



University of Wollongong

THE NEWS

NOVEMBER 1997
For the campus and the community

Premier delivers \$2 million towards new Science Centre

VISITORS to the Science Centre at the University of Wollongong are expected to soar from 35,000 to 80,000 a year after a \$2 million cheque handover by the NSW Premier, Mr Bob Carr, towards construction of stage one of a new facility.

The Vice-Chancellor, Professor Gerard Sutton, received the cheque from the Premier at a ceremony at the existing Science Centre site at Cowper Street on Campus East at Fairy Meadow on 3 November.

The centre, now housed in a refurbished migrant hostel, delivers hands-on experience in science and technology for schools and the public.

"This development will be of benefit to the whole state and, indeed, Australia," Professor Sutton said.

'It's vital for the development of this country that we get more people to think about science'

- Premier Bob Carr

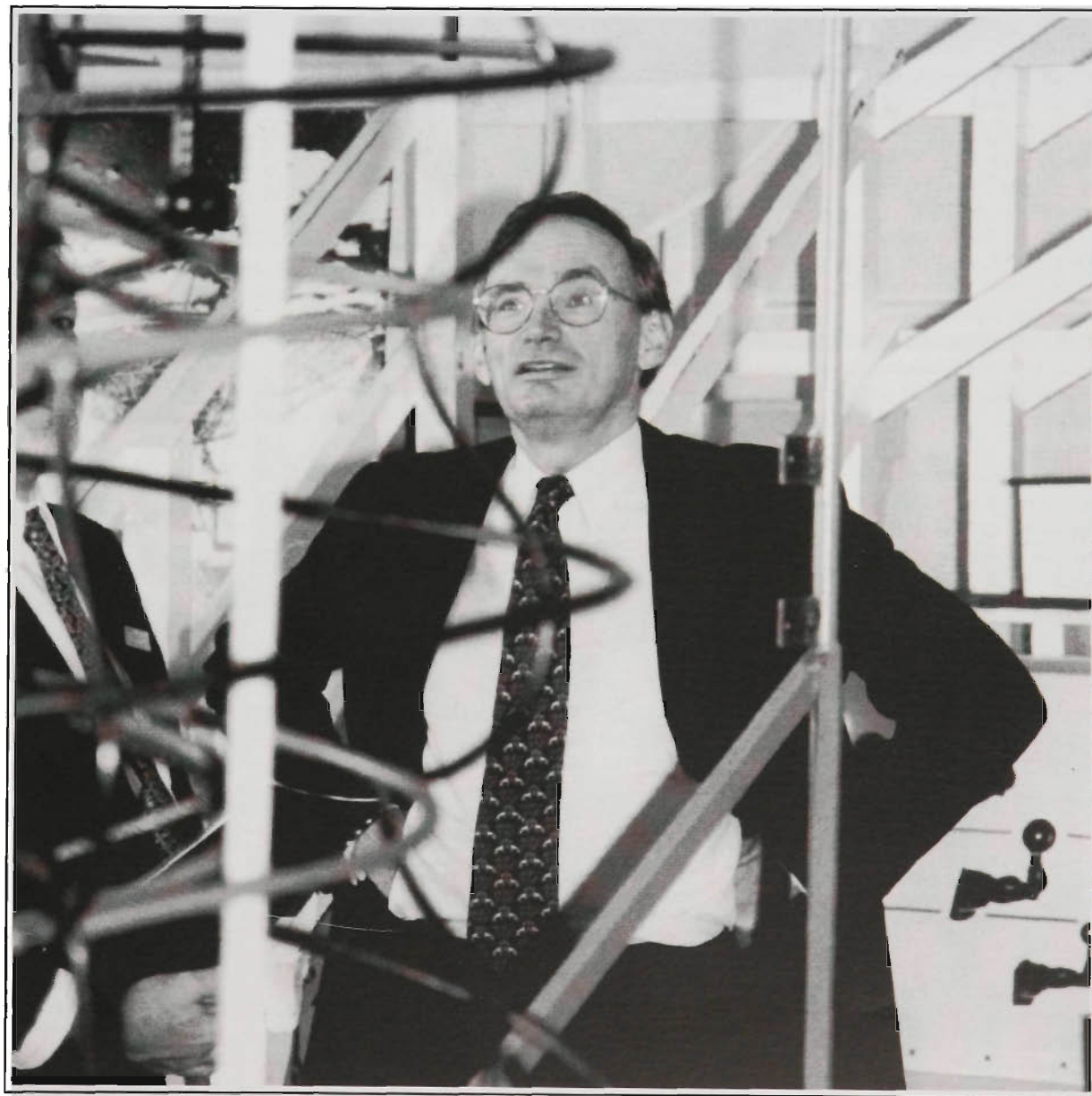
"It's vital for the development of this country that we get more people to think about science."

The \$2 million NSW Government grant is in addition to a Commonwealth Regional Tourism Development Grant of \$200,000 and a University Quality grant of \$150,000.

The Premier was taken on a tour of the Science Centre by Professor Sutton.

The Member for Keira and Parliamentary Secretary for the Illawarra, Mr Colin Markham, and the centre's Director, Mr Glen Moore also joined the tour.

Mr Carr said the Science Centre served the region in its roles as an



The NSW Premier, Mr Bob Carr, was highly impressed by the exhibits at the existing Science Centre

educational resource and tourist attraction.

The Premier said an IMAX cinema (very large screen cinema) could be added to the centre in the future.

The new facility will be built on land adjacent to the Campus East site and Brandon Park soccer ground.

Stage one, designed by architects Graham, Bell and Bowman, will include the construction of an 85-seat planetarium, a public observatory, a 90-seat demonstration theatre, administration area and exhibition space.

The development will go to tender early next year and is expected

to be completed by January 1999.

Mr Moore said the second stage would enable Wollongong to host major travelling exhibitions and would also incorporate an exhibition dedicated to the scientific interests and achievements of Lawrence Hargrave.

US mining support manufacturing company strengthens ties with University

THE president of the Jennmar Corporation of Pittsburgh, Mr Frank Calandra, visited the University on 21 October.

The visit was aimed at strengthening Jennmar Corporation's ties with the University of Wollongong for long-term cooperation in research, scholarship and career development.

Jennmar Corporation is a keystone bolt company which is a subsidiary of Frank Calandra Industries Group, with two common stockholders, Jack and Frank Calandra Jr.

Accompanying Mr Calandra, was vice-president of Jennmar Corporation and managing director, Jennmar Australia Pty Ltd, Mr John Olsden.

Jennmar Corporation is also setting up a roof bolting and mining support system plant in Australia.

This Australian operation makes the eighth plant owned and operated by Jennmar Corporation.

This visit was a follow-up to the visit made last June by Associate Professor Naj Aziz to Pittsburgh and Jennmar Corporation's headquarters.

After a meeting with Vice-Chancellor Professor Gerard Sutton and Pro Vice-Chancellor (Research) Professor Bill Lovegrove, the party visited the Faculty of Engineering with Professor Brendon Parker and inspected facilities at the Department of Civil, Mining and Environmental Engineering and research work being undertaken for Jennmar Australia by Professor Aziz.



Dean of Engineering, Professor Brendon Parker; Mr John Olsden, Mr Frank Calandra, Vice-Chancellor Gerard Sutton and Associate Professor Naj Aziz.

After the initial visit with the Jennmar Corporation, the following arrangements have been committed:

- Research funding, totalling \$105,000 over three years, leading to Ph.D studies on roof bolting. This project is underway with a postgraduate student shortly to join the project. The project will be jointly supervised by Professor Aziz and Dr Buddhima Indraratna.
- Two Jennmar engineers will enrol for postgraduate studies leading to the ME (honours) in Mining Engineering.

