

# Tele-education is one answer to funding squeeze says Pearcey

Calls for increased participation in tertiary education, and the likelihood of the Government not providing the funds to match will place an intolerable burden on tertiary institutions in the next decade.

That's the opinion of Dr Trevor Pearcey, Foundation Dean of Chisholm's Faculty of Technology, who believes tele-education could be the solution.

As head of the Tele-Education Working Party set up by the Director, Mr Patrick Leary, in May, Dr Pearcey is investigating a proposal to establish Chisholm as a pilot centre for research into the applications and implications of tele-education in tertiary institutions.

He says signs of the difficulties ahead can be seen in the Commonwealth Tertiary Education Commission (CTEC) guidelines for the next triennium, which support enrolment increases in the whole of the tertiary sector to the tune of about two percent per year.

This is further reinforced by the draft proposals contained in the Department of Science and Technology's National Technology Strategy, released in April, which calls for higher business and technology student numbers in particular, but this time at the rate of about eight percent per year.

If this proposal is accepted and implemented, Dr Pearcey says, and the Government 'refuses to fund at corresponding levels as it has in the past, something will break'.

Over a 10 year period it will mean student numbers will at least double, requiring a corresponding increase in provision for facilities, equipment, capital works and staff numbers to cope with the influx.

'How do we accommodate them?' Dr Pearcey asks.

His answer is tele-education at a number of levels, aimed at performing teaching functions where appropriate, and reducing the amount of time a student spends on campus.

Step one would be the installation of about 100 Telecom connections to a tele text system held on campus.

Since the bulk of students will be from metropolitan areas, the call cost of using the system would be the same as a single telephone call.

The system, which sends encoded video signals would be based on a set of frames stored in an on-campus computer, offering a range of subjects with teaching sequences 'on call any time of the day, any day of the week.'

'Tele text provides a certain degree of interaction between the system and the student, and this could be augmented by following the video frame by a system of encoded scripted speech to improve understandability, and enable a student to communicate through his keyboard with his tutor using an electronic mail facility on the same system.'

Dr Pearcey says his calculations indicate that use of tele-education methods such as tele text would cut

by half the amount of time a student spends on campus.

'If we can reach this objective, the campus itself could handle a total enrolment of between 50 and 100 percent more than at present.'

Step two in the development of tele-education at Chisholm would be the setting up of medium band width video conferencing facilities, linking first the two campuses, and later local suburban education centres (possibly as additions to high schools).

'My own experience with tele conferencing is that if the facilities are good, it only takes two to three minutes of a session for members on either end of the link to forget they are not all in the same room talking to each other.'

'If these are set up, there is even less need for students to actually present themselves on campus, while still gaining the benefits of interaction.'

Dr Pearcey says the introduction of tele-education methods would have the advantages for students of less travelling time to and from campus, as well as 24 hour a day accessibility to educational materials.

For Chisholm, the major advantages lie in cost factors.

A 50 percent increase in student numbers over the next five to 10 years would necessitate an increase of about 40 percent in effective recurrent funding (about \$10 million).

In contrast to this, Dr Pearcey believes an outlay of \$1 million on tele education, which would cover installation of equipment such as tele text at an additional recurrent cost of about \$1 million, development costs for teaching, and running costs, would allow the Institute to handle between 50 and

100 percent more than the number of students it does at present.

Dr Pearcey says he is 'confident that this can be done.'

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# Chisholm Gazette

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Picture by Peter Taylor, EDU.

• Wendy Franklin with her interpretation of 'Winter', one of the four entries which won her the New Idea 'Craftswoman of the Year' title.

## Season of success for Wendy

Final year Graduate Diploma in Art Education student, Wendy Franklin, has won the New Idea magazine 'Craftswoman of the Year' award.

Her entry, four pieces of machine embroidery depicting each of the four seasons, has earned her a two-week, all expenses paid trip to England.

Ms Franklin, 26, is a teacher at Seaford Park Primary School.

She completed her teacher training at the then SCV Frankston in 1979.

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## State Enterprise winners head for national final

A Chisholm-trained team put together the winning business plan for a new invention, the Optical Data Link, in the State final of the Victorian Enterprise Workshop.

The team will compete against others from throughout Australia in a national two day final on 12 November.

