

Curtin 
University of Technology

CURTIN UNIVERSITY OF TECHNOLOGY

Report on operations 2009

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STATEMENT OF COMPLIANCE

The Honourable Dr Elizabeth Constable, MLA
Minister for Education; Tourism; Women's Interests
19th Floor, Governor Stirling Tower
197 St Georges Terrace
PERTH WA 6000

Dear Minister

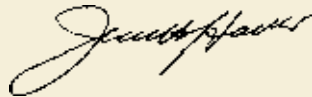
In accordance with section 61 of the *Financial Management Act 2006*, we hereby submit for your information and presentation to Parliament the Annual Report of Curtin University of Technology for the year ending 31 December 2009.

The Annual Report has been prepared in accordance with the provisions of the *Financial Management Act 2006*.

Yours sincerely



Dr Jim Gill AO
Chancellor



Jeanette Hackett
Vice-Chancellor

On behalf of the University Council

Dated this 17th day of March 2010

CHANCELLOR'S FOREWORD

This has been another challenging but rewarding year for Curtin. In keeping with its vision – 'to be an international leader shaping the future through our graduates and research, and positioned among the top 20 universities in Asia by 2020' – Curtin was for the first time ranked amongst the top 500 research universities in the global listing published annually by Shanghai Jiao Tong University. Curtin is in fact the first university in the Australian Technology Network to achieve such a result, and the ranking confirms its status as a serious research university.

In addition, in recognition of this process of change and evolution from a university focused principally on applied technology to a truly research-based institution positioned among the leading universities in Asia, a decision was taken by Council to change the name of the University from 'Curtin University of Technology' to 'Curtin University'. The change of name requires an amendment to the Act of State Parliament through which Curtin operates and this process is now underway.

There were a number of key achievements during the year, including:

- acknowledgement of Curtin's focus on the quality of teaching and learning through the Australian Learning and Teaching Council (ALTC) Australian Awards for University Teaching
- opening of the Resources and Chemistry Precinct, bringing together the State Chemistry Centre (WA), CSIRO's Australian Minerals Research Centre and Curtin's Department of Chemistry with BHP as a major partner in the complex. This precinct will enhance Curtin's position as a leader in collaborative research and education in the minerals, energy and chemistry sectors
- launch of the Australian Sustainable Development Institute (ASDI), bringing together a number of bodies in the area of sustainability and providing a platform for focused research in areas such as the built environment, climate change, ecosystems, sustainable tourism and sustainable resource processing
- launch of the \$100 million International Centre for Radio Astronomy Research (ICRAR), a partnership between Curtin, The University of Western Australia and the State Government. This centre will lead Australia's bid for the \$3 billion Square Kilometre Array
- allocation of \$20.5 million from the Education Investment Fund towards an Engineering Pavilion Complex, to enhance the quality of learning for Curtin engineering students and the Curtin Engineering degree
- opening of Curtin Stadium, a multipurpose sports and events centre.

Of special significance this year was Curtin Sarawak's 10th anniversary celebration. Curtin Sarawak has been at the forefront of Curtin's international focus and my thanks are extended to all those who have contributed to its success, especially Dr George Chan without whose steadfast commitment and vision it would not have been possible.

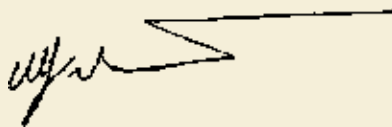
I convey my sincere thanks to members of staff, both academic and general, for their contribution to Curtin throughout the year. Also, my special thanks go to members of Council whose role in setting and monitoring the framework and direction of the University is rarely understood and recognised. I would especially like to acknowledge departing members of Council, Don Humphreys, Chad Silver and Yong Chee Lai, and to welcome new members Gene Tilbrook and Luke Saraceni.

This is my last year as Chancellor of Curtin. I have enjoyed the role immensely and I thank all those people along the way for their commitment and support. I especially thank Pro Chancellor Michele Dolin for her guidance and counsel.

It is my firm belief that the success of any organisation aligns in large part with the ability of the CEO and in this respect I thank Vice-Chancellor Professor Jeanette Hackett for her leadership, her vision, her drive, and her energy over the past three-and-a-half years.

Dr Jim Gill AO assumes the role of Chancellor from January 2010. I congratulate the Council on his appointment and have no doubt he and Professor Hackett will go a long way towards achieving the University's vision.

I wish Curtin all the very best in the future.



Gordon Martin

Chancellor

1 June 2006 – 31 December 2009



During 2009, Curtin focused on developing strategies to help it achieve the vision it adopted in 2008: 'to be an international leader shaping the future through our graduates and research, and positioned among the top 20 universities in Asia by 2020'.

This vision is the central idea that now guides Curtin's plans and strategies in all areas and at all levels. The University is focusing on areas of strength and moving away from areas in which it is not competitive, aiming always to optimise its performance and improve quality in the services it provides its stakeholders. This focus has resulted in some exciting initiatives and achievements, which are discussed below.

TEACHING AND LEARNING

The expertise of Curtin's teaching staff was recognised in several ways during 2009. Six Curtin academics were awarded Citations for Outstanding Contributions to Student Learning by the Australian Learning and Teaching Council (ALTC). These Citations recognise staff who have made long-standing contributions to the quality of student learning and improving the overall student experience. Citations were awarded to Associate Professor David Baccarini, Dr Georgina Fyfe, Associate Professor Peter Galvin, Associate Professor Glenda Scully, Professor Zora Singh and Professor Bert Veenendaal.

The quality of Curtin's teaching was also acknowledged through the prestigious ALTC Australian Awards for University Teaching which recognise the nation's top university teachers and most outstanding programs and services. Curtin won a program award for the Master of Business Administration program and teaching awards were won by Associate Professor Simon Lewis and Mr Glen Hutchings.

In addition, Professor Beverley Oliver was awarded a 2009 ALTC Teaching Fellowship which provides funding of \$100,000 for activities that promote excellence in teaching and learning. Professor Oliver's Fellowship will focus on national benchmarking in student achievement of graduate attributes and employability skills, and will include national dissemination of Curtin's Curriculum 2010 Course Review tools such as the needs analysis, the curriculum map and the eVALUate graduate survey.

Work also continued on key teaching and learning projects during 2009.

Through the Curriculum 2010 (C2010) reform project, Curtin revised the University degree award and determined which of its existing courses are sustainable

in terms of strategic focus, quality and financial viability. Also as part of C2010, the Comprehensive Course Review and Annual Course Review processes were initiated and tools and processes to ensure the currency of course data were implemented.

In 2009, Curtin piloted the iPortfolio, an innovative online space designed to connect students with prospective and current employers and start preparing them for career interviews. The iPortfolio enables students to collect evidence of their learning and achievements (using movies, audio, images and documents) as well as their special skills and abilities. They can use the iPortfolio to get feedback from friends, mentors and lecturers, as well as showcase achievements, select the highlights and share them on the web and, in time, publish them to iTunes U. The iPortfolio will also be available to staff.

In 2009 eVALUate, Curtin's online system for gathering and reporting student feedback on their learning experiences, was available for units and teachers at all campuses in Australia and most overseas programs. More than 95 per cent of unit summary reports were published online and are accessible to Curtin students and staff.

The eVALUate results show that students are increasingly satisfied with the quality of their teaching and learning experiences. The items showing the greatest improvements since 2006 are feedback, students' perceptions of their motivation to learn in a unit, students' perceptions of the quality of teaching, and overall satisfaction with units.

The number of teachers requesting surveys has increased each year. In 2009, there were more than 3,000 teaching survey requests in eVALUate.

A record Course Experience Questionnaire (CEQ) survey response rate of 57 per cent (or 2,899 responses) was achieved in 2009, up 11 percentage points from 2008, allowing the University to utilise its student satisfaction information in a more granular way for improvement. Curtin has performed relatively consistently between 2006 and 2009 on all CEQ measures. In 2009, Curtin's student satisfaction remained stable, with 86 per cent of graduates reporting they were satisfied with their course experience.

RESEARCH AND DEVELOPMENT

Curtin's reputation as a serious research university was both confirmed and enhanced by its inclusion in the top 500 research universities in the 2009 Shanghai Jiao Tong ranking index. It is the first time the University has been ranked so highly in the index.

Vice-Chancellor's Report (continued)

This achievement is reflected in the most recent research metrics now available. The official national research income data for 2008 showed an 11 per cent increase for Curtin, to \$64.5 million, with the University maintaining its ranking of 11th nationally. Research publications in 2008 were 1,425 (weighted HERDC points) for Curtin, an increase of 14.4 per cent, which placed the University 11th on the national rankings for research publications, a significant increase on its ranking of 13th in 2007.

The University's focus on four key areas of research and development – resources and energy, health, ICT and emerging technologies, and sustainable development – continued to yield benefits. Curtin is a key player in seven Cooperative Research Centres that will receive more than \$164 million in Federal Government funds. These major initiatives complement Curtin's areas of research expertise and foci, and will play a major role in coming years.

Curtin's \$116 million Resources and Chemistry Precinct was opened by the Premier of Western Australia in November 2009. The development is the fulfilment of a vision to unite the University with key state and federal agencies and industry involved in research and education for the minerals, energy and chemistry sectors, and to attract the best national and international researchers and teachers to Perth. Located in the Precinct are Curtin's Department of Chemistry and the Chemistry Centre (WA), and the complex is adjacent to the Australian Minerals Research Centre. BHP Billiton is also a partner in the complex.

Curtin is the largest and most comprehensive provider of research and education in health sciences in Western Australia. Development of the Curtin Health Innovation Research Institute (CHIRI) continued in 2009. CHIRI is a unique and innovative facility that will accommodate researchers, educators and health professionals. The Institute will focus on the prevention and management of chronic disease and the provision of wellness clinics to enable people to stay out of hospital, as well as self-management programs to empower individuals to manage their own health care needs in the comfort of their community. The Institute will place special emphasis on the chronic health needs of vulnerable populations, particularly Indigenous peoples, the elderly and those with compromised mental health.

Curtin consolidated its research strengths and leadership in the area of sustainable development by establishing the Australian Sustainable Development Institute (ASDI) in 2008. Through ASDI, Curtin offers visionary research opportunities in sustainable development, built environment, climate change, environmental ecosystems, biodiversity, sustainable tourism and sustainable resource processing. The Institute was officially launched in April 2009, and more than \$9 million in research grant and contracts have already been agreed.

Curtin's focus on research in the area of ICT and emerging technologies developed in 2009 with the launch of the \$100 million International Centre for Radio Astronomy Research, a partnership between Curtin, The University of Western Australia and the State Government. The \$100 million Centre will play a key role in Australia's bid for the \$3 billion Square Kilometre Array project, as will the Curtin Institute of Radio Astronomy, which was established late in 2008. To enhance Australia's capabilities in this area, in 2009 the Federal Government allocated \$80 million for a high-performance computing facility at Technology Park, adjacent to the Curtin Bentley campus. Curtin will also be involved in this facility.

GOVERNMENT POLICY

In the May 2009 Budget, the Federal Government announced several initiatives that will impact on universities. These include establishing target attainment rates for undergraduate studies and low-SES students, the removal of domestic undergraduate enrolment caps from 2012, the development of new performance targets and measures for universities, and changes to the mechanisms under which research funding is allocated.

As part of this reform of higher education, the relationship between the Commonwealth and individual universities will now be outlined in compacts, which will provide a framework for jointly achieving the government's reform agenda and institutions' individual missions.

Compacts will articulate an institution's particular mission and describe how it will fulfil that mission and contribute to the Australian Government's sector-wide policy objectives. They will facilitate alignment of institutional activity with national priorities and identify clear targets for individual universities.

The compacts have been designed to recognise the value of institutional autonomy while promoting excellence and supporting growth. They will facilitate the distribution of performance-based funds for teaching and learning and for research.

Compacts have been developed to promote greater specialisation within the sector and greater diversity of missions.

In the last quarter of 2009 Curtin developed and finalised its compact agreement with the Commonwealth for 2010. Curtin's compact agreement was developed to ensure the University continues to progress towards its vision whilst contributing to achieving the government's reform agenda.

CURTIN SARAWAK CELEBRATES 10TH ANNIVERSARY

Curtin's Sarawak Campus in Miri, Malaysia, celebrated a decade of success in 2009 by marking its 10th anniversary. Included in the year-long celebrations were the official opening of the new 1,200-person capacity Recreation and Events Centre and the new School of Business, as well as a groundbreaking ceremony for the new RM20 million state-of-the-art Biotechnology Park. This park will be funded by the state and federal governments and will be built on the Curtin Sarawak Campus.

Over the past 10 years, Curtin Sarawak has established itself as an icon of international tertiary education in the region and a key industry and community player. In the 2008 Australian Universities Quality Agency audit, Curtin received a commendation specifically related to the successful development of the Sarawak Campus.

OFFICE OF ADVANCEMENT ESTABLISHED

Curtin is committed to its role as a university of service and has established an Office of Advancement to support this commitment. The Office of Advancement's key role will be to lead the University's fundraising function and nurture and expand stakeholder relationships.

PHYSICAL FACILITIES

The development of Curtin's physical infrastructure continued in 2009 with the official opening of Curtin Stadium, a state-of-the-art gymnasium, sports and events centre. This multipurpose centre will also be used as an event and exam venue, and graduation ceremonies were held there for the first time in 2009.

Also completed this year was the Curtin Resources and Chemistry Precinct, a unique facility bringing together academia, industry and government expertise in chemistry and resources.

During 2009, Curtin announced it would be developing an Engineering Pavilion Complex to create a vibrant, student-focused learning centre for engineering students. It will be a unique facility in WA combining leading-edge technology and a sustainable focus. The Commonwealth Government allocated \$20.5 million in the Education Investment Fund to help fund the project, and construction of the first stage commenced in the area between buildings 204 and 205.

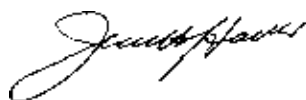
FINANCIAL SECURITY

Curtin achieved a re-investment fund for 2009 of \$59.663 million. This is a considerable achievement given global financial pressures and the uncertainty of 2009. The University will continue to exercise financial restraint in 2010 and work to increase revenues, reduce costs and increase efficiencies. The University is in a healthy financial position and was impacted less by the global crisis than many other organisations.

NEW CHANCELLOR

Mr Gordon Martin has been Curtin's Chancellor since 2006. The University has greatly benefited from his term, and he has contributed significantly to the development of Curtin's new strategic plan and its vision to become a top 20 university in Asia by 2020.

Mr Martin has now chosen to step down as Chancellor and Dr Jim Gill AO will assume the role from 2010. Dr Gill has had a career in public service and was the Water Corporation's inaugural chief executive officer from 1996 until he retired in December 2008. The senior executive team and I look forward to working with him.



Jeanette Hackett
Vice-Chancellor



ABOUT CURTIN



Curtin University of Technology is Western Australia's largest university, with more than 44,000 students. Of these, about 19,000 are offshore and onshore international students, and more than 2,000 are research students. The University takes its name from the Prime Minister of Australia from 1941 to 1945, John Curtin, and its values reflect the leadership and strength associated with one of Australia's pre-eminent prime ministers.

Curtin is an internationally focused institution. A culturally diverse university, it fosters tolerance and encourages the development of the individual. The University's programs centre on the provision of knowledge and skills to meet industry and workplace standards. A combination of first-rate resources, staff and technology makes Curtin a major contributor to tertiary education, both within Australia and internationally.

The University's main campus is in Bentley, six kilometres south of the centre of Perth, Western Australia's capital city. Curtin has two additional metropolitan campuses and regional campuses in Kalgoorlie, Northam, Margaret River and Geraldton. Curtin also has a campus in the Sydney Central Business District and two offshore facilities – Curtin Sarawak, in Miri, Sarawak, East Malaysia, and Curtin Singapore.

Curtin offers a wide range of undergraduate and postgraduate courses in business, humanities, health sciences, resources, engineering and related sciences. The University is recognised for high-impact research across four defined and distinct areas of focus:

- resources and energy
- ICT and emerging technologies
- health
- sustainable development.

Curtin has close links with business, industry, government and the community, and its courses have a strong practical focus, with many involving vocational or work experience components. As a result, Curtin graduates are job-ready and prepared, with skills that enable them to have a genuine and positive influence in a continuously changing world.

Curtin University of Technology is a body corporate established under the *Curtin University of Technology Act 1966*, an Act of the Western Australian Parliament. It is domiciled in Australia.

The University is not an incorporated company under the Corporations Law. Therefore it does not have an Australian Company Number (ACN), nor does it have a Certificate of Incorporation.