Jennmar Corporation has already provided scholarships to two of the University's Mining Engineering undergraduates. Both students, Matthew Murray and Ben Shepherd, have been receiving their funds since the start of this semester.

Jennmar Corporation is part-sponsoring the International Conference on Geomechanics and Ground Control in mining and underground excavation to be held at the University of Wollongong, July, 1998.

Student Services getting together

THE University's Disabilities' Service is now located on:

Level Three, Unicentre, Building 11, ext. 4942

The service had been temporarily located on the ground floor of the Library, but is now co-located with all the other student services and the Dean of Student's Office.

The top floor of Building 11 has become a student services floor.

Valuable business contacts initiated at inaugural town and gown function

MORE than 100 leading business and community organisations in the Illawarra region participated in the inaugural Town and Gown Cocktail Party organised through the University of Wollongong.

One hundred Master of Business Administration (MBA) students, many of whom are international students, also attended to make the function valuable for establishing business contacts.

The function, held at Gleniffer Brae Manor House on 16 October, was initiated by the Business School MBA Student Advisory Committee and organised in conjunction with the Business School, Faculty of Commerce and the Illawarra Quality Im-

provement Network.

The director of the Business School, Professor John Glynn, announced during the evening that the inaugural function had been so successful that a second Town and Gown Cocktail Party would be sponsored next year. Professor Glynn will introduce a new-style MBA next year which has been designed to meet the business community's needs.

A component of the course will be a project in a management discipline where students will be required to undertake a project either allo-

cated by the Business School or provided by the business community.

The founder President of the MBA Student Advisory Committee, Mr Barry Moane, said MBA students, through the advisory committee, had expressed a need for greater exposure to local business and managers.

He said to achieve this it was proposed to introduce a mentoring system along the lines of Oxford University's mentoring.

The mentoring would be in two forms - individual mentoring for projects and general mentoring for students through the MBA course.

The News

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'Global Spin' – new study exposes corporate tricks

A NEW wave of corporate activism is coming to Australia from the United States, according to a study by University of Wollongong academic Dr Sharon Beder.

These corporate activists seek to counter the gains made by environmentalists, to undermine public support for environmental protection and to persuade politicians against increased regulation.

In her new book, *Global Spin: The Corporate Assault on Environmentalism*, Dr Beder exposes the sophisticated techniques being used by some of the world's largest multinational corporations to thwart environmental protection.

Global Spin reveals that US firms spend more than a billion dollars a year on environmental public relations.

About one-third of this is spent advising companies how to counter environmentalists.

There is a whole industry specialising in the manufacture of grassroots support – 'astroturf' – for industry causes, Dr Beder said.

"Additional money is used to fund corporate front groups and think tanks to cast doubt on environmen-

tal problems and to exaggerate the cost of their solution," she said.

Corporate front groups have already begun to appear in Australia and local think tanks are busy ensuring that economic rationalism dominates the environmental agenda.

Dr Beder said other corporate tactics being imported from the US include Strategic Lawsuits Against Public Participation – SLAPPs – where citizens who speak out are intimidated and silenced by the threat of lawsuits that have no legal merit.

"Environmentalists are losing the war of ideas," Dr Beder said. "By combining activist techniques with huge financial resources, corporations are beating environmentalists at their own game."

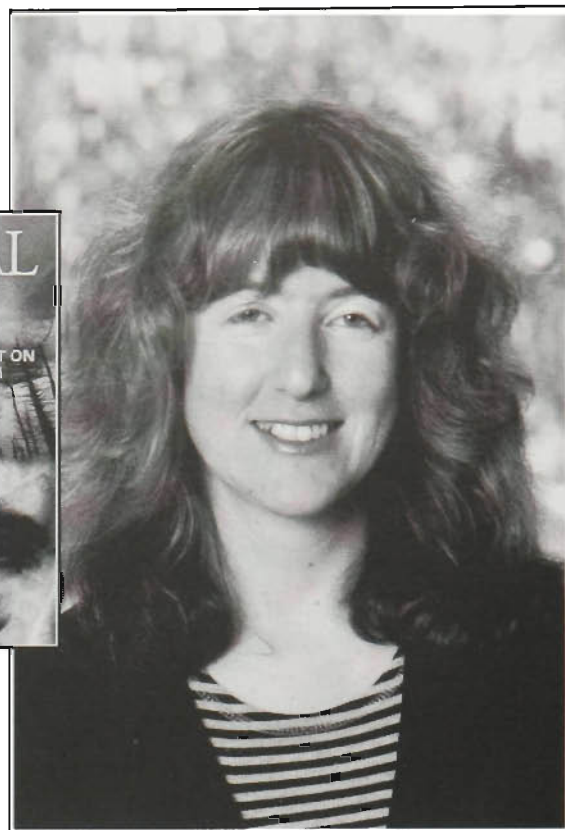
She said this situation poses grave dangers to the ability of democratic societies to respond to environmental threats.

"A good example of this is the global-warming issue," she said.

"The polluters have already convinced the Australian Government to represent their interests at Kyoto, contrary to the desire of most Australians to reduce greenhouse gas



Dr Sharon Beder (right) and her new book... 'Environmentalists are losing the war of ideas'



emissions.

"Corporate America is running a multi-million dollar campaign of environmental subversion to ensure that no effective agreement is made at the climate change conference in Kyoto in December."

Global Spin shows how large corporations are undermining demo-

cratic values and setting the environmental agenda.

This corporate activism is happening on a global scale and is having environmental repercussions all around the world, she said.

For a copy of *Global Spin* contact Scribe Publications on (03) 9388 9670.



Part of the large group of students heading off to undertake some of their studies overseas and act as ambassadors for the University.

New horizons for exchange students

THE University held a function on 17 October to farewell 53 students who are heading off for student exchange programs in the Americas and Europe.

Asian programs depart later.

The International Exchange Program is a working example of the University's internationalisation

program.

It provides opportunities for academic and personal growth by exposing students to new methods of teaching and new cultural environments.

Many of these students have been working part-time or relying on supportive families to finance

this opportunity as they recognise the value of the experience for their future careers.

The University has 36 agreements overall, 19 in the USA, one in Canada, six in Europe and 10 in South-East Asia.

Since 1989, around 350 students have benefited from this program.

Joint presentation to a powerful team

A UNIQUE event in the history of this University occurred during the October graduation ceremonies.

A joint presentation of two honorary awards was held, which was appropriate as Nancy Reynolds and Winifred Smith have had intertwined careers that were remarkable for their impact on the health and welfare of the community and the development of their profession.

Nancy Reynolds and Winifred Smith were admitted as Fellows of the University.

At the ceremony, the Deputy-Chancellor, Dr Brian Gillett, said that these two women "moved, with skill and success, from the clinical practice of nursing to teaching and leadership. Their record of service stretches over 50 years and is still growing."

After extensive training in nursing and nursing specialisations, Nancy and Winifred gravitated towards a powerful partnership that helped to take nursing in this state from the level of technical training and service provision into the fields of tertiary education and professional recognition.

Winifred's involvement in nurse education developed momentum

Honorary award for David Waters

DAVID Waters has been involved in nearly all areas of the life of the City of Wollongong and has served the city well for many years.

He joined the family firm, W. Waters and Sons, in 1948 and became the managing director and later executive chairman, overseeing the store's transition into the Mitre 10 group.

He became chairman of the Illawarra Mutual Building Society in 1992.

He was involved in the planning of the Wollongong City Mall and was a member of Wollongong Tourist Authority.

He has been a member of the Salvation Army Advisory Board and, since 1989, has chaired the Salvation Army Red Shield Appeal.

Mr Waters has spent time and resources assisting young people to broaden their educational horizons and has been a firm friend of the University.

In 1995 he became a board member of the University of Wollongong Foundation, an organisation committed to the development of the University and the provision of opportunities for students.