The Workshop program, run in Victoria by Chisholm in parallel with Swinburne Institute of Technology, aims to equip Australian inventors with the skills necessary to turn their ideas into financial success stories.

The Optical Data Link (ODL) was invented by Mr Brian Taylor and Mr John Drain, owners of Data Plex, a company specialising in local area data distribution for all brands of computers and terminals.

The invention is designed to transmit computer data over

distances of up to 1000 metres via an invisible infra red light beam.

Conventional systems, such as those used by Telecom, use cables under the ground.

ODL, the inventors claim, is a far simpler and less expensive alternative.

For the Victorian Enterprise Workshop, Mr Taylor and accountant, Mr Steve Wharton, teamed up with Senior Lecturer in Management, Mr Tim Haslett, in the role of facilitator.

It was a winning combination.

A total of seven teams spent about five months on the Workshop program, which took participants through the various stages of business skill development, research and analysis of the technical and commercial aspects of the inventions, business plan preparation, and presentation technique.

Staff from all areas of the Institute assisted in the training of the three Chisholm teams which

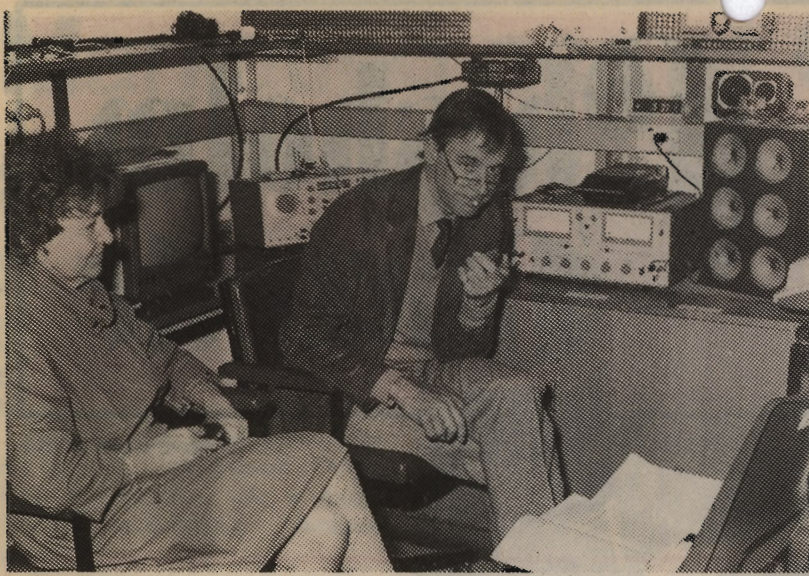
prepared business plans for a Chinese Word Processor (facilitated by accounting lecturer, Mr Bryan Baker), a sophisticated alarm system, 'Checkpoint K1000' (facilitated by marketing lecturer, Mr Garry Harris), and the ODL.

Director of the Chisholm program, David Syme Business School Dean, Dr Ken Tucker, said after the Victorian final that all three Chisholm teams had impressed the judges because of the commercial viability of their plans.

He said this aspect of the preparation had been given greater emphasis than ever before. In four years of Workshop programs, only one invention has been a commercial success.

This point was taken up by the Minister for Industry and Commerce, Senator John Button, in his address to the Workshop presentation dinner on 19 October.





Dr Keulemans and Ms Gourlay providing the Chisholm representation at the recent national tele conference.

## Satellite link-up signals new era

An unusual national conference held in October, has signalled a new era in communications at Chisholm.

Principal lecturer in Communication Studies, Dr Tony Keulemans, and Information and Resources Librarian, Ms Jean Gourlay, took part in a tele conference via the ATS-1 satellite involving representatives from tertiary institutions throughout Australia.

It was the first time antenna designed by electrical engineering students for reception and transmission to the ATS-1, had been put to the test for tele conferencing purposes.

Dr Keulemans says discussions were held with various tertiary institutions in all mainland States.

The main focus of the talks, chaired from Darwin, was the educational use of the Australian Communications Satellite System (AUSSAT), to be launched next year.

Both Mr Keulemans and Ms Gourlay are members of Chisholm's Tele-Education Working Party, established in May this year to investigate a proposal to establish the Institute as a pilot centre for research into the applications and implications of tele-education in tertiary institutions.