CURTIN'S BENTLEY CAMPUS IS LOCATED AT:

Kent Street
BENTLEY WA 6102

POSTAL ADDRESS

GPO Box U1987
PERTH WA 6845

WEBSITE ADDRESS

curtin.edu.au

OTHER CAMPUSES AND CENTRES ARE LOCATED AT:

Kalgoorlie	Western Australian School of Mines Egan Street KALGOORLIE WA 6430	Geraldton	Geraldton Universities Centre 33 Onslow Street GERALDTON WA 6530
	Centre for Regional Education Egan Street KALGOORLIE WA 6430	Karratha	Pilbara TAFE Karratha Campus Millstream Road KARRATHA WA 6714
	Curtin VTEC 34 Cheetham Street KALGOORLIE WA 6433	Midland	Swan TAFE Lloyd Street Campus Lloyd Street MIDLAND WA 6936
Margaret River	Margaret River Education Centre 272 Bussell Highway MARGARET RIVER WA 6285		Chief Mechanical Engineers Building Yelverton Drive MIDLAND WA 6056
Northam	Muresk Campus Off Spencers Brook Road NORTHAM WA 6401	Port Hedland	Pilbara TAFE South Hedland Campus Hamilton Road SOUTH HEDLAND WA 6722
Shenton Park	Selby Street Selby Street SHENTON PARK WA 6008	Malaysia	Curtin Sarawak Senadin MIRI, SARAWAK, MALAYSIA
Albany	University of Western Australia Albany Centre 35 Stirling Terrace ALBANY WA 6322	Singapore	Curtin Singapore 90 and 92 Jalan Rajah SINGAPORE 329162
Armadale	Swan TAFE Armadale Campus 40 Commerce Avenue ARMADALE WA 6112	Sydney	Curtin House 39-47 Regent Street CHIPPENDALE NSW 2008
Esperance	Library and Learning Centre Esperance Community Education Campus Pink Lake Road ESPERANCE WA 6450		

MISSION, VISION AND VALUES



The University applies the philosophy of its namesake, former Prime Minister John Curtin, who said:

**'The great university ...
should look ever forward;
for it the past should be
but a preparation for the
greater days to be.'**

VISION

An international leader shaping the future through our graduates and research, and positioned among the top 20 universities in Asia by 2020.

MISSION

Curtin is committed to excellence and innovation in teaching and research, for the benefit of our students and the wider community.

VALUES

- Integrity – being consistently honest and trustworthy in all activities
- Respect – having regard for self and others
- Fairness – ensuring just decisions through open decision-making
- Care – acting to ensure the welfare of others



The Curtin vision is an aspirational and inspirational statement for the future for the University. It places Curtin on the international stage as a leader in the provision of quality teaching and research. Curtin's mission identifies it as a strong research and teaching university committed to innovation and excellence and working with the Western Australian, national and international communities. The Curtin values underpin all activities undertaken by Curtin.

The Strategic Plan 2009-2013 was developed and approved during 2008 and commenced implementation in 2009. It contains five key strategies:

- develop a culture of excellence and innovation
- focus on high-quality courses in areas of strength
- strengthen research capability and performance
- drive international excellence
- enhance capacity and financial sustainability.

The Strategic Plan provides a framework for the development of key plans across teaching, research and administrative areas. The strategies are further developed and elaborated in the Research Management Plan, Teaching and Learning Plan, Internationalisation Plan and the Valuing Curtin Staff Plan.

Curtin is pursuing its vision and mission in a challenging environment of increased competition, global financial uncertainty, advances in technology and ambitious government targets. The Strategic Plan presents strategies to position the University for excellence, innovation and sustainability in an ever-changing environment.

The '2009 Activity Highlights' section presents Curtin's activities and achievements in the first year of the new Strategic Plan. It describes both the overall intent of its key strategies and the major initiatives being pursued to achieve these goals.

REPORT ON PERFORMANCE – 2009 ACTIVITY HIGHLIGHTS



Key Strategy 1 Develop a culture of excellence and innovation

Curtin will recruit and retain quality staff, and provide them with an environment where they excel. From this, our reputation for delivering applied, industry-relevant teaching and research will continue to grow. To achieve this we will:

- improve leadership and accountability
- optimise performance and innovation
- clarify and improve business processes
- improve the quality of the University environment.

Key Strategy 1 is principally supported by enabling initiatives contained in the Valuing Curtin Staff Plan 2009–2013. The Valuing Curtin Staff Plan is the University's plan for the support, development and growth of its people, workplace environment and organisational culture for a five-year period. While the final measure of Curtin's success is the reputation of its students and partners, and the value of education and research to their futures, it is clearly the ability, motivation and enthusiasm of our staff that will realise the University vision and goals.

The goal for the 'Valuing Curtin Staff' Plan is to communicate the high value placed on staff at Curtin and to create and enhance a culture to ensure that Curtin has a distinctive competitive edge, a highly supported workforce and the desired capabilities.

ENABLING INITIATIVE: IMPROVE LEADERSHIP AND ACCOUNTABILITY

Curtin will achieve this by setting clear objectives, implementing plans, and monitoring performance and progress.

- In 2009, the Organisational Development Unit (ODU) launched the 'Learning to Lead' program for staff aspiring to supervisory roles. The six half-day workshops, completed by 33 staff, included two accredited modules from the Certificate III in Frontline Management. In addition, 35 general staff with supervisory responsibilities completed the Certificate IV Frontline Management Program and 67 staff participated in project management courses.
- The inaugural 12-month Head of School development program was completed in September 2009 and was well received by the 21 participants. The program included four two-day conferences, a 360-degree feedback process, individual learning plans and action learning projects. A second cohort of 23 participants commenced the 2009-10 program in December 2009.
- The executive management team participated in a development program that included the completion of the 360-degree feedback exercise, team-building events and the provision of executive coaching.
- Senior managers were given the opportunity to help shape Curtin's future and develop a shared view of the

University's strategic direction through a series of Senior Managers' Forums and a two-day Senior Managers' Conference.

- The ODU supported the ongoing implementation of the Work Planning and Performance Review, designed to promote staff engagement with the University, a satisfying career for each staff member and a high level of performance aligned to the University's strategic direction. Staff are required to complete a work plan and a performance review at least annually. More than 175 participants attended the 15 workshops run for staff and managers to, among other things, assist them to engage in meaningful performance planning and review conversations.
- A Community of Practice was established for Heads of School to further support cross-university networking and dialogue with the Vice-Chancellor.
- The Academic Leadership Program for Course Coordinators, the result of a Curtin-led Australian Learning and Teaching Council (ALTC) leadership grant, is now embedded after a successful trial last year. The program is intended to assist busy academic staff who coordinate courses to enable them to develop knowledge and skills in academic leadership, to create a vision of what a course might be, and to foster a culture that supports and delivers excellent courses. A total of 29 participants completed the program in 2009.
- **Highlights of Curtin's academic leadership achievements in 2009 included:**
 - Professor Peter Howat, Director of the Centre for Behavioural Research in Cancer Control, received a Fellowship from the American Academy of Health Behaviour. He is only the second Australian resident to become a Fellow of the Academy. Professor Howat has authored more than 280 publications, including more than 120 refereed journal articles, and has been the principal or co-investigator on 92 research grants.
 - Dr Helen Armstrong, from the School of Information Systems, received the prestigious Western Australian Information Technology and Telecommunications Awards (WAITTA) Achiever of the Year Award. Dr Armstrong is the first woman to have won this award in recognition of her outstanding contribution to information technology and telecommunications in Western Australia.
 - Professor Léonie Rennie, from the Office of Research and Development, won the 2009 National Association for Research in Science Teaching (NARST) Distinguished Contribution Through Research Award. This is the single most prestigious award and the highest honour bestowed by NARST on scholars in the field of science education. It recognises those who have made continuing contributions to, provided notable leadership in, and had substantial impact on, science education through their research over a period of at least 20 years.
 - Professor Linda Briskman, the Dr Haruhisa Chair of Human Rights Education, won the literature non-fiction award at the Australian Human Rights Commission's annual Human Rights Medals and Awards ceremony in December for *Human Rights Overboard: Seeking Asylum in Australia*.
 - Professor Peter Newman, Head of the Curtin University Sustainability Policy (CUSP) Institute, was elected a Fellow of the Australian Academy of Technological Sciences and Engineering (ATSE), honouring his contribution to sustainability planning across the world. Professor Newman is one of 28 leaders in technological science, engineering and innovation from Australia and overseas who have been elected as Fellows of ATSE on the basis of their achievement in the application of science, technology and engineering to Australian life.
 - Professor Barry Fraser, Director of Curtin's Science and Mathematics Education Centre (SMEC), was invited to become a Fellow of the American Educational Research Association (AERA), the world's largest and most prestigious association for educational research. This sits alongside Professor Fraser's Fellowship of the American Association for the Advancement of Science (AAAS), International Academy of Education (IAE), Academy of the Social Sciences in Australia (ASSA) and Australian College of Educators (ACE).
 - Professor Igor Bray, Director of the Institute of Theoretical Physics and an Australian Research Council Professorial Fellow, was shortlisted for the WA Science Awards Scientist of the Year, the most prestigious award for scientists in Western Australia. Professor Bray was nominated for his groundbreaking research in the field of quantum mechanics, specifically in the area of atomic collision theory. His work has led to advances in astrophysics, plasma displays, lasers, lighting and fusion energy. The Institute was officially opened in May by WA Chief Scientist Professor Lyn Beazley and is part of the Australian Research Council (ARC) Centre of Excellence for Antimatter-Matter Studies.
 - Dr Bob Loss, Head of Medical Imaging and Applied Physics, was elected President of the Inorganic Division of the International Union of Pure and Applied Chemistry. The Inorganic Division evaluates and publishes fundamental inorganic chemical data for science commerce and trade, and recommends funding for projects from around the world.

Report on Performance (continued)

- The School of Civil and Mechanical Engineering achieved recognition for two of its top personnel. Professor Tony Lucey, Head of the School of Civil and Mechanical Engineering, became the new president of Engineers Australia's WA Division while Dr Euan Lindsay from the Department of Mechanical Engineering was named the National President of the Australasian Association of Engineering Education (AAEE).
 - Professor Alan Fenna, from the John Curtin Institute of Public Policy (JCIPP), was elected President of the Australian Political Studies Association (APSA) for 2009-10. APSA is the professional association for those teaching and researching political science in Australia.
 - Professor Rosemary Coates was elected President of the World Association for Sexual Health (WAS), the first time a woman has held this position. The president's role is high-profile, requiring public statements on behalf of WAS, driving activities to fulfil its goals and liaising with government organisations such as WHO and UNESCO and many NGOs.
- Curtin also won a number of Australian Learning and Teaching Council (ALTC) awards in 2009:
 - At the prestigious ceremony for the 2009 Australian Awards for University Teaching held at Parliament House, the following ALTC awards were presented:
 - Teaching Excellence (Work Integrated Learning) – Glen Hutchings
 - Teaching Excellence (Physical Sciences and Related Studies) – forensics lecturer Associate Professor Simon Lewis
 - Programs that Enhance Learning (Postgraduate Education) – the Graduate School of Business' Master of Business Administration (MBA) degree. The awards were worth \$25,000 each.
 - Six Curtin academics were awarded ALTC Citations for Outstanding Contributions to Student Learning, recognising their long-standing contribution in this area. These were:
 - Associate Professor David Baccarini, recognised for his teaching achievements in the field of project management
 - Dr Georgina Fyfe for her sustained and student-recognised achievement in improving student learning through innovation, advocacy, reflective practice and effective feedback
 - Associate Professor Peter Galvin, recognised for motivating and inspiring mature-age, part-time business students
 - Associate Professor Glenda Scully, recognised for excellence in leadership of the School of Accounting's teaching quality using a research-led approach to change management
- Professor Zora Singh, for sustained excellence and innovation in student-focused undergraduate teaching and postgraduate research supervision in horticulture and viticulture
 - Professor Bert Veenendaal for developing an interactive and stimulating flexible learning environment to engage and motivate students in the discipline of geographic information science.
 - Professor Beverley Oliver was awarded an ALTC Teaching Fellowship, which provides funding of \$100,000 for discipline-based or interdisciplinary activities that promote excellence in teaching and learning. Professor Oliver's Fellowship will be focused on national benchmarking in student achievement of graduate attributes and employability skills and will include national dissemination of C2010 Course Review tools such as the needs analysis, the curriculum map and the eVALUate graduate survey.

**ENABLING INITIATIVE:
OPTIMISE PERFORMANCE AND INNOVATION**

This initiative will be achieved through staff development and recognition and reward programs, and by improving communication throughout the University.

- During 2009, the Organisational Development Unit (ODU) arranged and delivered 129 professional development events, addressing the needs of 2,482 participants, and undertook more than 26 consultancy projects with faculties, schools and areas aimed at improving staff performance and satisfaction.
- The ODU also led the development of Curtin's first staff online learning program (Information Management) and successfully implemented an online staff induction program for sessional staff.
- The Teaching Performance Index rewards excellence in teaching and learning, based on claims submitted by individuals and teams for activities, achievements, publications or events. The overall number of Teaching Performance Index claims submitted in 2009 increased from the 401 claims submitted in the 2008 pilot.
- The Foundations of Learning and Teaching program continued to be successful with 315 staff (including 225 sessional staff) attending and providing the program with an overall satisfaction rating of 96.4 per cent. Forty-five staff completed all seven modules.
- Curtin's Excellence and Innovation in Teaching Awards recognise excellence in teaching across the University, with prize-winners awarded certificates and financial prizes to further enhance their teaching and learning. There were 10 individual and team winners this year.

- Curtin hosted the inaugural Western Australian Networking and Dissemination Forum – an event for all academic staff in Western Australian universities to find out more about the availability of awards, grants and fellowships in the State’s universities. The event, which was funded through an ALTC grant, attracted 85 attendees.
- Flexible and blended learning was promoted across the University through the allocation of strategic funding for Faculties to implement flexible and eLearning approaches. Five small (<\$10,000) and five large-scale (>\$10,000) projects were awarded with four of the projects completed in 2009. Additionally, 10 eTeaching and Learning scholarships (each valued at \$10,000) were awarded to 22 academic staff across the University to implement learning technologies in blended learning environments. The eScholars will take part in a collaborative action learning process to develop student activities for implementation in 2010.
- Building on the outstanding success of the Curtin New Inventor Competition, organised annually by Curtin’s Office of Intellectual Property (IP) Commercialisation, the Curtin Commercial Innovation Awards recognise Curtin staff and students for innovation based on new, commercially relevant technologies, products or services related to the applicants’ area of work or study. Applications are judged by an independent industry panel that assesses criteria such as novelty, market potential, competitive advantage and level of development. The technology, product or service must be at least at the initial proof-of-concept stage. The 2009 prizes were awarded as follows:
 - The Curtin Commercial Innovation Award (\$15,000 cash and \$5,000 in commercialisation services from Australian Venture Consultants) was won by Professor Robert Amin and Associate Professor Ahmed Barifcani for their development of a more efficient and cost-effective way of removing contaminants from natural gas streams.
 - Professor Svetha Venkatesh won the runner-up award (\$7,000 cash and \$3,000 in commercialisation services from Griffith Hack patent attorneys) for her statistically based system for detecting abnormal events (such as loitering and potentially dangerous behaviour) in group situations, leading to improved security responses in areas where public safety is of major concern.
 - Dr Qin Li won the commendation award for a new nanotechnology method of producing light-emitting carbon dots that can be used as targeted drug carriers in treatment and imaging of cancers and in other applications such as the production of LEDs and solar cells.
- Curtin’s focus on applied research has generated many technologies with commercial potential, and through its \$5 million Pre-Seed Funding initiative, has been instrumental in bridging the funding gap between research and commercialisation. Leveraged by government programs such as COMET and Commercial Ready, this funding has enabled more than 15 projects to attract external capital investment, and spawned market-leading products across a diverse range of industries. Building on the success of the Pre-Seed Fund, Curtin has expanded its commercialisation activities by making a further \$5 million available in the form of a Follow-On Fund to provide ongoing support and to maintain a significant equity position in spin-out companies that have excelled above expectation. Commercialisation success includes Scanalyse, Cool Energy, Sensear, Neuromonics, The Buzz, Virtual Observer, Smart Homes and eXotix. During 2009, Curtin continued to commercialise research into real-world applications through the strategic use of seed funding investment to assist companies to establish themselves in the market place. Two examples of this were:
 - HiSeis Pty Ltd, a new company set up by Curtin’s Western Australian School of Mines (WASM) to help mining companies map their ore bodies and plan mining operations using the latest seismic imaging technology. HiSeis Pty Ltd builds on the technology and expertise in seismic imaging developed over many years in Curtin’s Department of Exploration Geophysics to offer a unique set of skills and technology related to hard rock seismic surveying. This technology has the potential to significantly increase the effectiveness and efficiency of creating three-dimensional images of the subsurface geology for a number of industries, including mineral exploration and delineation, geothermal and water exploration, and geosequestration.
 - Deep Vision3D Pty Ltd has been established to commercialise stereoscopic three-dimensional (3D) video camera technology for use in the oil, gas and mining industries. The camera has been effective in providing realistic depth perception in hostile environments when using remotely controlled equipment. Deep Vision3D Pty Ltd is built on a unique set of skills and processes developed by Curtin’s Centre for Marine Science and Technology (CMST) to produce low-cost stereoscopic 3D mini cameras and offers significant benefits over existing cameras used in the industry. The company plans to market two products based on this technology, a marine 3D camera (for sub-sea inspection use in the oil and gas industry) and a hostile environment 3D camera (for use in hostile environments like underground mines and copper smelters). Deep Vision 3D was a recent recipient of the merit-based Commercialising Emerging Technologies (COMET) grant offered by the Federal Government.

Report on Performance (continued)

- In November, Curtin appointed a Commercialisation Advisory Board to provide high-level strategic advice on the University's technology commercialisation program and make recommendations on investments from its pre-seed and follow-on funds. The new board, headed by Dr Keith Shilkin, former Chief Executive Officer of PathCentre WA, has members drawn from across Australia including: Paul Cheever, a leading proponent of early stage venture investing in Australia; Charlie Morgan, an experienced entrepreneur and early stage investor; Mike Quinn, Principal of Innovation Capital, Sydney; and Bernie Stapleton, Director of NBC Capital, Brisbane.