The University recognised his work and achievements and welcomed him as a permanent member of its community by admitting him as a Fellow of the University during the October graduation ceremonies.

during her years at the Royal Alexandra Hospital for Children where she became Supervisor of Nursing Administration in 1957 and Sister-in-Charge of the School of Nursing from 1958 to 1973.

During that time she established Postgraduate Certificate courses in Paediatrics for registered nurses and co-authored one of the standard works in nurse education, 'Nursing Care of the Patient'.

Nancy, at the young age of 27, became Matron and subsequently one of the state's first directors of nursing at Bowral and District Hospital - a post she held for 34 fruitful years.

She established the Winge-carribee Home Care Service, Meals on Wheels and the District Nursing Service as well as the Winge-carribee Adult Day Care Service.

She also became a surveyor with the Australian Council for Hospital Standards - bringing the principles of quality client service firmly into hospital administration.

In September 1973, Winifred was appointed deputy director of Nursing at Bowral and District Hospital.

Her teaching and writing talents

were teamed with Nancy's organisational prowess to create a partnership that has been described by their colleagues as 'pioneering', 'single-minded', 'tenacious' and 'ground-breaking'.

In 1979, Nancy became chair of the Illawarra Regional Council of Nurse Education with Winifred as education director.

Nancy guided the amalgamation of the local schools of nursing into the Illawarra School of Nursing.

Winifred was seconded to the Ministry for Education to become co-ordinator of the school which was established in the Wollongong Institute of Education in 1979.

In that role, Winifred developed one of the first tertiary curricula for nurse education in Australia.

In 1985, after the amalgamation of the Institute of Education into the University of Wollongong, a School of Nursing was established on this campus.

That school has evolved into the University's Department of Nursing and an integral part of the Faculty of Health and Behavioural Sciences.

"This University is privileged to have benefited from their administrative and academic abilities," Dr Gillett said.

"Their involvement with the campus is significant on many levels: Winifred headed the Illawarra School of Nursing and Nancy Reynolds was a member of our governing Council in the late 1980s when the campus was going through a period of change and growth."

First PhD Graduate from P.T. Krakatau Steel

THE Department of Materials Engineering at the University of Wollongong has been involved in a major education and training program with the largest steel company in Indonesia, P.T. Krakatau Steel, for the last five years.

An off-shore Master of Engineering Practice coursework program in Engineering Materials resulted in the graduation of 92 engineers over a four-year period and 12 students have completed Honours Master of Engineering research projects on topics concerned with iron and steel making and steel processing which are relevant to the company's commercial operations.

The University's October graduation ceremony was an important milestone in this fruitful relationship between the University and P.T. Krakatau Steel because Mr Subagyo received the first PhD degree awarded to an employee of Krakatau Steel.

Mr Subagyo, who completed his

research under the supervision of Professor Nick Standish and Dr Geoff Brooks, submitted a thesis on Velocity Distribution of Single Phase Fluid Flow in Packed Beds.

This topic which is highly relevant to metallurgical extraction processes.

Mr Subagyo's thesis was highly commended by the examiners for its quality and originality.

Two other engineers from the company, Mr Tri Djaka and Mr Djoko Muljono, are also enrolled in PhD programs in the department and are expected to finish in 1998.

In addition, three other Krakatau Steel engineers are enrolled in Honours Master of Engineering coursework programs in the department.

This education and training partnership has been so successful and the company is so forward-looking that it is likely that the University will continue to be a major provider of postgraduate training in the metallurgy/materials area for the company's engineers for the next five years.

Emirates 'ambassadors' motor into Wollongong

FOUR young 'ambassadors' for the United Arab Emirates, who are roaming the world by car spreading information and understanding about the Emirates, paid a courtesy call to the University of Wollongong on 15 October.

It was a courtesy call because of the strong linkage between the University and the Emirates.

The University of Wollongong operates one of its satellite campuses out of Dubai in the Emirates.

After a brief visit to the city and the University, the visitors attended a lunch which included the Lord Mayor of Wollongong, Councillor David Campbell, and the Vice-Principal (International) and Joint Managing Director of the Illawarra Technology Corporation, Mr Jim Langridge.

The team's honorary president, Sheikh Hamad Bin Hamdan Al Nahyan, is the Emirates' Minister for Higher Education and Scientific Research (the equivalent of Australia's Federal Minister for Employment, Education, Training and Youth Affairs).

During the first stage of their trip, they have covered 40,000km and visited 25 countries.

Increasing divide between rich and poor

Vice President of the Industrial Relations Commission, Mr Iain Ross, gave the 19th Sir Richard Kirby Lecture on 20 October.

Mr Ross examined trends in our community that increasingly threaten the notion of Australia as the 'lucky country' with a reasonably fair distribution of income.

In particular he discussed the earnings gap, i.e. the gap between income levels established as a result of enterprise bargaining and those determined by the award system.

What followed was a disturbing picture of the deterioration of wage equity and the concept of a 'fair go' for Australian workers.

After a description of the highly undesirable social consequences of such trends including an increase in crime, poor health and suicides, Mr Ross said: "Unless action is taken to substantially renew the system of minimum wage regulation, there is a real risk that social divisions will become entrenched."

He concluded by quoting the foreword to the submission by the Brotherhood of St Laurence in the April 1997 proceedings:

"With this case before the Industrial Relations Commission we have it within our power to choose to go down a route which promotes greater poverty and misery for low wage workers and their families.

"We also have it within our power to choose a different, more just, route which ensures that every Australian has a right to a decent standard of



Mr Iain Ross (third from the left) and Richard Kirby (fifth from the left) with the prize winners.

living.

"If we choose the first option we are in danger of creating a society which is deeply divided between the rich and the poor. If we choose the second, however, we can reaffirm the commitment of Australians to a just society.

"Given all the pressures which currently divide us, it is therefore

important that the commitment be strongly stated."

Copies of Mr Ross's address are available from Media Services, ext. 3926, or from Sophie Abercrombie, Department of Economics, ext. 3666.

At the lecture, Industrial Relations prizes were presented. The winners were:

Sir Richard Kirby Prize: Trent Sebbens, Fabio Tosti.

Hilda Kirby Prize: Elizabeth Piper, Trent Sebbens.

Eric Derra Young Prize: Anna Wright.

MTIA Prize: Amanda Tucci.

NSW IR Society Prize: Chelsea Hampel.

China's National Natural Science Foundation visits University

THE University of Wollongong's continuous development of institutional links with north Asia has taken another step forward.

There have been serious discussions on co-operation and research policy training between the University's Centre for Research Policy (CRP) and China's National Natural Science Foundation (NFSC) in Beijing.

The foundation was established in 1986 as an outcome of reforms in science and technology in China.

Its objectives are to promote and financially support basic and applied research in China.

It distributes in excess of 570 million yuan research funding annually and is the largest funding agency for basic research in China.

This visit, which was facilitated by the Australian Research Council and the Chinese Embassy in Canberra, was part of a search for an appropriate science funding system..



Warren Wang Changrui and Matt Ngui

The director of the foundation's policy bureau, Professor Wu Shu-yao, his deputy, Professor Chang Qing, and other senior officials from the foundation met Professor Peter Robinson, Associate Professor Tim Turpin, Dr Sam Garret-Jones and CRP

project manager Mr Matt Ngui at the University.

The CRP has trained and hosted Mr Warren Wang Changrui from the NFSC since May 1997.

Mr Wang is a program manager with the Division of Pro-

gram Management, Bureau of Planning, NFSC.

He has undertaken a comparative study of the funding strategies and operations of the Australian Research Council (ARC) with the NFSC in China.

The CRP has been responsible for doing commissioned research work for the ARC, hence Mr Wang's strong interest in the CRP's operation.

