions and finances
- support for members (via Council Secretariat Budget) to attend conferences, seminars and other activities (4 members attended the National Conference on University Governance, 6-7 October 2005)
- special topic presentations at Council meetings
- special briefing sessions on major issues outside meetings as required
- attendance at relevance conferences and activities, and campus tours



Council boards and committees

Two statutory boards, the Academic Board and the Board of TAFE Studies, report to Council. Both Boards oversee academic programs of study in the Higher Education and TAFE sectors, respectively.

Academic Board

The powers of Academic Board, as set down in Section 30 of the *Swinburne University of Technology Act*, are as follows. The Academic Board:

- may discuss and submit to the Council an opinion on any matter relating to the prescribed higher education programs of the University and, in particular, may make to the Council such recommendations as it thinks proper with respect to instruction, studies, discipline, examinations, assessments, research, degrees and diplomas in those programs of the University
- must report to the Council on all matters submitted to it by the Council for report
- has such other powers and duties as are conferred or imposed upon it by this Act or by the Statutes or Regulations
- subject to this Act and, except as otherwise prescribed by the Statutes and Regulations, may regulate its own proceedings

Board of TAFE Studies

The powers of the Board of TAFE Studies, as set down in Section 35 of the *Swinburne University of Technology Act*, are as follows:

- academic oversight of prescribed programs and courses of study in technical and further education
- providing advice to the Council and the Board of Technical and Further Education on:
 - (i) the conduct and content of those programs and courses
 - (ii) the awarding of certificates and diplomas in technical and further education

Standing committees of Council

Audit and Risk Committee: Chancellor, Ms J King (Chair to 31 July 2005), Mr S van der Mye (Chair from 1 August 2005), Mr B Cohen, Mr T Brown

Assists Council in fulfilling its governance responsibilities and assures the quality and reliability of financial information presented by the University. The Committee establishes and oversees conformance with ethical standards and legal compliance, ensures adequate systems of internal control and risk management operate, reviews the annual internal audit plan and monitors relationships with the Office of the Auditor-General. It also appoints and

liaises with the University's external auditor and receives, reviews and acts on reports from this auditor.

Campus Planning & Building Committee:

Chancellor, Mr D Eynon (Chair), Mr R Hodges, Professor I Young, Mr G Leonard, Mr J Ngam

Advises Council on major matters affecting campus planning and buildings and on overall planning for the physical development of the University's campuses. The Committee considers strategic directions associated with campus planning and building development and identified associated financial, physical and human resource implications.

Executive Committee:

Chancellor, Mr T Brown, Professor I Young, Ms K Bowlen, Mr D Eynon, Professor H Lueckenhausen, Ms S Desmond

Meets to consider matters that require an immediate decision between Council meetings. The Committee advises the Chancellor and Vice-Chancellor on matters which should not be delayed until the next Council meeting, and acts for Council between Council meetings in considering and acting upon matters referred to it by Council.

13

Organisational profile (continued)

Finance Committee: Chancellor, Mr T Brown (Chair), Mr D Watson, Mr D Eynon, Professor I Young, Mr D Street, Mr J Ngam

Has specific authority to monitor and approve the financial performance of the University. The Committee approves detailed budgets for all divisions of the University, considers and approves the University's annual accounts, and acts on behalf of the university in areas of delegated authority.

Governance and Membership

Committee: Chancellor, Mr T Brown, Ms J Trehwella, Ms J King (Chair), Professor H Lueckenhausen

Reviews the governance framework of the University, makes recommendations to Council on the appointment of wider community members of Council, ensuring an appropriate range of skills, experience and expertise, and succession planning.

Honorary Degrees & Professors

Emeritus Committee: Chancellor (Chair), Mr T Brown, Professor I Young, Professor H Lueckenhausen, Professor K Pratt

Receives and considers submissions for the conferring of honorary degrees and the title of Professor Emeritus. The Committee meets as required to consider these nominations to the Vice-Chancellor and makes recommendations to Council.

Legislation Committee: Chancellor, Ms H Gray (Chair), Professor I Young, Mr G Leonard, Ms S Desmond

Advises Council on legislation matters affecting the University. The Committee meets as required and also considers matters referred to it by Council or the Vice-Chancellor.

Staffing Committee: Chancellor, Ms K Bowlen (Chair), Mr S Lipski, Mr K Townsend, Professor I Young, Ms V Ryan, Mr J Ngam

Advises Council on human resources issues including staffing and other appropriate policies, and considers strategic directions in the staffing area.

Strategy and Performance Review

Committee: (Chancellor, Mr T Brown, Professor H Lueckenhausen, Ms L Palmer, Mr D Watson (Chair), Ms K Bowlen, Mr R Hodges, Ms S Desmond)

Provides input into development of the University's mission, strategic directions, profile and positioning, and monitors the performance of the University against planning objectives.

Ad hoc committees of Council

Remuneration Committee:

Chancellor (Chair), Mr T Brown, Ms K Bowlen, Mr D Eynon)

Meets twice a year to discuss the performance and remuneration of the Vice-Chancellor.

Ethics Committees are organised through the Office of Research and Graduate Studies and provide a report for Council's information.

Risk management

Council has adopted a statement of its primary responsibilities, which includes: "...ensure systems of control, risk management, compliance and accountability are in place, including for controlled entities."

Responsibility for oversight of University commercial operations and ventures rests with Finance Committee, on behalf of Council. Finance Committee requires business plans to be submitted for all such operations and ventures according to a standard proforma. Where a related company is to be established, Finance Committee requires officers of the University and of the company to ensure that key issues have been considered, due diligence undertaken and procedures put in place. The constitution of a company and business plan must be approved by Finance Committee, as well as any subsequent changes.

In entering into any venture or establishing any company, the Finance Committee seeks to ensure that public assets are protected, and the control of company assets is determined. Finance Committee establishes an approved process for the appointment of directors to related companies, and ensures that University appointees have appropriate financial expertise.

Finance Committee also maintains a list of companies, ventures and major projects that require monitoring. Designated individuals are required to submit progress reports based on a pro forma at designated intervals. Onward reporting to Council is normally via the Finance Committee Report to Council.

The University implemented its *Risk Management Policy and Principles* in July 2001. The policy, based on the Australian/New Zealand Standard for Risk Management (AS/NZ 4360:1995), provides a comprehensive approach to identifying and managing risk within units. Under it, all unit managers have responsibility for the ongoing consideration, assessment and appropriate action to address risk in their areas of responsibility including:

- occupational health and safety
- employee relations
- financial operations
- emergency management
- insurance protection

A Risk Management Framework supports this responsibility through deployment of a number of approaches including:

- development or review of policies for specific areas
- risk management workshop program
- ongoing internal audit

The following table details the nature and extent of risk for associates and commercial ventures with a capital investment in excess of \$100,000, or turnover exceeding \$500,000, and those associates and ventures which have no limited liability.

Associate/Commercial Venture	% Ownership	Principal Objects	Level of Financial Risk (High, Medium, Low)	Level of Reputational Risk (High, Medium, Low)
Swinburne Limited	100	Property holding company, for the land and buildings leased to the University.	Low	Low
BR (Vic)	100	To utilise the neuroinformatic database of the Brain Resource Company via a franchise relationship for neuroscience research and to provide a service of reports to clinical practitioners.	Low	Low
Swinburne Ventures Limited	100	Trustee for the Swinburne Intellectual Property Trust.	Low	Low
National Institute of Circus Arts Limited	100	To promote and enhance the cultural development of the Australian arts industry by providing high-level quality training in circus arts and physical theatre.	Low	Low
Genos Pty Ltd	24	A vehicle to market the Swinburne University Emotional Intelligence Test (SUEIT).	Low	Low
Nanotechnology Company Limited by Guarantee	25	To conduct development and demonstration projects using nanotechnologies.	Low	Low

University Companies and Controlled Entities

BR (Vic) Pty Ltd
 Graduate School of Integrative Medicine
 National Institute of Circus Arts Limited
 Swinburne Limited
 Swinburne Students Amenities Association
 Swinburne Ventures Ltd

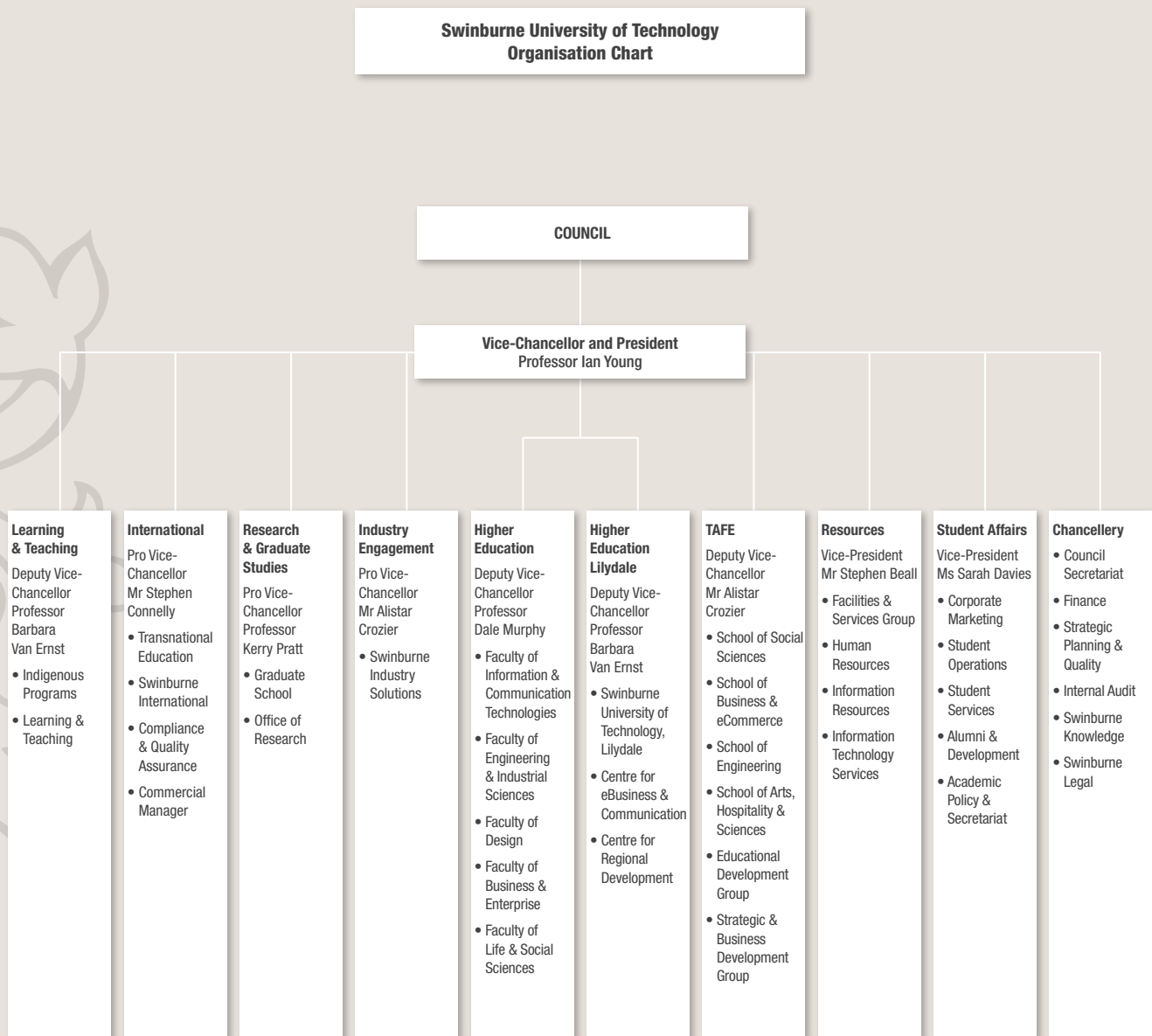
Statutes and Regulations Amended in 2005

Statute 13	Degrees/Diplomas/Certificates and Other Awards – Procedures
Statute 19	Regulation Making Power
Regulation 23	Academic Dress

Additions	
Regulation 24.1	Swinburne Sports Foundation
Regulation 24.2	Sports Without Borders Foundation

SWINBURN UNIVERSITY OF TECHNOLOGY > ANNUAL REPORT 2005

Organisational profile (continued)



Profiles of senior executives



Chancellor

Mr Bill Scales AO, BEc (Mon)

The Chancellor is the titular and ceremonial head of the University.