**ENABLING INITIATIVE:
CLARIFY AND IMPROVE BUSINESS PROCESSES**

Curtin will ensure continuous improvement of its business processes through rigorous self-examination and benchmarking.

- The Organisational Development Unit (ODU) delivered a range of programs in 2009 to promote continuous quality improvement throughout the University. School and area review workshops provided an update on the direction of quality and excellence at Curtin, focusing on the School and Area Review process. This was a joint initiative between the Quality Enhancement Office and the ODU.
- Benchmarking workshops also helped Schools and areas to consider what they need to benchmark, and who they should benchmark against, in relation to contributing to the University's new vision of top 20 by 2020.
- A Library Operational Plan was developed to better align library business processes and procedures with the University's strategic direction. Initiatives included: the introduction of a new Library catalogue interface (Primo) incorporating Web 2.0 technology; further development in research and e-repositories; the implementation of an online information literacy module for postgraduate students, InfoScholar; the establishment of a protocol for measuring internet speeds at regional and remote sites; research into the information literacy activities of high school students; and the launch of the Curtin Library Mobile pilot website providing clients with access to key library information and services from a range of mobile devices including iPhone, iPod Touch and smartphones.

**ENABLING INITIATIVE:
IMPROVE THE QUALITY OF THE UNIVERSITY
ENVIRONMENT**

Curtin must do this to make the environment in which learning takes place more satisfying for both students and sta .

- With the support of the Organisational Development Unit, (ODU) each area of the University developed a local area action plan to address issues raised in the Your Voice Curtin Staff Satisfaction Survey (administered in May 2008 to better gauge staff needs and interests). Each area prepared a report on progress for the Vice-Chancellor, with the following key areas identified for university-wide attention: leadership development; cross-sectional communication; staff bullying; staff reward and recognition; and academic workloads. Centrally resourced initiatives included: roll-out of leadership development programs; training sessions addressing staff bullying for at-risk areas; review and expansion of the Excel Staff Awards program; and development of a consistent framework for workload allocation for academic staff. Actions resulting from the survey findings have been communicated to the Curtin community via emails from the Vice-Chancellor and the VC's addresses to staff and the ODU continues to hold focus groups to further investigate staff concerns expressed in the survey.
- A working party with representation from Edusafe, University Counselling Services, Grievance Resolution and the ODU has reviewed policy and strategies to address the issue of bullying in the workplace.
- A review, conducted by a consultant specialising in communications, has also provided direction to further improve the standard and effectiveness of the University's internal communications practices.
- Curtin continued to develop initiatives to encourage cross-cultural professional development and internationalisation of staff. The Fly In, Fly Out Induction Program for staff working offshore was run twice within Curtin Business School during 2009, with 20 people attending. In addition, Module 6 of the Foundations of Learning and Teaching Program 'Intercultural communication' was delivered to 81 participants.
- The ODU conducted a needs analysis to inform the University-wide cultural diversity staff development project. The recommendations will be implemented in 2010.
- The Centre for Aboriginal Studies, in partnership with the ODU, has finalised plans to increase Curtin staff participation in the 'Ways of Working' Program to provide greater understanding of Indigenous culture and ways of working among non-Indigenous staff. Six programs are scheduled for 2010.
- A more collaborative and innovative approach to the use of teaching spaces was investigated in 2009, resulting in an Engaging Learning Spaces report and action plan including research on student ownership

and use of mobile devices (1,600 respondents). Action on the report has begun with the development and approval of minimum standards for teaching spaces and an online mode for reporting classroom improvement needs.

- Stage I of the Kalgoorlie Campus Library space improvements, including the installation of 20 new workstations, was completed and work on Stage II is planned for 2010.
- Housing Services introduced flexible additional services for after-hours and weekend check-in to student residences and expanded assistance for new student arrivals with the collection of new students from the airport and hotels within the CBD. The central Housing Services office was refurbished to accommodate a new one-stop-shop for housing, financial and tenancy advice.
- CurtinMobile is a new mobile website that provides easy access to important University information for students 'on-the-go', recognising that students needing help in a hurry can't always find it on Curtin's main website. This 'help at your fingertips' website, which can be accessed through web-enabled mobile phones, enables students to access information on transport services, financial support, housing and places to eat as well as staff directories and campus maps.

OTHER HIGHLIGHTS

Student and graduate achievements

- Software engineering students from the Department of Computing won the Student Project Category at the Western Australia Information Technology and Telecommunications Awards. The group produced the groundbreaking 'SENSii' technology that aims to improve the quality of life for people living in aged-care facilities and, ultimately, save lives. Associate Professor Tele Tan and Professor Geoff West supervised this project in association with Mr Steve van Blommestein from the Netlink Group. This project was part of the Software Engineering course where final-year students work in teams on a major industry-led project, utilising the broad range of skills and knowledge acquired through the course.
- Two teams of first-year engineering students won awards at the prestigious national engineering competition, Engineers Without Borders Challenge, which this year required students to find an engineering solution to support the development of communities living along the Tonle Sap Lake in Cambodia. The project 'Communal anchored storm protection attachments for houses' (designed by students Phillip Lawrence, Megan Depiazzi, Giang Nguyen, Kadn Dennis, Gerard Litynski and Carl Davis) won an Outstanding Achievement Award, while the 'Integrated bamboo catchment and filtration system' project (designed by Needra Wickramaratna, Debbie To, Samuel King, Chris Barratt and Paul Gresser) won the BHP Billiton Award for Sustainable Design and Appropriate Technology.
- The Centre for Aboriginal Studies continued to report great student academic success. This year, the top 20 students achieved outstanding academic results and have been invited to join the John Curtin Leadership Academy.
- Susanne Sugiarto, a PhD student in the School of Electrical Engineering and Computing, won a prestigious Prime Minister's Australia Asia Endeavour Award to further her research into wind technology in China, one of the largest wind energy producers in the world. The Endeavour Award provides scholarships for the 'best and brightest' university students from Australia and Asia. Ms Sugiarto plans to spend between six and 12 months at Beijing's Tsing Ha University in 2010.
- Curtin film graduates enjoyed more success within the film industry in 2009. Screen Arts graduate Antony Webb (who graduated in 2002) won the ABC WA Young Filmmaker of the Year, the fourth time a Curtin graduate has won this award in the past five years. He also won the People's Choice Award at the WA Screen Awards for his short film *Tinglewood* while the film *Legacy*, directed by graduate Grant Sputore and produced by graduates David Smith and Poppy Dowle, won the night's Best Director and Best Drama awards. Graduates Corrie Jones, Sarah Shaw and Andrew McLeod had their film *Water* screened at the 56th Sydney Film Festival, while graduates Britt Arthur and James Grandison had their film *My Uncle Bluey* screened at the same event. All met while studying film and television at Curtin in the late 1990s.

John Curtin Medal

- The annual John Curtin Medal (the highest non-academic award offered by Curtin, presented to outstanding citizens who exhibit former Prime Minister John Curtin's qualities of vision, leadership and community service) supports the University's aims of developing a culture of excellence. The 2009 John Curtin Medal was awarded to Aboriginal leader Patrick Dodson, known throughout the nation as the 'father of Australian reconciliation', for the outstanding contribution he has made to the Australian community over many years.

Report on Performance (continued)



Key Strategy 2

Focus on high-quality courses in areas of strength

Curtin will deliver courses that meet students' and employers' needs. Building on existing work, the University will offer financially viable, quality programs in our areas of strength. To achieve this we will:

- improve the quality of the learning experience
- strengthen teaching quality
- consolidate on teaching strengths.

Key Strategy 2 is principally supported by enabling initiatives contained in the Teaching and Learning Enabling Plan 2009-2013.

Curtin recognises that excellence in relation to teaching and learning is dependent on a robust quality improvement cycle, a learner-centred approach, building a capable teaching force, supportive technology-enabled learning environments and a commitment to producing highly employable graduates.

ENABLING INITIATIVE: IMPROVE THE QUALITY OF THE LEARNING EXPERIENCE

Curtin will address the student experience of courses and subjects offered, and achieve consistent standards in service delivery.

- Work-integrated learning is an important aspect of teaching and learning at Curtin as it provides students with an opportunity to apply theoretical knowledge and build their employability as graduates. Initiatives implemented in this area in 2009 included the development of a fieldwork education guidelines manual and a dedicated fieldwork website as well as the development of a Fieldwork Preparation Online program for use by staff, students and industry partners. The online program provides essential guidance on preparing for work placements, as well as information on privacy and confidentiality, occupational safety and health and insurance matters.
- Curtin ran a number of professional development workshops relating to assessment in 2009 covering: the design and analysis of examinations/tests; plagiarism avoidance, detection and the use of the plagiarism detection software Turnitin; moderation of assessment; and assessment of group work. Modules relating to assessment in the Foundations of Learning and Teaching Program were revised, bringing sessions relating to marking, feedback and plagiarism into the core of the program. A new optical mark reader system (used for rapid and automated marking of specially designed answer sheets) was installed and configured for use at Curtin, substantially improving analysis and reporting.
- Moderation is a quality assurance process designed to ensure that student assessments are marked with accuracy, consistency and fairness. A set of four

overarching moderation principles were established throughout the year and funds provided to develop related resources, improve processes, provide staff development and enhance moderation of examinations. A total of \$220,000 was allocated directly to Faculties and \$105,000 distributed via competitive bids to fund 19 individual projects throughout the University.

- All Distance and Open Learning units are now available online with all traditional distance education units moved from print-based to online delivery via the FLECS-Blackboard Learning Management System. The 2009 distance education enrolments remained stable and there was a 129 per cent increase from the previous year in Open Universities Australia enrolments, largely attributed to the commencement of the Bachelor of Education (Primary) program.
- Curtin assists staff to develop flexible, effective and engaging learning materials for online, distance and Open Learning courses under the banner of 'educational instructional design'. In 2009, initiatives in this area included: the development of a flexible learning website (that received 30,000 visitors); a comprehensive revision of Blackboard and OLAS training and support resources; attendance by more than 370 people at seminars, workshops and one-on-one training sessions; and the publication of eight issues of the *Let's Get Flexible* newsletter.
- At the end of 2008, Curtin migrated course units to a single University-wide Learning Management System (LMS) which has resulted in an increase in student users from 9,000 to 36,000 (300 per cent increase). There are now 2,700 active units online (a 47 per cent increase from 2008).
- Curtin's comprehensive iLecture system records lectures, workshops and tutorials which can later be accessed as high-resolution video or audio files from computers, mobile phones and iPods, enabling students to view them at a time and location that suits them. A review of the iLecture system and infrastructure in 2009 saw iLecture facilities introduced into a further 30 venues and to 300 desktop facilities. iLecture boundary microphones were also installed at 40 locations. There were approximately 800 lectures or seminars recorded each week (tripling the 2008 numbers) and 880,000 student viewings of iLecture recordings.
- Virtual worlds (eg Second Life) were explored and activities coordinated throughout the year to maximise teaching and learning opportunities presented through this technology. This included connecting Curtin Second Life islands and engaging staff and students in the use of Second Life.

ENABLING INITIATIVE: STRENGTHEN TEACHING QUALITY

This initiative will realise continuous improvement of our teaching quality, and recognition and professional development for teaching sta .

- eVALUate is Curtin's online system for gathering and reporting student feedback on their learning experiences and for gathering feedback from employers and graduates for the purpose of comprehensive curriculum review. The system continued to provide critical information on the quality of the University's teaching and learning activities in 2009:
 - The eVALUate unit survey, which asks students their perceptions of what helps and hinders their achievement of unit learning outcomes and their overall satisfaction with the unit, was automatically available at Curtin's Australian campuses and at the following offshore campuses: INTI International College Penang, Metro College Malaysia, Miri Sarawak campus, Mauritius (Charles Telfair Institute), CSM Singapore, Curtin Singapore, UHK Space (main campus, Admiralty Centre and CIDP). Comparison of like semesters in 2008 and 2009 showed that student response rates increased in Semester 1 (36.9 per cent) and reached a plateau in Semester 2 (35.7 per cent). The eVALUate results for Semester 1, 2009 indicated that overall satisfaction for units was 82.9 per cent (an increase of 0.7 per cent since Semester 1, 2008). Semester 2, 2009 results indicated that overall satisfaction for units was 83.2 per cent (a decrease of 0.3 per cent since Semester 2, 2008).
 - The eVALUate teaching survey asks students to give feedback to individual teachers on their teaching effectiveness and is available to all teachers on request. In each semester in 2009, more than 670 teachers registered for a teaching survey – an increase of more than 120 teachers each semester since 2007. The total number of teaching evaluation requests has also increased annually. In 2008 and 2009, there were more than 3,000 teaching survey requests in eVALUate. This represents an increase of 500 requests since 2007.
 - As part of the Comprehensive Course Review process, eVALUate graduate and eVALUate employer surveys were conducted for 35 courses. These surveys will be replaced with the Graduate Employability Indicators in 2010, developed through an Australian Learning and Teaching Council Competitive Grant and led by staff in the Office of Teaching and Learning.
 - A record Course Experience Questionnaire (CEQ) survey response rate of 57 per cent (or 2,899 responses) was achieved in 2009, up 11 percentage points from 2008, allowing the University to

Report on Performance (continued)

utilise its student satisfaction information in a more granular way for improvement. Curtin has performed relatively consistently between 2006 and 2009 on all CEQ measures. In 2009, Curtin's student satisfaction remained stable, with 86 per cent of graduates reporting they were satisfied with their course experience.

- A new desktop academic integrity reporting tool for reporting instances of plagiarism went live in July 2009 allowing the University to records all instances and outcomes in a central database. The *Plagiarism Annual Report for 2008-2009* reported substantial progress against recommendations made in the 2007-2008 report. Highlights included better treatment of plagiarism incidents in terms of improved reporting and a reduction of inappropriate penalties from nearly 40 per cent in 2007-2008 to less than two per cent in 2008-2009.
- A formal Scholarship of Teaching and Learning committee was established in 2009 to promote a stronger institutional culture and build staff capability in this area. The Office of Teaching and Learning is taking an evidence-based and scholarly approach to all its endeavours as well as engaging in national and international dissemination of Curtin's academic work. It hosted three international visitors in 2009.
- Services to support student learning were expanded in 2009 to include: greater support for Higher Degree by Research (HDR) students; delivery of online learning support to distance education, regional and offshore students; development of a new 'Successful Assignments' 10-hour program module; development of an Academic Resilience Program for Indigenous mainstream students; and the development of new websites to facilitate online delivery of learning resources. The Learning Centre provided support to 2,203 students through seminars (nearly 29,000 hours of assistance) as well as individual consultation to 253 students.
- In 2009, the Curtin Careers Centre organised the inaugural Vacation Career Fair on the Bentley campus, attended by more than 2,100 students. A Curtin Careers Mentoring Program was also developed and piloted to assist student transition to employment, while Skype and eCounselling services were introduced following a review of the delivery of career and learning support services to remote and regional students. In a joint initiative with the Centre for Aboriginal Studies (CAS), three Indigenous students were employed under the Indigenous cadet program and career services were improved for Indigenous students, including the delivery of course career workshops for those studying at CAS on block release. Other Career Services initiatives throughout the year included: the production of occupational information booklets for

80 per cent of Curtin courses; the development of an online, interactive career development module for Higher Degree by Research students, emphasising sharing experiences through blogs; and the expansion of the Curtin Jobs and Events online jobs board to include part-time positions. Participation in the Student Mentoring project significantly increased in 2009 to include 250 mentors for more than 3,250 first-year students.

- Curtin Volunteers (CV!) increased opportunities for student volunteering and work experience in 2009 and is now running 45 programs on an ongoing basis for nearly 1,500 volunteers. It also trebled the active volunteering hours for its Remote and Indigenous Program, expanding its activities from one to four remote/rural communities. Throughout October CV! coordinated the biggest John Curtin Weekend ever, with some 500 volunteers going out to more than 35 country towns to undertake community service activities. New one-off events for volunteer engagement included Clean Up Australia Day, Let's Go Surfing Day, the Great Kangaroo Walk-Out, Koorda Agricultural Show, the Great Cane Toad Muster, ACTIV City to Surf, Pingelly Drug Awareness Weekend, Merredin School Orientation Day, Tambellup Holiday Fun Day, the Survival Festival, the Wardarnji Festival and the Your Voice Forum.

ENABLING INITIATIVE: CONSOLIDATE ON TEACHING STRENGTHS

Continuing the work of Curtin's Comprehensive Course Review will see a consolidation and improved financial viability of teaching units offered.

