Two returned, six new members elected to Council

Following the elections for the new Council of the University, two members of the Interim Council have been returned. Professor John Hamilton and Dr Peter Hendry were elected in their respective categories.

Ms Judy Wallom, Dr Bill Warren, Ms Marion Williams, Mr Trevor Waring, Dr Diana Day and Mr Vic Levi were also elected and are new members of the Council.

In the four elections held, considerably more interest was elicited, judging by the votes cast, than in elections held before amalgamation.

The new Council assumed responsibility for the University on September 1, succeeding the Interim Council.

The University's Act provides for a Council with a maximum membership of 18:

- Parliamentary members (one each elected by the Legislative Council and the Legislative Assembly),
- Official members (the Chancellor, if not otherwise a member, the Vice-Chancellor and the Deputy (sitting Officer of Senate),
- Appointed members (four persons appointed by the Minister for School Education and Youth Affairs, the Hon. Virginia Chadwick),
- Elected members (eight), and
- A member whom the Council may appoint itself.

In the ballot to decide who would fill the position on the Council for the non-academic member, Ms Judy Wallom was elected.

Four hundred and sixty-three staff out of an estimated 1000 non-academic electors on the campus cast votes and after Ms Wallom received her quota (232 votes) the result was: Mr David Heggan 127, Ms Merryl Wright 54, Mr Wayne Sheean 25 and Mr Stephen Watson 22.

Dr Bill Warren and Professor John Hamilton were the successful candidates from the academic staff.

Three hundred and thirty-five academic staff out of an electorate of approximately 800 cast votes. When Dr Warren and Professor Hamilton reached their quotas (109 votes), Dr Jack Caldwell had received 93 votes, Simon 49, Dr Glen Albrecht 38, Professor Victor Emeljanow 33 and Ms Lyn Forritt 21.

The successful student candidate, Ms Marion Williams, attracted 537 votes and Mr Kent Gillman 294. Eight hundred and sixty-one students voted out out of an electorate of about 12,500.

In the ballot to decide the four positions for members of Convocation, Mr Waring, Mr Levi, Dr Day and Dr Hendry were successful from a field of 11 candidates.

A total of 1258 votes were cast out of a possible 16,500 electors and after Messrs Waring and Levi and Drs Day and Hendry had been allotted sufficient votes to be elected (252 votes), Sister Mary Sinclair had received 244 votes, Mr Ray Hodgins 152, Dr Alec Forsythe 132, Ms Barbara Gaudry 107, Mr Hugh Floyer 101, Ms Jean McGarry 68 and Ms Radmila Yates 41.

The Council will meet on September 14 to consider the election of a Chancellor and the appointment of a member by the Council.

Convocation members will serve on the University's governing body for three years, academic and non-academic members for two years and the student member for one year.

The Minister for School Education and Youth Affairs, the Hon. Virginia Chadwick, has been reappointed, Dr Alec Forsythe, Mr Richard James Owens and Mr John Peschar to the Council.

The Minister's other appointee is the Executive Director of Nursing at the John Hunter Hospital, Mrs Susan Gail Rappell.

Unlocking the genesis of ore deposits, - P3
Last Interim Council, - P4
Office for Research feature, - P8
Campus University Challenge, - P11
Greater safety on campus, - P13
A 'supermarket' of microcomputing hardware and software will be on display when the University of Newcastle hosts the 7th Annual Newcastle Microcomputing Exhibition later this month.

The three day event regularly attracts between 15,000 and 20,000 visitors each year because of its uniqueness and its aim of making the community more aware of the impact of microcomputer equipment on everyday life. The 1990 Exhibition to be held from Thursday to Saturday, September 20 to 22 in the main concourse of the Hunter Building at the University is being conducted by the University in association with The Newcastle Star newspaper.

Convenor of the event, Mr John Dugas, said the Exhibition was originally started by the former Newcastle College of Advanced Education to assist students who were undertaking computing studies. It rapidly grew because of the great interest of the community in microcomputers and its need to be exposed to the ever changing nature of the industry.

"The industry is still changing because of the great developments in both hardware and software and I believe students, as well as the public, need to keep up with the changes," said John, who is a lecturer in the Department of Pedagogical Studies at the University.

"The event allows the public to gain hands on experience and also to talk to experts and there will be some outstanding demonstrations of software packages.

"There will be training workshops each day which will be looking at AutoCad, WordPerfect, Microsoft, Lotus and Novelle and I am quite sure there will be something for everyone during the three days."

About 25 local companies and computer-related organisations are expected to take part in this year's Exhibition with final preparations nearing completion.

The daily times will be midday to 9pm on the Thursday (September 20) and 9am to 5pm on both Friday and Saturday (September 21 and 22).

### Roman Barbecue

Banquet for the Classics Society. September 12, Drama Studio, 6pm.

Tickets cost members $11 and non-members $13 (includes Roman meal, three free drinks, entertainment).

- A slave auction will be held.
- Guests need to bring feasting gear, plate, knife, fork and cup.
- Tickets are on sale at the Department of Classics office in the McMullin Building.

### Goodbye to Mr O'Doherty

Mr Bernie O'Doherty arrived at the University in 1983. Although he was not employed by the University, he became a well-known campus figure.

As Manager of the Commonwealth Bank on campus, he was respected for his wealth of knowledge in areas of finance.

As Bernie O'Doherty, he was known as a friend and acquaintance with a constant smile.

Bernie retires from the Commonwealth Bank on September 7 and he told the BULLETIN that his position at the University had been one of the most enjoyable of his career with the bank, which started in Toowoomba in 1949.

"Normally, a bank manager works in a building in a busy commercial area where you get the passing trade," he said. "Therefore the quiet campus environment is unique for a bank!"

Mr O'Doherty said his satisfaction had been heightened by the courteous members of the University with whom he had associated and the outstanding staff of the bank.

Among the farewells to honour Bernie, a dinner will be held at the Madison hosted by the Area Zone Manager of the Commonwealth Bank, Mr Richard Watson.

Our photo shows Mr O'Doherty receiving retirement best wishes from his colleagues Mr Paul Osborn, Ms Helen Cadogan and Ms Cheryl Lawrence.

### Department of Sociology seminars

Room W308, Department of Education, Tuesdays 1pm to 2.30pm

- September 11, Greg Evans (Hons), 'Getting by in the informal economy'.
- September 18, Jara Krivanek (Department of Physical Health Science), 'Opiate use in Australia: professional ethics and government policy'.
- October 9, Gill Cowlishaw (Department of Social Sciences, Charles Sturt University), 'Gendered racism'.
- October 16, Cynthia Hunter (post-grad), 'Ethnicity and health care'.
- October 23, Dennis McIntyre (post-grad), 'Working on Newcastle Buses: the Drivers' Interpretation of the situation'.

### Sports Union's query on bowls

The Sports Union is interested to learn how many people on the campus are interested in playing bowls.

The Sports Union is negotiating with a bowling club about the likelihood of an association being formed between the club and the University.

Interested persons should contact the Sport & Recreation Office.
Award restructuring

A national strike might be necessary if academics were to have key issues addressed in award restructuring negotiations, a special meeting of the University's Staff Association was told on August 21.

Ms Jenny Strauss, Vice President of the Federation of Australian University Staff Associations, addressing more than 60 UNSA members, said there was unrest nationally concerning some of the proposals to restructure university academic awards.

Ms Strauss said the Australian Higher Education Industry Association (AHEIA), the Vice-Chancellors' industrial body, supported by the Federal Government, was insisting, among other things, on "hard bars" (restrictions to salary increments) being placed within scales for certain levels of staff, and "quotas" being applied to promotions beyond certain levels.

Objectives central to FAUSA's claim included the introduction of a genuine career structure and the pursuit of national standards for conditions of employment.

Ms Strauss said it was possible that FAUSA would hold a one-day national stoppage in October. "Work bans and other applicable action should be kept in our sights," she said. "Universities do not like action which draws attention to them, so our campaign should target some event interfacing with the community."

Possibilities also included holding back examination results and withdrawing academics from campus committees.

"Many of our colleagues are reluctant to do things like this, preferring to be bound by gentlemen's agreements. Therefore there will have to be a great deal of consultation with academics and students."

The President of UNSA, Dr Bill "Tren, said Ms Strauss's address had been "a reply to consciousness-raising. He hoped members went away from the meeting having 'girded their loins'."