Mr Wang will complete a report on his comparative analysis between the NFSC and the ARC by next month 1997 when he returns to Beijing.

Mr Wang, the first person to visit the University of Wollongong from the NFSC, left on 13 October to visit the ARC head office in Canberra.

"We regard north Asia, particularly the People's Republic of China, as a major partner in developing future institutional research policy linkages particularly in basic and applied research," according to Mr Ngui.

Improving Personnel and Financial Services

THE reshaping process underway at the University has resulted in the amalgamation of the Personnel and Financial Services Divisions.

The management evaluation that recommended the amalgamation also proposed changes to meet the reshaping requirements and identified several areas where changes were required to improve service.

The division proposes to create a new service centre for faculties by putting personnel and financial administration together.

This service centre will have six finance officers each with responsibility for several faculties or cost centres.

Each finance officer will be teamed with a personnel officer who has responsibility for the same clients. Personnel and finance officers will be encouraged to work in faculties on a part-time basis.

These new finance officers will progressively pick up functions as tasks are reengineered to fit the new structure.

Some of these tasks are:

- Purchasing for the client units.
- Creditors work and invoice payment.
- Assets recording and administration
- Journal transfers.
- First level debt follow-up.

In the longer term, it may also be possible to incorporate:

- Budget adjustments.
- Research accounts

It is proposed to implement this new structure in early 1998, possibly by as early as 1 March.

To facilitate the restructure and refocus of the Personnel and Financial Services Division several functions are being transferred to other units:

- The collection of student and related fees will be transferred to the Academic Registrar's Division combined with the implementa-



Above: Assistant Director (Personnel) Robin Buckham (right) with Manager, Personnel Operations Nathan Asher. Right: Assistant Director (Finance) Allan North

tion of credit card and EFTPOS facilities.

- Sale of parking permits to be provided through the Unicentre.
- All student-related inquiries and services will be transferred to the Academic Registrar's division.
- Personnel officers will be responsible for travel, position establishment and casual authorities.
- Professional indemnity and public liability insurance will be the responsibility of the Occupational Health and Safety Unit.

In future more responsibility will rest with internal audit and audit systems rather than Financial Services staff.

In addition to these structural changes which should have a significant impact on service levels, other recommended changes will be introduced to benefit service.

These include:

- University-wide implementation of the current quick order system

which will reduce central processing of purchase requisitions.

- Reimplementation of some form of monthly reporting of cost centre balances.
- Leasing of the motor vehicle fleet.
- A new process for journal transfers which will accelerate processing.
- Further consideration of the best organisational location of the Printery and mail and central distribution units.
- Review of the current finance delegations with a view to extending the delegations.
- Restructure of the internal audit function and the conduct of an overall audit risk assessment.
- Updating of all finance policies and placement of them on the University's web site.

Any member of staff with queries in regard to these or related issues or

any suggestions for further improvements in service, contact Chris Grange or one of the other appropriate staff in the division.

The new division's management structure is:

Director, Chris Grange;
Assistant Director (Finance), Allan North;
A/Management Accountant, Michael Ramsey;
Financial Accountant, Paul Murphy;
Systems Accountant, Doug Simpson;
Assistant Director (Personnel), Robin Buckham;
Manager, Personnel Operations, Nathan Asher;
Manager, Employee Relations, David Wedgwood;
Manager, Career Development, Pam Piela;
Manager, Occupational Health & Safety, Gerry Holmes.

Key government adviser praises Wollongong's sensible approach

The University of Wollongong is moving in exactly the right direction for this particular era of higher education in Australia, according to the Parliamentary Secretary to the Minister for Employment, Education Training and Youth Affairs, Mr Tony Abbott.

Mr Abbott, who is also Member for Warringah, praised the University after meeting with senior University executives and visiting some key sites on campus today.

Mr Abbott told *The News* that Australian universities had an era of expansion during the 1950s, '60s and '70s, followed by an era of consolidation in the 1980s under John Dawkins who controlled the education portfolio.

"Now we have moved into an era where universities must find their areas of excellence and let potential staff and students clearly know what these areas are," Mr Abbott said.

"They would then come here knowing they would find world leaders in various fields."

Mr Abbott said it was clear that universities could no longer just rely on tradition to attract the 'best and brightest'.

He said the University of Wollongong was sensibly building on its strengths through its links with companies such as BHP, but it was not resting on its laurels.

Mr Abbott praised the University's growing focus on telecommunications as the way of the future.

"This will become the telecommunications university in Australia," Mr Abbott said.

Mr Abbott paid tribute to the former Minister for Employment, Education and Training, Senator Amanda Vanstone, saying that history would treat her more kindly than she has been judged lately.

"She will be judged a reforming minister who

has given back to universities their autonomy," he said.

"At the same time, I believe universities will welcome the new minister, Dr David Kemp, who has succeeded Senator Vanstone.

"As a former academic, he really is a university man. He is the finest political intellectual in Australia."

Mr Abbott was asked what effect the race debate triggered by the Member for Oxley, Pauline Hanson, would have on the push by universities such as Wollongong to attract more international students.

"She is an aberration," he said.

"I have more faith in the Australian people that they will see her for what she is.

"And I actually believe she will not hold her seat in Oxley and that her push for Senate seats will also fail."

Chancellor opens \$6.4m Informatics Building



Dean of the Faculty of Informatics, Professor Ah Chung Tsoi, Chancellor Michael Codd and Vice-Chancellor Gerard Sutton at the ceremony.

DURING the official launch of the \$6.4 million General Academic Building on 10 October, the Vice-Chancellor, Professor Gerard Sutton, announced that the site would now be known as the Informatics Building.

The building was opened by the new Chancellor, Mr Michael Codd, who was officiating at his first building-opening ceremony on behalf of the University.

Professor Sutton told those present at the opening that the University Council had decided on a \$40 million building program two years ago and the University was halfway through that program.

Mr Codd, who has close connections with organisations such as IBM and Telstra, said he was fully aware of the importance of a building such as Informatics highlighting the fact that the University's special interest in telecommunications was the way of the future.

The Chancellor complimented the architects, Wollongong-based Graham, Bell & Bowman, who have worked on all the major buildings on campus since 1984.

"I have no hesitation in saying that Wollongong has the most beautiful campus in Australia," the Chancellor said as he unveiled the plaque to open the Informatics Building.

The Dean of the Faculty of Informatics, Professor Ah Chung Tsoi, said it would be great to bring together under one roof several schools separated over a considerable distance.

This three-level building will be used for computer science and information technology teaching. It is equipped with research laboratories, staff accommodation and general teaching space.

The new building will act as a gateway to the informatics/engineering precinct.

It will be occupied by the Faculty of Informatics and symbolises the University's strong commitment to furthering its international reputation as a leader in information technology and telecommunications education and research.

One of the features of the building is an attractive internal garden with understorey rainforest plants and palms. Overall, the building occupies 3,600 square metres.

Accreditation for pilot Practical Legal Training Program

THE University of Wollongong is offering Australia's first flexible-delivery Practical Legal Training (PLT) program for law graduates.

It combines a mixture of off-campus and on-campus activities.

Law graduates who have been unable to attend existing practical legal training courses may now qualify for admission to practise in NSW through the University's PLT course.

The course, conducted by the PLT Unit in the University's Faculty of Law, has been accredited by the Legal Practitioners Admission Board, after a successful pilot course in 1997.

It was devised to meet the requirements of Wollongong Law graduates, but also a wider group of students with family, employment

and financial responsibilities who would encounter considerable personal and financial hardship undertaking alternative practical legal training courses which generally require daily, on-campus attendance over 15 weeks.

The Director of the PLT Unit, Associate Professor Ainslie Lamb, said it was a radically different course to the Professional Program offered by the College of Law and the University of Technology Sydney.