- The Curriculum 2010 (C2010) reform project is designed to enhance the quality of Curtin's learning and teaching performance, improve staff workloads and determine which existing courses are sustainable in terms of strategic focus, quality and financial viability. Work continued on this project throughout 2009, and included:
 - ongoing revision of the Curtin award, resulting in the bachelor degree regulations being implemented and the postgraduate degree regulations being approved for implementation in 2010
 - negotiation of a revised structure for the large undergraduate degrees (Arts, Commerce, and Science) with 'mix and match' majors and marketing of their implementation in 2010
 - continuing work on the Comprehensive Course Review, which requires all continuing courses and majors to undergo comprehensive review by 2010. A total of 112 courses and 67 majors have now completed this process, with 45 courses and 19 majors still under review. Each School or



Department is also required to complete an Annual Course Review of all coursework courses (or majors within courses in the case of large courses)

- continued testing of the Course Sustainability Indicator. Courses were reduced by 34.6 per cent between 2007 and 2009, largely as a consequence of the C2010 Project. Discontinuing units (ie those which have been phased out or which have an agreed deactivation date) have been reduced by 42.3 per cent since the benchmark date of January 2006.
- Curtin's New Course Development Committee supported 11 of the 23 new course proposals submitted to it in 2009, with further information requested on another two. A total of seven new courses have been developed and completed the University approval process.
- A process for reviewing service-taught units has been introduced which includes a consultative approach with all stakeholders and gathers feedback to inform the review of these units. A total of 35 service-taught units from Health Sciences and Science and Engineering have been reviewed.
- The Unit Outline Builder, a tool for building unit outlines online by sourcing data from the student records system and other official University databases, was developed. This tool will help manage course information and ensure consistency of information. Implementation begins in Semester 1, 2010 with a trial of 285 units and will be phased in for all courses in 2010-2011.
- To facilitate simpler course changes, a new process has been implemented to ensure that the recording of study packages in the student records system (Student One) supports Student Self Management (SSM) and online enrolment. The movement to more complex course structures involving a wider use of majors and streams within generic courses has proved a challenge to the functionalities of the University's systems. Responses to these challenges include: ongoing work on improving the functionality of Student One, including the better provision of data fields to allow greater sophistication in managing the life cycle of study packages; rewriting of Student One reports to make it easier to access information about students approved for majors and streams; and establishment of a working party to examine all aspects of the future development of the online handbook and other products which rely on extractions from the Student One database.
- The UniReady Enabling Program, designed to assist students of different ages and educational backgrounds to obtain entry qualifications into Curtin, was reviewed. UniReady is now available fully online (with web conferencing support sessions), the duration has been reduced to six months (full-time) to remain competitive with other institutions and early TISC results show a 229 per cent increase (from 2008) in first preferences for the program.
- Curtin also endorsed and began implementation of its Triple-i curriculum in 2009. This means that, in addition to student achievement of Curtin's nine graduate attributes, three main aspects of the curriculum will be emphasised:
 - Industry (graduate employability)
 - Indigenous/Intercultural/ International (global citizenship)
 - Interdisciplinary (rich educational choices).
- To align with the Triple-i curriculum, Curtin also piloted iPortfolio - an online space that enables students and staff to create, collaborate, share and publish evidence of their learning, providing a useful tool for students to connect with current and prospective employers.

Report on Performance (continued)



Key Strategy 3

Strengthen research capability and performance

Curtin's existing research strengths – Resources and Energy, Health, Sustainable Development and ICT and Emerging Technologies – remain central to our activities. These will be further strengthened through activities that respond to emerging global and community challenges. The following initiatives will advance this strategy:

- acquire high-quality research capability
- leverage international partnerships
- build research culture and performance expectations
- align research incentives with international indicators.

Key Strategy 3 is principally supported by enabling initiatives contained in the Research Management Plan 2009-2013 which provides the framework to guide the University towards growing and improving its research program.

Curtin is positioning itself in the global arena with a focus on interdisciplinary research. An interdisciplinary approach is increasingly important to address major global issues and societal challenges, and Curtin is supporting interdisciplinary research through major strategic initiatives – including the Resources and Chemistry Precinct, which was launched in April 2007 by the Premier of Western Australia, and the Australian Sustainable Development Institute. Curtin's positioning in the global arena is also based on a focus on the progression of research to innovation and development, and through maximising activities through collaborations with international campuses.

Given the development of research policy nationally and internationally, our research plan addresses the broad issues of research differentiation, research capacity building and research translation/knowledge transfer.

Some refinement of the foci for research has been undertaken to ensure that the University's research profile maximises existing and potential capability and allows the University to differentiate itself in the sector. Areas of research strengths for 2009-2013 are:

- resources and energy
- ICT and emerging technologies
- health
- sustainable development.

ENABLING INITIATIVE: ACQUIRE HIGH-QUALITY RESEARCH CAPABILITY

Curtin must attract the quality research capability that builds the University's reputation.

- Curtin's commitment to high-quality research continued to attract high-calibre recruits in 2009:
 - Professor Chun-Zu Li joined the School of Chemical and Petroleum Engineering this year as Professor Clean Coal Technologies and Director of the Centre for Advanced Energy Science and Engineering, and will be leading the Curtin Centre for Advanced Energy Science and Engineering. He has an outstanding international reputation in the areas of chemical engineering, energy and environment, has co-authored more than 225 papers in journals and conference proceedings and has received numerous prestigious awards.
 - Professor Mark Buntine joined as the new Head of Chemistry. His fields of interest include laser chemistry and spectroscopy, computational chemistry and chemistry education. His experimental research program uses laser spectroscopy coupled with mass spectrometry to investigate the molecular structure of the liquid-vacuum interface and the partitioning of energy as molecules spontaneously evaporate from liquid surfaces.
 - Professor Peter Teunissen, winner of a prestigious Australian Research Council Federation Fellowship, joined the Department of Spatial Sciences from Delft University of Technology in the Netherlands.
 - Professor Brent McInnes joined Curtin as the new Director of the John De Laeter Centre of Excellence for Mass Spectrometry. He is the author of almost 100 technical articles, including publications in *Nature and Science*, and his strengths include capability building through technological innovation and strategic positioning for growth in the context of global trends in the resources sector. He has received numerous honours including the 2004 CSIRO Chairman's Gold Medal for Research Excellence (marine exploration), the 2007 CSIRO Service from Science Awards (Alphachron™ invention and commercialisation) and the 2007 Australian-American Fulbright Professional Fellowship (NASA).
 - Dr Marian Tye joined Curtin as Director of the Centre for Sport and Recreation Research, a collaborative relationship between Curtin and the State Department of Sport and Recreation. A senior academic, Dr Tye's research areas include entrepreneurship, business synergies and physical education and she has lectured in sport, health, recreation, physical education, arts and business. In 2005, Dr Tye was honoured as one of the 10 leaders responsible for developing Technology Park, Bentley.
- In 2009, Curtin continued to build partnerships to support Australia's bid for the \$2.5 billion international Square Kilometre Array (SKA) project. The SKA, involving 19 countries, will be the most powerful radio telescope on Earth, with the ability to examine the formation of galaxies, stars and planets.
 - The Curtin Institute for Radio Astronomy (CIRA), launched in December 2008, will play a major role in the \$20 million International Radio Astronomy Research Centre (IRARC), an initiative of the Western Australian Government to support Australia's bid for the SKA project. Curtin is also the lead organisation in a State Centre of Excellence for radio astronomy, under the leadership of Premier's Fellow Professor Steven Tingay, and Professor Peter Hall, Chair of Radio Astronomy.
 - The \$100 million International Centre for Radio Astronomy Research (ICRAR) was officially launched in Perth on 1 September by the WA Premier, the Hon Colin Barnett. ICRAR is a joint venture between Curtin University of Technology and The University of Western Australia, sponsored by the State Government, and receives strong collaborative support from partners such as CSIRO, iVEC and IBM. ICRAR will play a pivotal role in Australia's effort to secure the SKA. It will also help coordinate WA's radio astronomy research and attract more than 30 new international astronomers, scientists and experts in related fields to the State. The Centre is led by some of Australia's most eminent astronomers from the two universities and includes three Premier's Fellows (Director Professor Peter Quinn, Deputy-Director Professor Steven Tingay and Deputy-Director Professor Lister Staveley-Smith) and Australia's only Professor of Radio Astronomy Engineering (Deputy-Director Professor Peter Hall).
 - The Federal Budget allocated \$80 million for the Australian National Centre for Square Kilometre Array Science to be established in Perth. This significant investment positions Australia as a serious international leader in radio astronomy science and will revolutionise the computing capability and skills base in Western Australia. Curtin's 20-strong radio astronomy research team led by Professors Steve Tingay and Peter Hall is well prepared to respond to the technical, engineering and logistical challenges that the SKA project will require.

ENABLING INITIATIVE: LEVERAGE INTERNATIONAL PARTNERSHIPS

Curtin needs to leverage the resources and capabilities of partner organisations to achieve international leadership.

Report on Performance (continued)

- Supporting radio astronomy research in WA, a new \$80 million high-performance computing project was announced by Senator the Honourable Kim Carr in August. This collaborative centre will have a radio-astronomy focus and be closely linked with the leading-edge Australian SKA Pathfinder radio telescope being built in WA as a precursor to the SKA project. It will build relationships with institutions like the new International Centre for Radio Astronomy Research to assist with providing the data processing power needed to interpret information from the Pathfinder and the SKA. The centre will be built next to the Australian Resources Research Centre in Perth on land owned by CSIRO using funds from the \$160.5 million space and astronomy component of the Federal Government's Super Science Initiative and will be operated by iVEC – a joint venture between Curtin, CSIRO and WA's three other public universities, with support from the State Government.

**ENABLING INITIATIVE:
BUILD RESEARCH CULTURE AND PERFORMANCE
EXPECTATIONS**

By further developing activity in established areas of research focus, Curtin will accelerate and expand its research achievements.

- The launch in April of the Australian Sustainable Development Institute (ASDI) was yet another major milestone in the University's commitment to sustainable development as one of its strategic priorities. ASDI combines the resources and strengths of 16 research centres and has a wider breadth of research than any other sustainability institute in Australia. It seeks to provide the best possible scientific and policy advice to government, industry and society to provide broad benefits to the community. The Governor of Western Australia, His Excellency Dr Ken Michael AC, who has a keen interest in science and sustainability, accepted Curtin's invitation to become the inaugural patron of the Institute. Curtin's significant investment in ASDI will be matched by contributions from government and industry.
- The Curtin Health Innovation Research Institute (CHIRI), an integrated health research, education and practice initiative, progressed in 2009 with the establishment of two Professorial Chairs in Population Health (James Semmens) and Chronic Disease (Moyez Jiwa) and the appointment of Professor Barbara Horner as Clinical Director. CHIRI enables the alignment of key existing areas of strength in health research under the five pillars of Ageing, Chronic Disease, Indigenous Health, Mental Health and Population Health. Key successes in 2009 included participation in the Population Health Research Network, funded by the National Collaborative Research Infrastructure Scheme, through Professor James Semmens, Chair of Population Health. This multi-million dollar project involves the provision of state-of-the-art health data linkage facilities and services that will enable data from a diverse and rich range of health data sets to be linked nationally and internationally. Professor Moyez Jiwa, Chair of Chronic Disease, secured more than \$500,000 for research into palliative care and the role of the community pharmacist.
- Curtin secured \$20.5 million from the Federal Government's Education Investment Fund for the construction of an Engineering Pavilion Complex (the only university in WA to receive an allocation from this funding arrangement for key infrastructure projects at tertiary institutions). The unique complex will create a vibrant, student-focused learning centre for engineering students, combining leading-edge technology and a sustainable focus: the pavilion will be Curtin's first five-star green-rating building, and will act as a showcase for sustainable design, incorporating photovoltaic solar panels and two wind turbines.
- In 2009, successful grants from the Australian Research Council (ARC) and National Health and Medical Research Council (NHMRC) included the following:
 - Professor Steve Zubrick from Curtin's Centre for Developmental Health is one of the chief investigators on a \$9.7 million five-year study into child health funded by the NHMRC. Commencing in 2010 at the Telethon Institute for Child Health Research, in collaboration with researchers from Curtin and The University of Western Australia, Professor Zubrick will lead the team in studies of the critical social, economic and environmental factors in pregnancy and early childhood that have a lifelong impact on human capital building, health and wellbeing.
 - Associate Professor Tony Butler received a prestigious ARC Future Fellow grant (designed to provide the best and brightest in Australian research with the resources needed to conduct four years of world-class research) to unlock some of the scientific secrets of crime. Working from the National Drug Research Institute (NDRI) he will explore the causes of violent criminal behaviour and the health and drug-related problems experienced by prison populations, potentially helping to stop people committing criminal acts or reoffending, and reducing the costs of imprisonment.
 - Associate Professor Butler also received an NHMRC Project Grant (\$245,563 over two years) for his project 'Hepatitis C, Prisons and Treatment Opportunities (HePATO)'. Despite the availability of an effective treatment for hepatitis C and the high prevalence of infection among Australian prisoners, treatment uptake is extremely low.

Using survey data and qualitative interviews with prisoners and prison health staff, this project will investigate the structural and cultural barriers which limit access to treatment and care. The project will also estimate the public health benefits that would result if the uptake of treatment was to reach its full potential.

- Associate Professor Butler also received an NHMRC Partnership Grant for the project 'Reducing impulsive-violent behaviour in repeat violent offenders'. Strong evidence points to a link between poor impulse control (impulsivity) and violent crime. Impulsivity has been shown to be associated with reduced levels of the neurotransmitter serotonin. In studies of impulsive individuals, selective serotonin reuptake inhibitors (SSRIs) have reduced impulsive aggression but there has been no systematic study of the benefits of SSRIs for violent offenders at risk of reoffending. He will investigate whether SSRIs can reduce repeat violent offending.
- Other major research grant successes in 2009 included:
 - Population Health Research Network: the National Collaborative Research Infrastructure Strategy (NCRIS) program will provide \$20 million (supplemented by a further \$31.7 million) to develop the Population Health Research Network (PHRN). Consisting of nodes distributed throughout Australia, the PHRN will provide Australian researchers with state-of-the-art health data linkage facilities and services. Curtin will establish and run the PHRN's Centre for Data Linkage, which has a budget of \$3.6 million over a four-year period. A number of leading record linkage researchers will arrive at Curtin to work on the project including Professor Christine O'Keefe (seconded from CSIRO), Mr James Boyd (who has been central to the development of the Scottish Record Linkage Project), and Ms Anna Ferrante (seconded from The University of Western Australia and responsible for the development of the WA Crime Research Database).
 - Spinal Injury and Physical Activity: Associate Professor of Neuroscience and Trauma Physiotherapy, Garry Allison, will collaborate with University of Western Australia researcher Professor Sarah Dunlop on one of four research projects that comprise the national research program 'Spinal cord injury and physical activity: Promoting neural recovery following spinal cord injury through exercise'. The program, worth over \$4.5 million, is being funded by the Victorian Neurotrauma Initiative and led by the University of Melbourne.
 - Hydrogen Storage Research Group: the Curtin group was awarded a US\$180,000 grant from Russian Aluminium company Rusal to investigate the use of aluminium as a future petrol tank for hydrogen-fuelled vehicles.
- Curtin Centre for Advanced Energy Science and Engineering: Curtin was awarded \$2.5 million through the Federal Government's \$15 million Second Generation Biofuels Research and Development Program in August – the only university in WA to have received funding under this program. The Curtin Centre for Advanced Energy Science and Engineering, led by Professor Chun-Zhu Li, together with other partners including CSIRO, the WA Department of Environment and Conservation, CREST (a joint venture of Curtin and Murdoch University) and Future Farm Industries CRC, will investigate the sustainable production of high-quality second-generation transport biofuels from mallee biomass.
- Curtin was successful in its application for funding for seven national Cooperative Research Centres (CRCs) in which it is a partner. These CRCs, which will receive more than \$164 million in Federal Government funds, will focus on leading-edge research in a number of areas.
 - CRC Mining: designed to deliver innovative technologies and systems to the Australian mining industry
 - CRC for Greenhouse Gas Technologies: will develop carbon capture and storage technologies
 - Deep Exploration Technologies CRC: intended to develop new technologies to safely explore deep under the Earth's surface, to find undiscovered mineral wealth
 - CRC for Spatial Information: involves the establishment of a coordinated national network of satellite system reference stations and the formation of the Australian Spatial Marketplace
 - CRC for Infrastructure and Engineering Asset Management: intended to increase the availability, productivity and useful life of defence assets (including combat aircraft and ships), and of railways and power and water utilities
 - CRC for Remote Economic Participation: will support the Federal Government's commitment to close the gap on Aboriginal disadvantage and develop economically sustainable communities in remote areas
 - Wound Management Innovation CRC: will improve wound healing and quality of life for people with wounds, and provide cost-effective wound care that lessens burdens on our healthcare system.
- ARC Discovery Project Grants were awarded to:
 - Associate Professor Felix Chan (\$252,365 over three years) to provide a framework to better measure and forecast financial risks by applying a set of techniques known collectively as 'entropic analysis'. This is a novel way to measure the amount of information that can be extracted from historical data.

