Chisholm

July 1989 Volume 6 Number 2



Computing School's 25th year • New President a graduate

Japan Consul-General visits • Caulfield parking problem addressed



Contents

Monash and Chisholm move to merge	
	A quarter of a century in computer education – page 4
CASE for the future of software	
New President a graduate of CIT	
Information for an edge in business	
Engineering students survey the snow	
Language developmen	it
Japanese Consul-General speaks to marketing students 12	
Conservation leader vi	sits Chisholm
	Virus? I didn't even know it was sick Computer viruses infect Chisholm – page 14
Research grants	
New approach to inservice education	
Treasury dealing room at Chisholm	
Parking breakthrough at Caulfield	
Computer Power lecturer appointed	
	May graduations – page 21
Unleashing your brain – Moni Storz' new book	
Chisholm supports enterprise scheme	

Cover, from left: Mr Peter Wade (Comptroller of Monash), Prof. Mal Logan (Vice

Chancellor of Monash), Mr Paul Ramler (President of Chisholm's Council), Dr Geoff

Vaughan (Director of Chisholm), Dr Graham Trevaskis (Associate Director of Chisholm)

Chisholm Gazette

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Editor: John Wilkins, 573 2099.

Associate Editor: Tim Mansour, 573 2311.

Design by Tony Chapman Design.

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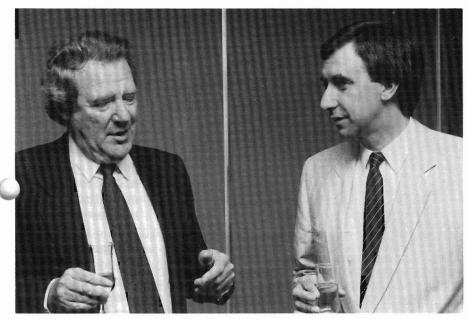
Chisholm Institute of Technology

Chisholm Institute of Technology is a multidisciplinary tertiary institute with campuses at Caulfield and Frankston. Studies are offered in four schools and two faculties.

Chisholm is the second largest of Victoria's Colleges of Advanced Education with a total enrolment of more than 8,000 full- and part-time students in its graduate and undergraduate programs in Art and Design, Business, Education, Nursing, Social and Behavioural Studies and the Technologies.

Chisholm has a proud record of offering relevant short courses in its areas of expertise for thousands of students each year, and a strong reputation as a research and consultancy organisation.

Monash and Chisholm move to merge



Paul Ramler (left), President of the Council of Chisbolm, discusses the merger with Prof. Mal Logan, Vice Chancellor of Monash, after the historic signing.

Chisholm and Monash, two of Victoria's premier higher educational institutions, have agreed to a merger process leading to the establishment on 1 July 1990 of the second biggest university in Australia.

A Heads of Agreement setting out the procedure and conditions whereby Monash University and Chisholm Institute of Technology will merge was signed recently by the Vice Chancellor of Monash Professor Mal Logan, the Comptroller of Monash Mr Peter Wade, the President of the Council of Chisholm Mr Paul Ramler, the Director of Chisholm Dr Geoff Vaughan and the Secretary to the Council of Chisholm, Associate Director Dr Graham Trevaskis.

The combined institution will have almost 20,000 full-time equivalent enrolments, representing 24,000 students, with a total budget approaching \$200 million a year.

The merger of these two important institutions will result in a significantly enlarged and changed Monash University, capable of both maintaining the reputation of the academic programs currently offered by both institutions and enabling the development of important new academic initiatives that will benefit the community they serve.

The two institutions will benefit also from the close and significant link that Monash has already formed with the Gippsland Institute of Advanced Education, which is to become a College of Monash University on 1 January 1990.

With this link, the new university will be able to offer distance education right across the nation. The Minister for Education, Employment and Training, the Hon. John Dawkins, recently announced that the Monash/Gippsland affiliation will be developed as a National Distance Education Centre.

Professor Logan and Dr Vaughan said that the merger would be made easier by the complementary relationship and goodwill which already existed between the two institutions. Monash and Chisholm had been working together on a number of joint ventures in recent years, they said.

Examples of this included the jointly managed Centre for Stream Ecology, a bridging program in mathematics, and a Business Languages Program.

The Centre for Stream Ecology is a research and consultancy centre focusing on Australia's freshwater resources, which developed from research being undertaken jointly at Chisholm's Water Studies Centre and the Department of Zoology at Monash.

The Bridging Mathematics Program is an intensive "catch-up" program for mathematics skills aimed at prospective tertiary students who do not have the mathematics prerequisites in their secondary education.

The Business Languages offered at Chisholm – Japanese and Chinese – are taught by staff of Monash (and Victoria College).

In addition, library, telephone and computer resources are also already being shared and in some areas they are integrated.

It is envisaged under the Heads of Agreement that Chisholm's present system of joint administration of the Caulfield and Frankston campuses would become campus-based in due course. All present courses on each campus will continue to be offered.

The Heads of Agreement signed by both Councils sets out several conditions of merger, and enables either body to withdraw if conditions favourable to a merger cease to exist. The combined institution will be constituted under the Monash University Act, with appropriate amendments to cover the Chisholm component.

(continued on page 8 ...)

Chisholm celebrates a quarter of a century in

This year marks the 25th anniversary of computing courses at Chisholm Institute. From humble beginnings, the Institute has been involved in the evolution of computer technology in Australia ...

Since its early days as a Technical College offering one certificate and three diploma courses in computing, Chisholm has developed into one of the most progressive and dynamic computer education institutions in Australia.

In October 1963, the then Caulfield Technical College installed its first computer – a Ferranti Sirius.

With the advances made in computer technology over the ensuing 25 years, that early machine seems cumbersome and limited.

As Pearl Levin, a Principal Lecturer and longest-serving member of the computing staff explains, "the Ferranti was the size of a large office desk, boasted a one kilobyte nickel-delay memory, and communication with the computer was through



Four of the longest-serving computer staff at Chisbolm. From left, Ray Newland, Computer Centre Manager (20 years service), Jack Greig, Head of the School of Computing and Information Systems (19 years), Pearl Levin, Principal Lecturer (24 years) and John White, Associate Director – Planning and Resources (23 years).

punched paper tape". Although advanced in its time, this machine contrasts with currently available portable computers, frequently equipped with up to two thousand times the memory capacity of the Ferranti.