Students who successfully complete the course will qualify with a Graduate Diploma in Legal Practice, and are also qualified for admission as a legal practitioner in New South Wales. Ten graduates of the pilot course were admitted to practice on 10 October.

The course was designed by Professor Lamb who has previous experience in practical legal training with the Leo Cussen Institute in Victoria and the Bar Admission Course in Ontario, Canada, as well as more than 20 years' practice as a solicitor.

It builds on the Wollongong LLB subject, The Legal Profession and Australian Society, which teaches the social and ethical framework for legal practice, and includes an eight-week placement program.

It also builds on the legal skills subjects undertaken in the Wollongong undergraduate degree. These pre-requisites are an integral part of the accreditation of the course.

The course will be offered twice a year, in February and July from 1998.

Wollongong students break Twitching records

THE last weekend in October was the annual Birds Australia Twitchathon.

The aim of the Twitchathon is to identify as many bird species as possible in 24 hours.

The competition is national but awards are given on a state basis because of the difficulty in comparing the number of birds from state to state.

There are two divisions, the Main Race and a Champagne Division.

Teams from the University of Wollongong, which were made up of staff and students from the Department of Biological sciences and some of their friends, won both divisions and broke records for the number of species seen.



Inspiring visit to Hunter coal operations for mining students

THREE Hunter Valley coal mines and Bayswater power station were hosts during September to 11 students from the University's Mining Department.

The visit provided an excellent opportunity for the students to meet engineers working in the mines and aside from discussions of a technical nature, they were able to gain valuable career points as well.

The salaries being discussed left no doubt that the students, on graduation, will receive more than adequate financial rewards.

This, together with the high placement rate enjoyed by mining students, is a source of satisfaction to all involved in the profession.

The students, who initiated and organised the trip, were accompanied by Professor Raghu Singh and Dr Joe Shonhardt of the Civil, Mining and Environmental Engineering Department.

The group visited Ravensworth

and Drayton open-cut operations, then inspected Wambo open-cut and underground operations finishing the two-day tour with a visit to the Bayswater power station in the afternoon.

At the Drayton mine, the students were conducted over the lease by a 1993 Wollongong mining graduate, Dean Sorley.

They were shown a large dragline operating in the unusual mode of stripping overburden to expose multiple coal seams that were then recovered by shovel and trucks, instead of single seam extraction more commonly carried out by these large machines.

The group inspecting the underground workings at Wambo were shown a longwall installation 2.5 metres high and 200 metres long which, together with two development headings, produced the impressive output of 2.5 million tonnes per year from a single face.

At one of the open-cut operations, some students were allowed on to a dragline while it was in operation, giving them an opportunity to look at the functioning of its machinery and the methods of operation.

Later at the same mine they were put into 190 tonne capacity diesel electric dump trucks, and it is rumoured that they were allowed to drive the large machines.

Study of the methods used and the effectiveness of reclamation at the various mines was an important component of the trip.

The students were told of the strategy for disposal of the large quantities of fly ash resulting from coal combustion in the power station involving return of the unwanted fly ash to the voids created by the open-cut mines.

The students were also shown the results of the large-scale rehabilitation programs at the mines to reclaim the disturbed areas remaining after the open-cut has moved on.

Mining engineers conference held in Wollongong

WOLLONGONG hosted the 1997 convention of the Institution of Mining Engineers, held at the Novotel Northbeach from 17-19 October.

The Institution of Mining Engineers, a UK-based body, has its southern NSW branch operating out of the Faculty of Engineering at the University of Wollongong, with the help of the Professor of Mining Engineering, Professor R N Singh.

The conference theme, Mining Into the 21st Century, covered many aspects of mining with emphasis on the immediate challenges facing the industry.

The attention of the delegates was brought into focus by a very pertinent presentation by the keynote speaker, the Minister for Minerals and Energy and Fisheries in the NSW Government, Mr Robert Martin.

He spoke of the State Government's perception of the importance of the mining industry to the state's economy, while he also dealt with several issues that he suggested the industry as a whole ought to address to assure its future prosperity.

In this context he pointed out that the industry has a need to improve overall safety standards as accident rates have been running at unacceptably high levels in recent years.

Mr Martin pointed out the continuing need for competitiveness in mining operations if it is to maintain its position in world markets.

The Lord Mayor of Wollongong, Councillor David Campbell, added his comments supporting the importance of mining not just to the NSW economy but to the Illawarra.

Mr Campbell also spoke of the role of the University in the local community, touching briefly on the employment which it brings to the area and referring favourably to the University's telecommunications research.

The presence of delegates from many mining districts in Australia testified to the success of the conference.

The topics covered included mine safety, productivity, mine ventilation and other matters of technical interest.

The conference was attended not only by mining engineers, but also by a large contingent of electrical and mechanical engineers from the mining industry.

Euroshinus Falcata to join Red Kamalas

TWO years ago the University's Landscaping Services planted two Red Kamalas in the campus bushland area which are doing well.

They now plan to follow up with two ribbon woods (Euroshinus Falcata). Ribbon wood is a member of the Mango family but it is doubtful that the fruit tastes the same.

This tree has a limited and scattered distribution in the Illawarra and is not common.

Until five years ago it stood as a small tree in the North Creek. With the building of units it disappeared.

Thanks to Andes Boldfelt, of Wollongong City Council, who donated the plants, a remnant population of ribbon wood remains on campus, proudly protected by Warrick Grace and the Landscaping Services team.

As well, thanks to the assistance of some staff, students, Gwynneville residents, Wollongong City Council Bushcare program, long-term volunteer George Takas and the Agro Forestry Project on Robinson Road run by Richard Scarborough from the Department of Biological Sciences, Landscape Services has overseen the planting of 2,500 endemic plants to enhance and protect for the future our campus bushland heritage.

Landscape Services is endeavouring to ensure that the 80 or more species of birds, the occasional wallaby and echidna, water dragon and possums, to name a few, are still seen around the campus into the next century and beyond.

A healthy bushland and a well-established Keira green corridor is worth everyone's effort and care.



Warrick Grace (back) explains the features of the trees.