Unlocking the Genesis of Ore Deposits

Gold, silver, lead and zinc have been mined since the beginning of civilization, but scientists don't know how the ores were formed in the dimness of prehistory.

Dr Joanna Parr, a Post-doctoral researcher in the Department of Geology, is undertaking a study of ore deposits in Broken Hill to try to learn about their formation.

A few years ago, she sought out the minerals in Sweden. However the scope for investigations was limited because there are few ore deposits in Sweden.

By contrast, Broken Hill possesses the world's largest deposits of lead and zinc and Dr Parr has established herself underground, conducting her research in the Pinnacles Mine, which is still in production.

Dr Parr, who will have a two-year attachment to the Department of Geology, funded by the UK National Environment Research Council, holds a BSc degree with honours from the University of Leeds and a PhD degree from the University of Cardiff. She has taught geology at the University of Newcastle-Upon-Tyne.

For her and her collaborator, Professor Ian Plimer, Professor of Geology, the task is to explain what happened 1800 million years ago.

"There was a sudden major event - the earth experienced a violent degassing," they said.

"We, will use a new isotopic method to try to understand how hot volcanic sea rocks reacted to something to form ore deposits. We don't know yet what really happened and how it happened!"

'Fatherly gleam in eye'

The guest speaker at this year's annual reunion for Newcastle surveyors and surveying graduates admitted to having 'a fatherly gleam in his eye'.

Professor Peter Angus-Leppan, Associate Professor of Surveying at the University of New south Wales, was Head of the School of Surveying at the University of New South Wales at the time of the establishment of the surveying degree course at this University in 1970.

During his address to the surveyors and surveying graduates in the Union on August 10, Professor Angus-Leppan congratulated the University of Newcastle and it's 150 surveying graduates on their fine level of achievement in the profession of surveying.

Professor Angus-Leppan went on to give details of recent activities he had been involved in, including being leader of a World Bank project in Thailand, which had as its objective the establishment of land titles for 15 million Thai landholders. The five-year task was now reaching its successful conclusion, he said, and he referred of the involvement of surveyors as experts in land management and as project managers in land redevelopment.

Professor Angus-Leppan concluded by pointing out that we live in times of rapid technological change and the inter-disciplinary skills of surveyors would be called upon more and more to solve problems related to our most fundamental resource - land.

Professor John Fryer, Associate Professor of Surveying, earlier welcomed more than 40 guests to tea dinner, including the Lord Mayor, Alderman John McNaughton, the Surveyor-General, Mr Don Grant, the Chairman of the Association of Consulting Surveyors, Mr John Mortensen, and the Registrar of the Board of Surveyors Mr Alan Pendleton.

Mr Darren Lewis received prizes from the Photogrammetric and Remote Sensing Society, the Association of Consulting Surveyors and the Board of Surveyors' Gold Medal for being the most outstanding surveying graduate in 1990.

The Hunter Manning Group of Surveyors' prize for the best final year performance went to Mr Adam Smith. Noteworthy is the fact that Adam was the first person to complete the combined Bachelor of Engineering and Bachelor of Surveying degree course offered by the Department of Civil Engineering and Surveying.
INTERIM COUNCIL

The Interim Council met for the last time on August 24. (The Council's first meeting was held in September, 1989). The University of Newcastle Act provides for the amalgamated University to have a new governing body, the Council.

Vice-Chancellor's Report

Central Coast Friends of the University

The Vice-Chancellor, Professor Keith Morgan, expressed his pleasure that a Friends of the University group was being established on the Central Coast and informed Interim Council that Emeritus Professor Clif Ellyett, Chairman of the Central Coast Tertiary Education Development Committee, had sought the Interim Council’s support for the move.

V-C's Overseas Trip

Professor Morgan attended the International Association of Universities Conference at the University of Helsinki, Finland, which marked the 350th anniversary of the establishment of the University of Helsinki, and found the conference to be particularly rewarding.

He informed Interim Council that the meeting had strengthened educational links between Eastern European and Russian universities and universities in other parts of the world, particularly in areas of concern to students.

He spent a few days in Korea and visited four universities. He exchanged an agreement of co-operation with Ehwa University (a women's university in Seoul). The university would send representatives to Australia in a few months to visit this University, he said.

One of the most interesting visits he made to universities in Korea was to POSTEC, a new university which emphasised postgraduate programs.

POSTEC and this University had a lot in common. POSTEC operated in an industrial city with a port which was the destination for most of the coal shipped from Newcastle, and its Engineering and Science Faculties carried out research which was similar to the research done at this University.

The Vice-Chancellor said Professor Ron MacDonald, who had visited POSTEC soon after he had, shared his impressions of the institution's high standard of work. The establishment of academic ties would be desirable.

On his return trip Professor Morgan called at Hong Kong and attended a reunion dinner for graduates of this University. The 47 graduates who were present had received him warmly.

The newly appointed Area Director and Professor of Anaesthetics and Intensive Care, Professor R.B. Hollings, and Interim Secretary, Mr P.D. Alexander, had also attended the dinner, the Vice-Chancellor said.

Academic Salary Loadings

Acting on the recommendation of the General Purposes Committee, Interim Council decided that the Academic Salary Loadings Working Group resume its work and advise on the kind of academic loading scheme which should be introduced at this University.

The Academic Salary Loadings Working Group had suspended its activities pending the outcome of academic award restructuring. However, the General Purposes Committee advised the Interim Council that the investigation of salary loadings should be proceeded with if the University was to remain competitive with other institutions in attracting and keeping staff.

The Vice-Chancellor said the discussions in Canberra on academic award restructuring would not solve the problem of the University being disadvantaged by other universities paying academic salary loadings. The situation could not be ignored any more.

He said he hoped the Academic Salary Loadings Working Group could bring recommendations forward to the next Council meeting.

Child Care

Upon the recommendation of the Advisory Committee on Affirmative Action and Equal Opportunity, the General Purposes Committee on August 10 considered the need for child care facilities at the University and instructed the Interim Council to do likewise.

The Advisory Committee requested that the matter be referred to the Dean of Students, Professor Ken Dutton, to devise a work-based child care facility for the use of students and staff.

Following a recommendation from the General Purposes Committee, Interim Council asked Professor Dutton to give advice on the proposal.

University Union

Interim Council was informed that the Union of the former Hunter Institute had been dissolved on June 30 and amalgamation with the University Union, the Sports Union and the Students’ Association had taken place on July 1.

The cash assets of the Hunter Institute Union had been transferred to the University Union for the sole purpose of developing Union facilities on the East Campus. All staff of the Hunter Institute Union had also been transferred to the University Union.

Acting on the recommendation of the General Purposes Committee, Interim Council increased the University Union component of the General Services Charge from $110 to $124 and agreed that the Sports Union and the Students’ Association components, along with other relevant changes, should remain the same next year as this year.

New Entrance

Members viewed drawings prepared by the Site Architects, Eckford Johnson, for a new entrance to the University.

The entrance has to be reconstructed owing to the major changes made by the Roads and Traffic Authority at the entrance to the construction of State Highway 23.

In their submission, Eckford Johnson said their concept was made up by the following main elements: the gateway, the University pylon, the new bus stop and the landscape.

The site planners said two serpentine walls made of clinker bricks were envisaged as forming the gateway to the university - the western wall originating from the new bus stop and the eastern wall emerging from the ground.

The choice of serpentine walls originated from the idea of universities in the New Worlds and did not rely on an English tradition.

The concept of gratitude acknowledgment bricks had been developed, the bricks providing a physical recognition of achievement for graduates and beginning a tradition for the University. The concept could also be a vehicle to provide a source of funding for this and future projects.

Eckford Johnson’s design shows the walls terminating with a pair of structures which contain hidden sandstone pylons. The pylons feature spiraling stainless steel rods and hidden lighting. A new roundabout at the top of the entry drive is the proposed site of the University pylon. The intention of the roundabout is to ease congestion at the ‘T’ intersection.

The landscape has been designed to complement the natural environment of the University and it is proposed to use indigenous species in a formal layout.

The Deputy Vice-Chancellor (Planning), Dr Doug Huxley, informed Interim Council that the drawings would be displayed in the foyer of the Great Hall. Comments from interested members of the University would be sought.