Ever-increasing growth

"In order to cope with the ever-increasing growth in student numbers, Chisholm has had to continually expand its computing facilities", said Pearl. Early in 1965, the Institute installed a Control Data 160A computer, and in 1969 increasing demands led to the installation of an ICL 1900-series mainframe. Indeed, this computer formed the heart of a network of

similar machines sited at campuses throughout Victoria. The ICL equipment was replaced by Data General and Prime minicomputers in 1978–79.

"Chisholm's facilities have continued to increase with a growing number of microcomputer laboratories being installed", Pearl said.



Students working in a microcomputer laboratory



Constant funding is needed to maintain up-to-date equipment

computer education

"A Victorian Education Foundation (VEF) grant of \$266,000 in March was used to install a laboratory with sixteen Intel 80286-based microcomputers, with a faster 80386 machine as a controller for the network." Pearl explained that each of these desktop computers has more speed and memory than the earlier mainframe computers.

"A further grant of \$400,000 was made by the VEF in May, which will be used to establish an advanced Computer-Assisted Software Engineering (CASE) laboratory in conjunction with the Pearcey Centre."

Liaison with industry

The Pearcey Centre for Computing continues the Institute's traditions of maintaining a close liaison with

Courses currently offered by Chisholm's School of Computing and Information Systems

Bachelor of Applied Science (Computing)

Bachelor of Applied Science/ Bachelor of Business (Computing and Accounting)

Graduate Diploma in Business Technology

Graduate Diploma in Computing

Graduate Diploma in Information Technology

Master of Applied Science (Computing) by coursework

Master of Applied Science by research

In addition, many computerrelated courses are offered by other sections of the Institute. industry and commerce. The Centre is named after Dr Trevor Pearcey, foundation Dean of the School of Computing and one of the developers of CSIRAC, Australia's first computer. The Pearcey Centre currently provides short courses, consultancy services and applied research as well as tailoring specific courses for organisations.

Chisholm's links with the business world are strengthened by sponsorships, which are provided to assist students in their studies and in postgraduate employment. Sponsorships are currently offered by BP, National Australia Bank, Arthur Andersen, Paxus, Shell, Coles-Myer, Kodak and ICI.

2,000 graduates

In 1964, some twenty full-time and 150 part-time students were enrolled in courses at Caulfield Technical College. Twenty-five years and over 2,000 graduates later, enrolments in the Bachelor of Applied Science (Computing) and the four postgraduate courses offered at Chisholm include 600 full-time and 750 part-time students.

Chisholm's strong presence in the computer history of Australia is largely attributed to the insight of Austin Lambert, Principal of the then Caulfield Technical College. There were only two staff when computing courses started in 1963 – John McClelland and Doug Mills, who later became Director of Footscray Institute of Technology. There are now 50 staff members in the computing area.

To commemorate the achievements of the last 25 years, the School of

computing and data processing, the College has been giving short part-time courses for some years. It is now introducing full-time and part-time diploma and certificate courses in commercial data processing. These will be the first courses of their type in Australia, either at universities or technical colleges.

 Austin Lambert, Principal of Caulfield Technical College, Principal's Report 1963.

Computing and Information Systems planned a Gala Dinner for 15 July, with guest Professor Bart Sylvester from Cornell University, USA, speaking on the topic of Artificial Intelligence. Also planned for launch at the dinner was the Computing chapter of the Chisholm Alumni Association.

Much research work has been devoted to the production of a history of computing at Chisholm, to be published shortly.

CASE for the future of software

Graeme Shanks, senior lecturer in the School of Computing and Information Systems, is justifiably excited about his recent research project with the Australian Wool Corporation.

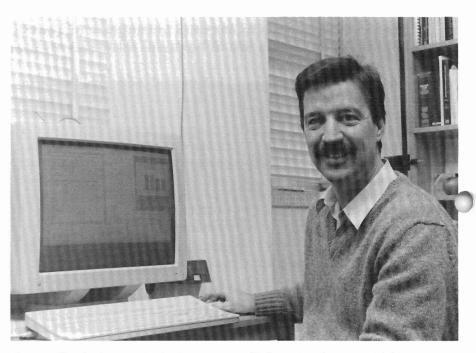
The project revolves around the concepts of Computer-Assisted Software Engineering or CASE, a field of computer science which has started to really take off with the development of microcomputers with sufficient memory and speed to make it viable. The use of CASE tools allows computer systems personnel to more easily and efficiently develop appropriate systems for organisations, with emphasis on a "holistic" approach to their development.

Graeme's project involves the defining of a methodology for the Wool Corporation's systems development section.

"The methodology is different from other commercial offerings in that it makes explicit use of CASE tools in the planning and analysis phases of the systems development life cycle and also utilises a philosophy of progressive prototyping", explained Graeme.

"In addition to the specification of the methodology, the roles of data administration, project teams and management steering committees are defined in terms of project management. Models were built describing the mission and broad functions of the Corporation, and a corporate entity relationship model was constructed", Graeme said.

"These models were built by teams consisting of staff from the data administration and user areas. This created an awareness of the data administration infrastructure with the Corporation, and established its role as an active participant in system modelling."



Graeme Shanks, lecturer in the Department of Information Systems, with his systems development tools on an Apple Macintosh computer.

The first phase of the project has been completed, involving the specification of the methodology on paper. Phase two involves its implementation on computer, with the prototype system being built using Hypercard software on Apple Macintosh computers.

"The use of Hypercard will enable automatic links to be maintained between training, the CASE tool itself, advice and project control", said Graeme.

"It is planned to provide automatic links to a video-disk system for when the user needs assistance or training about using the methodology.

"Furthermore, advice-giving modules using Expert Systems technology are planned to give the user assistance in navigating through the methodology and making key decisions at checkpoints in the system", he said.

Graeme said that this approach to systems development offers great potential to improve the productivity and quality of systems analysis.

"It is hoped that the methodology automation tool from phase two of the project will have potential as a marketable product", he said.

Graeme presented a paper on his project at *CASExpo* in Sydney in June, and his Master's degree thesis on "Analyst Workbenches" is due to be published by the Information Systems Research Centre, recently established by Chisholm.

New President a graduate of CIT

The new President of the Council of Chisholm Institute of Technology is the first graduate of Chisholm to hold that office and has nineteen years of involvement with the Institute.