Report on Performance (continued)

- Professor Carey Curtis (\$479,000 over four years) to explore built and social environmental influences on children's independent mobility, active travel and health.
- Professor Kliti Grice (\$450,000 over three years) for her project linking modern biolipids and pigments to ancient biomolecules. This will help scientists understand recent and past climate changes and in turn will improve our ability to forecast future climate change and help Australia manage current threats to biodiversity.
- Professor Boris Gurevich and Dr Max Lebedev (\$295,000 over three years) to develop theoretical models of seismic attenuation and dispersion in hydrocarbon reservoirs, and a new method for experimental testing of these models to provide new information to substantially improve characterisation of hydrocarbon reservoirs from geophysical data.
- Professor Tony Lucey (\$262,000 over three years) for his project to predict and control fluid-structure interactions. Flow-induced vibration of the external panels of vehicles causes damage and noise and can adversely affect performance. This project will develop a new approach for the analysis of these interactions.
- Associate Professor Nigel Marks (\$305,000 over three years) to examine how radioactive decay inside a solid changes the chemistry of the material over time. This study will improve nuclear waste storage and will reveal how insitu chemical change creates new kinds of solids which cannot be made by conventional means and which can exhibit unusual and useful behaviour.
- Professor Paul Miller (\$537,000 over four years) to help Australia to design better migration and immigrant settlement policies. The project will provide policymakers with information on the economic and social adjustment of high-skilled immigrants in a global economy and hasten the contribution of these immigrants to the development of Australia's technological capabilities.
- Dr Hiroaki Suenaga and Professor Harry Bloch (\$185,000 over three years) to model more accurately the complex dynamics of primary commodity prices and their intermarket linkages, which will allow traders, producers and consumers to better forecast commodity price movements and protect themselves through inventory management, hedging and long-run production planning.
- Professor Kok Lay Teo (\$240,000 over three years) to help achieve optimum performance in DC/DC converters widely used in power supply systems and hybrid power systems to generate cleaner energy.
- Professor Svetha Venkatesh (\$310,000 over three years) for her project 'Surviving the data deluge' which will provide new frameworks for addressing crucial problems of sensory data management, applicable to a wide range of disciplines.
- In 2009, ARC Linkage Projects were awarded to:
 - Associate Professors Cynthia Joll and Anna Heitz (\$510,000 over four years) to develop innovative water treatment processes to selectively remove bromide and iodide from potable source waters.
 - Associate Professors Richard Midford and Tanya Chikritzhs (\$277,000 over three years) to develop, implement and evaluate one all-encompassing, evidence-based drug education program for junior high school students across Victoria that will be used to influence national drug education programs.
 - Professor Sven Nordholm and Dr Yee-Hong Leung (\$358,000 over three years) to extend hearing device products produced by Sensear (a Curtin spin-off company that enables speech communication in high-noise environments without the need to remove hearing protection) to include compensation for people with hearing loss. This will give Sensear a competitive edge in hearing protection products, and enhance Australia's reputation in assistive hearing technology.
- In the area of Indigenous health, Associate Professor Tony Butler of the National Drug Research Institute (NDRI) was awarded \$2.3 million to develop capacity in Indigenous offender health research, building a team of Indigenous researchers, and creating an Australia-wide network for sharing knowledge in this field; while Professor Jan Piek from the School of Psychology was awarded \$2.4 million to build a critical mass of Indigenous and non-Indigenous researchers to develop a sustainable, culturally appropriate mental health policy and service model.

**ENABLING INITIATIVE:
ALIGN RESEARCH INCENTIVES WITH INTERNATIONAL INDICATORS**

Curtin's aim here is to improve our research performance ranking.

- Curtin achieved a ranking amongst the top 500 research universities by a global listing published annually by Shanghai Jiao Tong University since 2003. The listing is widely recognised as the leading league table for universities. This top-500 ranking confirms Curtin's status as a serious research university; it is the first university in the five-member Australian Technology Network to achieve such a result.



Key Strategy 4

Drive international excellence

Curtin is an international Australian university with a sound reputation in Asia. To build on Curtin's achievements, and exploit opportunities for Curtin to become a leading university, we have identified the following initiatives:

- build partnerships that enhance international reputation
- optimise international outcomes
- continuously improve internationalisation quality.

Key Strategy 4 is principally supported by enabling initiatives contained in the International Plan 2009-2013. The plan provides direction for Curtin's international initiatives and operates the concept of driving international excellence.

ENABLING INITIATIVE: BUILD PARTNERSHIPS THAT ENHANCE INTERNATIONAL REPUTATION

Curtin will review and implement the international footprint for activities that enable us to access valuable partnerships.

- In 2009, more than 25 international agreements were signed including articulation agreements, Memorandums of Understanding (MOUs), sponsored student agreements, student exchange and offshore teaching

contracts. These agreements focused on collaborative research, student exchange and student recruitment.

- A joint marketing group was established to link the marketing activities of branch campuses with the marketing activities of the Bentley campus to ensure economies of scale and consistency in marketing the Curtin brand across the globe.
- More than 686 international students sponsored by the Australian Government (AusAID), foreign governments and universities and international companies were enrolled at Curtin in 2009. This represented a six per cent growth on 2008 figures. The International Sponsored Students Unit (ISSU) provided assistance and support to sponsored students, including individual case management, pastoral care for students and their families, and opportunities to participate in social events. Curtin received a 100 per cent satisfaction rating as part of the annual survey completed by Curtin AusAID students.
- 'Global Connections', an activity to build stronger relationships between international and local students, was introduced. The program provides opportunities for international and local students to work together to explore the work cultures of their home countries. The Career Service also co-led the organisation of an Australian Technologies Network (ATN) Universities International Career Fair in Kuala Lumpur, building stronger relationships with Curtin Alumni and the ATN Universities, and raising Curtin's profile with Malaysian employers.

Report on Performance (continued)

- An international 'Inner Circle' engagement event series, organised by Curtin's Office of Alumni Relations, was launched in Beijing, China, in 2009. These events aim to raise the profile of the University internationally through strategic engagement opportunities with influential alumni.
- In July 2009, Curtin signed an agreement with the State Key Laboratory of Coal Combustion at Huazhong University of Science and Technology (HUST) to establish a new Curtin-HUST Joint Research Laboratory for Coal and Biomass Utilisation that will investigate the development of new low-emission energy technologies. Curtin's participation in this collaboration is through the Curtin Centre for Advanced Energy Science and Engineering, led by Professor Chun-Zhu Li. The joint research laboratory provides a vehicle for collaborative research projects, joint workshops and symposia, research staff and student exchanges, mutual access to facilities and interaction with international organisations.
- This was the first full year of operation for the Curtin Singapore campus, providing students in Singapore with the opportunity to undertake quality education in modern facilities at a purpose-built campus. At the end of 2009 there were 950 students enrolled. In 2010 the Curtin Singapore campus will diversify its Curtin course offerings with the delivery of humanities and health sciences courses.
- Curtin International College (CIC) continued to be the major pathway provider for international students starting study at Curtin in 2009. Students articulating to Curtin from CIC continued to be successful and clearly benefited from the teaching model, pastoral care and resources that CIC provides. In 2009, the number of students who articulated to Curtin increased by more than 25 per cent to 717.

ENABLING INITIATIVE: OPTIMISE INTERNATIONAL OUTCOMES

Curtin will increase its activity in targeted markets, and review its activity in areas of low return.

- In 2009, Curtin's international student population (both onshore and offshore) grew by eight per cent to 18,916. This growth, achieved when the global economic crisis had its strongest impact, can be attributed to Curtin's strong position in the international education arena and its ability to promote itself as a research and teaching institution.
- In 2009, Curtin continued to consolidate its offshore operations. In addition to its offshore campuses in Malaysia and Singapore (where student numbers increased by 10 per cent to 8,603), Curtin courses are offered in collaboration with partners in nine countries including China, Singapore, Hong Kong, Malaysia, Mauritius and Sri Lanka.
- The number of international onshore students enrolled at Curtin's Western Australian campuses increased to 8,961 in 2009. This growth rate of six per cent from 2008 included marked increases from China, Indonesia and India as well as significant growth in students from the Middle East.
- The number of international Higher Degree by Research (HDR) students increased from 506 in 2008 to 611 in 2009. This 21 per cent growth was a result of the further development of partnerships with government sponsorship agencies in Vietnam, Indonesia and the Middle East.

ENABLING INITIATIVE: CONTINUOUSLY IMPROVE INTERNATIONALISATION QUALITY

Through this initiative Curtin will further develop the internationalisation of the University, and ensure that Curtin awards have a consistent quality across national and international locations.

- Curtin continued to provide student mobility opportunities as well as travel grants to assist students participating in Curtin international student exchange programs (a total of 145 in 2009). In addition, more than 200 Faculty of Health Sciences students joined overseas study tours and, as part of the Faculty's Go Global Program, participated in overseas clinical placements in the Ukraine, South Africa, India and China. The experiences gained from these types of activities are an important element of internationalisation.
- There was a strengthening of quality assurance mechanisms for Curtin offshore programs in 2009 to ensure that equivalent standards were offered in all locations. As a follow-up from the 2008 Australian Universities Quality Agency (AUQA) report, comprehensive quality reviews are completed annually for each program.
- Manish Jhowry represented Curtin international students at the Department of Education Employment and Work Relations (DEEWR) initiated national working party in September 2009. This was established to review the services offered to international students in light of recent safety issues for this student group. Curtin continues to work closely with the Student Guild on all student-related issues.



OTHER HIGHLIGHTS

- Curtin's International Office again supported the International Students Committee (ISC) to stage the annual Pasar Malam (night market) – a colourful event that is a highlight of Curtin's Multicultural Week. This year's event was again well attended and allowed the Curtin international student body to mix with Australian students and the wider Curtin community.
- Curtin's Vice-Chancellor, Professor Jeanette Hackett, received an award from the International Education Association of Australia (IEAA) for outstanding leadership in international education. Professor Hackett has played a leading role in establishing Curtin as a leader in international education and the IEAA award recognised Professor Hackett's significant contribution over a period of 18 years.
- Professor David Wood was appointed Deputy Vice-Chancellor International in October 2009. Prior to this appointment, Professor Wood was Pro Vice-Chancellor of Humanities for more than three years where he initiated significant curriculum reform enabling greater flexibility within the Faculty. His academic background includes extensive research in urban and regional planning and he has made significant contributions to many government projects such as his role as chair of the Ningaloo Sustainable Development Committee.

Report on Performance (continued)



Key Strategy 5

Enhance capacity and financial sustainability

Curtin is a financially secure university. However, in times of both stable and uncertain economic climates, we need to improve Curtin's financial position and leverage the resources and capability of the University. We must have financial sustainability to allow us to undertake strategies and projects with long-term returns, and to withstand adverse conditions. The following initiatives have been identified to strengthen this strategy:

- improve efficiency and productivity
- diversify profit streams
- optimise the use of University buildings and land
- focus on core activities.

Key Strategy 5 is principally supported by enabling initiatives contained in the following enabling plans:

- Information and Communications Technology Plan 2009-2013
- Strategic Asset Management Plan 2009-2013
- Strategic Financial Plan 2009-2013.

ENABLING INITIATIVE: IMPROVE EFFICIENCY AND PRODUCTIVITY

Curtin must continuously improve the efficiency and productivity of its operations.

- Curtin Information Technology services (CITS) reviewed a range of information and communication technologies and support services in 2009 to improve costs and efficiencies for the University. These included:
 - tenders to supply telecommunications services, Windows-based PC equipment and Cisco equipment. Optus won the telecommunications contract, providing an estimated 22 per cent savings on existing arrangements

- the establishment of the Curtin Mobile web service at <http://m.curtin.edu.au/about/> to provide ready access to University services from almost any mobile handset
- replacement of the existing five ICT helpdesks and telephone switchboard with a single ICT helpdesk
- upgrading of the network links to Technology Park and the Murray Street and Kalgoorlie campuses
- enhancement of wireless network services for staff and students at Bentley campus with the installation of more than 200 extra wireless access points to improve coverage of key areas
- establishment of a baseline for Green IT sustainability at Curtin with the aid of Fujitsu Consulting.
- The University Library implemented a new collection strategy for the acquisitions budget to address the fluctuations in the value of the Australian dollar.

ENABLING INITIATIVE: DIVERSIFY PROFIT STREAMS

Curtin is diversifying its financial sustainability by diversifying its profit streams.

- The University continues to develop new opportunities to make funds available for its core activities of teaching and research, including new commercial activities and the generation of funds from initiatives such as the development of Curtin's Bentley campus and philanthropy.
- In July 2009, Mr Tony Hume was appointed director of the University's new Office of Advancement, which will lead the University's fundraising function and nurture and expand stakeholder relationships. Mr Hume comes to Curtin after two years as the inaugural Head of Advancement at the Western Australian Institute for Medical Research where he was responsible for all fundraising and philanthropic activities for the State's largest adult medical research institute. His key tasks will be focused on major gift solicitation, School and Faculty-based fundraising projects, bequest promotion and annual appeals.

ENABLING INITIATIVE: OPTIMISE THE USE OF UNIVERSITY BUILDINGS AND LAND

This strategy will see Curtin continue with developments that improve utilisation of existing buildings and land.

- Curtin has been formulating an innovative master plan for the future development of the Bentley campus that aligns it with the University's 30-year strategic vision for growth, wealth generation and international research status. Under this plan, the University will establish a mechanism by which it can unlock its asset of approximately 35 to 40 hectares of land adjacent to the present academic core, to develop a vibrant, busy university town that will be a key component of the State's economic future. The plan envisages substantial private sector involvement, but the University wishes to permanently retain control and management powers over the land to ensure alignment with its strategic knowledge creation and dissemination activities and to maintain it as a legacy for the future operation of the University. Consultation is being undertaken with the Minister for Planning and his department to this effect. The main components of the plan include:
 - expanded capacity for University academic programs and for its research partners
 - capacity for an additional workforce (over and above current University employment) of around 16,000
 - 'on campus' accommodation for a large proportion of students
 - around 2,500 residential dwellings/apartments and a permanent residential population of around 5,000 people
 - supporting infrastructure including main street facilities and activity and a much improved public transit system
 - provision for the project to be self-funding.
- During 2009, a comprehensive Building Condition Audit was completed which will now be used to provide the University with the basis of a maintenance plan for the coming years. Buildings on all metropolitan sites, as well as the Kalgoorlie and Muresk campuses, were subjected to inspection of the architectural, mechanical and electrical building elements. Maintenance requirements for the coming 10-year period have been identified.
- The majority of initiatives identified under the Sustainability Action Plan 2009 were implemented throughout the year. These included:
 - establishment of the Environmental Sustainability Committee, which met for the first time in August
 - drafting of the Environmental Sustainability Policy which was adopted by the committee
 - development of the Properties Sustainability Website.
- The 2009 Environmental Management Plan was implemented successfully this year, covering energy, greenhouse gas reporting, water use, stormwater and pollution, recycling and waste management and sustainable building design. Some of the strategies completed in 2009 included:
 - adoption by the Water Corporation of the 2008-2009 Water Efficiency Management Plan for the Bentley campus, showing a 33 per cent reduction in scheme water use when compared with the 2006-2007 baseline year
 - collation and reporting of the University greenhouse gas emissions under the National Greenhouse and Energy Reporting Act (Commonwealth) 2007 for the year 2008-2009
 - introduction of environmental procedures into the Contractors Safety Handbook
 - introduction of spill kits and training for spill control in the Facilities area
 - recycling of e-waste on campus, with an e-waste drive organised for staff and students in April
 - completion of a waste audit with students and finalisation of a waste assessment of the whole Bentley campus.
- In 2009, the University approved the construction of two additional car parks on the Bentley campus to meet current demand and offset the loss of existing car parking that will be subsumed in future developments.

ENABLING INITIATIVE: FOCUS ON CORE ACTIVITIES

Curtin seeks to improve the quality of its activities and its financial sustainability by reviewing its non-core activities.

- In common with most universities, Curtin operated an in-house printing operation. In reviewing the suitability for the operation to be outsourced, factors such as the amount of space being utilised for the operation, and its capital requirements were considered. The printing operation was outsourced during the year, enabling floor space of over 500sqm to be utilised for other purposes, and eliminating the need to replace expensive equipment.
- Curtin's student email was outsourced, providing a better service for students, and a more cost-effective function for the University.
- The new arrangements for the supply of personal computers and laptops to the University have been structured so that many of the activities associated with the provision and subsequent replacement of this equipment is outsourced.

REPORT ON OPERATIONS

Governance of the University

The Council is the governing body of the University, and its powers are set out in the *Curtin University of Technology Act 1966 (WA)*. It has 'the management and control of the property and affairs of the University and may do all such acts and things as it may think best calculated to promote the interests of the University'.

The Curtin Act provides for a Council comprising of the Chancellor, the Vice-Chancellor, members appointed by the Governor, a nominee of the State Minister for Education, co-opted members, members elected by the academic and general staff, members elected by students, members who are members of bodies that represent the interests of the University in places other than at the Bentley campus, a member of the Academic Board, and a member of the Alumni Association.

Council met on eight occasions during 2009 under the chairmanship of its Chancellor, Mr Gordon Martin, and considered two matters by circular resolution. In addition, a retreat involving members of Council and the senior executive was held in July 2009.

At its meeting on 18 March 2009, Council noted that Mr Martin was willing to serve a second term as Chancellor for a period of up to one year in order to provide sufficient time for a suitable transition to a new Chancellor. It therefore resolved to re-elect Mr Martin to the position of Chancellor for a new term beginning 1 June 2009 and ending 31 March 2010.

Following a nomination process overseen by the Executive Committee at its meeting on 17 June 2009, Council resolved to elect Dr Jim Gill AO to the position of Chancellor for a period of three years commencing on a date to be determined. Following consultations between Mr Martin and Dr Gill, it was agreed that Dr Gill's term as Chancellor would commence on 1 January 2010.

At its meeting on 17 February 2009, Council also approved the reappointment of Professor Jeanette Hackett to the position of Vice-Chancellor for a term of five years commencing 1 March 2009.

Major strategic issues considered by Council in 2009 included:

- renaming of the University to 'Curtin University'
- approval of key performance indicators for the University's new Strategic Plan 2009-2013
- consideration of a report on the establishment of a medical school

- authorisation for the University to negotiate with the Department of Education and Training (DET) on the transfer of the Curtin Vocational Training and Education College (VTEC) at Kalgoorlie to DET
- approval of a regional campus strategy 2010-2013.