Dr Huxley said the proposal for the graduate bricks had met with favourable comment and some graduates seemed extremely keen to have their names inscribed.
August Senate

Senate considered two matters that were raised at the first Academic Forum on July 13, procedures for the operation of the Senate and the provision of child-care facilities adequate to the needs of staff and students.

Procedures for the operation of Academic Senate

Academic Senate adopted procedures submitted by the Deputy Presiding Officer, Professor Ron MacDonald, who said it was important for Academic Senate to have a set of procedures, which would allow the body to function with confidence.

Child care facilities

The Dean of Students, Professor Dutton, reported on Kintaiba and Wonnayba Child Care Centres. He said staff and students did not receive preference when they applied for places in the centres for their children.

Professor Dutton Kintaiba catered for 101 children a week and Wonnayba for 49 and there were long waiting lists for each, the lists including names of some unborn children. The inadequacy of child care facilities at the University was undoubted.

As the Boards of Kintaiba and Wonnayba Child Care Centres were keen to expand the centres they had made approaches to the Federal Government and the University for funds. Since amalgamation the Boards have been talking together in a co-ordinated way.

Unless the government's guidelines were changed, the expansion of the child care centres would not take the form staff and students wanted. They died the community centres and places could not be reserved for the children of staff and students.

Dr Phil Moore, Chairman of the Kintaiba Community Child Care Centre's Board of Trustees, said Kintaiba's intention in trying a few years ago to provide 40 occasional child care places in a separate building was that it would be a user pay system. The University should make a commitment to providing this kind of child care.

Vice-Chancellor's Report

The Vice-Chancellor, Professor Keith Morgan, in his report to Academic Senate, reported on his overseas trip.

Professor Morgan said he had gained an interesting and useful series of visits. During an international universities conference in Finland he had had interesting discussions with Rectors and Vice-Chancellors of Universities in Eastern Europe about their changing situation.

New Courses

The School Board, School of Administration and Technology, reported that it had endorsed proposals for a Bachelor of Applied Science (Consumer Science) course and a Bachelor of Social Science (Justice Studies) course next year and recommended that Academic Senate approve the proposals.

In support of the introduction of the Bachelor of Applied Science (Consumer Science), the Board said that there appeared to be a strong regional and state need for courses at the degree level in the areas of food and textiles which had technological, business and consumer perspectives.

The proposal for the Bachelor of Social Science (Justice Studies) was for the upgrading of the existing Associate Diploma Police Studies to a degree with an optional Associate Diploma exit. Academic Senate approved of the courses in principle and referred the documents relating to the courses to the Planning and Resources Committee and Faculty Boards for consideration.

Employment Studies Centre

Among the items dealt with by Academic Senate was a proposal for the establishment of an Employment Studies Centre in the Faculty of Economics and Commerce. The Centre would promote teaching, research and training in the general area of labour, employment and industrial relations and co-ordinate the provision of consultancy services and commissioned research.

Dr Duncan MacDonald, of the Department of Economics, in an address to the Academic Senate, said it had been a source of surprise for a long time that employment studies had not enjoyed a high profile in the University, given Newcastle's traditional interest in industry and industrial relations.

Teaching and research in the area, he said, had been strengthened by recent staff appointments, and a training scheme had been accepted by the Federal Government, resulting in funds being allocated to the University.

Industrial relations, labour economics and related subjects were attracting an increasing number of students, Dr MacDonald said, and the Faculty of Medicine was offering a course in occupational health and safety.

Dr MacDonald envisaged the Employment Studies Centre having fairly modest beginnings, initially being hosted by the Department of Economics and ultimately being self-sufficient.

The Vice-Chancellor said he hoped Academic Senate would welcome the proposal based on the University's existing strengths in the field.

Academic Senate approved the proposal.

Contacts with Visitors for Conference

The Dean of the Faculty of Arts and Head of the Department of Drama, Professor Victor Emeljanow, will leave Australia for Canada on September 15 and return on October 6.

As well as gathering information on modern Canadian theatre and planning the introduction of a Canadian component into drama courses, Professor Emeljanow will hold discussions with academics who will attend an international conference on Canadian theatre at this University in July 1991.

His visit will be funded by the Canadian Government through a scheme which provides study grants to selected academics from Australia and New Zealand who want to develop Canadian studies at their institutions.

Professor Emeljanow said theatre scholars from Canada, the UK, the USA and other countries would take part in the conference, to be titled Imperialism and Popular Theatre.

He would visit the Universities of Vancouver, Victoria and Toronto and York, Guelph and Brock Universities. He would have talks with Professors Ron Bryden, Christopher Innes, Leonard Connolly and Mary Miller, among others, about the papers they would present at the conference at Newcastle University.

In Vancouver Professor Emeljanow will meet Emeritus Professor Mavor Moore, a distinguished playwright, novelist, theatre critic, actor and director. While still on the west coast, he will visit Professor Michael Moore at the University of Victoria. Michael Moore, who is Chairman of the Department of Theatre, worked with Victor Emeljanow at this University for eight weeks late last year.
Dinner to Celebrate International Day of Peace

A former Chancellor of the University of Newcastle, Justice Michael Kirby, will be special guest in Newcastle later this month to help celebrate International Day of Peace.

The Newcastle Branch of the United Nations Association of Australia in co-operation with a number of other local organisations has invited Justice Kirby to Newcastle on Tuesday, September 18.

Chairman and Convenor of the dinner/meeting, Dr Romesh Amar, said the venue would be Edwards Hall at 6.30pm.

Other special guests on the night will be the Director of the United Nations Information Centre for Australia, New Zealand and the Pacific, Phelma O'Connor-Socorzano and the Consul General for India, Arif Qarnan.

Dr Amar said tickets could be obtained by telephoning 692305. Cost of tickets is $16 for members, $20 for non-members and $12 for students.

Sports Union's query on bowls

The Sports Union is interested to learn how many people on the campus are interested in playing bowls.

The Sports Union is negotiating with a bowling club about the likelihood of an association being formed between the club and the University.

Interested persons should contact the Sport & Recreation Office.

Correction

The BULLETIN went desperately seeking Susan last fortnight to report the fact that a student of this University had been awarded an Australian Nuclear Science and Technology Organisation scholarship.

We inadvertently took a photograph of the wrong Susan, Ms Susan Curtis, Tutor in Geography, and apologise to the recipient of the scholarship, Ms Susan Keay (above) for the mistake. We also congratulate her.

FACULTY OF ENGINEERING Open Day

Sunday, September 9, 9am to 4pm

The Faculty's Open day will provide Displays, Hands-on demonstrations Videos, Talks, Exhibits

And Much More

Discuss courses and careers with staff, professional engineers and Computer scientists and see computers, machines, a wind tunnel, water flumes, the Jameson Cell, students' projects, TUNRA Bulk Solids and turbulence research.

Family Competition for a personal computer donated by MAINTAIN AXIS COMPUTERS

"Engineers Look Ahead"
Newcastle Inventor on American TV

A unique speech and graphics system for the blind invented by Assoc. Professor Don Parkes is to be shown across America on the Discovery TV Channel.

The computer aided system called NOMAD enables people of all ages to interpret tactile graphics (i.e. raised line graphics).

NOMAD was one of five Australian inventions selected to be shown on Discovery TV. The series considers inventions from countries around the world and is undertaken under the auspices of the Smithsonian Institution, Washington.

Professor Parkes, who is Director of the University’s Institute of Behavioural Sciences, told the BULLETIN he understood that the US programme would be shown later this year. Filming of the invention had been completed in Sydney, he said. Staff and a blind child at St. Lucy’s School for Blind Children in Wahroonga, Sydney, assisted in the filming.

Professor Parkes has been working, with Mr Richard Dear, for the past two and a half years developing the software for NOMAD.

During the past few months, apart from new software developments, speech output into German, Spanish, Italian and French has been completed, with translations by Mrs Jayne Farrell for the French, Mrs Nora Moelle for the Italian, Mrs Marea del Carmen Kolmajer for the Spanish and Mrs Richard Dear for the German. A Japanese translation is also being made.

Don Parkes said he and Richard Dear had been working closely with Dr. Hideo Makino, of the Department of Engineering at Nigata University in Japan. Dr. Makino is undertaking research in the area of graphical information for the blind.

A Japanese language voice synthesiser has been bought for the Institute of Behavioural Sciences through Dr. Makino.