At 36 years old, he is the youngest ever President of Chisholm and perhaps the youngest College President in Australia.

Mr Paul Ramler, married with three children, graduated in Marketing in 1973 from the then Caulfield Institute of Technology. He was also the foundation President of the Student Union of Caulfield in 1972 and 1973, and the first student to be elected to the CIT Council in 1971. The Student Union, which Mr Ramler reformed out of the Student Representative Council, recently incorporated as an independent body, completing the process he had begun.

At the time of his graduation, Mr Ramler was not only on the Board of Studies – the academic board of Caulfield – but was also the chairperson of the Marketing course advisory committee. Chisholm's Marketing courses in the David Syme Business Schools are Australia's premier courses in this field.

While involved with his family's furniture manufacturing business, Paul has remained involved in the affairs of the Institute. When Holmesglen College of TAFE was created from Caulfield Institute's TAFE sector at the time Chisholm was created in 1982, Paul continued on the Councils of Holmesglen and Chisholm. He was thus the Foundation President of Holmesglen for seven years until he retired this year to take up his Chisholm Presidency. During that time, Holmesglen has undergone a massive building program and expansion and is the most progressive of the TAFE Colleges in Victoria. Mr Ramler has also been a Vice-President of Chisholm for the previous four years.

Mr Ramler was responsible for commencing the planning and negotiations which resulted in the Institute constructing a joint Student Union facility and office complex, known as the Technology Tower. The student facilties are considered among the best in the state.

"My nineteen years involvement at Chisholm has given me an insight into the people and the issues here", he said.

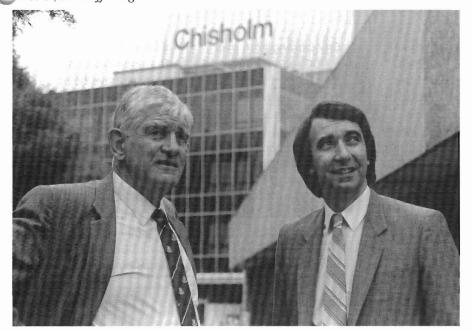
"With that background, I hope to address in detail such issues as funding, campus development, institutional associations leading to a better articulation between courses and other matters, at all times retaining the basic ethos of Chisholm."

"The reason I attended Caulfield Institute rather than a University was that I was interested in the basic practical approach of its courses. I would like to see the Council give every support to the staff at all levels to maintain and encourage the applied approach to education. Regardless of the outcomes of proposed institutional associations, our courses and day to day work will continue at the same high standard as always. It is full steam ahead for Chisholm."

Mr Ramler said that the proud history of over 60 years of the two institutions that preceded Chisholm has made a significant impact on higher education in Victoria, shown by the high demand for it courses. Caulfield began in 1922 as Caulfield Technical School and Frankston commenced operations in 1959 as Frankston Teachers College.

"It is up to the present Council and staff of Chisholm to see that in another 60 years time people will look back and see that we have enhanced that reputation", he said.

The new President of Chisholm Council, Mr Paul Ramler (right) with Chisholm's Director, Dr Geoff Vaughan.



Monash and Chisholm merger

(... continued from page 3)

The Heads of Agreement includes a number of specific conditions concerning staff. Both institutions have given an undertaking to staff that there will be no forced redundancies as a result of the merger, and that both institutions will negotiate, as appropriate, with academic staff, general staff and other relevant unions. They also give an undertaking that no staff member will suffer a loss of salary or terms and conditions of employment as a result of the merger.

A Merger Implementation Committee has been formed which includes the Vice Chancellor of Monash, the Director of Chisholm, the President of Chisholm, and seventeen other members, including academic and general staff association representatives and students from both institutions.

The committee is to establish various specialist subcommittees to advise and make recommendations of the issues concerned with bringing together, managing and maintaining the procedures of the two institutions, and the effective merging of their respective student bodies and staff complements.

Links between the student unions and staff clubs will be negotiated by those bodies, with Monash and Chisholm undertaking to protect the interests of all students and staff of the combined institution.

The new institution will cover a geographic region from the eastern suburbs of Melbourne to the growing Mornington Peninsula/Westernport region, and with the Gippsland Institute of Advanced Education will extend to the Gippsland region.

The Heads of Agreement states that after the merger, the range of courses offered at each campus will be maintained and extended, and that access to funding for research and consultancy will be on an equal footing.

The Director of Chisholm, Dr Vaughan, said that the new institution will offer educational and research advantages to students and staff. There will be a diversity of programs and opportunity for much wider transfer between campuses than in the past.

The new Monash stands prepared to support the Federal and State initiatives for growth through which new opportunities will be offered in higher education, he said.

In brief

Chisholm was amongst the various bodies represented at the Barmah Forest conference at Nathalia, Victoria, at the end of April. Topics discussed included the decline in tree growth and in waterbird and fish breeding, with the full effects of the construction of Lakes

Hume and Dartmouth in 1978 still unknown. Some results of the conference were to be considered by the Conservation, Forests and Lands Department.

The "Southdoc" index of Frankston/Mornington Peninsula local history is now available for on-line consultation at both campuses of Chisholm, as well as the Frankston

City Library. With over 8,000 records covering events from 1805 to 1989 already indexed, work continues on early local newspapers and relevant documents. Further information can be obtained from the editor, Neville Houghton, on (03) 784 4345.

As part of the Federal Government's "A Fair Go" strategy for rural education, eight
Distance Education
Centres have been
established. Among
those of the fourteen
applicants to be
accepted was Monash
University/Gippsland
Institute of Advanced
Education, boding well
for Chisholm course
availability to off-campus
students after the
amalgamation.

Information for an edge in business

The Chisholm Centre for Competitive Advantage got under way recently with the arrival of its new Director, Mr Terry Moroney.

The Centre aims to link industry with information technology to help companies gain a competitive advantage in their marketplace, according to Mr Moroney.

"By providing an objective business iew on the use of information technology, the Centre will enable companies to be critical of the bias technology suppliers show towards hardware and software, and to use the technology in the best way that meets their strategic goals", he said.

The Centre has been established by the David Syme Business Schools of Chisholm to provide insight and assistance to Australian industry in the field of business information and to help them identify sources of information that they need to compete. The Centre will also offer advice to companies on how to use the information and technology to suit their own business operations. It plans to



Director of the new Centre for Competitive Advantage, Terry Moroney.