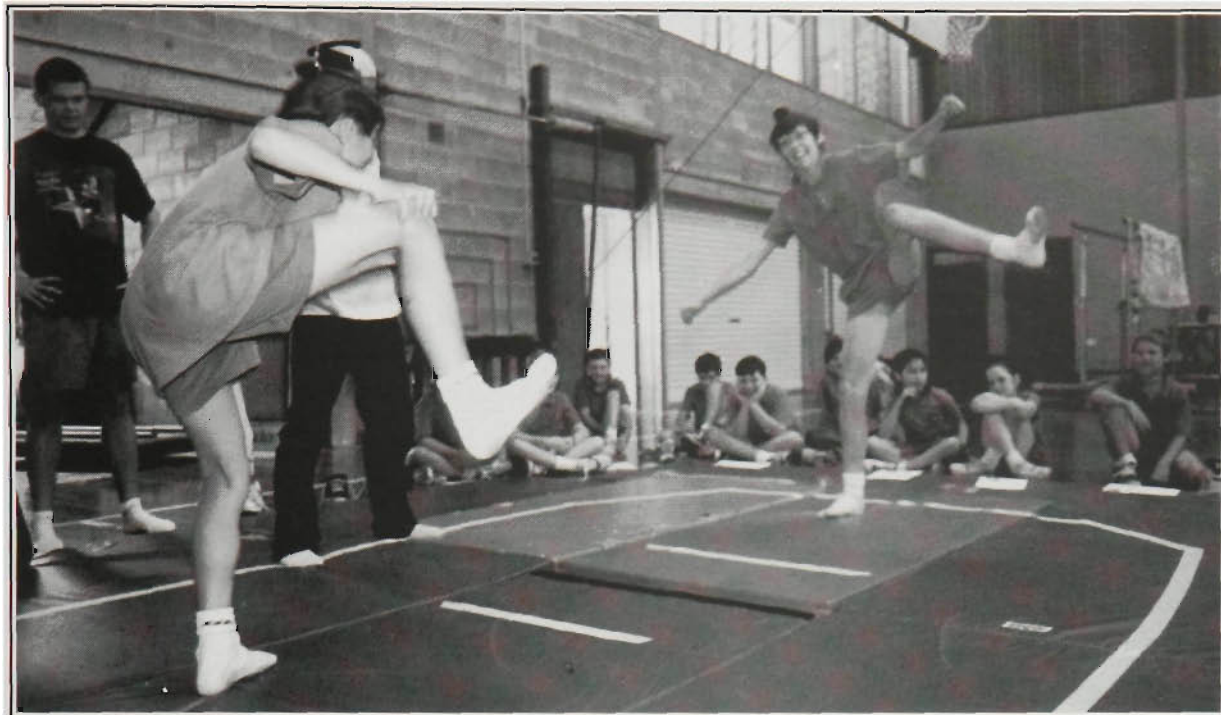


VICE-Chancellor Gerard Sutton (left) and captain of the Australian rugby union team, John Eales, exchanged gifts when the Wallabies were on the campus recently.

The Wallabies used the University's training facilities in preparation for their tour of Argentina.

It is the first time the Wallabies have used the Wollongong campus for such an extended training period and it is expected to become an ongoing arrangement.

University provides a taste of Japanese culture



THE University hosted a Japanese Expo recently for local primary school children who are learning Japanese.

It was organised by the Modern Languages Program in the Faculty of Arts under the guidance of lecturer in Japanese, Yuko Ramzan.

Students from the University's exchange universities in Japan and our students who studied at these universities teamed up with the 168 school students from St Patrick's and St Pius primary schools for a Japanese cultural experience.

University students in each group took responsibilities to run a Japanese theme station and the children from the primary schools visited each station.

The children enjoyed Japanese cartoons, kimono wearing experience, Sumo wrestling, tea ceremony, traditional Japanese games, Japanese food and Japanese word processing.

Perhaps the most popular was the Sumo wrestling, especially amongst the girls.

There are six universities in Japan with an exchange agreement with Wollongong University - Sophia, Otaru, Kobe, Tsukuba, Obirin and Hiroshima Shudo, with further agreements under negotiation.

Every year the students who complete their Bachelor of Arts degree majoring in Japanese go to those universities to undertake a Graduate Diploma in Japanese.

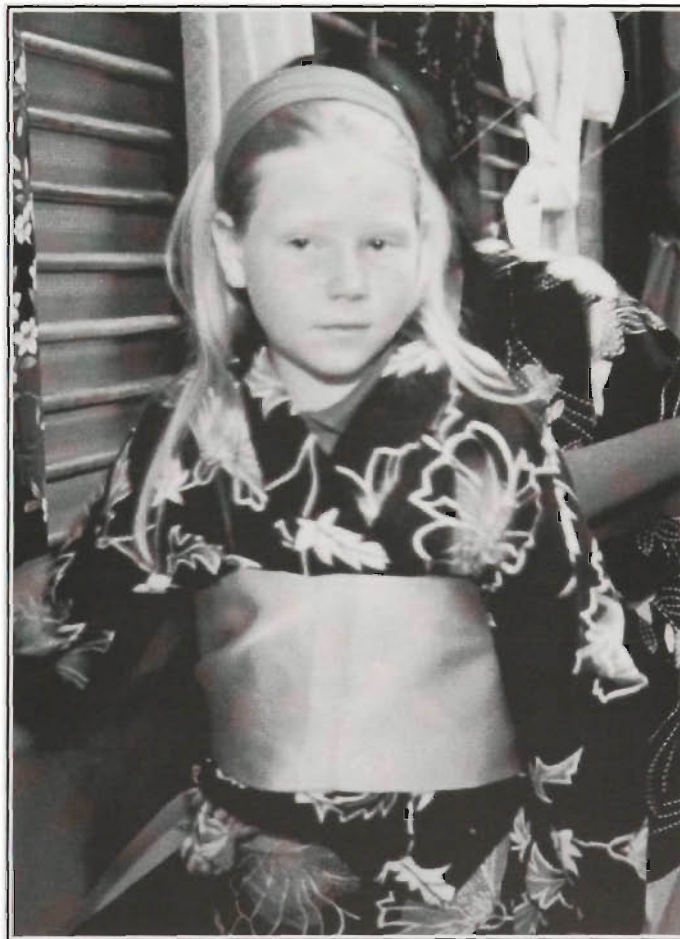
When they return to Wollongong they are very competent in the language, and have had many wonderful experiences.

Japanese university students visit Wollongong to study their special field, improve their English skills, and experience the Australian lifestyle.

However, they do not have much opportunity for exchange with the local community so Yuko has introduced this Expo so they can meet local students and teachers.

Similarly, until this event was organised, the local schools that offer Japanese language have had no opportunity to give their pupils a taste of Japanese culture.

*Above: The Sumo wrestling was a favourite
Below: Kimono wearing experience*



Premier Materials award to Deputy Vice-Chancellor

DEPUTY Vice-Chancellor at the University of Wollongong, Professor Peter Robinson, has been awarded the Institute of Metals and Materials Australasia's silver medal - the institute's premier award.

It is only the 17th time in the last 50 years that the medal has been awarded. Professor Robinson is to be honoured for his overall eminence in the profession.

Professor Robinson will receive the award at the International Materials Research 1998 conference at the University of Wollongong from 6-8 July.

He is following closely in the footsteps of another University of Wollongong academic, Professor Howard Worner, who is generally regarded as Australia's most distinguished metallurgist and materials engineer.

Professor Worner is also a past recipient of the institute's silver medal and like Professor Robinson both academics have served two terms as federal president of the institute, although some 25 years apart. Professor Robinson also won the institute's Claude A. Stewart award in 1980 for his contribution to Australian manufacturing industry.



Professor Stephen Castles

Honour for Stephen Castles

PROFESSOR Stephen Castles has been elected as a Fellow of the Academy of the Social Sciences in Australia.

Fellows are elected on the basis of having made a substantial contribution to the Social Sciences. This honour is recognised internationally.

Professor Castles is Research Professor of Sociology in the Migration and Multicultural Studies Program, Institute of Social Change and Critical Inquiry at the University of Wollongong.

Since 1994, Professor Castles has served as a member of the Federal Government's National Multicultural Advisory Council, and since 1995 has been director of the Secretariat, Asia Pacific Migration Research Network, UNESCO Management of Social Transformations Program.

He was a member, then chair, of the Bureau of Immigration and Population Research Advisory Committee.

Professor Castles is a Visiting Fellow in the Reshaping Australian Institution's Program of the Research School of Social Sciences, Australian National University and from 1998 will be Visiting Professor of Migration Studies, University of Sussex, UK.

He has recently taken over the role as Associate Editor of *New Community* (Utrecht).

Australians surfing the information revolution

DURING the Christmas period of 1996 approximately 606,750 Australians were surfing the web.

By July 1997 the number had doubled to 1.21 million, ranking us fifth in the world in connections to the Internet.

So there were no surprises when the University of Wollongong's *Australian Information Technology Spring School* again filled to capacity.

What perhaps is surprising – as we move from the industrial revolution to the information revolution and industry becomes increasingly reliant on Information Technology (IT) – is that it is the only school of its kind in Australia.

The spring school includes workshops in Netscape, email and HTML Web programming, expert speakers and a tour of the city of Wollongong (developed for the three-quarters of the participants who were from outside the Illawarra area).

Its popularity has grown in the four years since a promising 40 students attended the inaugural school.

On 1 October 80 Year 11 3U Maths and 2/3U Computing Studies students gathered to explore the excitement and career prospects that information technology has generated.