Use of the ATS-1 'Kangaroo Network', Mr Keulemans explains, is an ideal way of keeping up to date with developments in the use of telecommunications for educational purposes.

'Now that we have our own earth station, we can be regular users of the network for tele conferences. Quite a few institutes have their own antennae so we can keep each other informed about any developments and continue discussions about whatever benefits might flow from Australia having

its own satellite system next year.'

Mr Keulemans says one possibility which has been raised is a cost sharing arrangement between tertiary institutions for available circuit capacity on AUSSAT for educational purposes.

'We are still very much in the exploratory stage, but in the meantime we can keep each other up to date by using ATS-1 free of charge.'

Chisholm has two antennae, designed by fourth year electrical engineering students, Michael Little and Andrew Edwards, for reception from and transmission to ATS-1.

The satellite was first launched by the US National Aeronautical and Space Administration (NASA) in 1966. It has considerably exceeded its working life expectancy of four-five years.

After NASA had completed its own program of experiments in 1969, ATS-1 was handed over to the PEACESAT project, an educational program first aimed at linking the several campuses of the University of Hawaii, and later bringing Australia, South East Asia and part of China within range, resulting in the establishment of the Peacesat Australia Kangaroo Network.

The network allows first hand educational experience in the use of communication satellites, and in particular, the use of voice-band channels for broadcasting, remote tele-classroom and tutorial applications, digital communications applications and tele conferencing.

Mr Keulemans says signal strengths at the recent tele conference were good from most states, although Darwin was 'patchy'.

## From Page 1: Tele-education

Chisholm should aim to establish itself as a pilot centre for tele-education within the next five years, 'later to be picked up and supported by the Government as a proven method of teaching technology'.

In the long term, 'if this takes off and becomes acceptable, it will have a massive effect on the organisation of tertiary education,' Dr Pearcey says.

Students could eventually register for 'a smorgasboard of subjects' across institutes, and institutes themselves would need to

develop a 'much more co-ordinated attitude'.

Dr Pearcey says moves by Chisholm in this direction would establish it as a leader in the field.

Other tertiary institutes which have worked on the distance education model include the British Open University and closer to home, Deakin, but neither has explored the use of tele-education as a major teaching method to the degree being proposed by Dr Pearcey.

His report is about two-thirds complete. He expects to hand it to Mr Leary by the end of the month.

# Computer images worth a thousand words

The use of computer imaging technology as a data base and communication technique could mean big savings for governments and private enterprise.

Dr Charles Osborne and Dr Imants Svalbe have been spreading this message on a computer imaging crusade in recent months.

They say contacts the Chisholm Computer Imaging Group has made as a result indicate that many government and private agencies are seriously considering computer imaging technology as an information storage option.

'Present techniques of data storage where images are involved are still those developed 20 years ago, and there's little awareness that there are more effective techniques available', Dr Osborne says.

The Imaging Group is doing all it can to educate the community about the power of imaging technology as a data base and communication technique.

Dr Svalbe says using computer imaging techniques, it is possible to 'tailor the solution to the problem - for example, it is crazy to store things like graphics images or handwritten communications using the same techniques used to store text.'

In recent months, work done by the Group has been causing quite a stir.

It has involved development of the expertise to apply computer imaging techniques, previously the sole province of big, expensive computers, to simple and inexpensive personal computers.

The Group believes this aspect of their work is unique in Australia, and possibly the world.

The workshop series, 'Can Your PC See?', run over six weeks from 28 August, launched the Group's work into the public arena.

Designed to enable PC users to exploit the full graphics and computing power of microcomputer systems, the workshops covered such aspects as the digitisation and storage of images in a computer, and how to process or enhance those images to extract selected features.

Dr Osborne says they were fully booked, and response from participants extremely favourable.

Their diverse backgrounds also highlighted the wide application of computer imaging.

Major interest groups were from the textile and mining industries, security organisations, and those groups involved in the storage of documents.

The success of the workshops, Dr Osborne says, has rekindled the enthusiasm of the Group to the extent that they will be repeated in the first half of 1985.

Dr Osborne and Dr Svalbe have, since the conclusion of the workshops, 'gone on safari', giving in-house courses at BHP laboratories, and the Patents Office in Canberra, resulting in continued contact and proposals for joint ventures in imaging projects.