Here in Newcastle Junko Abe has done English to Japanese (Katakana) translations and Hillary Norrie, of the Japanese Section, has also been helping. NOMAD was launched in Canberra in September, 1989, by the (then) Minister for Science and Technology, Mr Barrie Jones. A researcher in the UK has submitted a grant application to the Nuffield Foundation to enable graphics from new software output into German, Spanish, Italian and Japanese for the University of Technology.

Dr. Makino has been working closely with Dr. Parkes, who is Director of the University’s Institute of Behavioural Sciences, and has also been helping.

In the United States a similar application has been made by a team of researchers at a New York state university for Federal funding to integrate the NOMAD system into a graphics production facility using scanner input and thermo-ink jet tactile graphics.

An American expert in Environmental Toxicology, Health Risk Assessment, Waste Incineration and Project Management visited the University recently to hold talks with the committee for a proposed Centre for Environmental Toxicology.

Dr Kathryn Kelly is President of Environmental Toxicology International, Inc. in Seattle and President of Alden Analytical Laboratories, Inc. She is known internationally for her work in environmental toxicology and health risk assessment problems and has advised several state and government agencies in the United States and also in Australia about both waste and toxic waste problems.

Spokesperson for the Environmental Toxicology Unit Committee at the University, Dr Howard Bridgman, said that academic personnel from the Departments of Pharmacology, Clinical Toxicology, Occupational Health and Epidemiology within the Faculty of Medicine, and the Board of Environmental Studies have been working on the proposal for the Environmental Toxicology Centre for the past eight months. He said the proposed Centre is a shared project with the University of Technology Sydney.

Dr Bridgman said initial seeding funding of $100,000 from the State Government allowed the Unit to purchase computer hardware and to develop software for an environmental data base for the Hunter and Central Coast Regions.

An application to the NH&MRC for funding would, if successful, provide staff and equipment. "The University is recognised as having a top level personnel to form a toxicity unit and has made significant advances in the field in recent years", said Dr Bridgman.

"The fact that Newcastle is an industrial area would provide an ideal local research base. It would allow us to develop programs in the Hunter first," he said.

Dr Kelly advised the committee on the structure, organisation and mission of the Centre. She will also spend part of her visit interviewing the medical personnel associated with the committee.

INTERESTED IN TEACHING AT MUSWELLBROOK IN 1991?

Community Programmes teaches its Open Foundation Course to adults in the Upper Hunter.

In 1991 it wishes to appoint a casual tutor to teach one two - hour session per week over 27 weeks. (Transport provided).

If you might be interested in this position, please contact Mr Collins on Extension 600.

Most disciplines other than Psychology and History will be considered.
Research Grants On Vax 'News' System

With assistance from the University Computing Services (UCS), the Office for Research has now introduced new and improved means of advising members of the academic and research staff of the existence of research grants from both internal and external sources.

In the past, this information has been circulated under cover of a memorandum to heads of relevant departments, with the request that copies be made available to appropriate members of staff. The advantages of the new system include the large amount of paper circulating within the University and the potential delay in this information reaching all relevant members of staff.

In an attempt to address these problems a data-base has been established on the University VAX computers using the NEWS system. UCS hope to extend this to other computers on campus before the end of the year.

As users of the 'NEWS' system will appreciate, NEWS covers a wide range of information. The new research grants system is accessed as NU RESEARCH.

The information in NU RESEARCH is grouped into categories that reflect the new DEET 'Field of Research Classification'. The details of each source of funding are entered according to the relevant research classification.

The NU RESEARCH system aims to:

- Ensure all staff can have access to information on sources of funding as soon as possible, and so allow for the maximum time to prepare grant submissions.
- Allow staff to examine grant information in their research area, or the whole range of grant information, rather than being restricted to someone else's assessment of what is relevant to their discipline, and
- Save paper, as we will move towards a situation where printed information will no longer need to be distributed.

A summary of the current grants and closing dates will be published in every BULLETIN issue.

The NU RESEARCH database presently has over 60 entries, each providing a summary of a research grant scheme. The summary includes the areas of research for which funding may be provided, where to get further information and the closing date for applications. The entries are maintained over the full year and updated as fresh information is obtained. They therefore provide a constant source of reference on grants and closing dates. A description of the contents of the NU RESEARCH System are described below.

In order to access the system you will need an account on the UCS VAXcluster and access to a terminal connected to the campus network. If you do not have an account, registration forms are available from the UCS Help Desk, in G24 Mclnlin Building. The Help Desk staff will also give a demonstration of logging in and use of the NEWS system if required.

General use terminals are available at various locations in the University, the main centres being Room G24 Mclnlin Building, Room S105 in Economics and Commerce Building, S. F. 105 in Mathematics Building V, Room A98 Holder Building, Level 2 David Maddison Clinical Sciences Building (opposite Room 220) and Level 5 Computer Room, New Med II, Mater Hospital. In addition, many departments have terminals (or microcomputers which may be used as terminals) in laboratories, offices, etc. Please enquire in your department. Alleycat terminals in the libraries will generally not be able to be used.

The Office for Research welcomes comments from members of staff concerning this new system. It is now operational, however, the circulation of individual notices will continue in the near future to allow staff time to obtain an account and become familiar with the system.

NU RESEARCH A. GENERAL

Entries in this category include all general research information not related to a specific source of funding. For example, notification that a granting body's Annual Report has been received and placed in the Auchen Library; advice of the Research Seminars.

NU RESEARCH APPLICATIONS.

NOW CALLED

This is a summary of all current grants - ie, applications which have been called and have not yet closed. Each entry will direct the user to the relevant classification for further details.

NU RESEARCH APPLIED SCIENCES
NU RESEARCH BIOTECHNOLOGY
NU RESEARCH CHEMICAL SCIENCES
NU RESEARCH CLINICAL SCIENCES
NU RESEARCH EARTH SCIENCES
NU RESEARCH ENGINEERING
NU RESEARCH HUMANITIES
NU RESEARCH INFORMATION COMMUNICATION
NU RESEARCH MATHEMATICAL SCIENCES
NU RESEARCH MEDICAL AND HEALTH
NU RESEARCH PHYSICAL SCIENCES
NU RESEARCH RURAL SCIENCES
NU RESEARCH SOCIAL SCIENCES

These categories follow the DEET 'Field of Research Classification' now in use and will contain a description of all relevant available grants, both current and expired. The information will be updated annually as fresh information becomes available. The Applied Sciences category will list all grants to allow a full summary to be made.

OFFICE FOR RESEARCH

Information on the following grants has been circulated to Heads of Relevant Departments and is contained in NEWS on the VAXcluster. Further information and relevant application forms are available from the Office for Research - telephone 685302.

GRANTING BODY

DITAC Bilateral Science & Technology technology for academic and industrial applications. - (Closing Date, September 19, to Egg Industry & D Study and Training Fellowships, Extension study/training Awards, Officer Development Awards, Industry Personnel Development Awards. - (Closing Date, September 19, to Office for Research)
Implementing Computer Education in Primary Schools

A lot has been said about computers and how they have affected our lives, but how should computer literacy and education be implemented? In particular, what is the role of the principal in the implementation process?

This was the subject of a paper delivered by the Director of Off-Campus Studies, Dr John Schiller, at the fifth World Conference on Computers in Education held in Sydney.

The Conference which is held every five years was attended by more than 2,300 delegates representing 58 nations. It is the first time that it has been held in the southern hemisphere.

John's paper, among 390 accepted for presentation from 560 proposals was titled 'Implementing Computer Education: The Role of the Australian Primary Principal'. It described a study of six primary schools in the Hunter Region spanning a period of 12 months over two academic years in which all initiatives regarding the implementation and sustainment of computer education were recorded and assessed.

Finding that the principals, when implementing change, fell into one of three camps - Initiators, Managers or Responders - he went on to research why some schools implement computer education more successfully than others.

'It became obvious that to successfully implement computer education in a primary school, the principal needed to be very involved, basically to see the need and then to introduce computers into the school situation,' said John.

The study was conducted in three phases: a pilot study, the identification and selection of principals, and the in-depth study of the six primary schools as computer education was implemented.

It demonstrated that principals are key figures in successful implementation of Computer Education, because of the number and type of their interventions. In particular, those interventions of the principal, which have a monitoring and evaluative function, are to be influential in determining the Success of implementation of Computer Education. In addition, implementation success was greatest at schools where the principal demonstrated an 'initiator' change facilitation style as compared to a 'manager' or 'responder' style.