The Chancellor is also the Chair of the University's governing body, the Council.



Vice-Chancellor

Professor Ian Young, BE (Hons), MEngSc, PhD (JCU), FIEAust, CPEng, FTSE

The Vice-Chancellor is the Chief Executive Officer and President of the University, responsible and accountable to Council for all aspects of the efficient and effective operation of Swinburne.

The Deputy Vice-Chancellors in charge of each Division are responsible for the leadership, planning and management of all academic and administrative activities within their Divisions.



Deputy Vice-Chancellor, Higher Education Division (Hawthorn and Prahran)

Professor Dale Murphy, BE, MSc, DPhil (Oxon), MAIP, FIEAust, CPEng



Deputy Vice-Chancellor, Swinburne Lilydale and Learning & Teaching

Professor Barbara van Ernst, AM, BA, BEd (Mon), MEd (LaTrobe), PhD (LaTrobe), TPTC, MACE



Deputy Vice-Chancellor, TAFE Division

Mr Alistair Crozier, BSc (Hons) (London), PGCE (Camb), ARCS



Pro Vice-Chancellor, Academic

Professor David Booth
BSc (Hons) (Syd), MSc (Mon), PhD (Melb) DSc (DLSU) (honoris causa), FAIP, MIEEE, MAOS



Pro Vice-Chancellor, International

Mr Stephen Connelly, BA (Hons), DipEd, MA (Mon), PostGradDipMan (MBS)
The Pro Vice-Chancellor (International) is responsible for the leadership, planning and coordination of the University's international activity and for the operations of Swinburne International.



Pro Vice-Chancellor, Research

Professor Kerry Pratt, BE (Chem), PhD (Melb), FTSE, FICHE, FIEAust, CEng, FRACI, CChem
The Pro Vice-Chancellor, Research, is responsible for the leadership, planning and co-ordination of the University's research function, and for the office of Research and Graduate Studies.



Vice-President, Resources Mr Stephen Beall

The Vice-President Resources has responsibility for the major administrative and operational areas of Facilities and Services Group, Human Resources, Information Resources, Information Technology Services, and Security.



Vice-President, Student Affairs Ms Sarah Davies

BA (Hons) (Leic), Dip. Marketing (CIM), FAMI, CPM.
The Vice-President, Student Affairs is responsible for relations with the community, and all services that support students, including Alumni and Development, Careers and Employment, Marketing, Student Recruitment, Student Operations, Student Services, Swinburne Press and the University Secretariat.

SWINBURNE UNIVERSITY OF TECHNOLOGY > ANNUAL REPORT 2005

Swinburne at a glance

Statistical information (TAFE)

In 2005, the Swinburne TAFE Division achieved all of the 'student contact hour' (SCH) and 'headcount' training delivery targets in its Performance and Funding Agreement (PFA) with the State Government. Strong growth in apprenticeship and traineeship enrolments (L profile) were attributable, in part, to the establishment of an Apprenticeship/Traineeship Training Centre. Swinburne was also one of only four Victorian TAFE Institutes to achieve its age-related targets.

- L profile (apprenticeships and traineeships)
– 105.9% of the PFA target
- P profile ('mainstream' government-funded training)
– 100.4% of the PFA target
- Q profile ('special' government-funded training)
– 104.0% of the PFA target
- Z99 profile (youth pathways)
– 104.0% of the PFA target
- PRK profile (Indigenous programs)
– 140.0% of the PFA target
- VCAL – 80 students (c/f PFA headcount target of 65 students)
- training delivery to people aged < 25 years
– 116.0% of PFA target
- training delivery to people aged > 44 years
– 130.0% of PFA target
- Managed Individual Pathways (MIPs) delivery
– 104.0% of PFA target

Students 2003 – 2005, TAFE Sector	2003	2004	2005
Total student enrolments (persons)	39,199	41,350	32,986
Total student contact hours (SCH)	8,725,121	9,771,388	8,459,035
Total student load (EFTS)	12,118	13,571	11,749
By funding source			
State	8,434	8,625	8,695
Domestic fee-paying	2,290	3,795	2,078
Overseas fee-paying	885	779	684
Other ¹	175	124	200
Short Courses	334	248	92
By Level of Course (EFTS)			
Postgraduate Coursework Awards	71	81	88
Diploma	4,947	4,706	4,516
Certificate	6,105	7,856	6,285
Other ²	661	680	660
Short Courses	334	248	200
By School (EFTS) excludes short courses			
Arts, Hospitality & Sciences	1,740	1,892	1,984
Business & eCommerce	4,065	3,109	2,936
Engineering	2,541	2,286	2,281
Social Sciences	2,929	3,010	3,068
Other ³	843	3,274	1,480
By Campus (EFTS) excludes short courses			
Croydon	1,615	1,527	1,557
Hawthorn	3,218	3,051	3,036
Healesville	56	39	143
Lilydale	872	901	779
Prahran	2,683	2,790	2,658
Wantirna	1,659	1,595	1,697
Other ⁴	1,681	3,420	1,679
By Gender (EFTS) excludes short courses			
Female	5,777	6,605	5,592
Male	6,007	6,718	5,957
By Attendance (EFTS) excludes short courses			
Full-time	6,052	6,204	6,296
Part-time	20,016	24,551	17,350

¹ Includes interstate trainees and VET in VCE.

² Includes ELICOS, VCE, and non-certificate.

³ Includes Industry Consulting, Distance Education, ELICOS, NICA, Short Courses (Industry Consulting courses linked in schools in 2002/2003).

⁴ Includes workplace, distance education, outreach.

Statistical information (Higher Education)

Swinburne's Higher Education divisions achieved Commonwealth Grant Scheme (CGS) student load targets in 2005. The student load was 5,709 EFTSL (equivalent full time student load) – 107.3% of the target set (5,322 EFTSL).

Students 2003 – 2005, Higher Education sector	2003	2004	2005
Total Student Enrolments (persons)	14,757	14,907	14,958
Commencing Enrolments (persons) ¹	5,614	5,281	6,025
Total Student Load (EFTSL)	10,117	10,102	10,227
Commencing Load (EFTSL)	3,847	3,587	4,339
By funding source (EFTSL)			
DEST	6,157	6,003	5,918
Fee Paying Overseas	2,668	2,798	3,161
Fee Paying Local	1,292	1,301	1,148
By Level of Course (EFTSL)			
Postgraduate Research	386	375	456
Postgraduate Coursework	2,066	2,056	1,838
Bachelor Degree ²	7,665	7,671	7,933
By Division/Faculty (EFTSL)			
<i>Higher Education Hawthorn and Prahran</i>			
Business and Enterprise	1,834	1,919	2,313
Design	823	980	1,146
Engineering & Industrial Sciences	1,479	1,542	1,567
Information & Communication Technologies	2,382	2,026	1,670
Life and Social Sciences	1,900	1,885	1,905
Division Total	8,418	8,352	8,601
<i>Division of SUT at Lilydale</i>			
NICA			19
Learning and Teaching		11	7
By Campus (EFTSL)			
Hawthorn	7,596	7,383	7,096
Lilydale	1,698	1,739	1,600
Prahran	823	980	1,164
Malaysia (Sarawak)			368
By Gender (EFTSL)			
Female	4,035	4,006	4,152
Male	6,081	6,096	6,075
By Attendance Type (Persons)			
Full Time ³	7,574	7,496	7,472
Part Time	7,183	7,411	7,531

¹ Commencing after 31 August in previous year. ² Includes Bachelor Honours. ³ Full time = students undertaking an annual study load of 6 standard units or more. Note that data for students undertaking industry-based learning (IBL) are not included in the table.

Summary of financial results

Summary of financial results (parent entity)	2001 \$000	2002 \$000	2003 \$000	2004 \$000	2005 \$000
Net Assets	295,866	305,504	374,237	399,380	405,997
Operating Surplus (Deficit)	13,567	1,566	18,595	10,328	5,256
Overseas Students Revenue	29,639	34,148	43,237	46,378	43,779
Commonwealth Government Grants	55,219	56,335	62,746	61,995	65,664
State Government Grants	60,765	59,839	61,886	63,660	67,757
Summary of financial results (consolidated entity)	2001 \$000	2002 \$000	2003 \$000	2004 \$000	2005 \$000
Net Assets	343,688	356,063	429,623	465,224	472,662
Operating Surplus (Deficit)	15,042	1,869	19,537	16,413	5,925
Overseas Students Fee Revenue	29,639	35,648	43,237	46,378	43,779
Commonwealth Government Grants	56,755	57,775	64,106	69,625	67,419
State Government Grants	61,005	60,079	61,886	63,660	67,757
Financial key performance indicators (KPIs)	2001	2002	2003	2004	2005
No. of days expenditure covered by net liquid assets	43	42	82	79	63
Current ratio (current assets/current liabilities)	135.67%	152.59%	180.8%	147.2%	175.5%
Exposure to long-term debt (LT liabilities/total funds)	5.11%	4.66%	4.1%	6.6%	31.4%
Retention of reserves (surplus (deficit)/total income)	6.42%	0.80%	7.8%	6.4%	2.2%

Staffing

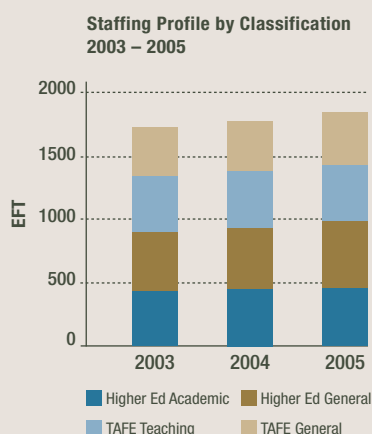
Staffing profile* by classification: teaching divisions

	2003	2004	2005**
Higher Education Divisions			
Academic	436	457	453
General	478	484	511
TAFE Division			
Teaching	440	443	437
General	378	389	418

* Equivalent Full-Time (EFT) staff: excludes casual and sessional staff.