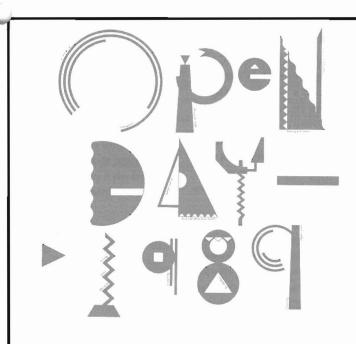
provide a variety of short courses, access to data bases and consultative advice.

"In today's global marketplace, the Australian companies that will thrive are those that can make best use of information and information technology to create new products and achieve high levels of customer service satisfaction", Mr Moroney said.

Mr Moroney joins Chisholm from Telecom Australia, where he gained considerable experience as an Information Systems manager. At Telecom he worked in the areas of business systems analysis, applications systems management and information architecture, and he was a senior national account manager in recent years. During 1984 and 1985, Mr Moroney worked in the telecommunications industry in the United States.

He plans to visit a number of Australian and international universities, centres and information providers in the near future to study the latest trends in the use of information and information technology for competitive marketing advantage.

The Centre is located at Chisholm's Caulfield campus in the School of Accounting and may be contacted on (03) 573 2221.



Chisholm's Open Day provides an excellent opportunity to discover the courses, facilities and resources available to students.

Open Day 1989 will be held on Sunday August 13, from 10am to 4pm on both the Frankston and Caulfield campuses.

Join us!

900 Dandenong Road, Caulfield East. McMahons Road, Frankston. For course information contact the Admissions Office, (03) 573 2000.

Engineering students survey the snow

Students from the civil engineering course recently devoted a week to designing wheelchair access to Cope Hut on the Bogong High Plains and surveying possible new ski lifts to replace some of the oldest ones.

Sixty-seven staff and students of the third and fourth year Civil Engineering course held their fifth annual field camp at Howman's Gap, just outside Falls Creek, in late April. They worked in small parties on a wide variety of small projects in the region, suggested by local engineers and others.

One of the projects was to survey a disabled access route to Cope Hut and design a durable pavement from the carpark. The route had to leave the



Engineering students using surveying equipment at Falls Creek

existing jeep track, used by the management staff, intact. This route is presently used for disabled access but it is easily damaged by water run-off and becomes impassable for wheelchairs in the wet. A related project looked at the existing facilities in the hut and how they may be upgraded.

In other projects, students used the Department of Civil Engineering's new Electronic Distance Measuring equipment to quickly survey several alternative ski tows to replace the ageing Ruined Castle lift, the International Pomma and the Summit T-bar lift. Students conducted preliminary surveys to enable the tow operator to consider the options.

Other parties worked on slope stability and foundation analyses in the area, skier–pedestrian traffic problems, and the design of a variety of small structures.

Superb weather during the camp allowed work to be completed quickly, leaving the group time to enjoy facilities in the area, including the volleyball court, the pool table and one of the best rope obstacle courses in Victoria.

Women in engineering

With a trend in Australia towards increased participation by women in traditional male occupations, it is important to also have women in positions of responsibility in these disciplines.

Chisholm's School of Engineering recently welcomed Dr Jagoda Williams as a staff member, and are anxious to promote the growth of women in engineering among prospective students. Dr Williams received her doctorate from the prestigious Polish Academy of Sciences, has

conducted research in West Germany and Hungary, and previously held a faculty appointment in New York city. She has undertaken internationally recognised research on "shakedown", and her recent work on state-of-the-art computer methods in structural engineering is of great relevance in Australia.

Young women entering tertiary education are encouraged to consider engineering as a challenging and rewarding profession. Those requiring further information are invited to contact the School of Engineering, (03) 573 2113.

Municipal engineering

The Department of Civil Engineering has introduced a *Graduate Diploma in Municipal Engineering* to meet the need for up-to-date skills in the full range of services normally undertaken by municipal councils and associated organisations.

The course, developed in consultation with practising municipal engineers, has the support of the Municipal Engineers Board and the Local Government Engineers Association of Victoria. Students complet-

ing the Diploma will satisfy the examination requirements for the award of a Municipal Engineers Certificate, subject to the normal procedures.

The course, planned to commence in July, is the equivalent of one year of full-time study but is offered on a part-time basis over a minimum of two years.

Further information may be obtained from the course leader, Mr Robin Underwood, telephone (03) 573 2329.

Language development

The Language Development Section at Chisholm has been assisting students at Caulfield and Frankston with their academic English since its inception in 1984. The Section now has an added dimension – that of providing services for over 150 full-fee paying overseas students.

A new full-time senior tutor with primary responsibility for full-fee overseas students, Mr Tim Moore, has joined the staff of Mrs Rosemary Clerehan, the coordinator, and Mrs Toni Chang and Mrs Elisabeth Grove, who are senior tutors.

Language Development Section staff develop programs geared to students' needs and generally teach them on an individual basis. This has worked well, because many students have individual language and learning needs, and also because of the busy timetables of most students at Chisholm.

Small groups are also taught, and Fim Moore has found that, where they can be organised, they are very helpful for overseas students. These students are often experiencing common problems in analysing task requirements, summoning appropriate study strategies and using academic English. The moral support and networking that can take place in these groups is extremely beneficial.

Depending on their background, students can arrive in Australia having learnt a very different variant of spoken and written English in their own country. Sometimes their tuition has consisted almost entirely of grammar, and it



Students are often tutored on an individual basis by staff from the Language Development Section.

Inset: Rosemary Clereban, coordinator of the Section.

does not take them long to realise that the social and adademic demands placed on them exceed the level of help offered by a grammar book.

Early contact with the Section can often forestall the onset of problems which may hamper the student's success in their course. In February, 41 students divided into two groups attended an introductory two-day course run by the Section, entitled "Academic Skills for Tertiary Study".

Staff of the Section are also in a position to pinpoint difficulties and assist other academic staff in helping their students. Over half the students seen

by the Language Development Section are self-referred. This amounts to around 500 students each year, for individual sessions, courses and accessing of resources. However, a significant number

are referred by staff when problems in written or oral communication are detected.

It is no wonder that overseas students may appear a little bemused when, in the classroom, they have to contend with the intricacies of Australian remedies for breach of contract and, outside, know how to respond when someone says "stay cool" or "catch you later"!