The 'responder' change facilitation style was associated with least success in implementation of Computer Education.

John said the approach to computer implementation varied from school to school. In some schools the principal was the sole initiator, in other schools, the principal worked with other members of staff, passed responsibility to other members of staff, or liaised with the school community generally including parents.

He said the introduction of computers into schools has placed unique pressures on school principals to implement change. In this instance, it is essential to have knowledge of how principals effectively manage staff and pupil use of computers.

"In New South Wales, Computer Education has been adopted as a new curriculum area for primary schools, however it is dependent on regional and local initiatives assisted by State level support/guidelines documents," said John.

"And this is not the only priority in schools. There are many other subject areas which need to be implemented as well, so the pressures are great," he said.

He said that although computers are only used in 15 percent of classrooms around the world, his question 'What do primary school principals do to implement computer education?', created a lot of interest at the conference.

Practical Approaches to Mental Health Care

Ma Trish Jacobs

What seems to be an unlikely subject for a person involved with the development of a course in Occupational Therapy is the topic of a new book.

'Practical Approaches to Mental Health Care' written by University lecturer, Trish Jacobs, in conjunction with Elizabeth Crichton and Maria Visotina, has been accepted internationally as a basic training manual and is being used in occupational therapy and health education throughout Australia.

Trish, the Course Director of the Bachelor of Health Science (Occupational Therapy), has extensive experience in a number of health fields.

The book is intended for use by all health care professionals, especially nurses and occupational therapists, and to social workers and welfare workers. As part of their education in mental health care, it supports the NSW State Government policy on the proposed Mental Health Act whereby mentally ill people are cared for in the community as an alternative to hospitalisation.

"I had gained a lot of practical experience working with mentally ill people through my work as a graduate counsellor with a 24-hour, seven day crisis team. In this role I was required to use my Occupational Therapy skills in terms of analysing individuals' needs as well as developing and undertaking intervention programs," said Trish.

"As the title implies, the book presents a very practical approach and can be of great assistance to health workers moving into community health care work, taking into account issues such as ethical considerations, the family involved, treatment techniques, assessment and rehabilitation and the types of services available.

"We have set out to cover every aspect of caring for a mentally ill person and provide practical guidelines on how to support seriously mentally ill people and their families both in and out of institutionalised care. It draws together the major themes and developments in this evolving and often controversial area, but the emphasis at all times is on the daily implementation of care," she said.

'Practical Approaches to Mental Health Care' published by Macmillan Australia is available in the University Co-op Bookshop for the recommended retail price of $34.95.
NEWCASTLE RETIRED LECTURER'S ASSOCIATION

In 1971 some retired members of staff of the Newcastle Teachers' College formed this association to maintain social contact with their former colleagues and to continue their interest in higher education.

The Association has flourished, growing in numbers as further retirements have occurred. Our main activity is to meet for lunch four times a year with attendances now about 70 members, spouses and friends.

Originally members were academic and senior general staff who had retired from the Teachers' College and its successors, NCAE and HIHE, or who, after having worked in these institutions, had retired from somewhere else, usually from the University of Newcastle.

Membership is now extended to retired academic and senior general staff members of the amalgamated institutions.

Annual subscription is $3 dollars.

Arrangements for lunches for the remainder of 1990 are:

Wednesday, September 12
and Wednesday, December 12
in a private function room at Wests Leagues Club, New Lambton.

Meeting dates for 1991 have not yet been set but are likely to be Wednesdays, March 13, June 12, September 11 and December 11.

Former University and Conservatorium staff who may be interested in joining us are invited to contact the Association President, Dr Jess Dyce (phone 522176) or the Secretary, Ray Hodgins (435667) for any further information, to be included in our contact list or to book to attend a luncheon.

US Information Service

The USIS Library is happy to supply copies of articles from air-freighted magazines that may be of interest. The latest list includes:

*Stephen Moore, Director of the American Immigration Institute, on why more immigration would benefit the United States. (Society, July/Aug. pp55-62).
*John J. Mearsheimer, University of Chicago; "Why We Will Soon Miss the Cold War" (The Atlantic, Aug. pp35-50).
*James Gustave Speth, of the World Resources Institute, says conquering global environmental problems will demand unprecedented co-operation between developed and developing nations. "Coming To Terms: Toward a North-South Compact for the Environment" (Environment, June, pp16-20, 40-43).

The USIS Library can be contacted at Electricity House, Park & Elizabeth Sts, Sydney. 2000. Phone (02) 264 7047.

Canadian Government's Awards

The Canadian High Commission has supplied the following details of awards for Australian academics:

BICENTENNIAL INSTITUTIONAL RESEARCH AWARD, 1991, $25,000

A Canadian contribution to Australia's Bicentenary, this award is granted annually to an institution for the purpose of conducting original research of outstanding academic quality about Canada, or the Canada-Australia relationship. The research project is to be conducted during the period April 1, 1991, to February 28, 1993.

Applications close on November 1.

FACULTY ENRICHMENT PROGRAM, 1991-92, up to $5,000

The programme is designed to increase knowledge and understanding of Canada by assisting academics in institutions of higher education to develop and teach courses about Canada in their own disciplines, as part of their regular teaching load.

Maximum value of each grant is $5,000 Canadian. The numbers of grants varies each year according to the quality and number of applications.


Application forms are available from:-

The Academic Relations Officer, Canadian High Commission, Commonwealth Avenue, CANBERRA, ACT, 2600
Tel: 06/273 3844, Fax: 06/273 3285.

New Text in Curriculum Theory

Dr Terry Lovat, Senior Lecturer in the School of Education, recently had a new academic text released from the publishers. Curriculum: Action on Reflection was co-authored by Dr Lovat and Dr David Smith, Sub-Dean of the Faculty of Education, Sydney University, and President of the Australian Curriculum Studies Association.

Curriculum: Action on Reflection is the first curriculum text published in Australia which has attempted to apply the so-called Critical Theory (largely of the Frankfurt School) to all aspects of general curriculum responsibilities and practice. It represents a culmination of the conceptual and field research of Drs Lovat and Smith over the past decade.

The book was written with both undergraduate and postgraduate Education students in mind. As such contains levels of reflection which are suitable to classroom problem-solving as well as higher degree research. Among other things, it contains a summary of the most up-to-date curriculum literature and research available. Even within the few weeks it has been available, the book has received extremely positive responses from most of Australia's tertiary institutions with several textbook adoptions already in place.

Former Soccer Head to Speak at Uni.

A former Executive Director of the Australian Soccer Federation will be the guest speaker at this year's Blues Dinner.

Mr Brian Emery, who was recently appointed Administrator of Newcastle Hockey Association's new centre at Broadmeadow, will speak at the dinner in the Union on Friday, September 14, beginning at 6.45pm.

For tickets, which cost $26, get in touch with Lesley on Ext 344.

Nominations Sought for Co-op Directors

The Co-op Bookshop is calling for nominations for the election of directors. Nominations shall be signed by two or more members and accompanied by a memorandum signed by the candidate, who must be a member, signifying a desire to be a candidate.

There will be three positions contested due to the normal retirement by rotation required under the rules.

Forms are available from the secretary, Mr C Bain, 80 Bay Street, Broadway, and should be lodged by 2pm on September 14.
New quiz should be a real Challenge

Remember University Challenge?

Remember how the University of Newcastle entered a team in last year's series of the TV competition for Australian universities and finished eighth?

Anyhow, after producing University Challenge for three years, the ABC has decided not to continue the show this year, meaning that those people from the University who liked University Challenge are disappointed.

The Students' Representative Council has reacted by launching a campus University Challenge and a search for a new inter-varsity University Challenge, which is being organised by Macquarie University's SRC and planned to begin after the mid-semester break.

Distinguished Visitor for Conference

The Regional Economics Unit of the Institute of Industrial Economics will hold its 1990 conference on regional modelling and regional planning in the Ambassador Hotel, King Street, Newcastle, on September 20 and 21.

Dr Peter D. Blair, Manager of the Energy and Materials Program of the Office of Technological Assessment of the United States Congress, will be the keynote speaker. He will speak to the conference on September 21 at 9.20am.

Further details are available from Dr Colin Aistabl, Ext 561.

Women's Fellowship for Study in USA

The American Association of University Women Educational Foundation offers annually the June and Charles Ross International Fellowship for an Australian Woman working in the biological or physical sciences.