To inform and enhance Council's role in shaping the strategic direction of the University, a series of presentations on key issues and themes was included in Council's meeting program in 2009. These presentations included:

- activities of the Curtin Business School
- Curtin name and brand
- research and development
- activities of the Faculty of Humanities
- activities of the Faculty of Science and Engineering
- review of the role of the Academic Board.

Council also held dinners with the following stakeholders to discuss issues of mutual concern:

- Hon Gary Gray, Parliamentary Secretary for Regional Development and Northern Australia
- Chairs of Faculty advisory boards
- Student Guild office bearers
- representatives of local councils.

Key governance-related activities in 2009 included:

- appointment of Professor David Wood to the position of Deputy Vice-Chancellor, International for a five-year appointment
- making of new:
 - Land and Traffic By-laws
 - Statute No 14 – *Curtin University of Technology Foundation*
 - Statute No 10 – *Student Discipline*
- repeal of Statute No 24 – *Curtin University of Technology, Sarawak Campus, Malaysia*
- approval of a revised role statement for members of Council
- approval of the 2010 Budget
- attendance at the 10th anniversary celebrations of Curtin Sarawak
- inspection of the Curtin Singapore campus
- inspection of the new Resources and Chemistry Precinct and the Curtin Stadium.

All members of Council were offered a developmental session on duties, responsibilities and the fundamental principles of corporate governance.

Members of Council for 2009

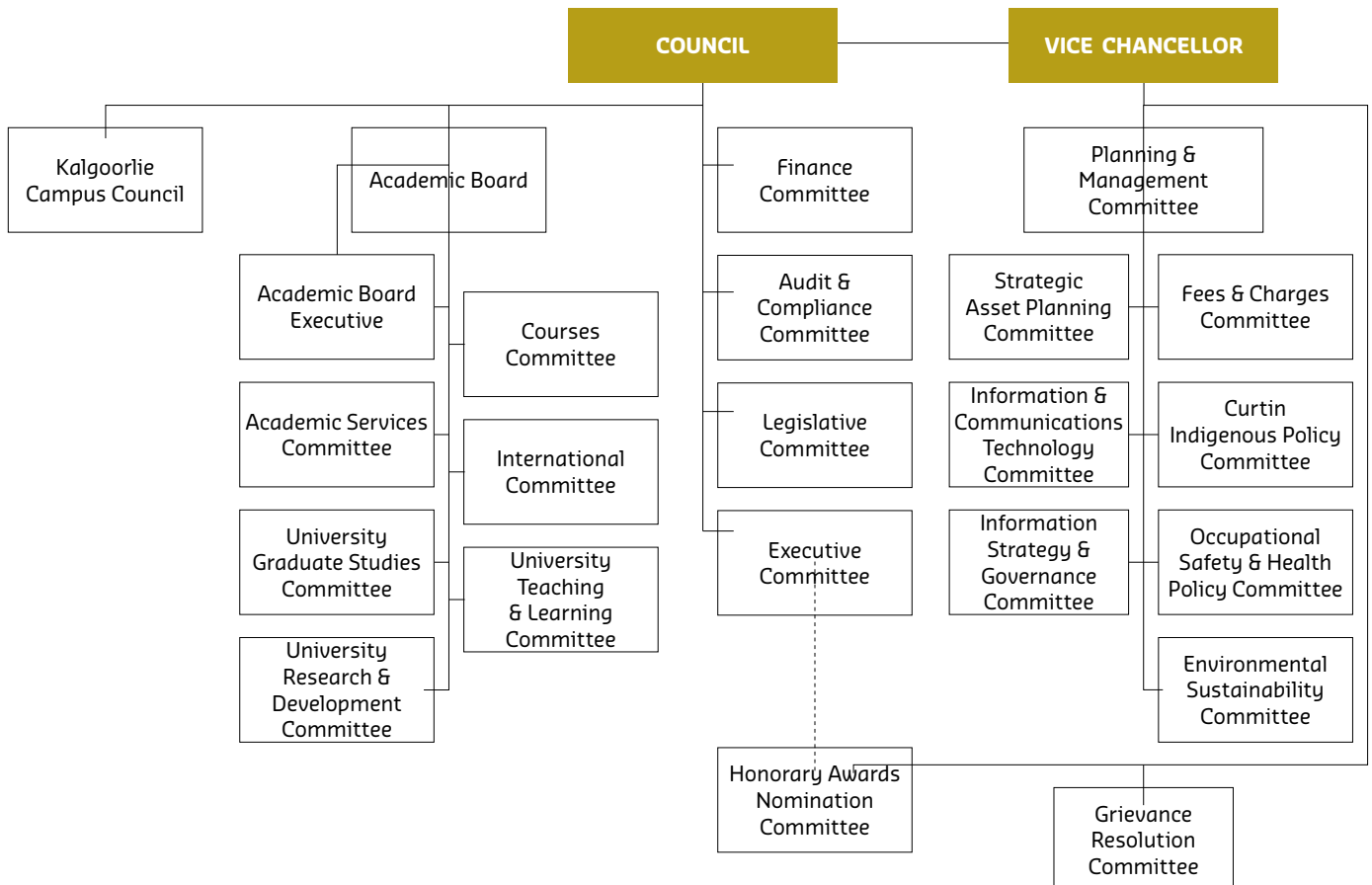
	COMMENCED	TERMINATED	DUE TO EXPIRE
Chancellor			
Mr Gordon Martin	1/06/2009	31/12/2009	31/03/2010
	1/06/2006	31/05/2009	
Members appointed by Governor in Council			
Mr Chris Bennett	1/04/2009	current	31/03/2012
	25/05/2006	31/03/2009	
Ms Michele Dolin (Pro Chancellor)	1/04/2007	current	31/03/2010
	1/04/2004	31/03/2007	
	1/04/2001	31/03/2004	
Mr Ian Fletcher	1/04/2007	current	31/03/2010
Mr Keith Spence	1/04/2009	current	31/03/2012
	20/06/2006	31/03/2009	
Dr Michael Stanford	2/12/2008	current	1/12/2011
Ms Lynne Thomson	26/02/2008	current	25/02/2011
Member nominated by the Minister for Education and Training			
Mr Luke Saraceni	20/04/2009	current	18/04/2012
Member who is the Chief Executive Officer			
Professor Jeanette Hackett (Vice-Chancellor)	14/08/2006	current	ex-officio
Members elected by Full-Time Academic Staff			
Associate Professor David Charnock	1/04/2007	current	31/03/2010
	1/04/2004	31/03/2007	
	1/04/2001	31/03/2004	
Dr Jan Sinclair-Jones	1/04/2008	current	31/03/2011
	1/04/2005	31/03/2008	
Members elected by Students			
Mr Yong Chee Lai	1/01/2009	31/12/2009	
Mr Chad Silver	1/01/2009	31/12/2009	
Member elected by Full-time Salaried (General) Staff			
Mr Liam McGinniss	18/06/2007	current	17/06/2010
Member elected by the Alumni Association			
Vacant			
Co-opted Members			
Ms Zelinda Bafile	1/04/2007	current	31/03/2010
	24/06/2004	31/03/2007	
Mr Don Humphreys	1/04/2008	31/03/2009	
	1/04/2005	31/03/2008	
	06/2002	31/03/2005	
Mr Gene Tilbrook	1/04/2009	current	31/03/2012
Mr Daniel Tucker	1/08/2007	current	31/07/2010
Members who are members of bodies that represent the interests of the University in places other than the University's principal campus			
The Honourable Datuk Patinggi Tan Sri Dr George Chan Hong Nam	1/04/2009	current	31/03/2012
	1/04/2006	31/03/2009	
Member who is a member of the Academic Board elected by and from the Academic Board			
Professor Jo Ward	1/04/2009	current	31/03/2011
	11/06/2007	31/03/2009	

Report on Operations (continued)

Governance structure (as at 31 December 2009)



Members are from left to right: Dr Jan Sinclair-Jones, Yong Chee Lai, Gordon Martin (Chancellor), Professor Jeanette Hackett (Vice-Chancellor), Chad Silver, Dr Michael Stanford, Gene Tilbrook, Chris Bennett, Liam McGinnis, Zelinda Bafile, Lynne Thomson, Ian Fletcher. Absent: Michele Dolin (Pro Chancellor), Keith Spence, Luke Saraceni, Associate Professor David Charnock, Daniel Tucker, the Honourable Datuk Patinggi Tan Sri Dr George Chan Hong Nam, Professor Jo Ward.



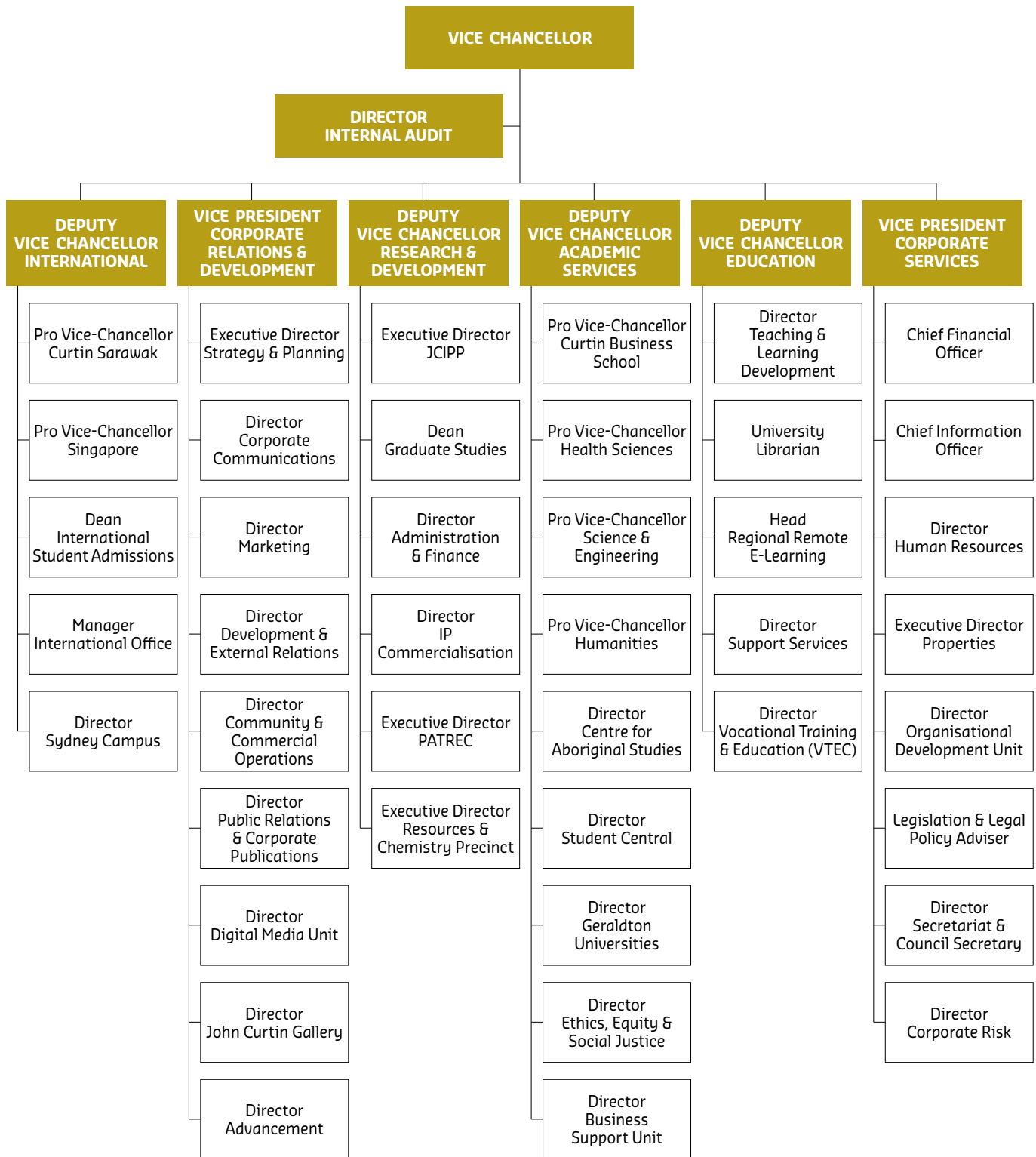
Administrative structure

SENIOR OFFICERS

Mr Gordon Martin	Chancellor
Professor Jeanette Hacket	Vice-Chancellor
Professor Jane den Hollander	Deputy Vice-Chancellor, Academic
Mr Geo Searle	Vice President, Corporate Services
Ms Valerie Raubenheimer	Deputy Vice-Chancellor, Strategy and Planning (1 Jan 2009 – 1 Feb 2009 acting) Vice President, Corporate Relations and Development 2 Feb 2009 – 31 Dec 2009
Professor Linda Kristjanson	Deputy Vice-Chancellor, Research and Development
Professor Robyn Quin	Deputy Vice-Chancellor, Teaching and Learning
Professor Patrick Forde	Deputy Vice-Chancellor, International (1 Jan 2009 – 31 Oct 2009 acting)
Professor David Wood	Pro Vice-Chancellor, Humanities 1 Jan 2009 – 30 Sep 2009 Deputy Vice-Chancellor, International 1 Oct 2009 – 31 Dec 2009
Mr David Menarry	Chief Financial Officer
Professor Duncan Bentley	Pro Vice-Chancellor, Curtin Business School
Professor Jill Downie	Pro Vice-Chancellor, Health Sciences
Professor Jennifer Nicol	Pro Vice-Chancellor, Humanities (7 Sep 2009 – 31 Dec 2009 acting)
Professor Andris Stelbovics	Pro Vice-Chancellor, Science and Engineering
Professor John Evans	Pro Vice-Chancellor, Sarawak
Professor John Neilson	Pro Vice-Chancellor, Singapore
Mr Stephen Harvey	Executive Director, Properties
Mr Marco Schultheis	Executive Director, Strategy and Planning

Report on Operations (continued)

Organisational chart



Staffing matters

STAFF SUMMARY

FTE of Academic and General Staff as at 31 March 2009 (excluding Hourly Paid/Sessional Staff)

	Continuing/ Permanent	Fixed Term/ Temporary	Total
Academic Staff	705.77	604.25	1310.02
General Staff	1240.64	545.68	1786.32
Total	1946.41	1149.93	3096.34

STAFFING POLICIES

New policies relating to working with children, criminal record screening, academic workloads and ceasing employment commenced during 2009.

The working with children policy has been developed to comply with the *Working with Children (Criminal Record Checking) Act 2004*, and demonstrates the University's commitment to ensuring the safety and wellbeing of children who come into contact with staff and students.

Through its commitment to public sector standards in administration, and in discharging its duty of care to students, staff, clients and community, the University introduced criminal record screening procedures for identified positions. The first of its kind in the University sector, the policy ensures that existing and potential staff and other persons representing the University do not have a criminal record that may adversely impact on the University's operations or reputation.

The ceasing employment policy came into effect in May 2009, and was developed to ensure that staff who leave the University understand their obligations with respect to ensuring that all University property is returned.

Policy development work commenced to support the new Academic Workload Management System which is being developed to ensure a consistent approach to the effective allocation of academic staff workloads.

Curtin's Code of Conduct was launched in 2009. This sets out the standard of behaviour expected of all Curtin's staff and associates in order to uphold the University's values of integrity, respect, fairness and care.

A policy with supporting documentation was developed for the Vice-Chancellor's Awards for Excellence and Innovation. This program will be implemented in 2010.

INDUSTRIAL RELATIONS

VTEC

Negotiations concluded for a varied certified agreement with academic staff at the Vocational Training Education Centre (VTEC) whose terms and conditions are covered by a separate collective agreement. This was a variation of a pre-reform certified agreement certified 24 July 2009 and brought VTEC academic staff more in line with their counterparts in the Western Australian TAFE sector.

Academic staff bargaining

Negotiations with the National Tertiary Education Union (NTEU) commenced in August 2008, and continued throughout 2009, to reach agreement on a new Curtin University of Technology Academic Staff Enterprise Agreement. The enterprise bargaining website was used to update staff regarding the nature and progress of negotiations and provided staff with the opportunity to comment on proposed clauses. The University was seeking a number of reforms particularly around staff disciplinary procedures and workload management.

Some staff engaged in protected industrial action including participation in a national strike day on 16 September 2009 and a ban on the transmission of student assessment and exam results. Following an intensive period of negotiations, the University reached an agreement in principle with the NTEU on key matters on 3 December 2009. Negotiations will continue in early 2010 to conclude a draft agreement for the approval of all academic staff by way of a staff ballot.

General staff bargaining

Negotiations with the Joint Unions – the Community and Public Sector Union, Australian Manufacturing Workers Union, Liquor Hospitality and Miscellaneous Union Workers Union, National Tertiary Education Union, Communications, Electrical and Plumbing Union and the Construction Forestry, Mining and Engineering Union – commenced in November 2008, and continued throughout 2009 with a view to drafting and reaching agreement on a new Curtin University of Technology General Staff Enterprise Agreement. The University is seeking reforms to shift work arrangements and alignment of public holidays with academic staff. The University reached an agreement in principle on key matters in early January 2010. Negotiations are continuing with a view to staff balloting in early 2010.

Child care staff

Staff from the formerly Guild-operated Curtin Guild Child Care Centre came into Curtin's employ at Curtin University of Technology Early Childhood Centre as at 18 June 2009. Following negotiations with Child Care Centre management, staff were balloted and accepted a new employee collective agreement which expired on 31 December 2009.