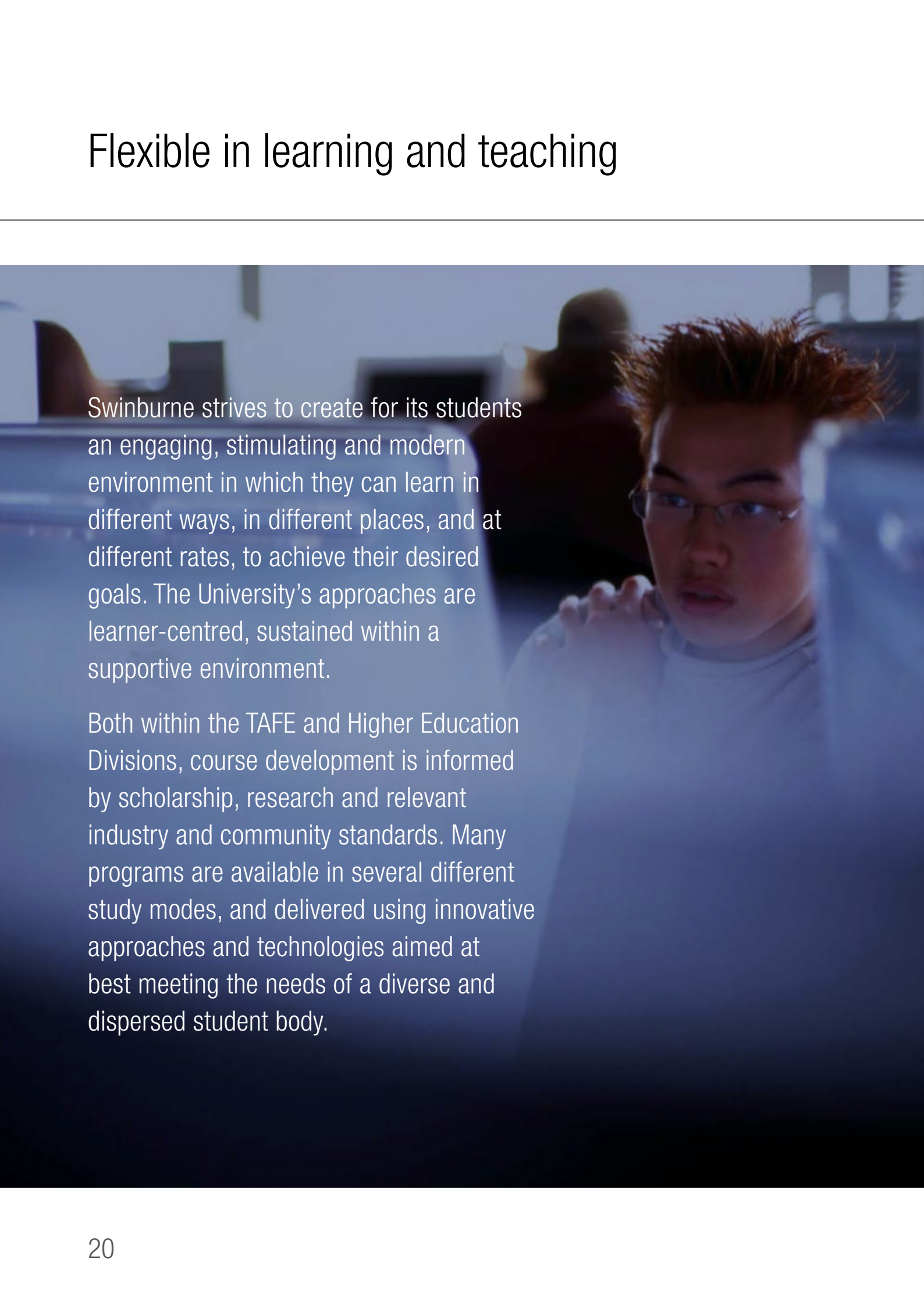
Chancery/Corporate staff allocated to Teaching Divisions in proportion to budget allocations. Data sources: OTTE (as at 31 December) and DEST (as at 31 March)

** The staffing increase in 2005 was mainly in the International Division and the corporate Student Operations area



19

Flexible in learning and teaching

A young man with glasses and spiky hair is looking intently at a screen in a classroom setting. The background is slightly blurred, showing other students and classroom equipment.

Swinburne strives to create for its students an engaging, stimulating and modern environment in which they can learn in different ways, in different places, and at different rates, to achieve their desired goals. The University's approaches are learner-centred, sustained within a supportive environment.

Both within the TAFE and Higher Education Divisions, course development is informed by scholarship, research and relevant industry and community standards. Many programs are available in several different study modes, and delivered using innovative approaches and technologies aimed at best meeting the needs of a diverse and dispersed student body.



Both the TAFE and Higher Education sectors at Swinburne emphasise 'experiential' learning – relevant, project-based activity that motivates effective learning and fosters highly portable employment skills such as teamwork, problem-solving, innovation and project management



Flexible in learning and teaching (continued)

Swinburne staff members provide high quality teaching that equips students with the knowledge, thinking and practical skills needed to operate within the international workplace. Moreover, the University's quality assurance and improvement processes ensure that Swinburne graduates are ready to meet the expectations of both industry and the wider community.

Within the TAFE Division, a diverse range of flexible delivery options are available to students. These options blend different delivery modes to meet the needs of specific learner groups. Program delivery often involves a mix of modes including off-campus, summer school, online, short courses, web-based communication, workplace assessment and recognition of prior learning (RPL). WebCT software provides a sound online environment for flexible learning. During 2005, the number of online learning resources available through WebCT more than doubled, and WebCT enrolments reached 30,000 for the first time.

The popularity of flexible delivery continues to grow in programs ranging from pre-apprenticeships to graduate certificates and graduate diplomas. For example, during 2005:

- training in disaster management was delivered via distance education to students in Thailand, Taiwan, the United States, Canada, Columbia and various Pacific islands, as well as to students in many parts of Australia
- there was increased demand for the Graduate Certificate of Business (Project Management), with a focus on using flexible project-based methods to develop strategic, analytical and business skills

- new online resources were developed to support flexible delivery of the *Certificate IV in Small Business Management*, the *Certificate IV in Financial Services* and the *Graduate Certificate of Business (Human Resource Management)*, specifically to meet the needs of students unable to attend scheduled sessions on-campus

Through a partnership between Swinburne's TAFE Department of Financial Services and the Victorian WorkCover Authority, 2005 saw a Certificate IV level program delivered flexibly to trainees across the workers compensation sector. This customised program was designed for workers moving to case management roles in the sector, and it is envisaged that other programs will be developed in collaboration with the WorkCover Authority during 2006.

Other flexible learning highlights for the TAFE Division in 2005 included the:

- establishment of an Apprenticeship & Traineeship Centre at the Croydon Campus, leading to strong growth in apprenticeship commencements
- development of new learning resources to support the development of literacy, numeracy and generic employment skills – as exemplified by “Where’s the Party At”, an equity ‘toolbox’ that incorporates a range of youth-centred, interactive online activities
- accreditation of a new Diploma of Sustainability program, accredited by the Victorian Qualifications Authority to be offered concurrently with other training programs

- highly successful introduction of the new Competitive Manufacturing Training Package, with more than sixty students enrolled

In 2005, Swinburne's Higher Education Division achieved considerable progress on its five-year Curriculum Framework Project. This initiative involves a process of curriculum renewal in six 'key curriculum areas' across all faculties and discipline areas. The six areas are:

- career orientated learning – improving students' career skills and employment prospects
- real-world learning – integrating real-world contexts with theory through classroom teaching
- widened learning opportunities – increasing flexibility, choice, acceleration and intersectoral opportunities in higher education programs
- learning for a changing world – aiding internationalisation of the Swinburne learning environment, and integration of an entrepreneurship and innovation emphasis together with an awareness of social difference and cultural diversity into students' learning opportunities
- pathways into research – providing research pathways and experience for undergraduate students
- learning to learn – reviewing current teaching practices and program structures plus approaches to orientation and transition, in order to encourage lifelong learning and to accommodate a range of student backgrounds and learning styles

Highlights of the Curriculum Framework Project in 2005 included completion of a targeted curriculum review process for sixty-eight undergraduate degree programs, and the development of Division-wide 'elective sequences' to provide complementary studies to broaden student career skills. As well, the commencement of special projects investigated effective assessment practices for real world learning, Honours as a pathway to research and strategies to improve student retention.

Other achievements in flexible learning and teaching during 2005 were the introduction of a more coordinated approach to student academic orientation, and the implementation of a new *Professional Certificate of University Teaching Practice*. In order to strengthen teaching standards, this qualification is integrated with Swinburne's *Graduate Certificate in Teaching & Learning*, and will assist all academic units to support the development of teaching expertise. Twenty academic staff completed units in the Graduate Certificate program in 2005.

Swinburne's Lilydale Division continued to expand its flexible learning and teaching activities during 2005, through its blossoming partnership with Open Universities Australia (OUA).

OUA is owned by seven Australian universities including Swinburne, and it describes itself in quite simple terms as 'a flexible way to get university education designed for people who don't have the time or desire to study on-campus'. In essence, it engages selected Australian higher education institutions to teach, via distance learning, approved units and courses of study.

Following the first thirteen enrolments in 2000, Lilydale's OUA enrolments increased by several hundred each year for the next three years. During 2005, however, the number almost doubled from 1,055 to 2,001.

In addition, the Lilydale Division commenced two flexible learning and teaching projects during 2005. One of these was aimed at optimising the flexibility of subject and program structures and content, while the other focused on assessment issues. Both projects are expected to be completed early in 2006.

Swinburne's Resources Group plays a major role in terms of Swinburne's drive to provide high quality education and training through flexible, student-centred delivery modes. Important initiatives undertaken by the corporate Facilities & Services, Information Technology Services and Information Resources units included:

- implementation during February 2005 of the *Supersearch* software, providing federated searching and linking of articles in databases – Swinburne was a leader in this project, joining with eleven other universities to facilitate acquisition of the software, but making much more use of it as a result of its early implementation and promotion by Information Resources staff
- establishment of "Late Lab" facilities at the Hawthorn Campus, in September 2005, providing 24 x 7 access for more than 1,000 TAFE and Higher Education students
- support through Information Technology Services of the WebCT and Blackboard learning management systems, combined with the deployment of a student portal scheme, wireless upgrades to all campuses, and a student notebook program negotiated with Acer to facilitate cost-effective access to notebook computers for Swinburne staff and students
- construction and refurbishment of major buildings infrastructure, designed specifically to cater for flexible delivery and to allow staff and students to study and work in a physical environment that is refreshed in appearance and technology

The Student Affairs Group also supported Swinburne's flexible delivery agenda in many ways. The Higher Education Support Act 2003 (HESA) and the Higher Education Information Management System (HEIMS) both took effect on 1 January 2005, and significant modifications were made to University systems and business processes in order to meet the Federal Government's new requirements. As well, 2005 saw significant progress on the development of a new student management system. Following successful completion of the initial stages of system design and development up until August 2005, the project was fundamentally reviewed in October 2005 in order to ensure successful ongoing implementation during 2006 and 2007.