The fellowship is for graduate study or research in the USA and carries a stipend of $13,000.

Applicants are judged on their academic records, letters of recommendation, the importance of their work to Australia and their professional potential.

On completing her studies, the Ross Fellow must return to Australia to pursue a professional career. Preference is given to applicants who can verify there is a definite position to which they would return.

Strong preference is given to women who can establish a prior commitment to improving the lives of other women and girls through civic, community or professional work and whose study or research proposals show a continued interest in the advancement of women.

(Restricted to English.)

Further information is available from the Pro-Vice-Chancellor (Development), Dr L. R. Eastcott, Hunter Building, Telephone 687 311

RADIOGRAPHY STUDENTS PRESENT MEDICAL IMAGING SEMINAR

Twenty-one final year students enrolled in the Bachelor of Health Science (Medical Radiation Technology) have presented a one-day seminar covering a broad range of subjects dealing with Medical Imaging.

The seminar, sponsored by DuPont Australia, allowed the students to present papers on current technology to an audience of practising radiographers and the radiography community in general.

Radiography Lecturer, Mr Tony Smith, said the seminar produced a variety of subjects such as Diagnosis and Treatment of Back Pain, Methods in Paediatric Radiography, Computer Radiography, IVU and Ultrasound in Renal Diagnosis and Mammography.

He said that DuPont, the University's supplier of film, chemistry and darkroom supplies for the Radiography course sponsored an award for the best paper of the day which was jointly presented by students Ms Tanya Sleveira and Ms Nicole Turner. Entitled 'Imaging of Abdominal Aortic Aneurisms', it employed a variety of imaging modalities from plain radiography through to ultra sound and computer tomography and briefly with magnetic resonance imaging.

Tony said this award would provide the winning students with funds to travel to other meetings of the Australian Institute of Radiography to add to their professional experience and further their knowledge.

"All papers presented by the students were of good quality, building on their knowledge of anatomy and physiology," said Tony.
Can Computer Speed Be Further Increased?

Computer power continues to grow steadily. In the last couple of decades, there has been an increase in computing power by a factor of 10 every five years.

Professor Heiko Schröder, Professor of Microelectronics, discussed whether it is technically feasible to further increase the speed of computers at a similar rate, and other questions, in his Inaugural Lecture on August 8.

The preliminary question of whether there is, in fact, any need for a further increase of computing power was answered by Professor Schröder's illustrations showing ever-increasing computing power:

- The CRAY 1 (an 'aging' supercomputer) needs 24 hours to do a reliable 24 hour weather forecast of Newcastle (and could, therefore, be replaced by a look out of the window),

- Artificial intelligence: Japanese fifth generation computers, needing to communicate with users by means of natural languages and images, require a trillion operations per second (10^12 OPS),

- Remote sensing: evaluation of the constant stream of information relayed by earth-orbiting satellites requires 10^10 OPS, and

- Simulated surgery: surgery performed initially by computer to assess patient risk requires 10^9 OPS.

The answer to the technical feasibility of increased computing power was not easy, he said. There are hard physical limits to the possible speed-up of future computers. One of these limits is the speed of light: light will only travel 0.3 mm while a fifth generation computer executes one instruction.

However, since instructions have to work on data and data has to come from some memory, there are strict bounds on how big and how far away from the processing elements the memory can be.

The fact that electrical signals travel much slower than light makes these limits even tighter.

The use of massive parallelism and distribution of computing power into the memory appears the only technically feasible way of fulfilling our need for continually increasing computer power.

Professor Schröder said the state of the art technology for highly parallel systems was VLSI (very large scale integration), where up to a million transistors could be placed on a single 1cm² chip.

This technology allows reliable functioning and extreme speed, but it also imposes certain design rules on the computer engineer. A major requirement is that a VLSI design has to be composed of a few types of simple cells connected in a regular pattern using short wires only.

This strongly favours simple computer architectures, such as 'meshes' (two dimensional arrays), and rules out fancy architectures, such as hypercubes for future generation parallel computers.

The Professor of Microelectronics stressed that a major difficulty which had to be overcome was the programming of parallel computers.

There are two main philosophies of parallel programming around: SIMD (single instruction stream multiple data stream), which synchronises all processing elements and requires them to do the same operation at any given time, and MIMD (multiple instruction stream multiple data stream), which gives a high degree of autonomy, allowing all processing elements to run their own individual programs.

While the first method is felt to be too restrictive (lack of flexibility), the second method gives an unnecessary degree of flexibility that can never be fully exploited. The first method does have the advantage of higher speed at lower cost as processing elements don't have to carry programs.

Professor Schröder's research has involved an alternative computer architecture, which appears to carry the advantages of both systems. This is the ISA (instruction systolic array), which allows for processing elements, even smaller than those needed for the SIMD concept, but offers a much higher degree of flexibility due to the fact that several instruction streams enter the architecture at the same time.

The aim of Professor Schröder's research team is to develop special purpose parallel computers based on the concept of the ISA. The first parallel machines under development at the Department of Electrical Engineering and Computer Science are tailored towards image processing and computer graphics.
Projects to Provide Greater Safety

Concrete pathways and new lighting are among improvements being made by the University to safety on campus.

The question of safety on campus was raised by the Chancellor, Justice Evatt, at the final meeting of the Interim Council.

Justice Evatt said she had received representations from students and felt she must raise the matter with the Council.

The Vice-Chancellor, Professor Morgan, replied that he had raised the question at a previous meeting of the Academic Senate.

"It is a matter that we do not take lightly," Professor Morgan said.

However, what the University could do in practical terms was limited to a small range of actions.

First, it could advise people on campus on how not to make 'targets' of themselves.

And secondly, it was taking action to construct new, concrete pathways, and to ensure their adequate illumination; and to encourage greater use of the bus transport provided for campus residents.

Justice Evatt said she thought advice to individuals was important.

"I think it is important every year, after daylight saving ends, to remind people of their obligation to have care," she said.

She asked what progress had been made on the new path to Edwards Hall and appropriate lighting. The Vice-Chancellor referred the query to the Buildings and Grounds Manager, Mr Maute Edmonds, who was in attendance.

Mr Edmonds said the work on the concrete path was about 50 per cent complete. He expected it should be finished about the end of September.

Bollard lights, similar to those used at Edwards Hall, had been ordered but the supplier had indicated immediate delivery was not possible. Mr Edmonds estimated a delay of six to eight weeks, but said the existing lights would not be removed until the replacements were ready.

The chairman of the Residential Members' Association, Mr Tony Hanson, has outlined further details of the improved safety measures in a letter published in this issue of the BULLETIN.

Safety on Campus

The attempted armed robbery on a student in June highlighted that persons on campus are not immune from the outside world.

To the students, this attack was foreseen. The students, for a period of 3 years, had asked for an adequately lit and paved pathway from the Hunter Campus to the residential area. Unfortunately the magnitude of correspondence and meetings of the Occupational Health and Safety Committee had no bearing on the situation. Students feel that inaction on the part of the University was a contributory fact that led to such an incident, where a student's life was placed in unnecessary danger.

Immediate steps were taken by the Student Representative Council to ensure the safety and security of all persons on campus. That included making the staff and students aware of the problems and giving them advice via the posters around campus.

Mayfield police were also contacted by the SRC, to seek their presence in the area.

There remains a grey area with regard to the relation between the students of the University and the Occupational Health and Safety (OHS) Act NSW 1983. I have been reassured that students are covered under sections 15, 16 and 17 of the Act, with reference to visitors. However, the July 'Admin News' states that the Occupational Health and Safety Officers function is mainly responsible for staff of the University.

At the moment, students are wanting to clarify the correct procedure of reporting OHS issues to the University.

Mr Bradley Templerly, Acting SRC President, and I were able to talk recently with Don Foster, Registrar University Services who has now been placed in charge of the Management and Safety of the Campus, and we are pleased that Mr Foster is making the necessary considerations of the areas of student and staff concern.

These include:

- Attendant Patrol Officers - Contact
  The telephone answering machine which is the contact for the University Attendant Patrol Officers at night is being reviewed.

- Pedestrian Access
  With the construction of a footbridge to be completed by late 1991, it would be too costly for the University to construct a path on Engineering Hill. Therefore the University will promote the Engineering foot bridge with signposting and review means of slowing the motor traffic in that area.