So, as well as pointing out resources, assisting with reading strategies and identifying different varieties of academic English, staff must also interpret Australian English and culture for students.

And, with an additional 200 overseas students anticipated to enter the Faculty of Business mid-year, the staff of the Language Development Section will be kept very busy indeed.

In brief

CSIRO scientists have been working for years on a number of low-cost alternatives to sewage treatment – a topic of great concern recently to Syndey beachgoers. *The Age* recently reported that Chisholm's *Water Studies Centre* has assisted of late with a proposal for "reed-bed treatment", which is cheap and environmentally sound. The fourday process, utilising a wetland of reeds, produces no odour and

operating costs are 75–90 per cent cheaper than conventional treatment. Twelve-month trials are underway in Frankston.

Japanese Consul-General speaks to marketing students

Marketing students were addressed by the Consul-General of Japan, Mr J. Kawashima, on 26 April, as one of the *Chandler Seminar Series*.

Mr Kawashima's 23-page address detailed matters of Japanese foreign policy, post-war reforms and Australia–Japan relations.

"Japan's foreign policy position centres around two main pillars", said Mr Kawashima.

"Firstly, Japan is a member of a free and democratic world, and secondly, Japan exists as an Asia-Pacific nation."

Mr Kawashima said that in the global context, Japan shares values common to Western, industrialised communities.

"A mutually complementary relationship has been established between Australia and Japan, based mainly on trade and economic areas", he said.

"Ever since the two nations started to trade with each other, Japan has been dependent upon Australia's rich endowment of natural resources and energy. On the other hand, Australia has been an important customer for Japanese manufacturers."

Although the USA is Japan's largest trading partner, a record level of \$US7.9 billion worth of Australian goods was imported in 1987. However, around 80 per cent of these imports were raw materials or foodstuffs, with a relatively low proportion of manufactured goods. Fifty per cent of Japan's coal imports and 60 per cent of beef imports come from Australia.



Consul-General of Japan, Mr J. Kawashima

"For the most part, our two economies have become elaborately interwoven and our mutual dependence has taken deep root", Mr Kawashima said.

"Japan has consistently recorded trade deficits with Australia – totalling, for instance, \$US2.8 billion in 1987", he said. Future deficits will probably increase after the commencement of exports of liquefied natural gas from Australia's North-West Shelf Project.

Mr Kawashima sees the expansion of ties between our contries with the prospect of further Japanese investment in Australia. Although he admitted that some negative reaction has occured with real estate investments, particularly in Queensland and Sydney, Mr Kawashima said that a majority of this investment appears

in the productive areas of "big-ticket" tourism and resort development projects.

"In this regard, Prime Minister Takeshita, having visited Australia, made clear that he would fully expect that Japanese firms investing in Australia would prove to be good corporate citizens, fitting harmoniously into local communities and playing a positive role in the Australian economy."

Mr Kawashima said that direct investment in Australia's manufacturing sector is another challenge.

"In terms of industrial relations, it seems that management and labour in Australia suffer from a 'them and us' attitude which, unfortunately, has left potential Japanese investors with the idea that industrial relations can be rather difficult here", he said.

One area Mr Kawashima sees as promising is that of cultural exchange, with language and cultural skills being actively pursued. He singled out Victorian tertiary institutions as having a strong record in promoting the expanding interest in the teaching of the Japanese language.

"The introduction of the Business Japanese course within the Faculty of Business at both the Caulfield and Frankston campuses will ensure that upon graduation, students will possess multiple skills which are so sought after in the business world at the moment", Mr Kawashima said.

Conservation leader visits Chisholm

Chisholm staff and students recently attended an address by David Westlake, Antarctic Campaign Officer for the Australian Conservation Foundation, who presented a compelling case why Australia should not sign the Antarctic Minerals Convention.

The signing of the Convention for the Regulation of Antarctic Mineral Resource Activity (CRAMRA) was later refused by the Federal Government, confirming the Conservation Foundation's fears for the future of Antarctica.

In his address to Marketing students and other concerned people, Mr Westlake outlined the reasons why no mining should take place, and supported the call for a World Park to cover activities in Antarctica.

"With significant global warming now recognised, there is a need for a dramatic reduction in the use of fossil fuels", he said.

"It is ridiculous to sacrifice the last great continent for an estimated five year extension of global oil supplies." Mr Westlake said that with no immediate interest in mining coming from Antarctic Treaty nations, now is the time to stop the formalising of minerals activity and assess whether we need minerals from this region.

66 It is ridiculous to sacrifice the last great continent for an estimated five year extension of global oil supplies.

Mining would destroy Antarctica's role as a unique, near pristine, scientific laboratory, and would result in irreversible damage to the fragile Antarctic environment. It would also greatly increase the risk of international political confrontation in this region.

Ice covers 98 per cent of the continent, and is between 1200m and 1800m thick. The ice is constantly moving at speeds of one to two kilometres per hour, and the continent

grows and shrinks each year, increasing to double its smallest size. Temperatures of –89°C have been recorded, with winds reaching speeds of 120 kilometres per hour.

Wildlife is diverse, including blue whales, seals, penguins, birds and krill, whilst flora includes mosses, liverworts, lichens and algae. Unusual adaptations of life have been developed for surviving the rigours of a cold, low-humidity, icy and salty environment. The key to the delicate food chain is the shrimp-like krill, a type of plankton, which is the major food source of whales, seals, fishes and birds.

According to Mr Westlake, such a short and sensitive food chain would be easily unbalanced by the impact of environmental accidents such as oil spills. The moratorium in force at present prevents mining, but the signing of CRAMRA would allow such mining to go ahead.

Mr Westlake said that, under the current Antarctic Treaty which was signed in 1961, there is an option for making and controlling a World Park.

"Wilderness conservation would be the first priority of the World Park", he said.

"It would maintain the pattern of activity in respect of scientific cooperation, and extend this to conservation. Also, it would set an example of environmental restraint, and maintain Antarctica as a zone of peace and a global ecological buffer.

"Australia has the responsibility for ensuring the future protection of this magnificent continent", Mr Westlake said.

Mr Westlake also showed *Antarctica: To Mine or Not to Mine*, a fifteen-minute video produced by the Australian Conservation Foundation to lobby government.



Head of the School of Marketing, Peter Reed (left) talks to David Westlake from the Australian Conservation Foundation.