Within the Student Affairs Group, the Student Services and Careers & Employment Units worked to develop and implement focused career services and programs throughout 2005, in order to improve the ultimate employability of Swinburne's TAFE and Higher Education students. The industry and community relevance of Swinburne programs is also strengthened by the pivotal role played by the University Secretariat and statutory board structures which generate ongoing reviews of Swinburne's academic policies and procedures.

Flexible Learning and Teaching									
Performance Indicator (Higher Education Only)	2003			2004			2005		
	Swin	ATN	Aust	Swin	ATN	Aust	Swin	ATN	Aust
Overall Satisfaction (%) – all graduates	92.3	89.6	89.6	89.9	89.4	89.4	91.3	89.6	89.5
Good Teaching (%) – all graduates	84.7	79.2	81.3	83	79.2	81.5	84.2	81.2	82.1
Graduate Employability (%) – local undergraduates only	71.9	78.5	80.1	76.1	80.9	79.7	78.5	80.5	80.9

ATN = Australian Technology Network of Universities
Aust = All Australian Universities

SWINBURNE UNIVERSITY OF TECHNOLOGY > ANNUAL REPORT 2005

Focused in research

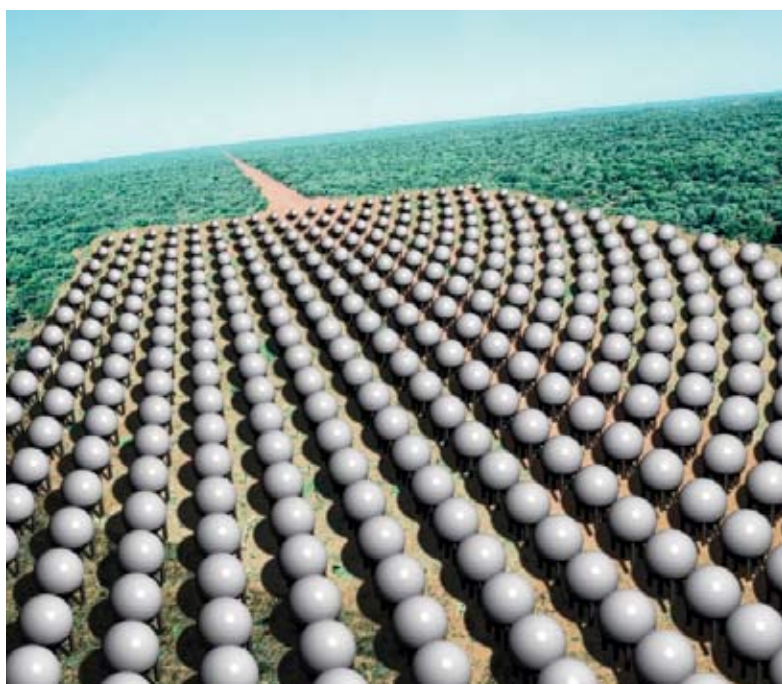
A close-up, low-angle shot of a person's face, partially obscured by a blue-tinted overlay. The person is looking through a telescope, which is held up to their eye. The telescope has a label that reads "CWHK 10X/18L". The background is dark and out of focus, suggesting an outdoor setting at night or in low light.

Swinburne's vision is to have a focused research base to deliver quality outcomes and high impact in several areas of strength. These areas are chosen to address the social issues and technologies of the 21st century, in keeping with national research priorities, and the University works to develop an international reputation for excellence within each one. Applied research with practical applications in industry and the community is a defining feature of Swinburne's research program, as is appropriate for a university of technology.



A water-soluble, biodegradable plastic for food packaging has been developed and produced in Australia by the CRC for International Food Manufacture & Packaging Science and Melbourne-based start-up company Plantic Technologies. Cadbury is using the product for its Milk Tray range of boxed chocolates, and Swinburne's Professor Greg Lonergan and Dr Ranjith Jayasekara are testing its biodegradability.

Swinburne is home to a supercomputer which breaks the 1 Teraflop barrier – one of two such machines in Australia and the only one in Victoria. Dedicated to astronomy and astrophysics, the Swinburne supercomputer is part of a project to design a US\$1 billion global radio-telescope that will provide science with an unprecedented view of the early universe before stars shone.



Swinburne's Dr Chris Fluke has designed and built a camera that films athletes in 3D scenarios that simulate real sport environments. The footage is used in training, skill development and strategy evaluation.



Focused in research (continued)

During 2005, Swinburne undertook a comprehensive review of its areas of research strength, in preparation for the introduction of the Federal Government's Research Quality Framework (RQF). Through this process, seven 'Tier 1' Research Centres were identified, along with six 'Tier 2' Research Centres, on the basis of their size, research reputation and impact history:

Tier 1 Research Centres

- Centre for Astrophysics & Supercomputing
- Centre for Atom Optics & Ultrafast Spectroscopy
- Centre for Microphotonics
- Industrial Research Institute Swinburne (IRIS)
- Institute for Social Research
- Brain Sciences Institute (BSI)
- Centre for Information Technology Research (CITR)

Tier 2 Research Centres

- Centre for Advanced Internet Architectures (CAIA)
- Business Work & Ageing Centre for Research
- Australian Centre for Emerging Technologies & Society (ACETS)
- Environment & Biotechnology Centre
- Centre for Molecular Simulation
- Centre for Sustainable Infrastructure

Swinburne intends to grow each of the Tier 1 centres into major, internationally competitive research groupings. To further this goal, the University will invest strategic initiative funding of approximately \$3m per year in high-profile staff appointments to them.

ARC Centres of Excellence

Australian Research Council (ARC) outcomes contribute greatly to the prestige of any Australian research institution, since these outcomes derive from independent peer review. Thus, the June 2005 announcement of the results of ARC Centre of Excellence applications was extremely pleasing, with Swinburne a core partner in two of the eleven successful bids – the Centre of Excellence for Coherent X-ray Science and the Centre of Excellence for Cultural and Media Industries. Swinburne is now a member of four ARC Centres of Excellence, and this is a great tribute to the researchers involved given that the Centres represent the pinnacle of ARC funding for outstanding research.

Overall, 2005 was a very strong year of achievement in research at Swinburne – probably the best ever, with new records set in relation to nearly all key performance indicators.

ARC Linkage Grants

In the first round of ARC Linkage Grants for 2005, nine of Swinburne's fourteen applications were successful. This represents a success rate of 64%, compared with the system average of 42.9%. In dollar terms, the total award for 2005 was approximately \$1.92m – a record for Swinburne.

ARC Discovery Grants

Swinburne's performance in the main 2005 round of ARC Discovery Grants was stellar – eleven grants (a new record) for a total of \$3.52m, and a success rate of 24.5% (equal to the national success rate). In 2001, the then Vice-Chancellor expressed the hope that Swinburne might attain the national success rate by 2007, so to have beaten that target by two years is very encouraging.

Swinburne ranked 17th nationally of Australian universities in terms of total ARC funding in 2005. The Discovery Grants included fellowships, of which Swinburne was awarded five Australian Postdoctoral Discovery Grants (APDs), the ninth highest nationally, as well as an Australian Research Fellowship. Swinburne also led three ARC Linkage (Infrastructure, Equipment and Facilities) applications, with a 100% success rate and funding of \$1.046m.

In summary, in 2005 Swinburne ranked nineteenth of Australian universities in total ARC funding – slightly behind RMIT and Curtin Universities (both approximately four times Swinburne's size) and ahead of longer established institutions such as Flinders, Latrobe, Deakin, Murdoch and James Cook Universities.

Science, Technology & Infrastructure Grants

Swinburne played a lead role in five successful bids made under the Victorian Government's 2005 Science, Technology Infrastructure (STI) Grants Scheme. These grants are strongly industry-focused, and the University's success is illustrative of its growing position in applied and industry-related research. The total funding won through these applications was \$15.8m, of which a significant portion is expected to flow to Swinburne. Our successful STI Grants in 2005 were as follows:

- Victorian Centre for Advanced Materials Manufacturing
- Small Scale Technology Cluster
- Advanced Processing and Innovative Foods Program
- Rapid Wood Forming for the Furniture Industry
- Biopharmaceutical Formulation and Finishing Sciences Centre

Total research income and research publications

Each year, Swinburne collects data on research income and publications for the previous year, and these data are reported to the Commonwealth Department of Education, Science & Training (DEST). For 2004, the total research income reported was \$11,891,901 – a 13% increase over the previous year and a new record. This result was largely due to increased success in winning National Competitive Grants (category 1) and Other Public Sector Funding (category 2). Funding was relatively flat in the Industry (category 3) and CRC (category 4) areas.

In regard to publications for 2004, Swinburne was able to report a total of 433.42 DEST points in 2005 – an increase of 18.44% on the previous year. While this was a good result, the increase was entirely in Category 2, Conference Presentations – journal publications, books and book chapters all declined. On the other hand, significant returns from the Lilydale Division and the Higher Education Division's Sarawak Campus were encouraging.

DEST Block Grant allocations

The provisional DEST Block Grant allocations for 2006 were announced recently. Again, Swinburne performed extremely well:

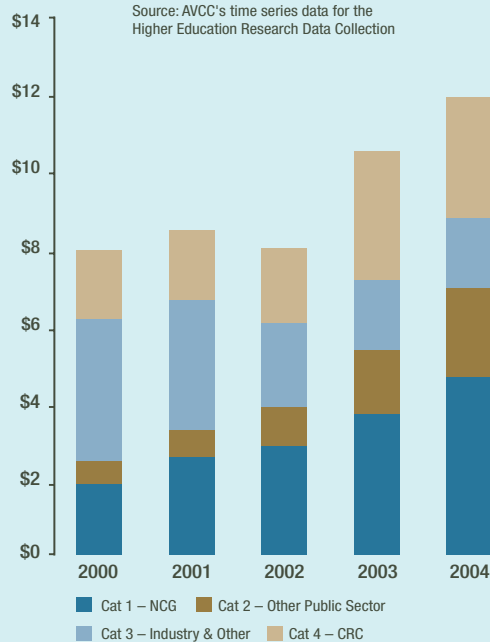
- Institutional Grants for 2006 – \$2,413,714 – an increase of 10.4% on grants for 2005
- Research Training Scheme Grants for 2006 – \$5,364,654 – an increase of 5.4% on grants for 2005
- Research Infrastructure Block Grants for 2006 – \$1,217,567 – an increase of 18.8% on grants for 2005

Overall, the total value of the DEST Block Grants for 2006 is \$8,995,935 – an increase of 8.4% (or \$696,646) over Block Grants for 2005. Given that this is a zero sum game, Swinburne increased its performance by 8.4% above the national average, following a 7.5% increase in 2005 allocations compared with 2004.