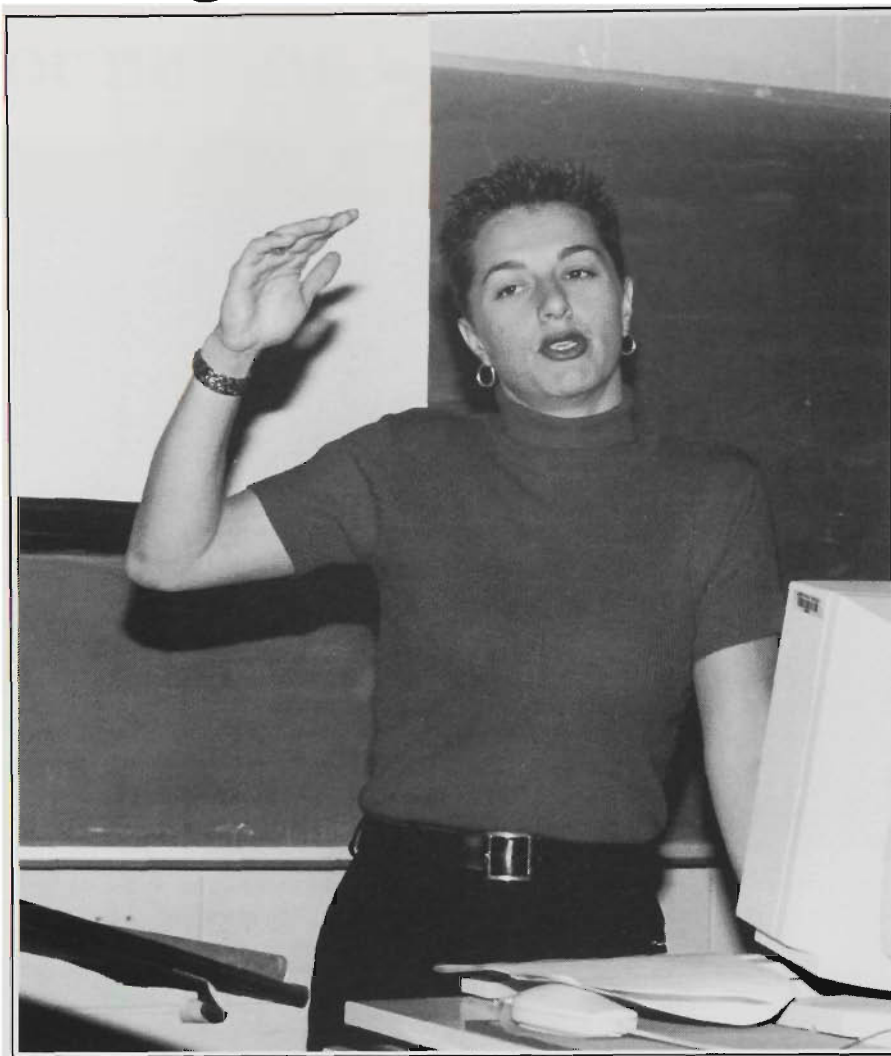
The school's opening speaker Ms Sandra Davey is manager of Foundation Law, a Law Foundation of NSW project that delivers Australian law and legal information over the web.

She has been involved with the web since its very early days and her enthusiastic assessment of its role in today's society blew away any remnants of the "computer nerd" myth that may have lingered.

It was evident that this is not longer a big issue.

Coordinator of the event, Ms Sonia Jennings, noted that the students see the Internet and email as *passé*.

To combat this, the department intends to introduce new forms of technology in next year's school. At



Sandra Davey addressing the Information Technology Summer School.

the current rate of development, that could easily mean technology not now invented.

A workshop that was popular was the HTML programming.

While various editing programs have evolved to simplify web programming, this basic programming system is still universal.

Students were given the opportunity to build their own homepage, and then the choice of handing it to the department to put on to the web.

Some of these are being broadcast at <http://www.itacs.ouw.edu.au/springschool/97spschool/index.html>.

A live video conference with students in Los Angeles also proved popular, and while email has lost some of its novelty excitement value, it regained all of its lost ground when participants were given the opportunity to talk to students in Obninsk, Russia and Texas, USA.

Other speakers also captured the students' imagination, with Dr Robyn Lindley from the Department of Information and Communication Technology discussing smart cards and the momentum of the cashless society.

Mr Peter Castle of the Department of Computer Science discussed the

burgeoning problem of computer fraud.

This theme was continued with Detective Sean Powe of the Police Fraud Enforcement Agency who discussed the 'COPS' computer system.

On the final afternoon Kim Anderson from West Wyalong won \$200 from the department and a computer and printer donated by Campus Personal Computing.

The other sponsors were Nortel who donated money towards the cost. This allowed the University, among other things, to subsidise fees and accommodation and lower the costs to students.

'What the Internet offers, for the first time in communications technology history, is the potential for all users to participate respond and most importantly, produce'

Get on your bike

AN EXTRA 80 bicycle parking places have been established in the middle to western part of the campus in areas where there was an identified demand.

This has increased the campus capacity to about 600 places.

The newest racks are the simple 'leaning rail' type endorsed by the Roads and Traffic Authority which are used and recommended by Wollongong City Council and manufactured locally.

The University has gained an RTA grant to subsidise the cost of providing these additional bicycle racks because the initiative encourages greater use of bicycles as a means of transport in urban areas.

First University team for Sydney to 'Gong ride



PICTURED are some members of the first University of Wollongong bike team who took part in the 16th annual Sydney to 'Gong ride on 2 November to help raise funds for research into multiple sclerosis.

Individuals from the University have entered before, but this is the first time the University has entered an official team.

One of the keen participants included the Pro Vice-Chancellor (Research), Professor Bill Lovegrove front second from right. About 50 academic and general staff and students comprised the overall team.



Rob Goodfellow

New book to aid business with Indonesia

A **TIMELY** and highly readable book, titled 'Indonesian Business Culture' by Mr Rob Goodfellow, will facilitate business links between Indonesia and Australia by promoting a better understanding of Indonesian culture, religion and economy.

Containing contributions from prominent Indonesian and Australian academics and economic leaders, many of whom are University of Wollongong graduates, the book covers topics such as cultural etiquette, the Islamic faith and business practice, economic development in Indonesia and perspectives on dealing with corruption.

Mr Goodfellow said: "Despite all the ill-founded political rhetoric about Australia's place in the region and about the lack of economic integration with neighbouring nations like Indonesia, Australians are forging links with the Indonesian business and academic communities."

This book would constitute an excellent training text for of large international companies who frequently move entire production crews and their families to Indonesia to work in such fields as mining, construction or technology infrastructure development, Mr Goodfellow said.

It is also essential reading for anyone undertaking or contemplating doing business in Indonesia or South-East Asia as well as being an appropriate text for college or university.

Mr Goodfellow held a tutoring appointment at the University of Wollongong and is an author, journalist, research student and a cultural consultant.

Flexible teaching program for academic staff a winner



Back (from left): Dean of Education, Associate Professor John Patterson, participants J. Rajendran Pandian and Renhu Pan. Front: ITT coordinator Maureen Bell, participants Head of Physics, Associate Professor Bill Zealey, and Catriona Edwards, and Director of CEDIR, Associate Professor Sandra Wills

A RANGE of independent study modules in tertiary teaching is available for University of Wollongong academic staff.

This new modular teaching development program supports the University's commitment to the provision of quality teaching and learning.

One of the participants, Associate Professor Bill Zealey, who has been an academic here since 1985, is enthusiastic about the course.

"It confirms some skills and opens up thinking about skills you haven't dared to use," he said.

"It gives you confidence through discussion with others about what works and what does not work.

"This course should not be confined to new academics. It should be revisited down the track after a number of years.