Report on Operations (continued)

Salary payments to staff in 2009

In January 2009, VTEC academic staff received a 5.5 per cent increase recognising significant productivity improvements around hours of work and a move towards improved relativity to the TAFE sector. In October 2009, the University authorised a cost of living payment of two per cent to all staff (other than VTEC Academic staff) backdated to 1 April 2009, with staff receiving the increase and back-pay on 29 October 2009. In late December 2009, VTEC academic staff received a further 5.6 per cent salary increase with no further increases projected for 2010 and onwards.

Fair Work Act

Commencing 1 July 2009, the new Federal industrial relations legislation *Fair Work Act 2009* came into effect. In accordance with the Act, the University commenced operating under the principles of good faith bargaining, which changed the way in which bargaining was conducted. Effective from 1 January 2010 the University must ensure compliance with the National Employment Standards and the new collective agreements are being drafted accordingly.

Dispute settlement

Throughout 2009 there was a sustained focus at the local level regarding the prevention and resolution of disputes. This approach has resulted in minimal industrial disruption, with no dispute notifications being lodged with the Australian Industrial Relations Commission for 2009.

OCCUPATIONAL SAFETY AND HEALTH, WORKERS' COMPENSATION AND INJURY MANAGEMENT

The reportable key performance indicators for 2009 were:

Incident Rate (lost time injuries/100 employees)	0.06
Frequency Rate (lost time injuries/1,000,000 hours worked)	0.6
Cost/\$100 Wage roll	\$0.35
Rehabilitation Success Rate	100%

Workers' compensation and injury management

Curtin maintained an in-house accredited injury management service within EduSafe to assist injured workers, minimise workers' compensation costs, ensure efficient return to work rates, and provide support to managers in managing injured/ill staff. The effectiveness of this program is evidenced by the impressive Rehabilitation Success Rate.

Prevention of occupational injuries and illnesses

Curtin continued to ensure legislative compliance in this area and to improve systems for the prevention of workplace injuries and illnesses. The effectiveness of the systems approach to health and safety management is evidenced by the low Incident and Frequency Rates for 2009, which are 95.38 per cent and 92.94 per cent, these being below current benchmarks for the Education Industry, published by WorkSafe WA.

Major inroads into safety were made within Facilities Management with the design and implementation of the University's Contractor Management System. The success of this initiative has resulted in the appointment of an ongoing safety position within the Facilities Management area.

Significant work has been completed towards improvement of the safety and health component of the Corporate Induction process. This will help inform new staff of services available to them and of their responsibilities as a key strategy for the prevention of incidents. The University's online system for reporting incidents and hazards continued to be refined to improve the early reporting, intervention and investigation of incidents.

Significant issues and trends

EFFECT OF ECONOMIC AND OTHER FACTORS

Curtin was able to boost its 2009 domestic intake due to an eight per cent overall growth in applications – comprised of a five per cent increase in school leaver applicants and a 17 per cent increase in mature age applicants. (Approximately 25 per cent of Curtin's domestic undergraduate intake in 2009 was mature age applicants.) The significant return of mature age applicants to the higher education market is a welcome change after several years of decline during years of high employment rates in WA, that saw mature age applicant numbers decline by almost 40 per cent.

The growth in 2009 applicants is attributed to the troubled economic environment of 2008 and early 2009, which for many school-leavers made immediate employment a less attractive option than in the past. Mature age students also appeared to be taking the opportunity to upgrade to formal qualifications or switch careers. Curtin also experienced strong growth in its 2009 mid-year intake as well as a reduction in the number of students leaving their course during the year – all products of economic and employment uncertainty.

Another cause of growth in domestic undergraduate applications was the increase in the number of courses of study available in high schools that students can use to generate a university entry TER score. This is likely to increase the number of applicants even more for the 2010 intake.

Curtin's postgraduate courses, for which domestic students pay full fees, showed only small growth in 2009 compared with 2008. This is a good outcome given the economic stresses experienced in WA communities in 2008-2009. Curtin has worked hard to make its fee-paying postgraduate courses attractive to students by improving the flexibility of study options available.

Despite the continuing downturn in the first half of 2009, the underlying long-term strength of the WA economy should continue to encourage and facilitate collaboration between Curtin, industry and government on many levels. Curtin's applied research capacity received a significant boost with the opening of the Chemistry and Resources Centre at Curtin's Bentley campus in November – a collaborative initiative between Curtin and the WA Government's Chemistry Centre with support provided by BHP Billiton. This \$116 million state-of-the-art centre will bring significant social and economic benefits to the people of WA for

many years to come. Curtin's new Health Innovation Research Institute is another significant partnership-driven venture that is underway and will bring significant benefits to the WA public as well as Curtin researchers and students.

Although international economic conditions in some countries were unstable in the first half of the year, Curtin's Asian markets (which contribute more than 80 per cent of the total onshore international student cohort) were relatively sound and contributed significantly to further growth of around eight per cent in Curtin's international student numbers.

The Australian dollar strengthened during the year against all currencies of its major source markets in Asia, causing an increase in the real cost of Curtin courses for overseas students. Past experience has shown that demand is reasonably elastic against price, so demand may be affected negatively. Continued strong growth in household incomes and demand for education in these markets should counter the additional cost imposed brought on by the negative exchange rate changes.

CHANGES TO THE LEGAL ENVIRONMENT AFFECTING THE UNIVERSITY IN 2009

The following summary refers to significant legislative changes that apply to the University as a whole.

Fair Work Act 2009 (Commonwealth) and related legislation

The *Fair Work Act 2009* and associated Regulations established a new workplace relations system built on the following elements:

- a comprehensive safety net of legislated National Employment Standards and modern awards that set minimum wages and employment conditions. (The new standards and awards will come into operation in January 2010.)
- the establishment of a 'one-stop shop' in the form of Fair Work Australia (incorporating the Fair Work Ombudsman) which will facilitate collective bargaining, approve enterprise agreements and assist in dispute resolution.
- a new framework for making enterprise agreements based on the concept of good faith bargaining and the creation of a single stream of agreements.
- extended protections from unfair dismissal for all employees, together with a streamlined system for dealing with disputed unfair dismissal cases.
- a clear set of rules governing workplace rights, protection against discrimination and unlawful termination, the conduct of industrial action, and right of entry by union representatives.

Report on Operations (continued)

Higher Education Support Amendment (2009 Budget Measures) Act 2009 (Commonwealth)

This Act amended the Higher Education Support Act 2003. Amongst other measures the amending Act:

- provided for changes to the maximum grant amounts to take account of indexation and 2009 Budget measures, including removal of the overall limit on student places that may be funded under the Commonwealth Grants Scheme from 2012
- updated the table of funding clusters in s. 30-15 to include 'education' and increased the Commonwealth contribution amount for all funding clusters
- increased the maximum additional funding that a higher education provider may receive for over-enrolment from five per cent to 10 per cent when calculating an adjustment to the basic grant, for 2011 onwards
- provided that 'Other Grants' may only be made to Table A and B providers that are universities for the purpose of supporting structural adjustment
- varied maximum student contribution amounts for 2010 and applied new indexation arrangements for such contributions in 2011
- removed the OS-HELP loan fee from 2010.

Disability Discrimination and Other Human Rights Legislation Amendment Act (Commonwealth) 2009

This Act made significant amendments to the *Disability Discrimination Act 1992*, and other human rights legislation including the *Age Discrimination Act 2004* and the *Human Rights and Equal Opportunity Act 1986*.

Some of the key changes to the Disability Discrimination Act are those that:

- make explicit that refusal to make reasonable adjustments for people with disability may also amount to discrimination
- make the defence of 'unjustifiable hardship' available in relation to all unlawful discrimination on the ground of disability, except for harassment and victimisation
- clarify matters to be considered when determining unjustifiable hardship, and clarify that the onus of proving unjustifiable hardship falls on the person claiming it (eg an employer)
- make clear that the definition of disability includes a genetic predisposition to a disability and behaviour that is a symptom or manifestation of a disability
- replace the 'proportionality test' in the definition of indirect discrimination with the requirement to prove that the condition or requirement imposed has the effect of disadvantaging people with the disability of the aggrieved person

- simplify requirements for demonstrating indirect discrimination and place the burden of proving the reasonableness of a requirement or condition on the person who has imposed it
- extend the defence of inherent requirements so that it is available to employers in a wider range of employment situations
- provide that discrimination on the ground that a person has a carer, assistant, assistant animal or disability aid is discrimination on the basis of disability.

The Act clarified that an organisation cannot request or require disability-related information from someone if the request is connected with action that is unlawful under the legislation.

The 'dominant reason' test has been removed from the Age Discrimination Act 2004. If a person's age is one of the reasons for taking discriminatory action, then this will be sufficient to be considered discrimination.



Other disclosures and legal requirements

ACT OF GRACE PAYMENTS

Under the University's policy on Act of Grace Payments, Curtin undertakes to report through the Annual Report all Act of Grace Payments made in each financial year. In 2009, a sum of \$18,267 was paid, representing payments of \$200 and \$327, \$2,000 and \$15,740 respectively.

ADVERTISING - ELECTORAL ACT 1907

Under section 175ZE of the *Electoral Act 1907*, the University is required to disclose expenditure for advertising agencies, market research organisations, polling organisations, direct mail organisations and media advertising organisation costs.

For 2009, the following costs were recorded against these items:

	Spend ex GST
Advertising Agencies	
Campaign	\$1,836,827.30
Non campaign	\$358,063.60
Media Advertising Organisations	\$2,121,568.00
Market Research	\$199,549.00
Polling Organisations	\$3,125.00
Direct Mail Organisations	
TOTAL	\$4,519,132.90

CAPITAL WORKS

Engineering Pavilion

Curtin has started construction on a world-class, student-focused learning centre which facilitates transformational approaches to teaching and learning – the 'Engineering Pavilion Complex'.

The complex, as envisaged, will be composed of two building wings located around an exhibition plaza forming an iconic gateway or shopfront for the Faculty of Engineering and Science. Its key feature is an open 'studio' style that facilitates peer learning and combines laboratories, amenities and areas for interaction into a suite of integrated spaces. Conceptually it is a natural extension of the 'First Year Studio' that formed part of the Carrick award-winning engineering Foundation Year Program and demonstrated the benefits of a non-traditional, innovative learning environment.

Work on Stage 1 of the Engineering Pavilion is progressing with completion scheduled for August 2010 and a schematic design for stage two has been developed. A detailed brief to fit out the highly flexible and efficient floor plates of the building is being finalised with construction commencing mid-2010 and completion scheduled for November 2011.

It is the first university building in Australia to be registered for Greenstar rating using the new 'V1' education rating tool. Incorporating a photovoltaic power supply, the use of rainwater for toilet flushing and Xeriscopic landscaping, the building will have interactive monitoring systems for power and water usage and will be of itself a learning tool in environmental management.

Resources and Chemistry Research and Education Precinct

Following practical completion of this significant building project in August 2009, both Curtin staff and staff from the Chemistry Centre of Western Australia have now moved into their respective sections of the building and begun operations. The building was officially opened by the WA Premier, Colin Barnett, and the Federal Minister for Resources and Energy, Martin Ferguson, on 13 November 2009.

Building 110 facilities management and asbestos removal

This project has been scheduled in two stages: upgrade of workshops, mail room and Central Resources area, and removal of asbestos; followed by an office building upgrade. Construction started in July 2008 and Stage 1 of the project was completed at the end of July 2009. Part of Stage 2 is currently being progressed, with the detailed scope of works for the remainder of Stage 2 still being completed. The expected completion date for this project is mid-2010.

Building 108 refurbishment

This project involves the conversion of Building 108 into teaching space for the School of Occupational Therapy and Social Work to provide much needed specialised teaching facilities as well as additional Centrally Allocated Teaching (CAT) space for general academic use, including a 99-seat lecture theatre. Work commenced on 23 November 2009. Completion is expected to occur mid-December 2010 with the facility to be operational for Semester 1, 2011.

DIRECTORS' AND OFFICERS' LIABILITY INSURANCE

An indemnity agreement has been entered into between the University and the directors and officers named in this report. Under the agreement, the University has agreed to indemnify those directors and officers against any claim to the extent allowed by the law, for any expenses or costs which may arise as a result of work performed in their respective capacities.

Report on Operations (continued)

During the year the University paid a premium in respect of a contract of insurance for the directors and officers of the University and all related bodies corporate, against liabilities incurred in acting in such capacities, to the extent permitted under the *Corporations Act 2001*. The contract prohibits the disclosure of the nature of the liabilities and/or the amount of the premium.

DISABILITY ACCESS AND INCLUSION PLAN OUTCOMES

Throughout 2009, Curtin continued its work in improving services to people with disabilities. While most activities tended to be focused on the Bentley campus where most staff and students are located, activities will expand to Curtin's regional campuses and education centres in 2010. Outcomes included:

Outcome 1

People with disabilities have the same opportunities as other people to access the services of, and events organised by, Curtin.

Curtin Stadium is now completed and has good access for people with disabilities. Event invitations have a standard by-line inviting requests for access support while the Curtin home page has been modified to promote ease of use by people with disabilities.

Outcome 2

People with disabilities have the same opportunities as other people to access Curtin's buildings and facilities. A draft updated access map of the Bentley campus and surrounds is available for feedback and an Access consultant is now engaged for all new projects. The student research projects regarding the relationship between access and the recruitment and retention of students with disabilities are complete and have been reported to the disability implementation committee. New 'courtesy parking' bays have been installed for people with temporary disabilities.

Outcome 3

People with disabilities receive information from Curtin in a format that will enable them to access the information as readily as other people are able to access it.

This has been a major activity in 2009 with best practice ideas, checklists and 'Curtinised' guidelines re accessible and inclusive information available on the disability website. A draft Accessible Information policy is now available for feedback from Curtin staff.

Outcome 4

People with disabilities receive the same level and quality of service from Curtin staff as other people receive from Curtin staff.

Disability awareness staff education programs were substantially upgraded and included: customised session

for Health Sciences on 'Fieldwork and Students with Disabilities'; liaison visits to Faculties/Schools; attendance at the Foundations of Teaching and Learning sessions for new academic staff; and printed material in all Organisational Development Unit packages for new staff. The two-day Mental Health First Aid training workshops were sell-outs, resulting in more than 100 Curtin staff being trained to recognise symptoms of mental distress.

Outcome 5

People with disabilities have the same opportunities as other people to make complaints to Curtin.

The complaints process was reviewed in 2008 and remains inclusive of people with disabilities.

Outcome 6

People with disabilities have the same opportunities as other people to participate in any public consultation by Curtin.

Accessible online surveys with alternative formats are available on request and these will be further reviewed in 2010.

Outcome 7

People with disabilities have the same opportunities as other people to participate in employment at Curtin (additional Curtin Outcome).

The Curtin Careers Centre will develop clearer guidelines regarding the disclosure of disability for students and graduates seeking employment. Careers has incorporated principles of Universal Design (UD) to support Curtin graduates with disabilities in career planning, including an approach to Curtin as a potential employer. An external employment provider provides education regarding staff with disabilities at Curtin.

Other outcomes included:

- the disability website disability.curtin.edu.au was well promoted as a 'first stop' reference
- Curtin hosted the Australia Sign Language Interpreters Awards (ASLIA) in June 2009
- Curtin provided feedback to the Federal Attorney General's draft Premises Standards
- information about universal design is included in staff professional development programs
- universal design reference is in the mandatory Teaching and Learning Booklet for all academic staff
- the Strategic Procurement manual informs that, where practicable, the goods or services purchased adhere to the principles of universal design
- orientation for Students with Disabilities/Medical Conditions was held in February 2009 and 'O' Week activities, website and information are now accessible for people with disabilities
- presentations at community events to inform prospective students about Curtin's Disability Services.

PRICING POLICIES ON OUTPUTS PROVIDED

Fees are charged in accordance with Commonwealth Government guidelines and University Policy.

Students in Commonwealth-supported places are required to contribute towards the cost of their education. The student contribution amount is calculated for each study period for his or her student load and the annual course contributions that apply for that year. In common with most universities, Curtin charges the maximum student contribution amount permitted by legislation.

Tuition fees for other students are determined by taking into account a number of factors, such as cost of delivery, 'market' factors and legislative requirements.

Approved fees are published online at fees.curtin.edu.au.

RECORDKEEPING - COMPLIANCE WITH THE STATE RECORDS ACT 2000 (WA)

Curtin is committed to the reliable and systematic management of its documents and records in accordance with best practice standards. As Curtin University of Technology was established under an Act of the Parliament of Western Australia, it is also subject to the provisions of the *State Records Act 2000 (WA)*. In accordance with this Act, Curtin works under an approved Recordkeeping Plan (RKP) and develops policies, processes, systems and tools to assist its staff to meet the requirements of the plan. In 2008, a revised RKP was submitted and subsequently approved for five years. This plan contains timelines and responsibilities for improving recordkeeping practices at Curtin.

Significant improvements and developments

- An Information Security Classification policy was developed with four levels of security. These classifications will be implemented during the rollout of *flow*, Curtin's enterprise content management system.
- *flow*, which will manage electronic content, including email, web content and records in physical formats, has been piloted in six areas of the University, to be further implemented in 2010-2011.
- A records management area was established at Curtin's Sarawak campus in Malaysia.
- A forms management program has been put in place to standardise Curtin's forms.
- A contracts register has been developed to ensure Curtin's contracts are able to be stored securely and managed appropriately. This will be fully implemented in 2010.