Millions

DEST Income Categories 1– 4

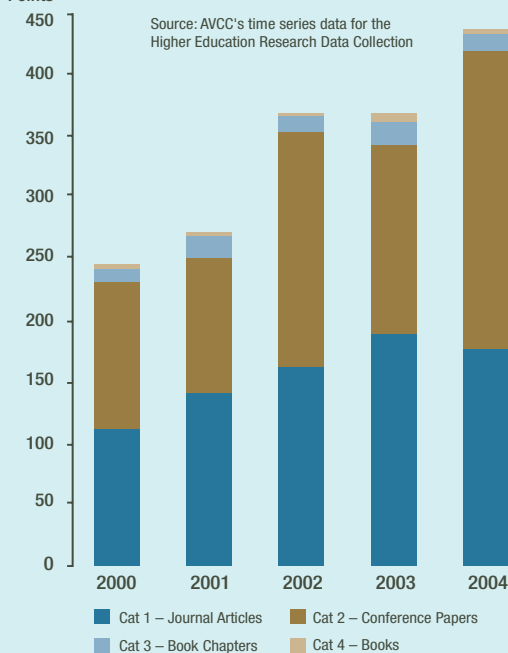
Source: AVCC's time series data for the Higher Education Research Data Collection



DEST Points

DEST Approved Publications

Source: AVCC's time series data for the Higher Education Research Data Collection



SWINBURN UNIVERSITY OF TECHNOLOGY > ANNUAL REPORT 2005

Focused in research (continued)

Notable achievements and events

During 2005, Swinburne's Board of Research developed and sponsored an innovative *Visiting Professor Scheme*. This Scheme provides financial assistance to enable prominent international academics to visit Swinburne research groups for short periods. Seven applications were funded under the Scheme, and this will result in visits by a number of very high-profile international researchers to Swinburne in 2006.

Several Swinburne researchers received accolades during 2005. Particularly significant were:

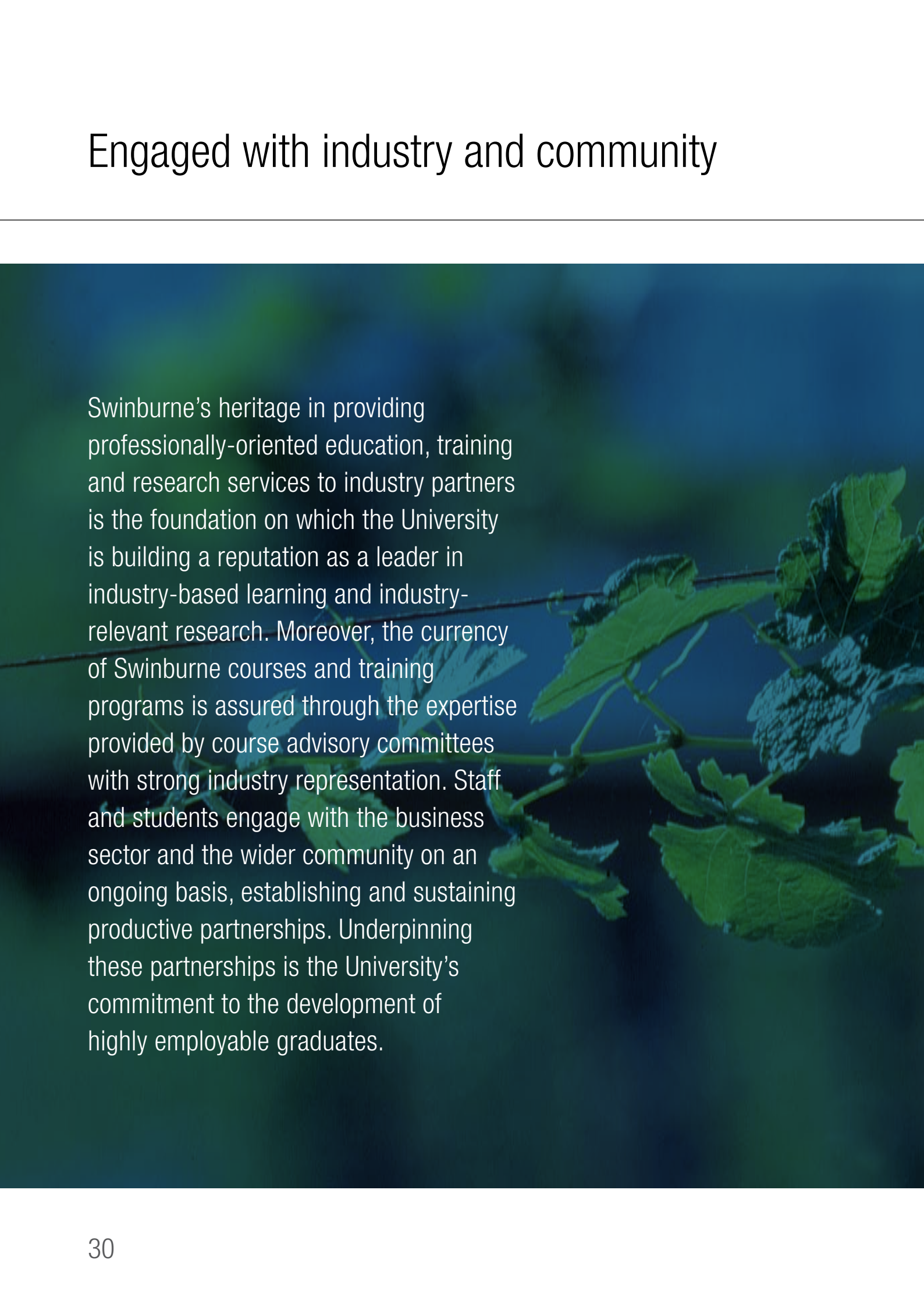
- the appointment of T Y Chen to the ARC College of Experts
- Peter Hannaford's involvement with the Nobel Prize selection and ceremony
- Erol Harvey's election to Fellowship of the Australian Academy of Technological Sciences and Engineering (Swinburne's fourth ATSE Fellow)

Other noteworthy achievements were:

- a well-attended Vice-Chancellor's Research Lecture given by Professor Manny Noakes of CSIRO Diet fame, and an equally successful Inaugural Professorial Lecture given by the Lilydale Division's Dr Josie Arnold
- a research seminar series introduced by the Faculty of Life & Social Sciences and called 'DataBlitz', with four speakers at each seminar and a period for questions from the audience
- revision of Swinburne's system of human research ethics administration
- special research grants for:
 - Grenville Armitage (\$110,000 from CISCO Systems USA)
 - David McKenzie (\$360,000 from the Federal Department of Family & Community Services)
 - Susan Moore, Mike Kyrios, Elizabeth Hardie, Christine Critchley, Nic Kambouropoulos, Naomi Crafti and Simone Buzwell (\$400,619 from the Department of Human Services)
 - Steven Tingay and collaborators Simon Ellingsen and John Dickey of the University of Tasmania and Tasso Tzioumis of the CSIRO Australia Telescope National Facility (\$185,000 for an ARC Special Research Initiative project to connect Australian radio telescopes to Australian supercomputers via high speed optical fibre networks)
 - Grant Devilly, with various collaborators (\$83,000 from the Telstra Community Development Grant Scheme and \$292,000 from the National Drug Law Enforcement Research Fund)
- David Mackenzie (\$305,000 from the South Australian Government, with Youth Development Australia and the Salvation Army)
- Geoffrey Chow (\$26,000 from various sources for research on the use of mobile computing devices in higher education)
- an increase in the higher degree by research load within Swinburne's Lilydale Division (from 5.5 to 18.25 EFTSU), with commensurate increases in the number of staff eligible to supervise higher degree by research students at co-ordinator level (from 10 to 12), and the number of staff contributing DEST-weighted research publications (from 13 to 15)
- the successful implementation of externally funded research projects within the TAFE Division on: training needs arising from the use of micro- and nano-technologies; competencies for sustainability; skill ecosystems; e-business skill requirements for the manufacturing sector; and workplace numeracy
- delivery and installation of version 2.0 of the ARROW software – the ARROW Project, funded by the Australian Government, has the goal of creating software and processes for online research repositories in Australia
- completion of a second consultancy for the State Library of NSW, developing guidelines for digitising images for local history collections
- a strengthened association with the Victorian Education and Research Network (VERN), with Swinburne becoming a shareholder during 2005 – VERN is deploying high speed optical fibre network across Victoria to support Victorian researchers and educators



Engaged with industry and community



Swinburne's heritage in providing professionally-oriented education, training and research services to industry partners is the foundation on which the University is building a reputation as a leader in industry-based learning and industry-relevant research. Moreover, the currency of Swinburne courses and training programs is assured through the expertise provided by course advisory committees with strong industry representation. Staff and students engage with the business sector and the wider community on an ongoing basis, establishing and sustaining productive partnerships. Underpinning these partnerships is the University's commitment to the development of highly employable graduates.

During December 2005, Swinburne's Corporate Marketing Group launched a new brand position for the University – *Let's get on with it*. The aim is to create a strong emotional resonance with prospective students, position Swinburne as an entrepreneurial university, and further differentiate the University from other providers. The new brand proposition should fortify Swinburne's existing rational brand position with key motivating emotional benefits, and better articulate the University's positioning.

In terms of industry engagement, another major initiative for the University during 2005 was the establishment of a new corporate unit called *Swinburne Industry Solutions*. As noted in the Vice-Chancellor's introductory remarks in this Report, the new unit provides a 'one-stop-shop' for industry in relation to the University's education, training, research and consultancy services.

For the TAFE Division, effective industry and community relationships are critical. Many such relationships were consolidated in 2005, and new ones were initiated. Swinburne's ability to deliver workplace training flexibly, to meet client needs, is the key to success. In summary, a total of 1,190,828 student contact hours (SCH) of training was delivered through government-funded profile hours and on a fee-for-service basis to a large number of different industry partners during 2005. The maturity (and diversity) of existing partnerships was exemplified by training delivery for:

- Australia Post – programs delivered nation-wide in electro-technology and transport and distribution, as well as the "Money for Keeps" program which involves personal finance training for 38,000 employees throughout Australia
- National Australia Bank – financial services training
- Victorian Department of Human Services – training in social housing and disability services
- Victorian Department of Communities – sport leadership training for young Indigenous people, in partnership with Indigenous agencies
- Hawker de Havilland – training in production engineering
- Victorian Institute of Sport – training for Sport Scholarship holders
- Various local government agencies – training in compliance, fraud control and prevention, and statutory investigation and enforcement

As well, a Young Indigenous Sport Leadership program was delivered to 24 participants aged 18–24 in partnership with the Department of Victorian Communities, VAEI, VAYSAR and VACSAL. The program was a Commonwealth Games Initiative.