Virus? I didn't even know it was sick ...

- Computer viruses infect Chisholm

Computer viruses that infected over 100 personal computers at Chisholm for student use and an unknown number of private and staff computers caused the loss of hundreds of hours of staff and student time.

A computer virus is a program that hides itself on disks and which is activated in certain circumstances to do something that may or may not be destructive. The first virus, known as the Stoned virus, displays the message "Your PC is now STONED". It is thought to have originated in the United States, and been modified in New Zealand.

Technical officers responsible for maintaining Chisholm's laboratories of MS-DOS compatible computers first

noticed that some computers were running slower and using the disk drives more often, several weeks before the viruses were recognised. By this stage, the virus had spread to the hard disks of most computers, and was carried by the floppy disks on which students had stored their practical assignments in business, computing, applied science and engineering courses.

Another virus, the "Ping Pong" virus, had also appeared, which irregularly displays a moving character bouncing around the screen like a ping pong ball. Neither virus was originally designed to cause damage, but



Staff who worked at solving the virus problems included (from left) Pearl Levin, principal lecturer in computing, Roger Riordan, lecturer in Electrical Engineering, and Chris Freeman from Chisholm's Pearcey Centre for Computing.

did so by interfering with the correct working of programs, sometimes inadvertently erasing data or preventing work from being saved to disk.

The facilities coordinator of the School of Computing and Information System's PC laboratories, principal lecturer Pearl Levin, implemented emergency procedures, closing the laboratories and reformatting all the hard disks, thereby erasing the viruses. A high level format using DOS did not work, so a low level format was necessary, taking considerable effort and staff

time. Then a quarantine procedure was set up to check student disks. In order to do this, a tool was needed that checked for the virus and removed it if it was there. For this, expertise at the systems level was needed, and Chris Freeman from Chisholm's Pearcey Centre for Computing was called in. Chris ascertained that the virus was more benign than initially feared, and that it mainly slowed down machines, usually doubling the number of accesses to A: drive. There

were several versions of the Stoned virus, and others appeared during the course of the infection, leading staff to conjecture that it was being deliberately introduced along with the Ping Pong virus. They found no evidence that students were involved, and similar versions appeared at Victoria College and Swinburne Institute. The Victoria Police Fraud Squad are investigating the

In brief

Chisholm's first courses to undergo internal accreditation under the Institute's new Declared status were given the final go-ahead at the June meeting of Council.
The Bachelor of
Business (Manufacturing
Management) was
accredited until the end
of 1994, and first intake
will occur in 1990. The
Bachelor of Technology

(Design) is the first known course in Australia designed with a consecutive six semesters, to be completed in two years. It was accredited until the end of 1992, with

first intakes due in July 1989. The Graduate Diploma in Applied Science was reaccredited, and is now to be administered by the School of Computing and Information Systems. infection in a number of higher education institutions.

Chris found that most of the problems caused by the Stoned virus were due to differences in the way some PC clones accessed their disks.



Around two hundred staff, students and members of the public attended the "Lets all NOT get stoned" seminar, held to educate people on how to deal with the viruses.

True IBM PCs and close compatibles simply slowed down, but others had important operating systems data overwritten by the virus. He wrote a program to remove the virus, but attempts to defeat the virus-beating program were made with new versions of the virus.

The Institute probably now has viruses permanently. Students unknowingly reinfect clean computers with untreated disks, and many hun-

dreds of hours of staff and student time is lost in dealing with them. Other staff, such as Roger Riordan, lecturer in Electrical Engineering, are also spending time working on solutions, and the same is true at other

higher educational institutions.

The media picked up the story from a press conference held at a computer abuse conference some weeks later, and many inaccurate details were reported, such as the virus being a deliberate attempt to destroy information. The Pearcey Centre held a public meeting to give the correct information and offer solutions. It has made a disk of information and vi-

rus-beating programs available to the public for \$20 (to cover costs). For details, contact the Pearcey Centre for Computing on (03) 573 2489.

Many new viruses are expected to arise in the future, and the best solution is to avoid copying software from suspect computers or unchecked sources. In other words, practise "safe software"!

How to spot the "Stoned" virus

The Stoned virus occasionally displays one of two messages: "Your PC is now Stoned", later versions added "Legalize Marijuana".

It uses 2kb of RAM when active, and can be checked if you know how much RAM you should have. If your PC has 640kb of RAM, under CHKDSK it will show 638kb. NOTE: using CHKDSK on A: will activate the virus; if present, to copy itself to any disk in A: drive!

If you can examine your hard disk boot sector with a program like Norton's Utilities, you may find the message rather than the DOS version number. Again, using Norton's on A: will activate the virus.

Computer crime and the law

Victoria has spearheaded the drive to outlaw forms of computer abuse which have not been dealt with under specific legislation before. These include data trespass ("hacking"), for which substantial penalties have been provided. In addition to this, federal Parliament is poised to enact laws dealing with the misuse of Commonwealth computers and their contents. Moreover, an offence will be created for carrying out a misuse using any Telecom lines.

These initiatives, together with the active role of enforcement authorities in this area, have provided would-be computer offenders with notice that they do so at their own risk.

 Greg Tucker, Senior Lecturer in Law, School of Banking and Finance.

Research grants

Chisholm has approved grants to support twenty research programs in 1989.

Grants from the Central Research Fund have been provided for the following:

Dr Paul Bailey \$1,000 Mechanisms of colonisation on leaf packs by stream invertebrates: a field study.

Dr Joy Birjak \$600 Choice of secondary school project

Dr Ian Campbell \$1,000 Life histories of tropical mayflies

Dr Brian Costar \$600 Premiership of V.C. Gair 1952–1957

Dr Ross Edwards \$2,710 Development of a field flow fractionation technique for the separation end enumeration of naturally occuring bacteria from aquatic systems.

Mr Barry Evans \$1,000 Effects of stress on police officers' cognitive functioning.

Mr Barry Evans \$500

Evaluating the attitudinal effects of communication skills training.

Dr Simon Hill \$1,000 Estimating higher-order derivatives

Dr J. Jakovidis \$2,100 Electronic properties of a high-temperature superconductor,

funded jointly with

Dr Barry Hart

Characteristics of particulate matter
in fluvial systems.

Dr Kim James \$1,000 An investigation of the pattern of consumption of terrestial leaves by stream invertebrates.