They have also taken their PC computer imaging message to the University of Wollongong for a recent seminar, 'The Strengths and Weaknesses of Computer Imaging on a Personal Computer'. It was

sponsored by the University's Geography, Physics and Computer Science Departments.

That seminar resulted in the establishment of a number of contacts with groups interested in the solution of imaging problems, including engineers, geographers, commercial graphics, enterprises high-tech industrialists, manufacturing technologists and educationalists.

Dr Osborne says a further development has been an expression of interest by Dr Ken Thompson, a Royal Melbourne Hospital radiologist, in continuing co-operation with the Group in the field of medical imaging.

Many of the contacts so far established, the Group says, have been as a result of wide-spread publicity of its PC computer imaging work.



## Technology a sink

Tailoring the solution to the problem - using computer imaging techniques, Drs Osborne and Svalbe have reproduced this original, familiar logo (left) into a digitised, uncompressed and reconstructed for output form.



## Technology a sink

## From Page 1: State Workshop win

Senator Button spoke of the importance of technology-based enterprises for the future, and the need to develop the management skills necessary to achieving success in new ventures.

'The imperatives for management in this environment are immediate and challenging,' he said, however 'the adoption of a particular technology in itself does not necessarily guarantee corporate success.'

'Many companies under-exploit their technology, whether it be obsolete or state-of-the-art.'

'Countries like Japan have demonstrated that management practices, like technology, are transitory.'

'We must adopt this creatively competitive philosophy in Australia.'

Senator Button said marketing was 'an important and often neglected aspect of technically-oriented businesses' and 'highly skilled communicators are required to create an awareness of the potential benefits of a new technology'.

'The Victorian Enterprise Workshop, organised to stimulate the

development of new technology and entrepreneurial management skills, is an initiative in this direction.'

Senator Button said he was 'delighted to see how it so effectively is designed to develop those same entrepreneurial abilities so much needed in Australia at this time.'

Several of the Workshop participants are already negotiating to launch new business ventures, including the Checkpoint K1000, which will be marketed across Australia through the 'Homeware' chain.

## GAZETTE DEADLINE

Deadline for the next GAZETTE on 22 November is Tuesday, 13 November. Copy can be left with the Public Relations Office, C1.08, or telephone the Publications Officer, Sue Couttie, extension 2311.





*Final year Mechanical Engineering student, Stephen Jackson at the Controls of the Computer Aided Drafting (CAD) system which, when linked to the new MAZAK machine tool, will revolutionise the design and production process of engineering components.*

*He is one of the four students who will demonstrate the system's capabilities on 8 November.*

## New system to equip tomorrow's engineer

Pencil and paper will become yesterday's drafting tools for Chisholm engineers, when the link-up of a computer-aided drafting system to the \$100,000 MAZAK vertical machining centre is completed next month.

Senior lecturer in mechanical engineering, Mr David Tyler, says it will be possible to design and produce an engineering component using the computer as the basic tool.

Mr Tyler spent about five months of this year on Professional Experience Program leave with Engineering Computer Sales (ECS) in Clayton, developing the post-processor to link the computer-aided drafting system to the CNC tool.

The computer-aided drafting software package, valued at upwards of \$15,000, was donated by ECS last year.

Mr Tyler's post-processor will allow computer-held drawing data to be transferred from an existing Hewlett Packard desk-top computer equipped with the ECS software package, to the CNC machine's computer.

The complete system now has a memory capacity of about 1.2 megabytes.

Mr Tyler says Chisholm engineers can now:

- Produce, without using pencil or paper, an engineering drawing.
- In 'plain English', insert machining instructions around the drawing and store it on a disk file in the computer. The post-processor will 'interrogate' the drawing file and generate machining instructions in a code the machine tool will understand.
- Feed that information from the computer into the machine's microprocessor.

The MAZAK CNC machining centre is one of the most advanced computer-aided manufacturing (CAM) units available, with the ability to repeatedly cut parts to a high accuracy (it works to 1000th of a millimetre).

Chisholm engineers believe their complete system may be the only one of its kind in Australia.

Currently, four final year mechanical engineering students are working on a computer-aided drafting project on the software package, and as part of their work a short demonstration of the system's capabilities will be presented on Thursday 8 November.