The establishment of new partnerships in 2005 saw training provided for:

- Melbourne Theatre Company – workplace delivery for 30 full-time production workers, based on the Entertainment Training Package
- AIG (the American International Group, which includes the American Home Assurance Company which is the world's largest insurance company) – training for engineers working in insurance assessment, soon to expand to personnel working in regional Victoria, Queensland and Western Australia using WebCT, video-conferencing and other methods
- Parks Victoria – training and assessment services for rangers, field service officers and business personnel statewide
- Glen Eira Council – delivery of the Certificate III in Children's Services (Family Day Care) with zero attrition and successful completion of the course by all participants
- Indigenous Partnerships for Community Development, Training & Learning – governance training for Indigenous workers throughout Australia

Engaged with industry and community (continued)

In another major development during 2005, the Victorian WorkCover Authority and the Transport Accident Commission selected Swinburne to be an official 'partner in learning'. As well, the TAFE Division's Department of Child & Families Studies and Regional Learning Networks Unit advised the Victorian Aboriginal Child Care Agency on a range of Indigenous family welfare initiatives.

As ever, the Lilydale Division was very active in community engagement during 2005. The Division:

- conducted well-attended public seminars on learning difficulties, and on early learning and children's literacy
- commenced new research into the backgrounds and destinations of outer eastern tertiary students
- participated in another successful year of the Swinburne/Shire of Yarra Ranges *Growth and Development Partnership*, which incorporates the well-attended *Town and Gown Lecture Series*
- through the Centre for Regional Development, participated in the *Australian Universities as Sites of Citizenship and Civic Responsibility* project, which culminated in the report *Beyond Rhetoric: University-Community Engagement in Victoria*
- led or participated in a range of industry-based learning and work-integrated learning projects, as well as initiatives such as the VicHealth funded *Community Wellbeing Indicators Project*, the 2005 *Festival of Words*, the Victorian Agricultural Networks *Building the Relationship between Agriculture & Tourism* project, and the Department of Health Services funded – *Third Place Problem Gambling Project*

In 2005, Swinburne gained representation on the Committee of the Australian Universities Community Engagement Alliance and the Australian Consortium on Higher Education, Community Engagement and Social Responsibility. These memberships will serve to inform Swinburne's approach to community engagement University-wide. Also in 2005, the Lilydale Division's Industry and Community Engagement Committee set in train a review of its engagement activities, in order to develop a framework and priorities for further community and industry engagement. This is in line with the Division's view that engagement should be embedded within the core activities of teaching, learning and research.

Lilydale's growing art collection was augmented during 2005 by two sculptures on loan from their creators, *Blast* by Queensland artist Sebastian Di Mauro, and *Garden of Eden One* by Victorian sculptor Adrian Mauriks. As well, some 22 local businesses, individuals, and community and local government organisations sponsored 30 academic prizes and 3 scholarships in 2005. They were: Anderson and Associates; Brian Glynn Ford; HSBC Bank Australia Limited; Invicta Bus Group; Jem Partners; LexisNexis Butterworth; Max D McWilliam; McGraw-Hill Australia; Millar Merrigan; Mr James Sawyer; the Pratt Foundation; Roche Financial Planning Service; the Shire of Yarra Ranges; the Shire of Yarra Ranges Sustainability Group; Snap Printing; STM Business Partnership; SVS Management Services; Swinburne Lilydale Student Village; Upwey and District Community Bank; Whiteside Andrews; William Buck Chartered Accountants; and WiseInternet.

Among the Higher Education Division's 2005 achievements in industry and community engagement were:

- establishing an agreement with the Australian Defence Force to offer advanced standing in Swinburne distance programs to Defence personnel who have completed internally-accredited courses
- launching a training program in management, through the Global Entrepreneurship Project (GEM), in conjunction with Westpac Business Bank, to provide management skills for administrative staff
- strengthening and diversifying Swinburne's relationship with the City of Boroondara
- hosting the Second Melbourne Computing Education Conventicle MCEC 2005, with participation by representatives of more than 50 universities
- working with the Melbourne Community Foundation to offer a poetry award in honour of a past student who died during 2004

Swinburne's industry-based learning (IBL) program is an important component of the Higher Education Division's practical, work-oriented approach to course delivery. During 2005, plans to expand IBL delivery were developed through the Office of Industry Liaison, supported by new PR materials for employers, a re-developed IBL website, and new handbooks for IBL students and their supervisors. A new IBL Scholarship Program was also introduced during 2005, worth \$26,00-\$32,000 annually to participants, again supported by a range of marketing and implementation materials.

Industry-Based Learning (IBL) and other work-integrated learning statistics for 2005

Higher Education Hawthorn and Prahran	Number of students who undertook work placements	Number of degree programs	Number of IBL placements	Participating businesses
By Faculty				
Life & Social Sciences	75	13	76	51
Business & Enterprise	71	8	71	47
Information & Communication Technologies	133	11	133	58
Engineering & Industrial Sciences	99	12	103	54
Design	55	4	57	47
Sub-total	433	48	440	257
Higher Education Lilydale	50	4	50	40
TAFE	916			854
Total	1399	52	490	1151

Industry-Based Learning (IBL) and other work-integrated learning statistics 2003-2005

	Year	Higher Education Division	Swinburne Lilydale	TAFE Division*	Total
Number of students undertaking work placements	2003	458	52		510
	2004	384	41	483*	908
	2005	433	50	916	1399
Number of degree programs	2003	58	9		67
	2004	43	9		52
	2005	48	4		52
Participating businesses	2003	246	40		286
	2004	186	35	735*	956
	2005	257	40	854	1151

* TAFE Division data collected for the first time in 2004

Swinburne's Open Day came back on campus in 2005, following two years at the Royal Exhibition Centre. All six campuses opened their doors to the public, showcasing Swinburne courses including apprenticeships and other TAFE, undergraduate and postgraduate study options. Activities on offer included information sessions, performances, personality testing, and a virtual reality tour of the universe.


The Swinburne biennial Careers Advisers Seminar was conducted in March 2005, with close to 200 attendees. The Seminar included a plenary session highlighting Swinburne's strategic directions, selection criteria for students, new courses and workshops. As well, Swinburne organised or participated in a total of 131 school-based events and career nights/expos during the year, and there was an upsurge in the usage of recruitment-focused websites. The Tertiary Information Service event, hosted at the Lilydale campus in July over two days, attracted more than 2,000 Year 12 students from the 21 secondary schools in the surrounding area. Swinburne was also represented at 49 tertiary information service events, reaching over 33,000 VCE students.

Other achievements in industry and community engagement during 2005 included:

- signing a range of agreements with community organisations for library use and mutual assistance – the organisations included the Yarra Valley Winegrowers Association, Borderlands, Handspan Theatre, and the Union Internationale de la Marionette Australia (UNIMA)
- the appointment of the University Copyright Officer to the AVCC's five-person copyright advisory body, the IPSF Steering Committee
- presentation of papers on Swinburne's 'Next Generation Network' by the Director of Swinburne's Information Technology Services Unit, Mr Richard Constantine, to QUESTNet and the South Pacific Users Services Conference

SWINBURNE UNIVERSITY OF TECHNOLOGY > ANNUAL REPORT 2005

International in outlook



Swinburne's vision is to be an international university, with students from around the world preparing for work and further study in a global context. The University's staff will be, increasingly, members of a world-wide education community, and global perspectives will enrich the delivery of learning, teaching and research. In this way, Swinburne will continue to broaden its international perspective, benchmarking internationally and strengthening its global presence through effective trans-national partnerships.



International in outlook (continued)

2005 saw Swinburne establish an International Division. This involved an extensive review and reorganisation of the University's international structures, responsibilities and activities. The appointment of Stephen Connelly as Pro Vice-Chancellor (International) late in 2004 was followed by the appointments of Jeffrey Smart to the position of Director, Swinburne International in May 2005, and Jim Garton to the position of Director, Transnational Education in October 2005. The new International Division now comprises:

- the Office of the Pro Vice-Chancellor (International), with overall responsibility for the University's internationalisation policy and strategy development
- Swinburne International, responsible for the recruitment, admission and support of international students who study at Swinburne's Australian campuses
- the Office of Transnational Education, responsible for programs and partnerships outside Australia
- the Education Abroad Office, which manages Swinburne's student exchange program

The 2005 review of Swinburne's international activities identified a sound basis for growth, but also issues that were compromising the University's competitive position. The basis for growth lay in the international student complement (nearly a quarter of all higher education enrolments) and the potential offered by Swinburne's campus in Sarawak, Malaysia. The problems were manifest in a decline in 2004 enrolments of commencing students onshore (compared with national growth of 7%), outmoded IT systems, organisational structures and business practices, and issues associated with the University's transnational education systems.

The implementation of solutions to these problems commenced during 2005, but it will take some time before Swinburne's international performance reaches its full potential. Notwithstanding, staff concerned with the internationalisation effort in general, and staff of the International Division in particular, are to be congratulated for their positive attitude and work during a year of very considerable change.

Highlights included:

- developing an International Strategic Plan
- introducing more efficient processes to manage student recruitment, admission and support, outsourcing the management of international student enquiries and centralising procedures for the initiation, implementation and management of transnational education programs
- establishing an International Programs Committee to advise the Pro Vice-Chancellor (International) on international matters including agreements, student exchange, programs for overseas students on- and offshore, assessment of business planning and risk management issues, and matters of academic concern with respect to transnational education program proposals
- appointing David Booth from the Higher Education Division as Pro Vice-Chancellor (Sarawak), and CEO of Swinburne's Sarawak Campus
- redesigning and upgrading the ICT network at Swinburne's Sarawak Campus, with high speed ADSL and dedicated VPN connections to provide transparent secure access to systems in Australia and enable services such as Voice-over IP telephony
- signing agreements for several transnational education programs, including pathway programs in partnership with Chinese universities and a Masters by Research in Engineering for the University of Kuala Lumpur

- participating in the AVCC/Chinese Ministry of Education sponsored “Chinese University Administrators Shadowing Program”, a first for Swinburne – Vice Presidents from China University of Communication in Beijing and China Jiliang University in Huangzhou spent a week at Swinburne in October
- undertaking research on international demand for associate degrees, to inform the development of market-relevant courses by the TAFE, Higher Education and Lilydale Divisions – this study led to the accreditation of an Associate Degree in Film & Television, with other courses in development
- delivering training programs for Vietnam Breweries, Vietnam Cement and Vietnam Airlines, through the TAFE Division's School of Business & eCommerce
- developing a competency-based training system for the Singapore Government in the area of precision engineering, through the TAFE Division's Centre for New Manufacturing
- planning for *Swinburne College*, the University's vehicle for the delivery of English language and pathways programs for international students, to be launched in 2006 with the aim of feeding graduates into a range of Swinburne TAFE and Higher Education courses
- delivering a 10-week enrichment program, through the Lilydale Division, for 17 senior academics from the Nanjing University of Aeronautics & Astronautics

- organising the first graduation ceremony for Swinburne's Hong Kong-based Communications and Design students, the second graduation ceremony for the Hong Kong-based Bachelor of Science (Information Technology) students, the second graduation ceremony at the Sarawak Campus, and the fourth graduation ceremony for Swinburne's Vietnam-based Master of International Accounting (MIntA) students.
- participating in a project with four other Australian universities to develop processes to identify and deal with fraud in student application documents
- completing an offshore quality project for the Department of Education, Science and Training, with papers presented at conferences and workshops in Beijing, Adelaide and on the Gold Coast

- hosting a transnational education workshop in August, with guest speakers from AUQA and the international education industry
- hosting the secretariat function of the International Education Association Australia (IEAA)
- relocating of the International Division to Swinburne Place West, at the Hawthorn campus

Swinburne continues to be a truly international university. In 2005, international students comprised 22% of higher education enrolments – well above the national average of 17.3%. Some 55 nationalities were represented in the semester 1 2005 commencing cohort, with 45 nationalities represented in the semester 2 commencing cohort. Importantly, the decline in onshore higher education commencements from 2003 to 2004 was arrested during 2005. TAFE commencements also grew, although Pathways enrolments declined.