Dr Willem Lindemans \$1,255 Static and dynamic characterisation of free particles and micro-organisms using digital signal processing.

Dr Brian McFarlane \$1,700 Two attemps at a national cinema – Australia and Britain.

Dr Charles Osborne \$2,000 The effect of colour in objective measures of texture.

Dr Graeme Ross \$1,000 Diagnostic wind field modelling incorporating atmosphere stability effects.



Research forms a major part of the overall approach to education taken by Chisholm.

Dr James Sarros \$1,500 Changes and challenges in Australian management.

Ms Mim Tisher \$1,500 Children's depression scale.

Mr Tony Townsend \$1,100 School effectiveness in Australia.

Mr Paul Wellington \$1,000 Evaluation of the educational outcomes of Chisholm vehicle projects.

Dr Jagoda Williams \$1,700 Computerised speech therapy.

In brief

The Chisholm Centre for International Business recently secured a contract to assist companies in Australia's fisheries industry, as part of an export development scheme. Caroline Fitzwarryne and lan Coombes from the Department of Primary

Industries and Energy visited the Faculty of Business in May, evaluating its capacity to assist them in the scheme which has strong funding from the Federal Government.

Frankston Council last year had plans to build a new performing arts centre, but these may be dropped in favour of revamping and expanding the George Jenkins Theatre at Chisholm's Frankston campus, with a larger foyer area and stage, and seating increased from 350 to 500.

The multipurpose hall in Chisholm's Technology Tower is to be renamed Chisholm Hall, to ensure the name is perpetuated after the Monash merger. The naming ceremony will take place in July.

New approach to inservice education

A new method of providing inservice training for primary school teachers was recently introduced by Chisholm's School of Education and the Victorian Ministry of Education.

Previously, schools have arranged their own inservice activities with Frankston campus for teachers in the Southern Metropolitan Region.

Altogether, Chisholm offered inservice programs to about 400 teachers, at 22 one-and-a-half-hour sessions under the four headings of social issues, assessment and evaluation, technology and its role in

teachers were appreciative of the range of options they could attend.

"They really liked the idea of being able to select topics which suited their individual needs and interests. The only drawback was that each option lasted and hour and a half, which did not allow for us as much in-depth discussion as some teachers would have liked", he said.

Mr Hill explained that teachers now know the range of options available, and Chisholm staff would be willing to conduct follow-up sessions for schools requesting them.

A further advantage of the scheme was that it enabled teachers and Chisholm staff to establish a closer relationship and understanding in a shared-work environment.

"Any scheme which encourages teachers and teacher-trainers to get together must have a lot going for it", Mr Hill said.

Dr Ray Anderson, School of Education Dean, received many letters of appreciation resulting from the program.

"We enjoyed the manner in which these sessions were presented, and the philosophy behind the activities had much appeal for the primary school", wrote one principal.

However, the prevailing feeling about this initial inservice was perhaps best summarised by a teacher who wrote, "the many spontaneous expressions of delight and enthusiasm by staff members at our school about the sessions attended was very gratifying. I am hopeful that these sessions may generate some new directions at the school."



From left, Dr Cliff Malcolm from the Ministry of Education, Ms Dianne Feldtmann who teaches at Mt Eliza North Primary School, Dr Ray Anderson, Dean of the School of Education, Mr Bob Greaves, senior lecturer in art/technology with Chisholm's School of Education and Mr Tom Hill, the School's In-Service Coordinator. The model on the table, made by Dianne, is designed to shake leaves from the trees.

guest presenters and facilitators invited to run courses in individual schools throughout the year.

This year the Ministry set aside two consecutive days in April for inservice activities for all state school teachers. Chisholm's School of Education staff were requested to run a two-day inservice program at the

the primary school, and curriculum issues.

Teachers were expected to attend three sessions per day, and although some of the courses had numbers restricted, most teachers' first choices were accommodated.

Tom Hill, the Chisholm lecturer who organised the program, said that

Interested in finding out more about Chisholm Institute of Technology? Chisholm Prospectus, recently updated, gives information on all facets of studying at Chisholm. To obtain a copy, contact the Public Relations Office on (03) 573 2099.

Treasury dealing room at Chisholm

The School of Banking and Finance at Chisholm is installing a Simulated Treasury Dealing Laboratory, at a cost of over \$870,000.

The School, Victoria's largest provider of tertiary banking and finance education, pioneered such education in Australia in the early 1970s, and its courses are recognised by the Australian Institute of Bankers.

The Laboratory's "front office" will contain a computer system to bring together all necessary real-time financial data to allow dealers access to the market for the development of trading strategies.

The effect of the front office trading on the management of financial risk will be developed using appropriate global risk management, portfolio management and analytic software.

A telephone system will be installed which will complete transactions between financial market participants.

The Laboratory's design includes teams of dealer's desks with portable partitions to simulate the competitive real-world environment. Security aspects have been incorporated in

the design as well as the ability to convert the facility into a personal computer laboratory.

Use of the Laboratory will be incorporated into four of the School's award programs: the Bachelor of Business (Banking and Finance),

Businesses with bead offices in Melbourne will be offered the chance to use the Laboratory as a commercial backup facility, and software houses will be able to use it on a commercial basis as a "shakedown" site.

Graduate Diploma in Banking and Finance, Graduate Diploma in International Business and the proposed Bachelor of Business (International Trade). Specialised training courses will be offered to the banking and finance industry.

In addition, businesses with head offices in Melbourne will be offered

the chance to use the Laboratory as a commercial backup facility, and software houses will be able to use it on a commercial basis as a "shakedown" site.

Funding for the project consists of \$309,445 from the Victorian Education Foundation (VEF), \$343,000 from industry discounts, \$125,000 from Chisholm Institute and \$95,000 from industry sponsorships of desks and software. Sponsorships have been received from the State Bank Victoria, National Australia Bank, the ANZ Group and the Commonwealth Bank, as well as the Bank of America.

VEF staff complimented the School of Banking and Finance on the quality of the submission which was prepared by the Head, Denise Wheller.

Denise has appointed Kevin Tant, the National Australia Bank Fellow in Treasury Operations, to manage the installation of the project.

It is anticipated that the facility, to be located on level two of building C at the Caulfield campus, will be operational by the first semester of 1990.