- Lighting on Campus
  The Attendant Patrol Officers have now been advised that all street, path and car park lights are to be switched on at sunset, and off at sunrise, seven days a week.

- Pedestrian Crossing, Rankin Drive
  Because the high number of severe pedestrian accidents strong requests will be made to the relevant authorities for the adequate lighting of this crossing.

- University Bus Stops
  Negotiations are underway on the feasibility of the University Bus Stops being situated on campus.

- Residential Area Pathways
  These pathways are currently being constructed and adequate lighting will also be constructed in the near future.

- University Site Master Plan
  Eckford and Johnson Partners are the University site planners and they are reviewing traffic and traffic network of the University. Suggestions on the master plan can be made to them with reference to ideas.

The attempted armed robbery highlighted an area neglected by the University for some time. Concern for student welfare and safety on campus, especially after dark, is paramount. However, when it takes eight months for the Buildings and Ground Division to fix a gas leak, and that only after a student complains of related headaches and his father has to get a local member of Parliament to make representations to the University, there is obviously inefficient treatment of serious matters around the University. For the sake of the students and staff, the issue of security and safety on campus is now being addressed. After seeking Legal advice at the time of the attack, it was suggested that the students should write to the State Industrial Relations Minister, because of the evidence of inaction on the part of the University. However, within possible constraints, I am now reassured that the University Administration will take the necessary steps to rectify the associated problems and a system of reporting complaints will be properly constructed for the 12,000 students.

Tony Hanson
(RMA Chairman)
Budget Influences on University

The Federal Budget for 1990-91 had "a brighter side and a darker side" for universities, according to the Vice-Chancellor, Professor Morgan.

On the brighter side were the announcements of $28.4 million for new student places, almost $200 million for building programs and additional awards for postgraduate research.

The darker side were the changes to Austudy and the Higher Education Contribution Scheme.

The Minister for Higher Education and Employment Services, Mr Peter Baldwin, announced on Budget night that students electing to defer payment of the HECS would be required - from July 1, 1991 - to make higher repayments than they have so far.

Repayments begin when the graduate's taxable income reaches $25,469 (in 1990-91), and the repayments have been the equivalent of one per cent, two per cent or three per cent of the graduate's taxable income, depending on his or her total taxable earnings.

From next July, the repayments will be two, three or four per cent of taxable income, based on the same sliding scale of income.

Professor Morgan said the Chairman of the Australian Vice-Chancellors' Committee, Professor Brian Wilson, had made the valid point that students had enrolled in courses already in the expectation of a given rate of repayments.

"To some extent, it's changing the rules after the game has begun," he said.

He told Academic Senate that the change might alter the perceptions that potential students have of a University education.

Changes in the criteria for Austudy were announced by the Minister for Employment, Education and Training, Mr John Dawkins.

Students will be allowed to earn up to $4,000 a year and still obtain the maximum benefit. The limit on other earnings has been $3,000 a year.

However, those students whose parents' assets exceed $200,000 will be ineligible for assistance. The assets limit imposed previously was $300,000.

Professor Wilson said the Vice-Chancellors' Committee had no argument with the concept of means testing, as long as students who needed assistance received it.

"However," he said, "the 1990 rate of $105.15 per week for students living away from home just doesn't go far enough. Austudy should at least be at par with unemployment benefits."

Professor Morgan said he was pleased that the Government had continued its commitment to "rolling triennium" funding. A number of decisions announced involve money to be spent in 1993.

Mr Baldwin announced that $198 million would be available for capital works in 1993, enabling some 40 new building projects to begin. The figure was an increase of 125 per cent over the 1988 level, he said.

He said there would be an additional 100 Australian Postgraduate Research Awards and 40 Australian Postgraduate Research (Industry) Awards each year from 1991, at a cost of $1.29 million.

Mr Dawkins said spending on higher education would reach $3.8 billion in 1993, continuing the growth announced already for the 1990-92 triennium, with an extra $28.4 million for new student places.

Mr Baldwin said the division of these places between undergraduate and postgraduate students would be decided after discussion with the relevant institutions.

STUDENTS SING THEIR WAY TO SUCCESS

At the end of June, when most students were recuperating after exams, 10 girls from Newcastle University were facing up to yet another challenge.

These girls are members of the Waratah Girls Choir, which enjoyed success in the Llangollen International Musical Eisteddfod in Wales.

The Eisteddfod was contested by 32 countries, some such as Czechoslovakia, Yugoslavia, Spain and the USSR renowned for their quality choirs.

The senior girls took out fourth place in the youth choir section with their renditions of Loving Jesus and The Last of His Tribe. The JWliors took thirteenth place and the Waratah Choral Ensemble, a mixed choir of young men and women, won third place from seven choirs competing in the chamber music section. It was the first time an Australian choir has won a primary placing at the Eisteddfod.

The choir toured Britain for three weeks and sang in shopping centres, churches and at Westminster Abbey.

Second year nurse, Elizabeth Roper, 19, and each member of the choir found the tour a 'stretching experience personally'.

"The highlight of the Eisteddfod for me was to meet people from all over the world," she said. Sally Horne, 19, also in second year nursing, has had to work a little harder at Uni because of her busy schedule with the choir but hasn't found it too difficult.

"With my mother, Wynette, as director, choir soon became a part of life" Nadine Caldwell, a secretary at the University said: "The choir usually meets for only three hours a week and although three weeks together caused a bit of tension I think we're now a closer choir."

The Waratah Choirs are due to sing with the Hunter Orchestra in November and are planning a tour of Australia for the near future.

Ms Nadine Caldwell (right, back) with her host family in Oswestry, Wales, Mr Christian and Mrs Joan Fjelle and their daughters.

CAMPUS SCAMPER

The University's 1990 'Campus Scamper' will be held an Wednesday, September, 19 with entries open to individuals and to teams.

The event will start at 12.30pm at the southern end of the Number 2 sports oval and runners/walkers will cover a distance of 5000 meters.

The Sport and Recreation Department is asking for all entry forms to be submitted by Monday, September 19.

Entry forms for the 'Campus Scamper' are available by telephoning the Department on Ext 469 (internal) or on 685469 (external).

by Jenny Coren
Final Year Student
Bachelor of Arts (Communication Studies)
Lecturers Voice Main Concerns

The University's Lecturers' Association met on August 23 and members were told that the associations' main concerns were academic award restructuring, early retirement and the academic restructuring of the University.

According to the President, Mr George Morgan, a campaign of industrial action will be taken by academics before the year is out if the Australian Higher Education Industrial Association (AHEIA) and the Federal Government remain intransigent in their stand on award restructuring.

Mr Morgan said the possible industrial action would include stoppages and other practices.

It had been reported to the Lecturers' Association's Executive that a number of developments had been proposed by the Federal Government's representatives which, in his view, seemed to be in breach of the spirit of the award restructuring.

"Indeed, it almost appears as if the Government is totally ignoring the principles of award restructuring", Mr Morgan said.

"Rather than enhancing career prospects, there seems to be a desire to put up obstacles in the form of 'hard bars' between the different categories, and even within categories, such as senior lecturers."

"The Government has had its pound of flesh in terms of increased workloads, loss of salary relativities and a 25 per cent decline in income standards since 1980." In 1980, Mr Morgan said, backbench parliamentarians in the NSW Parliament earned the equivalent of the top Lecturer I level. Today, a backbenchers' salary was $68,000 a year - $25,000 a year more than the salary of a comparable academic.

The Lecturers' Association decided to hold an emergency meeting on award restructuring in the next three weeks and to invite Industrial Officer, Mr Peter Woods, to address members on the current state of affairs.

Mr Morgan stated that some of his members had been 'somewhat surprised' by the small number of retirements that had been approved by the University this year under their early voluntary retirement scheme. He estimated that no more than 10 staff had been permitted to retire under the scheme.

The Lecturers' Association had decided to approach the Deputy Vice-Chancellor (Academic), Professor Michael Carter, and ask whether the early retirement scheme would be continued; if so, would a greater number of retirements be approved; and, if there were reasons for the number of retirements being limited, what were they?

The new lecturers' offices behind the Hunter building were mentioned at the meeting and it was claimed that comfort levels were oppressive to a degree that the offices were often uninhabitable.

Mr Morgan said it would be suggested to the University and the Occupational Health and Safety Committee that sun blinds be installed to protect the windows.