## Tighter computer security urged

Computer abuse, the darker side of the information technology revolution, is a growing problem in Australia, and is likely to increase rapidly in future unless more attention is paid to computer security.

That's the message from Chisholm Computer Abuse Research Bureau (CITCARB) executive, and independent computer control consultant, Mr Kevin Fitzgerald, in his report for CITCARB, Computer Related Crime in Australia in 1984.

Mr Fitzgerald's warning is based on the CITCARB casebook, compiled since September 1978, of 123 incidents of computer abuse in Australia, resulting in total losses to industry and government of \$5,643,266 from 65 incidents (58 cases were classified as non-assessable).

CITCARB, he says, is more concerned about the potential for future loss than the present evidence of actual loss.

By developing an Australian computer abuse profile, CITCARB aims to hammer home the message that many organisations operate at unacceptably high computer abuse risk levels, and that safeguards are not always prohibitively expensive or complicated.

'Computer abuse incidents have occurred overseas, some of them quite spectacular, and there is no reason to suspect that they do not occur in Australia.

'However, with the high tolerance level given by the business world to this type of crime, there is a low level of knowledge about computer abuse because it is not reported.'

Mr Fitzgerald argues that as computer literacy and proficiency in Australian society increases, so too will the opportunity for computer abuse.

'The speed of growth of the computer's place in the information society (typified by the explosive popularity of microcomputers in the early 1980s), the lack of concern for control and security represented best by the common expression "it won't happen to me", and the rapid rise in computer literacy in society in general, all contribute to the inevitability of several large computer related crimes in the 1980s....'

In future, Mr Fitzgerald points out, 'current needs for a distinction between white collar crime and computer crime will eventually disappear - all white collar crime will be computer related, all business crime will become computer crime.'

This situation places the onus of protecting the computerised business system from attack directly on the shoulders of management, he says.

CITCARB's casebook reveals that the incidence of computer abuse has no particular bias in either value or number, in any one industry.

What it does find is that computer-related fraud dominates, representing two-thirds of the total value of losses.

Other types of computer crime profiled by CITCARB include unauthorised use, theft of output, sabotage, destroyed masterfiles and theft of equipment.

Mr Fitzgerald says theft of output is one area of particular vulnerability because of the transportability of floppy disks and microfiche, and the poor performance of passwords and other access control systems.

'As microcomputer users convert their confidential information to disk files, that information which represents a competitive edge will become a target for industrial espionage,' he explains.

Currently, however, input oriented and installation oriented techniques represent 'the high profile techniques of Australian computer abuse' chiefly because they are the most visible.

'The categories that perhaps should cause us most concern are the ones that we do not know so much about - the processing oriented techniques and the output oriented techniques.

These 'probably represent the majority of the "under water iceberg" - the part we cannot see, because they are being executed either without detection, or, if they have been detected, management has been too reticent to reveal the abuse'.

CITCARB's profile also reveals that in all but one of the Australian cases, the perpetrator seemed to be a first-time offender 'motivated by greed and an awareness that the system had holes in its controls, security and auditing systems.

'No doubt the knowledge that there was little chance of being discovered also encouraged the perpetrators,' Mr Fitzgerald comments.

His warning is clear - the opportunities confronting employees to commit white collar crime have never been better, and the current 'it won't happen to me'

thinking is simply not good enough in the light of future technological developments.

Mr Fitzgerald says most of the cases so far collected by CITCARB are 'the simple cases'.

'The clever crimes netting huge dollar values are not as frequent as the folklore would have us believe nor are they likely to be reported if they are discovered.

'However, studies of the control and security effectiveness in computer systems in this country reveal embarrassing holes which would certainly enable the misguided whizz kid to perpetrate crimes of spectacular proportions.

'If such were the case in a business environment in which audit was given scant resources, then the chance of discovery would be minimal.'

CITCARB and the Pearcey Centre are presenting two one-day courses on 14 and 15 November relevant to the computer abuse issue.

'What the Computer Manager Should Know About Computer Audit', and 'Computer Related Crime', will be led by Mr Fitzgerald.

The courses are aimed at computer managers, systems designers, internal and external auditors, accountants and business managers.

Campus manager, Mr Barry Bilham, says it will be the consultant's job to 'get the facts and report on the options'.