Swinburne International Headcount Statistics

	Commencing *		
	2004	2005	% Change
On shore			
Higher Education undergraduate	907	865	-4.6%
Higher Education postgraduate by coursework	508	601	+18.3%
Postgraduate research	23	49	+113.0%
Study abroad	63	82	+30.2%
TAFE (Including Pathways)	444	335	-24.5%
Exchange-in	76	111	+46.1%
ELICOS (TAFE)	399	417	+4.5%
Off shore			
Malaysia (Sarawak)	279	460	+64.9%
Other	239	150	-37.2%
Total	2938	3070	+4.5%
ELICOS student weeks	5175	5415	+4.6%

Notes: Commencing Higher Education load data uses “DEST” definition of enrolling after August the previous year
 Commencing TAFE load determined by “Comm. Course” flag and includes multiple enrolments
 Data source: Higher Education sector 2004 and 2005 DEST data
 TAFE sector 2004 and 2005 OTTE data

SWINBURNE UNIVERSITY OF TECHNOLOGY > ANNUAL REPORT 2005

International in outlook (continued)

Student mobility

Swinburne's mobility programs were successful in 2005, with 183 students studying and/or working overseas in more than 18 different countries as part of their course. Swinburne benchmarks international mobility for its higher education students via the Australian Universities International Directors Forum – compared with the present national average of 6.5%, more than 13.0% of Swinburne higher education students have an international study experience as part of their course. More specific details for 2005 are as follows:

Education Abroad Administered Exchange Programs:

- 101 students; 18 countries
- International Exchange Programs: 85 students
- Study in Sarawak Study Tour: 8 students at the Sarawak Campus
- Global Tech leaders Symposium: 8 student delegates in Singapore and China

Faculty/School Administered Programs:

- Aviation Study Tour: 16 students travelled to 4 countries (Hong Kong, USA, UK and France)
- European Study Tour: 11 students travelled to 6 countries (Poland, Belgium, Germany, France, Luxembourg and Italy)
- Asian Study Tour: 10 students travelled to Japan and China
- Design Study Tour: 15 students travelled to Germany
- The London Experience, a TAFE Tourism & Hospitality, work experience program: 16 students travelled to the United Kingdom
- Lilydale Business Tour: 14 students travelled to Malaysia and Vietnam
- TAFE Child Care Practicum: 8 students undertook a placement in China
- Total students: 90
- Number of countries accessed: 13

Three new student exchange agreements were signed with foreign universities during 2005 – Bellarmine University in Kentucky, USA; Rensselaer Polytechnic Institute in New York State, USA, and LIUC Università Calleneo Castellanza, in Varese, Italy. These agreements should increase Swinburne students' level of international mobility in coming years. To this end, Swinburne also joined the Forum on Education Abroad during 2005. This Forum is a network of educational abroad professionals, academics and researchers at over 185 institutions worldwide, dedicated to promoting, enhancing and studying education abroad.

Swinburne International

As noted earlier, Swinburne International (SI) is responsible for the recruitment, admission and support of international students who study at Swinburne's Australian campuses. Within SI, the Education Abroad Office manages the University's student exchange program.

A particular highlight for SI during 2005 was the development of a new look for international advertising, publications, and webpages. SI also began development of a new international application management system, together with a new CourseFinder & Agents/Partners database. A framework for cooperation was established with Sarawak Marketing, and market research was undertaken to determine international student perceptions of the Swinburne brand and pathway programs, and the University's market position in India.

Office of Transnational Education

The Office of Transnational Education (OTNE) is responsible to the Pro Vice-Chancellor (International) for matters relating to Swinburne programs conducted outside Australia. This includes the offshore delivery of courses, offshore partnerships, and offshore pathways to Swinburne courses in Australia or Malaysia. OTNE is also responsible for the development of policy and procedures for the initiation, management and quality assurance of Swinburne's transnational education and training programs.

An important focus of the transnational education strategy in 2005 was to develop feeder programs, primarily in China, for Swinburne courses in Australia and in Sarawak. This involved close collaboration between TAFE, Higher Education, Lilydale and OTNE staff, several visits to Chinese universities, negotiation of agreements, and assistance with in-country approval processes. Approval procedures for transnational education programs were centralised during 2005, and a project initiation manual was produced to assist staff to meet the quality requirements of the University in proposals for partnerships offshore.

Transnational education agreements signed during 2005^{1,2}

Country	Institution	Province	City	Agreement type/program
China	China University of Petroleum, Beijing	Hebei	Beijing	Diploma of Business Studies & Diploma of IT Studies
China	East China Jiaotong University	Jiangxi	Nanchang	Diploma of Business Studies & Diploma of IT Studies
China	Nanjing University of Aeronautics & Astronautics (NUAA)	Jiangsu	Nanjing	MOU for an assisted articulation program: Bachelor of Business (eCommerce)
China	Sichuan University	Sichuan	Sichuan	MOU for an assisted articulation program: Bachelor of Business (eCommerce)
Malaysia	Limkokwing University of Creative Technology		Kuala Lumpur	Renewal and extension of moderation agreement in Design (various programs)
Malaysia	Universiti Kuala Lumpur		Kuala Lumpur	Master of Engineering by Research

¹ The partnership arrangement with NUAA includes a credit transfer agreement under which block credit of up to 150 credit points can be granted to NUAA Bachelor of Economics/Finance students towards completion of a Swinburne Bachelor of Business (eCommerce) degree through the Lilydale Division.

² Progress was also made in discussions between Swinburne's Higher Education Division and Northeastern University in Boston on offering dual-branded degrees in Australia and the United States.

Intersectoral in approach

Swinburne's dual-sector nature creates unique and distinctive advantages for students, staff, industry and the wider community. Students take advantage of pathways between the TAFE and Higher Education sectors, and staff collaborate across the sectors to develop new capabilities, products and services.





There is considerable student movement between the TAFE and Higher Education sectors at Swinburne. Many Higher Education students enhance their practical and business skills by taking specific TAFE courses or units, while TAFE students frequently articulate to undergraduate degree programs after completing their TAFE studies.

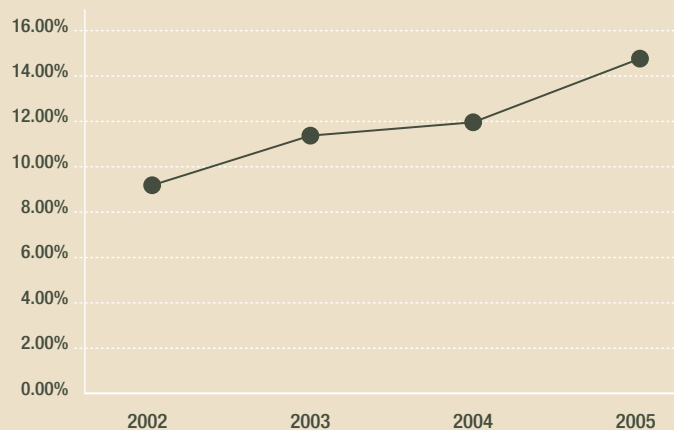
Intersectoral in approach (continued)

For the business sector and the wider community, Swinburne provides a single 'port of call' for a wide variety of products and services – from apprenticeships and traineeships to Masters and PhD programs, and from workplace training solutions to research consultancies.

Increasingly, Swinburne is using its resources from across the University to achieve the different elements of its vision. This means leveraging assets and resources of various kinds from both the TAFE and Higher Education sectors, and using them in the most efficient manner.

TAFE-to-Higher Education and Higher Education-to-TAFE pathways are a singularly important facet of Swinburne's intersectoral advantage, and the University continues to lead Australia in the number of students articulating from TAFE to Higher Education. In 2002, 191 students articulated directly from Swinburne TAFE programs to Swinburne Higher Education programs, excluding international student articulants. By 2005, that number had increased to 328, or 14.72 % of the domestic undergraduate student cohort. This figure increases to 27.46 % of the 2005 domestic undergraduate cohort with the inclusion of students admitted to Swinburne Higher Education courses on the basis of previous study at other TAFE providers.

Percentage of domestic undergraduate cohort at Swinburne articulating from Swinburne TAFE programs



During 2005, Swinburne's Higher Education Division streamlined its direct entry process for Swinburne TAFE students. This resulted in an 80% increase in the number of applications for places in Higher Education courses by Swinburne TAFE students, and 243 direct entry offers were made for places in Higher Education courses starting in 2006.

Two major intersectoral initiatives have been referred to earlier in this report – the establishment during 2005 of the *Swinburne Industry Solutions Unit* and of *Swinburne College* – the former a corporate unit established to facilitate industry engagement and account management, and the latter established within the TAFE Division to support international students through English language and pathways programs prior to their commencement of other Swinburne TAFE and Higher Education courses.

Another major achievement in 2005 was a restructuring of Swinburne's credit transfer database by the Academic Policy & Secretariat Unit in conjunction with Information Technology Services. The remodelled credit transfer agreements and arrangements in the revised database allow greater ease of access for students and staff, both locally and internationally. The changes show, interactively, how students can move most effectively between TAFE and Higher Education courses, and between undergraduate and postgraduate programs. The remodelled database was noted in the interim report of the Commonwealth Government's *National Study to Improve Outcomes in Credit Transfer and Articulation from Vocational Education and Training to Higher Education* (DEST, 2005), which states that Swinburne has developed "... the most detailed interactive web-based map of credit transfer agreements ...".

Other 2005 highlights in intersectoral activity included:

- significant enhancement of the intersectoral focus across a range of student service areas, promoted through the development of an intersectoral website which was launched in November 2005
- participation by Swinburne's Information Resources Group in a benchmarking project with Victoria University and Holmesglen College of TAFE – Swinburne is now a member of the Dual Sector Universities Library Group, which meets in conjunction with the Council of Australian University Libraries
- accreditation, through Swinburne Lilydale, of a new unit coded *LTP100 – Theory and Practice*, ready for delivery in 2006 – this unit is designed to assist articulating students in their transition from the TAFE learning environment to Higher Education
- accreditation, through the TAFE Division and the Board of TAFE Studies, of a Diploma of Business and Information Systems for delivery by the Higher Education Division at its Sarawak Campus
- implementation by the International Division of a demand study for associate degrees by international students, in order to inform the development of market-relevant intersectoral courses

In addition to activities directly related to course development, learning pathways and credit transfer arrangements, Swinburne's intersectoral advantage can be seen in a wide range of joint TAFE-Higher Education projects. For example, in 2005 the Aviation Team established by the Higher Education Faculty of Engineering & Industrial Sciences and the TAFE School of Engineering implemented a range of intersectoral initiatives. These included the establishment of an intersectoral Industry Advisory Committee (with representatives from CASA, QANTAS, Cathay Pacific, Air New Zealand, Singapore Airlines, Virgin Blue, Airservices Australia, Melbourne Airport, the Guild of Air Pilots and Navigators, and the Australian Airports Association, for example), collaborative tendering activity, joint marketing and student recruitment, and cooperative course design and delivery.