- The content of Curtin's online recordkeeping awareness training has been rewritten and made available to all staff through the University's learning management system.
- A total of 773 requests for destruction of University records were checked and approved and the relevant records securely destroyed.
- A total of 3,112 boxes of inactive legacy information were sentenced and transferred from business areas to central storage.
- Space for the storage of 1,000 boxes of archival material was created in the John Curtin Prime Ministerial Library for the storage of University archives for up to five years while a solution for permanent archival storage is being investigated.

Induction for new sta

- Information on recordkeeping and recordkeeping responsibilities is included in the University's induction package for new staff and is discussed again in staff induction sessions.
- University Information Management staff attend the University's induction sessions to provide additional recordkeeping information and handouts to new staff.

Ongoing training

- Training is available for all staff on Creating and Keeping Records, Sentencing Records, Transfer and Destruction, Managing Email and Preparing for *flow*. These modules were run on a monthly basis with a total of 391 staff attending in 2009. In addition, information sessions and presentations to staff on information management initiatives were conducted throughout the year.
- The *flow hub* role was established in key business areas as a first point of contact for help with information management issues and this will be expanded in 2010.
- A total of 185 Curtin staff members have completed the new online information management training (available from October 2009), which replaces the previous recordkeeping awareness training. All staff are required to complete this training within two months of starting at Curtin.

Comprehensive review of recordkeeping

Actions from Curtin's Recordkeeping Plan completed in 2009 included:

- implementation of interim procedures for the management of electronic and paper records
- development of metadata requirements
- development of standard titling guidelines for documents
- risk assessment of centrally controlled on-site storage areas
- development of University-wide Information Performance.

Report on Operations (continued)

RISK MANAGEMENT REPORT

Curtin continued to improve its risk management program in 2009 with a framework review and benchmarking exercise following recommendations from AUQA that Curtin ensure that its risk management framework integrates all major external risks and comprehensively addresses academic risks. Accordingly, Corporate Risk formulated a new risk management framework based on the 'gold standard' University of New South Wales model and integrating the new ISO 31000 that has been adopted worldwide. The revised risk management plan incorporates a three-year action plan with an annual cycle of review and describes the implementation schedule, reporting processes and accountabilities.

SENIOR OFFICER DISCLOSURES

The senior officers of the University have declared:

- they do not hold (as a nominee or beneficially) any shares in any subsidiary body of the University; or
- they (or a firm of which they are a member, or an entity in which they have a substantial interest) do not hold any interests in any existing or proposed contracts with the University or subsidiary body, related body or affiliated body of the University, except Professor Jill Downie, Pro Vice-Chancellor, Health Sciences, who has declared that she is on the boards of Bethesda Hospital Bethanie Inc and Perth Primary Care Network as a non-executive director, with whom the University contracted for clinical placements.

Professor David Wood, Deputy Vice-Chancellor, International, also has declared that his wife holds a small parcel of shares in Navitas Limited. Curtin Singapore and Curtin Sydney are both operated by Navitas Limited.

STRATEGIC PROCUREMENT

Curtin continues to deliver improved commercial processes, practices and systems through a strategic procurement approach. Contracts have been executed in many separate expenditure categories, with substantial savings to date. Strategic supplier-relationship management is used to maximise opportunities from commercial relationships, for added value and innovation.

SUBSIDIARY BODIES

The University had no subsidiary bodies as at 31 December 2009.

UNIVERSITY PUBLICATIONS AND MARKETING ACTIVITIES

The major publications and marketing activities of the University in 2009 were:

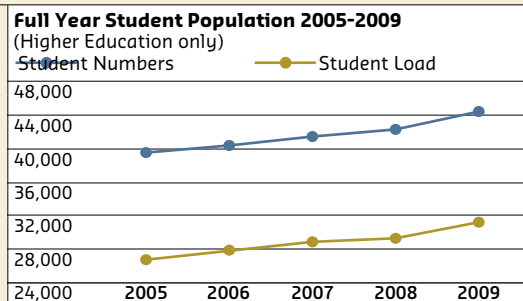
- the *Annual Report to Parliament* (print and electronic)
- undergraduate prospectus (domestic and international)
- postgraduate prospectuses (course work and research)
- *Curtin Courses Handbook* (print and electronic)
- *Cite* magazine (twice per year)
- *R&D Now* and *R&D News* (both twice per year), and other research-focused publications.

In addition, Curtin's four teaching faculties also issue publications each year. Major promotional, public relations or marketing activities undertaken included:

- educational expos
- Curtin Open Day
- the annual John Curtin Medals presentation
- participation in the Innovation Festival and National Science Week
- public lectures (such as the Haydn Williams Fellowship Lecture and the Ethics Lecture)
- proactive and reactive media liaison as appropriate
- Curtin facilities and program launches including the opening of the Curtin Resources and Chemistry Precinct and the Australian Sustainable Development Institute
- launch of The Box, an initiative to help Year 12 students preparing for TEE
- corporate positioning advertising campaign
- marketing campaigns focused on undergraduate and postgraduate student recruitment
- school visits and campus tours for Year 10-12 students
- teacher professional development days
- coordination of visits by overseas delegations and VIPs
- course and public-interest lecture advertising on an ad hoc basis for many Schools and teaching areas.

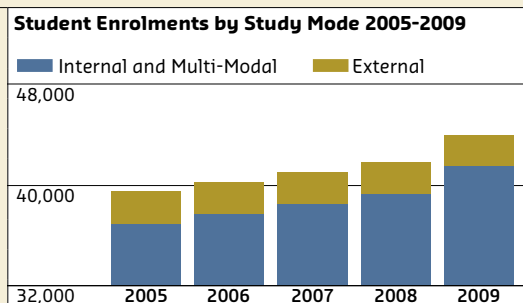
Full Year Student Population

	2005	2006	2007	2008	2009
Student Numbers					
Higher Education	39,562	40,360	41,348	42,252	44,471
Vocation & Education Training (VET)	4,083	4,859	4,854	3,244	2,558
Student Load					
Higher Education	26,741	27,796	28,806	29,316	31,235



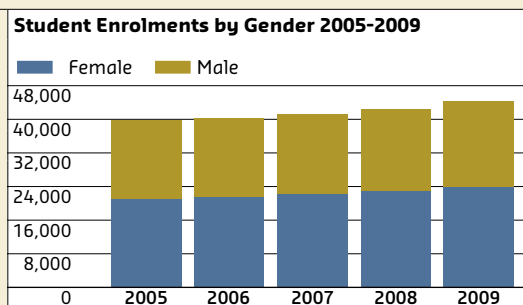
Student Enrolments by Study Mode

	2005	2006	2007	2008	2009
Internal and Multi-Modal	36,808	37,510	38,335	39,136	41,402
External	2,683	2,658	2,681	2,675	2,461



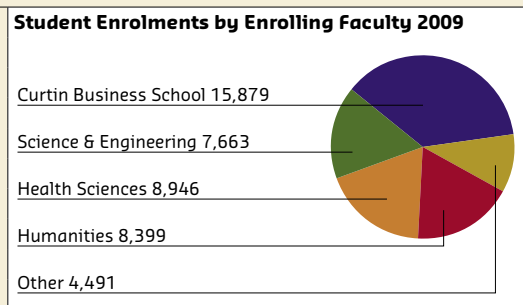
Student Enrolments by Gender

	2005	2006	2007	2008	2009
Female	20,576	21,274	22,119	22,519	23,796
Male	18,986	19,086	19,229	19,733	20,675



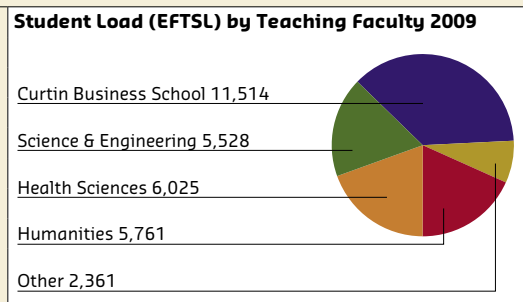
Student Enrolments by Enrolling Faculty

	2005	2006	2007	2008	2009
Ctr for Aboriginal Studies	328	388	316	319	303
Humanities	7,522	7,307	7,536	7,861	8,399
Curtin Business School	15,188	15,347	15,624	15,592	15,879
Science and Engineering	7,248	6,808	6,915	7,190	7,663
Health Sciences	6,854	7,273	7,763	8,142	8,946
Vice-Chancellorcy	1,573	2,135	2,284	2,247	2,093
Curtin Sarawak	1,543	1,805	1,744	1,763	2,095



Student Load (EFTSL) by Teaching Faculty

	2005	2006	2007	2008	2009
Ctr for Aboriginal Studies	301	386	309	347	340
Humanities	4,761	4,896	5,095	5,222	5,761
Curtin Business School	10,103	10,971	11,299	11,155	11,514
Science and Engineering	4,876	4,941	5,073	5,203	5,528
Health Sciences	4,574	4,954	5,274	5,516	6,025
Vice-Chancellorcy	259	280	305	335	326
Curtin Sarawak	1,354	1,370	1,398	1,538	1,695

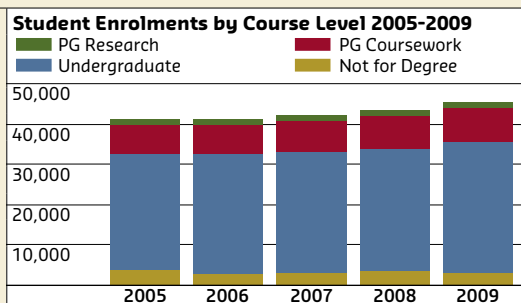


Curtin in Figures (continued)

Student Enrolments by Course Level

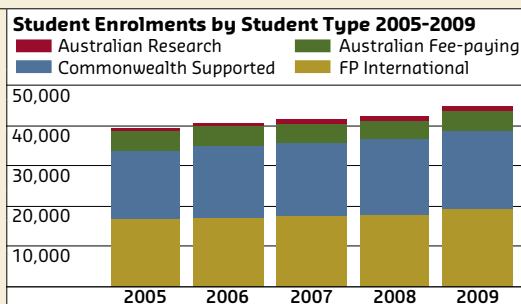
	2005	2006	2007	2008	2009
Doctorates (PhD)	1,577	1,475	1,462	1,502	1,641
Master by Research	309	329	325	337	376
Master by Coursework	4,649	4,709	4,743	5,111	5,381
Other Postgraduate	1,686	1,617	1,668	1,675	1,661
Graduate Certificate	1,064	1,052	1,213	1,338	1,213
Bachelor Honours	246	197	230	210	208
Bachelor Pass	28,076	28,781	29,432	29,730	31,882
Other Undergraduate	355	487	529	471	490
Not for Degree*	3,370	2,538	2,845	3,034	2,761

* Most 'Not for Degree' students are extension and summer school students who are also enrolled in degree courses. These students are counted in both categories.



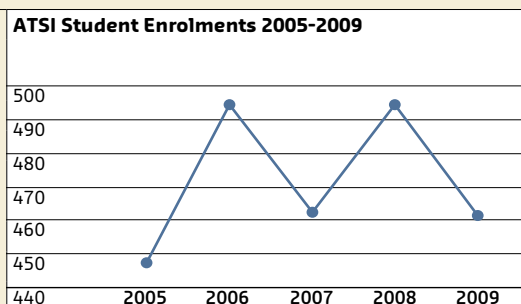
Student Enrolments by Student Type

	2005	2006	2007	2008	2009
Commonwealth Supported	16,791	17,408	18,079	18,645	19,607
Australian Fee-paying	5,177	4,879	4,990	4,807	4,780
Australian Research	1,091	1,162	1,266	1,385	1,326
FP International Onshore	7,523	8,269	8,809	9,735	10,310
FP International Offshore	8,990	8,768	8,353	7,793	8,606



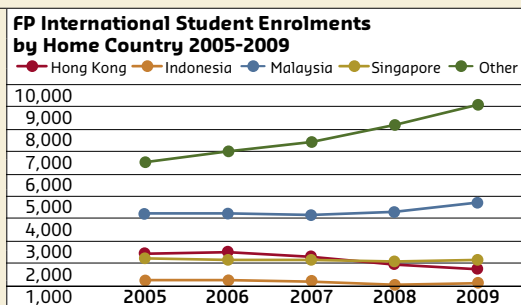
Aboriginal and Torres Strait Islanders (ATSI) Student Enrolments

	2005	2006	2007	2008	2009
High Education	447	494	462	494	461
Vocation & Education Training (VET)	437	484	488	278	275



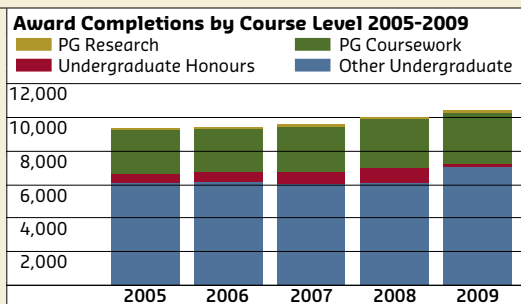
FP International Student Enrolments by Home Country

	2005	2006	2007	2008	2009
Hong Kong	2,457	2,506	2,276	1,921	1,767
Indonesia	1,238	1,228	1,169	1,054	1,130
Malaysia	4,263	4,232	4,198	4,279	4,752
Singapore	2,190	2,149	2,140	2,097	2,181
Other	6,503	6,994	7,432	8,177	9,086



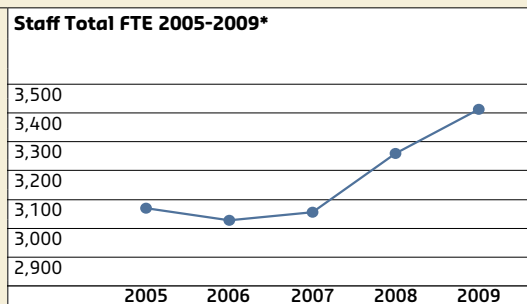
Award Completions by Course Level

	2005	2006	2007	2008	2009
Doctorates (PhD)	133	152	162	138	148
Master by Research	40	45	48	32	34
Master by Coursework	1,382	1,411	1,513	1,500	1,701
Postgraduate/Graduate Diploma	644	612	628	693	731
Graduate Certificate	497	524	598	710	664
Bachelor Graduates	42	33	21	13	3
Bachelor Honours	538	656	640	857	122
Bachelor Pass	5,915	5,874	5,632	5,865	6,826
Associate Degree/Diploma	90	99	303	149	143
Total	9,281	9,406	9,545	9,957	10,372



Staff Total FTE

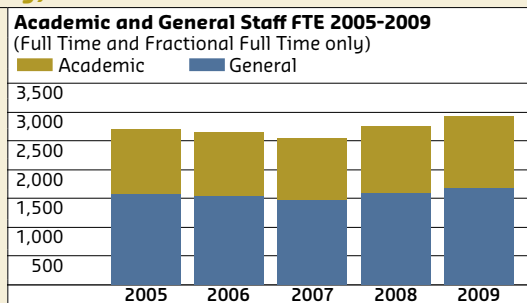
	2005	2006	2007	2008	2009
Higher Education	3,063	3,024	3,050	3,256	3,412*
Vocation & Education Training (VET)	113	112	109	105	107



* Includes an estimated casual/sessional staff FTE of 481 in 2009.

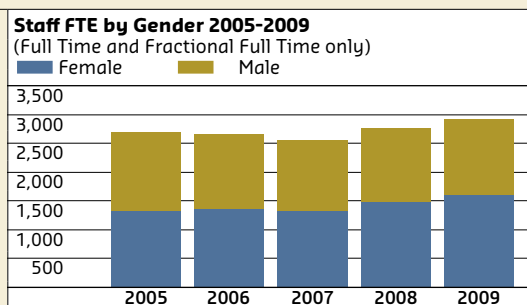
Academic and General Staff FTE (Full Time and Fractional Full Time only)

	2005	2006	2007	2008	2009
Academic	1,124	1,110	1,093	1,184	1,246
General	1,581	1,550	1,470	1,590	1,685



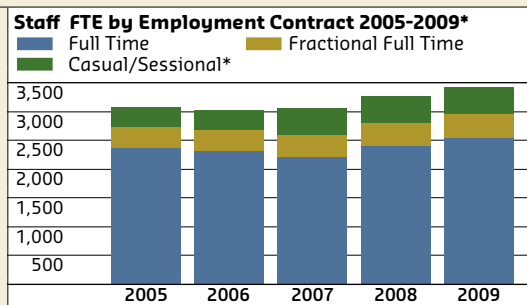
Staff FTE by Gender (Full Time and Fractional Full Time only)

	2005	2006	2007	2008	2009
Female	1,327	1,365	1,339	1,485	1,592
Male	1,378	1,295	1,224	1,290	1,339



Staff FTE by Employment Contract

	2005	2006	2007	2008	2009
Full Time	2,349	2,289	2,198	2,377	2,521
Fractional Full Time	356	371	365	398	410
Casual/Sessional	358	364	488	481	481*



* Estimated casual/sessional staff in 2009.

Staff FTE by Function (Full Time and Fractional Full Time only)

	2005	2006	2007	2008	2009
Teaching only	148	151	133	140	145
Research only	170	174	191	217	248
Teaching and Research	778	768	739	783	791
Other Functions	1,609	1,567	1,499	1,635	1,747