The Health Commission last year served notice on the Institute of a range of requirements necessary to bring the theatre into line with fire regulations.

Mr Bilham says since then all the minor works required have been carried out, including the installation this year of smoke outlets in the roof.

## Green light for Union building

The go ahead has been given by Chisholm Council for the student union facilities project at Caulfield campus to proceed to the design stage.

Convenor of the Building Project Management Committee (a working party of the Buildings and Property Committee), Mr Paul Ramler, told the October meeting of Council that the completion date for the development had been set at July 1986.

The two storey building will cover an area of 2297 square metres, and cost \$2.8 million.

The working party, renamed the New Building Development Committee, will now investigate in detail the usage of the facilities, which Mr Ramler said, 'must be used to a maximum by students, staff and the community.

'Questions like car parking, which in the initial stage are not a problem, will have to be addressed in the future,' Mr Ramler said.

Council backed his recommendation that the Buildings and Finance Committees be authorised to proceed to the design stage on the project.

The remaining works, including installation of a fire curtain and sprinkler system, will require a major financial outlay, and Mr Bilham says it will be the consultant's task to 'ascertain whether there is some area of compromise' with the Health Commission and PWD.

Mr Bilham says the consultant has extensive experience in the area of theatre design and equipment.

## Consultant to negotiate on theatre works

A consultant has been engaged by a Buildings and Property Committee task force to liaise with the Public Works Department and Health Commission on upgrading works for the George Jenkins Theatre at Frankston campus.



# Marketing ace at Chisholm

British marketing ace, Professor Gordon Wills, recently paid a flying visit to Chisholm.

From 17-19 September, his busy schedule included a marketing forum, addresses to marketing students (past and present), the Victorian Marketing Educators Group and a senior management briefing.

Professor Wills is Principal of the International Management Centre from Buckingham, UK, a multinational post-graduate business school.

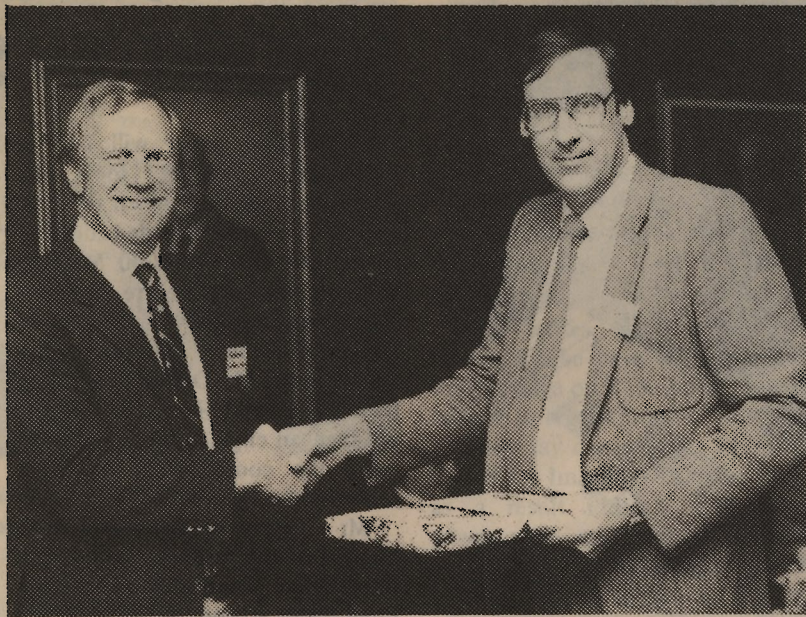
The school is unconventional - it has no classrooms and no set curriculum.

Instead, IMCB faculty members go to the client, instructing company managers on marketing problems and solutions.

Teaching and research have taken Professor Wills around the world, including America, Europe and Australasia.

He has a score of books to his credit, and has been editor of the European Journal of Marketing since 1967.

In 1981 he was jointly responsible for the establishment of the University of Queensland Business School.



## What's On

### CAULFIELD FESTIVAL 'RAGE ON' YOUTH DAY

At Chisholm Caulfield and East Caulfield Park on Sunday, 25 November, 10am - 6pm.