Another dimension of the intersectoral advantage is the capacity to share teaching expertise and resources across the sectors. For example, during 2005 more than 100 students studying Bachelor of Engineering courses at Swinburne used the TAFE Division's workshops for practical experience in materials technology, computer aided design/drafting (CAD) and machining. Not only does this provide for a more robust educational experience for the students – it also offers increased efficiency in the use of expensive workshops and equipment which often sit idle at other institutions.

Entrepreneurial in endeavours

The aim at Swinburne is to develop an entrepreneurial university culture – one that encourages and supports staff and students to generate innovative ideas. The intention is to achieve this through innovative approaches to curriculum development, teaching, research and administration, empowering creativity, flexibility and responsiveness.

Let's get on with it.

Swinburne seeks to become self-reliant, resourcing innovative developments in education and research from a range of sources and commercialising them where appropriate. Such developments are underpinned by strong risk management and quality assurance processes.

Graduates from both the TAFE and Higher Education sectors can meet the challenges of competitive business environments and rapidly changing communities. They have the flexibility and awareness to be successful in their chosen fields, and to contribute to the creation of community capacity and economic wealth.

For Swinburne as a whole, 2005 was marked by a raft of innovations at the 'whole of University' level, many of them led by the corporate Student Affairs and Resources Groups. These innovations included:

- launching the new *Let's get on with it.* brand proposition, designed to position Swinburne as an entrepreneurial university
- developing and implementing a course pricing framework that consolidates student fees into a small number of price bands, while at the same time increasing the number of courses on offer
- modifying the University's systems and processes to meet the requirements of the Higher Education Support Act 2003 (HESA) and the Higher Education Information Management System (HEIMS)
- developing and implementing a new "Students at Risk" program
- launching a new Disability Action Plan 2005 – 2007, to provide realistic strategies and processes for overcoming discriminatory practices and barriers

- implementing 'Ask George', an automated FAQ system based on a dynamic knowledge database that continuously self-updates as questions are asked via a dedicated 24/7 website
- instituting new practices for advertising jobs, in conjunction with Seek Limited, to develop better advertisements, improve Swinburne's employment branding and reduce costs
- reviewing employment policies in order to offer more flexible work arrangements
- implementing a number of highly innovative and entrepreneurial building projects, including the Wakefield Street development noted in the Vice-Chancellor's Introduction

For the Higher Education Division, a 2005 highlight was the establishment of the Richard Pratt Chair in Entrepreneurship within the Faculty of Business and Enterprise. Subsequently, Professor Tom McKaskill was appointed as the foundation incumbent. The Chair was established to honour the University's first Chancellor, Richard Pratt, who played a key role in encouraging Swinburne's entrepreneurial focus. The primary role of the Chair will be to develop entrepreneurship as a business discipline, but it will also play a part in the public promotion of entrepreneurship and in the generation of research funding.

In this context, the Faculty of Business and Enterprise unveiled a new initiative during 2005 whereby the Westpac Banking Corporation will supply up to \$150,000 per year for five years to support research in innovation and entrepreneurship. The Australian Graduate School of Entrepreneurship, based within the Faculty, will coordinate this research effort.

As noted earlier, 2005 saw Swinburne become the only Australian university to be accepted into the European Consortium of Innovative Universities (ECIU). This membership should assist Swinburne to enrich its entrepreneurial culture considerably, enabling it to play a catalytic role for innovation in industry and for society at large.

Master of Entrepreneurship & Innovation student David Dobson won the 2005 Richard Pratt Prize for Entrepreneurship. This prize was donated by a senior staff member of the Pratt organisation in honour of Richard Pratt's 70th birthday, and David has indicated that he will use the \$10,000 in Prize funding to further the development of his eStar software.

Within the TAFE Division, innovation coordinators based in the Schools mapped innovation competencies and skills to nationally-accredited training packages. This will enable the delivery of programs at various levels to include strategies for the acquisition of innovation skills. The Division's specialist centres also undertook highly innovative activities:

- Within the TAFE School of Arts, Hospitality & Sciences, the National Centre for Sustainability launched a Sustainability Covenant, in conjunction with the Victorian Environment Protection Authority (see page 47), and implemented a project called "Future of Business – SMEs Moving Towards Sustainable Practices".
- Within the TAFE School of Engineering, the Centre for New Manufacturing won a highly contested international tender to provide curriculum leadership for manufacturing training in Singapore, and implemented an action-based project on simulated learning in manufacturing.
- Within the TAFE School of Business & eCommerce, the Centre for Collaborative Business Innovation developed new e-business training programs and workshops to meet the needs of different industry sectors.
- Within the TAFE School of Social Sciences, the Centre for Health & Well-being explored sustainable skill ecosystems in the health sector, and the associated training needs.

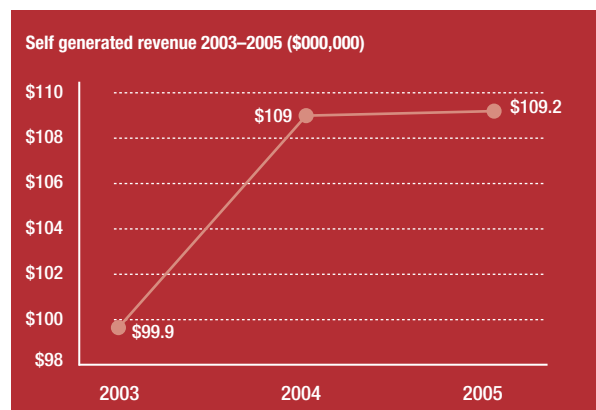
The TAFE Division's entrepreneurial approach was exemplified by its strategic approach to competitive tendering. This led to innovative developments including the:

- design of Certificate IV and Diploma courses in Aviation Safety, supported by new print-based and online learning resources
- blended learning programs characterised by face-to-face tuition supported by online resources and coaching for clients including Australia Post
- delivery of innovative training in competitive manufacturing for AMCOR
- implementation of English language and literacy training, supported by customised learning resources, in many workplaces across diverse industry sectors

The winners of the 2005 Judy Bissland Awards for Innovation were:

- Jill Slater, Trevor Bayley and Penny Corster-Hatten for the First Stop youth gateway at Croydon
- John Doyle for the international hospitality training initiative known as "The London Experience"
- Julia Kerton, Libby Roswell, Craig Jennings and Marina Makushev for the development of the "Where's the Party at?" toolbox
- Cathy Wills and Dianne Kelly for their Victorian WorkCover Authority project

Overall, Swinburne's commitment to entrepreneurship has produced pleasing levels of self-generated revenue, in recent years, and a total of \$109.2m in 2005.



SWINBURN UNIVERSITY OF TECHNOLOGY > ANNUAL REPORT 2005

Committed to sustainability



For Swinburne, the concept of sustainability incorporates financial, environmental and social dimensions, and these are interrelated. At an organisational level, for example, improvements in environmental sustainability generally contribute to improvements in economic and social performance. For this reason, the University endeavours to integrate economic, social and environmental principles into decision-making, and into the implementation of program delivery, research and other activities.

On 10 October 2005, Swinburne entered into a "Sustainability Covenant" with EPA Victoria, the Victorian Environment Protection Authority. Initiated by the University's National Centre for Sustainability under Section 49AA of the Environment Protection Act 1970, the Covenant commits Swinburne to working in a more environmentally sustainable way. It encourages the dissemination of sustainable practices to students and staff through teaching, learning and research, and the external promotion of sustainable practices.

The Covenant can be downloaded from www.swin.edu.au/ncs/. It has a life of three years from the date of signing and, during this period, Swinburne will:

- incorporate the interconnections between the environment, society and the economy into learning and teaching programs
- embrace sustainability as a fundamental component in research activities
- demonstrate leadership in sustainability through mutually beneficial links with industry and the community generally
- implement a range of University-wide measures to establish a workplace culture of sustainability

In terms of instituting more sustainable work practices, the launch of a Green Office program was a signal achievement for Swinburne in 2005. A themed seminar series raised awareness and relevant knowledge for administration staff throughout the University, and more than 100 staff were recruited to the program. A toner cartridge recycling system was instituted, and the use of 100% recycled paper was promoted (together with strategies to cut down on toner and paper usage). As well, Swinburne worked with Sustainability Victoria to develop tools and guidelines for energy management across the Victorian TAFE sector.

A new Diploma of Sustainability program was accredited during 2005, to be taken in conjunction with other accredited TAFE programs as a dual award. As well, projects relating to sustainability were incorporated into a range of TAFE and Higher Education courses. In the Faculty of Design, for example, student projects focused on topics including the development of electronic student notebooks, supersonic dishwashers, recyclable oil filters and biodegradable nursery pots. In each of these projects there was an emphasis on design for disassembly, design for recycling and closed-loop manufacturing, as well as more obvious objectives relating to reduced consumption and waste.

A range of innovative research projects also underscored Swinburne's commitment to sustainability in 2005. These included projects on:

- concrete recycling (through the Faculty of Engineering & Industrial Sciences)
- grey water use (through the Lilydale Division)
- biodegradable polymers (through the Environment & Biotechnology Centre)
- community networks (through the Institute of Social Research)
- indicators of community well-being and sustainability (through the Centre for Regional Development)
- community engagement with the sustainability concept (through the National Centre for Sustainability)
- community attitudes to water use (through the Institute of Social Research)
- treatment of mixed kitchen waste (through the Environment & Biotechnology Centre)

- development of a biodegradable lethal mosquito ovitrap for the control of Dengue fever (through the Environment & Biotechnology Centre)
- effects of wastewater on soil (through the Faculty of Engineering & Industrial Sciences)

Swinburne also developed a number of 'sustainable business' tools during 2005. These included the 'Business Transformer' (focused on sustainable growth strategies for SMEs), a tool for self-assessment of business sustainability, and a calculator for estimating the 'ecological footprint' of an organisation, unit, office or event. The Business Transformer was promoted through a successful series of business workshops, and through a Business Insight Program developed by Swinburne's Careers & Employment Unit.

Education is only the beginning.

It's not the end.

In fact, it's only the means.

It's the means to create, discover and improve.

It's the means to take what is and turn it into what will be.

But we're only given one lifetime to do it.

And each of us has our own potential and therefore
our own destiny in this world.

Education is there to unlock that **potential**.

So let's not sit around and talk about **what will be**.

Let's get on with it.

Swinburne University of Technology

www.swinburne.edu.au

ISSN 1447-8242

The information in this report was correct at the time of printing (April 2006). The University reserves the right to alter or amend the material contained in this publication.

CRICOS provider number 00111D

SP0207-29-0406