The Lecturers' Association passed two motions on the academic restructuring of the University. They are:

- The University be advised that the association is concerned about the lack of consultation on the proposals for academic restructuring, which in the association's view appear to be in breach of the industrial relations heads of agreement which had suggested that consultation would take place.

- In the restructuring, the association proposes that the principle of democratisation be incorporated in the new faculty structures, that Heads of Departments, Sub-Deans and Deans be elected to their positions, and that the position of Head of Department be remunerated at an appropriate salary no less than that received by an Associate Professor.

Computer Assisted Drafting and Design Centre Underway

Far from the days of set squares and meticulous hand drawn lines, computer assisted drafting systems are making their mark in industry and revolutionising the plan drawing process.

The University has become involved in the modern technology by establishing a new centre on campus, known as the University of Newcastle Authorised Auto-Cad Training Centre. The centre, which is a semi-independent enterprise will offer short courses to people wishing to take advantage of training in the new system.

In an agreement with Auto-Desk, the parent company from the U.S.A. and based in Melbourne, the Centre is the only authorised and approved Auto-Cad training centre in the Newcastle/Hunter Region and is being conducted from the Department of Industrial Technology.

The Centre is being conducted by lecturers in Industrial Technology, Luke Solly and Ray Fairall, who will pass on their knowledge in the system not only to those attending short courses, but also to current students of the University.

"This system has revolutionised the drawing and design industry. People are becoming more involved in computer graphics," said Luke.

"With new government legislation stipulating that companies have to spend money to train their staff, the Centre has been established at an opportune time and we are confident that our course will align well with industry needs," he said.

With funds generated by the short courses, the Centre will be able to purchase products, hardware and software that would normally be out of the reach of the Department's funds. This will enable students to receive training at discounted rates and introduce them to state-of-the-art facilities.

A schedule of the courses is as follows:

- Applications Level 1,2D (Two Dimensional Work) - Three consecutive Saturdays, commencing September 8 or October 13.
- Applications Level 2, 3, Auto Lisp (Computer Programming) - Three consecutive Fridays, commencing October 12.
- Applications Level 2,3D plus Autoshade (add-on package) Three consecutive Fridays, commencing November 2.

Enquiries can be made by contacting Luke Solly on 687285 or Ray Fairall on 687459.

Women in Sport: Seminar

The Hunter Academy of Sport will host a seminar on 'Women in Sport: Gateways to Participation' at the Medical Science Building on September 21, 22 and 23.

Speakers will include: the Chairman of the Academy, Professor Saxon White; Robyn Leggt, former captain of the Australian Hockey team; Ann Mitchell, former captain of the Australian cricket team; and the Minister for Education, Hon. Virginia Chadwick.

Questions to be covered over the three days include:

- Why do women drop out of sport more often than men?
- Why are there fewer women coaches than men?
- Sport and the family: how do you play the game?
- Free child care is available.

Inquiries and enrolments to: Mr K Clifford, Hunter Academy of Sport, PO Box 2136, DANGAR. 2309

Further information: ph 622 901.
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**For Sale**

1972 Grand-Luxe Volvo in excellent condition. Asking price: $2,000 or near offer. Please telephone 685 255 or 76 1944 after 4.30pm.

Baby-Sitter Service, fourteen year old girls, New Lambton, Adamstown, Merewether or adjoining areas. References available, reasonable rates. For information please telephone 57 4577 or 63 4498.

Formal Dress, Designer Label Size 10 - 12 Royal Blue Background with Coloured Pattern Paid $500 will sell for $250 ONO Phone 594285 or 685 404

Wanted: House to rent. Academic requires unfurnished four bedroom (or three bedroom with study) house within 15 minutes drive from the University and the City. Long term lease preferred. Please phone John Shea, 685 322 or 43 6329 in the evening.

Piano, Alex Steinbach, upright dark gloss walnut, in excellent condition. Asking price: $2495. Please telephone 52 9360.

1976 Mazda 808 sedan manual, KUX717 with 12 months registration. Very tidy and economical. Goes well, new tyres. Must sell, $1700 or near offer. Please telephone 83 1024 after 6pm on Wednesday or Thursday anytime.

For $8,700 you could be the proud owner of a Santana 22' fibreglass yacht. This yacht boasts 4 berths, interior and navigation lighting, stereo-cassette, portable toilet, as well as 12 sails, 6 hp Johnson outboard, boom tents, safety equipment, fitted compass, bilge pump, all ropes, blocks and winch handles. The cockpit is self-draining. Excellent condition. Suitable for the experienced or beginner sailor. Must sell urgently. Offers considered. Please contact Phil Moore in Education at 68 5532 or 633 512 after hours.

For Sale by Tender

Two Imagewriter II Printers. The Department of Community Programmes will consider swap and cash settlement for either a Star NX24 or Star NX15 printer. Tenders should be marked "Tender for Printers" and addressed to the Purchasing Officer, McMullin Building. Tenders close at 11 am on Friday, September 21, 1990.

For Rent

Two bedroom furnished home in Dudley (ocean views). Rental: $170 per week. Bond: $600. This home is available initially for six months commencing on September 6. Please telephone 49 7852.

**Radio Station Pleased About Radiothon**

2NUR feels it did very well in its 1990 Radiothon.

The Station's Manager, Mr Brett Gleason, announced an income of $23,000, compared with $13,000 in 1988.

The object of the eight-day Radiothon was to increase the number of subscribers to 2NUR, the University's community radio station. The station relies on subscriptions for part of its annual budget.

Mr Gleason said the radiothon received 782 telephone calls. About 70 per cent of calls were from new subscribers.

"Our aim was for 1000 phone calls so we were very, very pleased with 782", he said.

Subscribers to 2NUR pay $30 per annum and receive the station's monthly program by post. Full time students, pensioners and unemployed pay a reduced rate of $15.

**Freedom from Hunger - September 8 and 9**

Freedom from Hunger's aid to Cambodia is supplying pumps for the irrigation of fields in which two crops of rice can be grown every year.

In The Philippines, farmers can use the aid to buy land and grow food which they can sell to pay back the loans.

Not only people from South East Asia are assisted by Freedom from Hunger. The appeal also helps Aboriginals to receive an education in Australia.

Members of the University have been asked to recognise the plight of many disadvantaged people in the world and offer to help in the Freedom from Hunger doorknock appeal on September 8 and 9.

So, if you would like to offer your assistance, please ring Mr Peter Magill on 674 679.

**Sleaze and Tonic with Two Twists**

Bloodshot by Warwick Moss, dir. Brent McGregor, HVTC, Playhouse, 22 August - 15 September.

[1 borrow the title for this review from a colleague.]

There is much I can't say about this play, as it would spoil the dramatic effect; remove the two twists. There is also much I can't say because my greatest criticisms concern the ideas behind the two twists - both of which I found to be worrying, although dramatically effective, after a fashion.

It's not the sleaze that's the problem. Some of the advertising for the play contains a warning concerning "raw language". This does not indicate where the problems with the play lie.

D.H. Lawrence, after all, many years ago pointed out that it isn't language, itself that causes, or should cause, offence but the validity and integrity of the ideas and their contexts. Indeed, if I see any more plays which discuss, in detail, clitoral stimulation I may scream - not because it's shocking or shouldn't be talked about, for heaven's sake, but because of the way it's played for and receives laughs. Aren't we all enlightened!

The play, as the 2NC reviewer said, does have good one-liners, and I enjoyed much of the repartee in the first act. The twist at the end of the first act does work, although on second thoughts it's predictable. There are more cliches here than you could poke a stick at, as they say. This in itself does not render the play unacceptable. The wit and brittle humour often work well enough. Ever feel like you were part of some "intergalactic . . . joke", "a commercial break," asks Simon. Quite often.

Warwick Moss and Jacory Phillips are good actors, and the presentation of the production is professional. The setting, stage designs and lighting are smoothly handled.

The HVTC deserves support, and the production of plays by Australian writers is to be commended, but this, for me, was not one of the HVTC's best choices. Make your own minds up.

Marea Mitchell

**Convocation Annual General Meeting**

The formation meeting of the University's new Convocation (post-amalgamation) will be held in the Staff House on Thursday, September 20 at 7.30pm.

The guest speaker will be Vice-Chancellor, Professor K J Morgan.

Supper will be provided at the end of the meeting.

The University of Newcastle Act (1989) provides that the first meeting of Convocation shall be called by the Vice-Chancellor. This will be that first meeting.