The Program: -  
10am

- Breakfast 10.30 am - Noon
- Football coaching clinics (Bring a footie and get it signed by someone famous).
- Cricket coaching clinics (Bring your bat and get it signed by someone famous).
- Aerobics
- Gymnastics demonstrations
- Martial Arts demonstrations
- Trampoline display

Noon

- U25's 'STYX Tumblers' (Street theatre)
- Pedal Club Bike Rally
- Rap dancing
- 'Battle of the Bands' (Local bands competing for a prize)
- Electronics Games Olympics
- Table Tennis
- Fashion parade

All Day Activities

Roving musicians, food stalls, outdoor cafe, art show, displays, stalls, radio-controlled model electric car racing.

For further information, contact Jenny Bowman on 524 3333.

### SUMMER SCHOOL OF DRAMA

At Gippsland Institute of Advanced Education, 21 - 25 January 1985.

For people aged 16 - 20 years, the program includes skills acquisition classes, intensive drama workshops, discussion sessions.

Experienced tutors in theatre arts will lead participants through sessions on acting and performance techniques, voice production, dance, mime and design.

Enrolments close 14 December. For more information, telephone 051-220 225.

### FACADE

Chisholm Staff Club presents, on Sunday 11 November, 'Facade', an entertainment with poems by Edith Sitwell, and music by William Walton.

Doors open at 11am, and the concert starts at 11.30 am. Lunch is included in the price of the ticket (\$12 each).

For ticket information and inquiries, telephone 573 2133.

## Scholarships fellowships and grants

**WAIT** - Post-graduate courses in Extractive Metallurgy and Mineral Processing. Applications for enrolment close 18 January, 1985.

**STUDY IN YUGOSLAVIA** - Fellowships for post-graduate studies in the fields of culture, humanities and social sciences, for three to nine months from 1 October, 1985. Closing date: 7 December, 1984.

**PLOMLEY FOUNDATION FELLOWSHIP** - At the Queen Victoria Museum and Art Gallery, Launceston during 1985. Fields of study include fine art, decorative arts and crafts, history, anthropology, archaeology, botany, geology and zoology. Closing date: 30 November, 1984.

**THOMAS T. ROBERTS** - Education Fellowship, 1985. Sydney College of Advanced Education. Closing date: 30 November, 1984.

- For more information about any grants/scholarships/fellowships, contact the Development Director, Dr Bill Briggs, extension 2111 (Caulfield campus).

## BRIEFLY

### Welfare seminar

The role of police and welfare workers in the criminal justice system was the focus of a seminar at Chisholm Caulfield on 18 October.

About 30 students attended the seminar, organised jointly by the School of Social and Behavioural Studies' Welfare and Police Studies sections.

Senior lecturer in Police Studies, Mr Jim Reilly, says the major emphasis of the discussion was on prevention of juvenile crime, and the different perspectives of police and welfare workers to the problem.

The discussion revealed the perception by police that welfare workers are 'over solicitous' towards the offender, and that police believe society in general has little concern for the victim.

'There was general agreement among both groups that in trying to learn more about what works in crime prevention, it is necessary to abandon ideological preconceptions about what ought to work.'

'This can only come about by a more positive approach to eliminate misconceived prejudices by each group towards the other,' Mr Reilly said.

The causes of juvenile delinquency provoked animated discussion at the seminar, which Mr Reilly said, concluded that 'at best all we can do is to seek marginal improvements that can only be discovered through patient trial and error accompanied by some hard-headed and objective evaluation'.

### Library loss

The Library staff were saddened to hear of the death of Joan Rae on Friday 19 October. Joan died in the Peter MacCallum Hospital after a long illness.

Joan joined the library in 1978 as Inter-Library Loans Officer and then became the Information and Resources Librarian for the School of Art and Design.

Many staff at Chisholm will remember Joan for her generous spirit and for the forthright and courageous way she faced her illness. We will all miss her.

Olive Cousins,  
Acting Institute Librarian.

### Asbestos removed

Asbestos insulation has been stripped from pipes in three Frankston campus plant rooms.

At its September meeting, the Buildings and Property Committee gave the go ahead to the works, to cost an estimated \$10,000.

Safety Officer, Mr Alex Glennie, says the decision to remove the asbestos was made because much of it was in need of extensive repairs, which in any case 'would have cost us more than half what we spent in having it removed'.

The work was carried out in boiler rooms in B Building, the Halls of Residence and Struan House.