"Technology is moving rapidly, however this course confirms that there is room for the traditional as well as for new technology."

He particularly likes the option to complete the course over 12 months which, he says, "provides well defined breathing spaces which gives you time to relate the material to what you have been doing over the years".

Introduction to Tertiary Teaching (ITT) coordinator, Maureen Bell, has developed a set of specially designed resources that may be studied either as individual modules, combined to make up the requirements for completion of the ITT professional development program or the ITT subject EDGA997 which has to be completed over 12 months.

The resources used in this flexible

course comprise print-based learning activities, readings, videos, computer mediated discussion and face-to-face workshops.

Implementation of the new program is timely as the issue of university teacher accreditation is receiving attention through submissions to the West review.

Staff who are interested in completing a module over Summer session should access the ITT web page at <http://cedir.uow.edu.au/subjects/education/EDGA997/> or contact Ms Bell by email or phone 3946.

Professor Zealey is available to discuss the course from a participants point of view, ext. 3522.

ITT is presented jointly by the Centre for Educational Development and Interactive Resources and the Faculty of Education.

International views on health outcomes

THE Centre for Health Service Development in the Faculty of Health and Behavioural Sciences held a practical interactive seminar in October that featured some prominent national and international speakers.

Director of the Australian Health Outcomes Collaboration, Jan Sansoni, spoke on the international focus on health outcomes.

Dr Danny Ruta from Dundee University, Scotland, discussed the need to move from health status measurement to quality of life assessment.

Coordinator of the health outcomes research group at the University of Wollongong, Dr Rohan Jayasuriya, and director of the Centre for Health Service Development, Associate Professor Kathy Eager, spoke on patient generated assessments and linking health outcomes to funding respectively.

Dr Bruce Shadbolt described a study in the ACT on the clinical applications of health outcomes measurement.

Senior lecturer at the Sheffield (UK) Centre for Health Economics and Research, John Brazier, provided an overview of health outcomes and cost utility.



Associate Professor Kathy Eager, Dr Danny Ruta, Roy Harvey, Hilary Maitland, Jan Sansoni, John Brazier and Dr Rohan Jayasuriya.



Head of the Department of Chemistry, Professor John Bremner (left), was pleased to be able to welcome wife of the late Professor Halpern, Mrs Peg Halpern, on the occasion of the memorial lecture. Dr Peter Colman is pictured with them.

Record Halpern Lecture audience

THE 1997 Bert Halpern Lecture presented by Dr Peter Colman attracted a record audience from a wide cross section of the University and local communities.

Those attending were rewarded with a stimulating lecture on the latest developments in combating the Influenza virus, a topic of great interest to a general and scientific audience.

Dr Colman's address was informative to all those attending.

The Bert Halpern Lecture was established in 1988 by the Department of Chemistry as a public lecture to be presented annually at the University of Wollongong by a distinguished visiting scientist on a subject in chemistry or biochemistry.

It honours the memory of Bert Halpern, the Professor of Chemistry at the University of Wollongong from 1970 to 1980.

Study shows outside businesses see Illawarra in a positive light

LONG-held beliefs that people living outside the Illawarra perceive the region to be strike-prone and unable to attract potential new businesses, have been turned on their head, a study commissioned by the University of Wollongong has shown.

The study reveals that compared to the rest of Australia, the Illawarra emerged better than the national average when it came to businesses perceiving the region to have more positives than negatives.

The study, Investor Perceptions of the Illawarra Industrial Relations Climate, was launched at the University on Tuesday 4 November in the presence of business community representatives and the Vice-Chancellor, Professor Gerard Sutton.

Among those at the launch was the Shadow Minister for Employment and Training, Mr Martin Ferguson, who was in Wollongong for a shadow ministry meeting.

Authors of the study are Associate Professor Chris Nyland and Dr Ann Hodgkinson of the Labour Market and Regional Studies Centre, University of Wollongong, and Mr Simon Pomfret, of the Illawarra Regional Information Service (IRIS).

This is the second phase of a major study of the Illawarra industrial relations climate with an earlier report having been released in May which highlighted the perceptions of industrial relations among small business people within the Illawarra.

The trigger for the study came from a comment to Professor Nyland from a businessman who expressed concern as to what investors outside the Illawarra thought about the region as a potential investment area.

IRIS then surveyed a range of companies across

NSW to see what they considered to be the big issues for them if they decided to relocate.

They were also asked about their overall perceptions of industrial relations in the Illawarra.

Professor Nyland said the results for the Illawarra were then compared against Newcastle, Western Sydney and Australia as a whole.

"One interesting finding was the fact that 60 per cent of businesses thought industrial relations in the Illawarra region had markedly improved over the past decade," Professor Nyland said.

Professor Nyland said it should also be pointed out that many businesses, especially those in Sydney, had no opinions whatsoever on regions outside their own metropolitan area. Generally, businesses throughout NSW had a poor knowledge of the business environment in Wollongong and the Illawarra.

He said this was an issue itself which would need addressing.

As the study notes: "While residential, educational and service centre functions are developing in the region, overall the level of new job creation has been well below that necessary to meet local workforce requirements."

Access to markets, the physical requirements of the business and cost factors were found to be key motivators for organisations to consider new locations.

The study recommends that a high priority be placed on developing a promotional campaign for the region targeted at business managers and promoting the benefits of the region as a site for the relocation of new businesses requiring space to expand and as a location for business expansion for firms servicing national and international markets.

Long Gallery

A project run by the Faculty of Creative Arts. Works by visiting artists, students and staff. Many pieces for sale Bld 25 Admission free. Opening hours: 9am-4pm Mon-Fri and Sunday 1.30pm-4pm.

Enquiries 213996.

21 November-7 December: 6.30pm. HATCHED BCA Graduating Exhibition. Works by graduating students including painting, printmaking, textiles, graphic design, sculpture.

Theatre South

Begun in 1980 through the support of the University which continues to provide audiences, artists and administrative input. All productions at Bridge St Coniston unless otherwise stated.

Reservations (02) 4229 6144.

4-13 December: Old Flame. Mayhem and farce in a small town as the Olympic flame passes through. Illawarra Performing Arts Centre.

Seminars, discussions, lectures

20-22 January: Faculty of Science - Siemens Science School: Designed for students entering Year 10 in 1998. It is a chance for students to enjoy some of the wonders of science and technology and discover their uses in the modern world. The school includes laboratory sessions and excursions to BHP and the Science Centre. Application forms are available from most schools and local Rotary Clubs. Closing date 8 September 1997. Contact: Faculty of Science Office, Tel: 02 4221 3530.

Conferences

7-10 December: 9th Annual Innovative Technology Schools Conference. "Towards 2000. What does this mean?" Apple Computer Australia in conjunction with the Faculty of Education. For information contact: <http://www.imml.uow.edu.au/itsc> or <http://www.imml.uow.edu.au/>

8-10 December: Science, Law and Policy for Marine Environmental Management. Enquiries Centre for Maritime Policy: 02 42213224

9-12 December: TASA '97. The Australian Sociological Association Annual Conference hosted by the Sociology Program. Contact Trish Vezgoff, Tel: 02 4221 4055, Fax: 02 4221 4301

12 December: Management of Regional Seas - Cooperation and Dialogue. Organised by the Centre for Maritime Policy and the Australian National University. Venue: University House. Australian National University. Enquiries 02 42213224

University Social Club

Become a member and enjoy a variety of social events. A chance to meet people across the campus. Contact: Helen Hasan, Tel: 3757 or email.

The Campus Chapter of the Alumni Association, which runs the Secondhand Bookshop, will be holding a 'Big Ticket Discount Sale' on 22 and 23 November.

They are at Cowper Street, Fairy Meadow (opposite the Science Centre), and will be open from 10am.