Mr Glennie says the only remaining asbestos at the campus is around the boilers themselves but this does not represent a health hazard.

### Holiday fun

The City of Frankston has expressed an interest in establishing a permanent school holidays program for children at Chisholm Frankston.

Children's Services co-ordinator, Ms Maureen McInerney, says this follows the success of a Care/Recreation program held at the campus in August.

The 10 day program attracted a total enrolment of 106 children, with an average of 50 attending each day.

Chisholm Frankston was one of three venues chosen for the program, which was run by Frankston City Council.

### Citizen awards

Nominations are being sought by Caulfield City Council for the 'Citizen of the Year' and 'Young Citizen of the Year' awards.

The awards aim to recognise outstanding contributions by Caulfield citizens to the welfare of the local community.

They will be presented at the Council's traditional Australia Day champagne breakfast at the City Hall on Friday 25 January 1985.

Nominations should be forwarded to the Mayoral Secretary by Wednesday 12 December.

### Trophy win

Chisholm engineering students have won the coveted Institution of Engineers 'Sporting Challenge Cup'.

The annual event, run in conjunction with universities and CAEs, was hosted by Chisholm in August, and attracted competitors from Footscray Institute of Technology, RMIT, and Monash and Melbourne Universities.

The event has been run since 1981, and this year is the first time Chisholm has managed to secure the cup.

## Classifieds

### PUBLIC NOTICES

**FIRST AID** - A course will be run at Chisholm Caulfield from 1 - 5pm on 20, 22, 27, 29 November; 4 and 6 December. Participants will be presented with a St John First Aid certificate on completion of the course. Registration, through Cost Centre heads, should be lodged by Friday 16 November. For more information, contact the Safety Officer, Alex Glennie, ext. 2532.

### FOR SALE

**CORTINA GHIA 1978** 2 Litre automatic 12 months registration 76,000 kms, 1 owner, excellent condition \$4,350 no offers. Ext. 2367

### TO LET

#### INVERLOCH

New modern 3 B/R beach house. Only 1½ hours from Caulfield campus, 20 metres to surf beach. Ideal for all water sports. Fully furnished and carpeted. Available before Xmas and February \$300 p.w. Contact: Darrell Mahoney, ext 2314.

CLASSIFIED ADS IN THE GAZETTE ARE FREE. THEY CAN BE LEFT WITH THE PUBLIC RELATIONS OFFICE OR TELEPHONE EXTENSION 2311. PLEASE NOTE - ALL COPY FOR PUBLICATION IN THE GAZETTE SHOULD BE TYPED.

**Picture**  
Professor Wills (left) is farewelled by the head of the Marketing Department, Mr Peter Chandler at a breakfast on 19 October.

## Wanted - talented women

The State Government's Office of Women's Affairs is seeking women interested in serving on government boards and committees.

Ms Mary Draper, Co-ordinator of Women's Affairs, says the Office is updating and expanding its 'Talent Bank' - a register used by Ministers, Departments and Authorities as a source of nominations for Government boards, authorities and committees.

Expansion and updating of the register is needed to help meet the Government's objective of more equitable representation of women on advisory bodies.

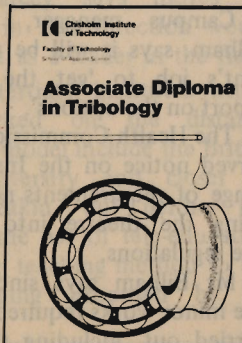
Inclusion in the Talent Bank does not mean automatic appointment.

Interested women should contact Ms Draper at the Office of Women's Affairs, Department of the Premier and Cabinet, 1 Treasury Place, Melbourne, 3002, phone 651 1500, or they can pick up a curriculum vitae and registration form from the Staff Branch at Caulfield campus.

## Printing Services

offers you the following services for Chisholm . . .

- designing, typesetting and complete art
  - same day service for class notes, minutes & agendas and all general printing (1.1 per side dept. funds)
  - colour printing • posters • brochures
  - reports & covers • business & compliments cards
  - manuals • letterheads • newsletters
  - course material • leaflets
  - collating • binding • stapling • folding
  - guillotining • drilling
- We also have a pick-up and delivery service.



(For further inquiries ring extension 2135)  
Located on ground floor, C Block, Room C1.04, Caulfield Campus