In brief

Euroa restaurateur Bernard Hayes spent six months searching for rubber rings, paid a patent attorney around \$5,000 and even had to take out a \$20,000 overdraft. But he still found the \$475 needed for the privilege of travelling 300km to Chisholm every Wednesday for fourteen weeks! Why? To attend Chisholm's Entrepreneurship and New Venture Initiation Workshop, because Bernard reckons he's developed the perfect wine rack, and doesn't

mind getting a little help in learning how to sell it.

The School of Education at the Frankston campus offered a course in May designed to help parents gain an understanding of the latest developments in primary education. The ten-hour course (over

five weeks) focused on encouraging children to use effective literacy skills, the use of maths in real life situations, and the development of decision-making, problem-solving and organisational skills.

Parking breakthrough at Caulfield

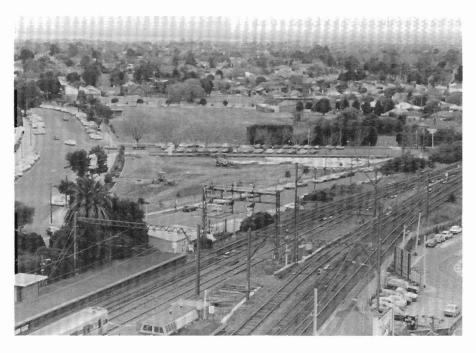
The perennial parking problem of the Caulfield campus of Chisholm Institute of Technology is to be significantly relieved through a cooperative agreement between the Victoria Amateur Turf Club (VATC), Caulfield Council, and Chisholm Institute of Technology.

The President of the Council of Chisholm, Mr Paul Ramler, the Chairman of the VATC, Mr Peter Lawrence, and the Mayor of Caulfield, Cr Emil Braun, jointly announced in principal agreement on 20 April. VATC Trustees have sought the approval of the Minister for Conservation Forests and Lands.

Under this proposal a total of 260 places are to be made available for Chisholm community use on VATC land at Caulfield Racecourse during the week. This will alleviate the competition between commuters who park outside the campus early in the morning, and students who seek parking later in the morning and throughout the day, often causing local traffic problems.

According to Mr Paul Ramler, the problem has been acute for many years, going back to the days of Caulfield Technical College in the sixties, and has recently been made worse by the Malvern council further restricting the availability of street parking north of Dandenong Road. "In addition", said Mr Ramler, "railway commuters take parking places in the areas next to Chisholm, despite the addition in recent years of some parking space at the station."

The agreement between the VATC and Chisholm is for the triangle of land adjacent to the racecourse, bounded by Normanby Road, Smith Street and Station Street to be sealed for the use of Chisholm staff and



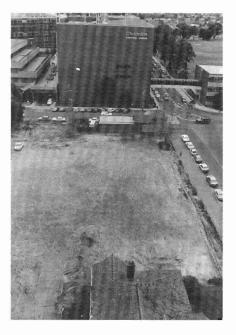
Above, work underway preparing the "triangle" to accommodate 260 additional parking spaces. Below, work continues on the new parking space for Tower tenants.

students during non-race days. Caulfield City Council will assist with the day to day operation and management of the car park.

The area will make 260 parking places available, in addition to the 120 places to be made available with the construction of the new carpark for tenants of the Technology Tower building on the north side of the Caulfield railway station. When the latter project is completed, Chisholm parking will be made available in the present Tower carpark in Princes Avenue.

The Council and Chisholm have also agreed to changes in street carparking. Queens Avenue adjacent to the campus, previously unrestricted, will now have a four-hour limit. Parking areas in Princes Street will have limits raised from two to four hours.

Mr Ramler said that the parking problem at Caulfield may never be



totally solved due to the centrality of the area for commuters, shoppers and students, but that these measures would go a long way to easing the problems for the community.

Alumni news

In May the Alumni Association's draft constitution was approved by Council, and we were the very grateful recipients of a \$25,000 donation from the State Bank of Victoria. With these developments, we are better able to provide benefits for members and introduce further Alumni chapters to cater for specialised fields of interest.

One of the most important tasks for the Association is to establish contact with the more than 15,000 students who have graduated over the past 30 years. We are keen to hear what graduates have been doing and keep them informed about developments at the Institute. An advertisement in The Age resulted in a most encouraging response, and we anticipate being inundated with replies from a mail-out in coming months. However, in many cases our records are old, and the best way to contact these people is by word of mouth. If you know of any graduates who would be interested in joining, please encourage them to contact the Association. Your assistance will be greatly appreciated, and their membership will help maintain the standards of excellence at Chisholm.



Director Dr Geoff Vaughan with Bill Moyle (left), Chief Executive of the State Bank which provided \$25,000 sponsorship for the Alumni Association.

Joining the Association involves an annual donation of only \$25, \$20 of which is tax deductible, and membership is not restricted to graduates. With Associate Membership available to non-graduates who wish to support Chisholm, all staff and members of the Chisholm community are invited to join. Funds raised through donation or bequest will be used to promote and support the library, as well as the educational and research functions of the Institute.

The Association has made available, until 31 December, a unique oppor-

tunity to elect for Foundation Membership. In addition to the benefits of normal membership, Foundation Members will receive a special membership card and have their names placed on a commemorative plaque.

Negotiations with the Chisholm library have resulted in the availability of borrowing rights to members, for the modest annual donation of \$20. We are also negotiating with the Chisholm Student Union to explore what Union facilities may be made available to members, including discount travel, and conference and catering facilities.

There will be an Alumni Association stand at both Frankston and Caulfield on Open Day – 13 August between 10am and 4pm – offering tea and coffee, and everyone is most welcome.

Further information may be obtained by contacting the Alumni secretary on (03) 573 2367 or (03) 573 2115, or by writing to the Chisholm Alumni Association, PO Box 197, Caulfield East, Victoria 3145.

Computer Power lecturer appointed

Computing Lecturer Gerry
Middleton has recently been
appointed as the Computer
Power Senior Lecturer in
Software Development within
the School of Computing and
Information Systems.

The position has been created with sponsorship from the Computer Power Training Institute and will concentrate on specific research and development tasks of interest to the Software Development Department and the Computer Power Training Institute.

These tasks will include the review and enhancement of existing Computer Power courses on programming and program development using the COBOL language. It is also expected that enhancement and development of new course materials for both Chisholm and Computer Power will result from research conducted by the Senior Lecturer.

The Computer Power Training Institute uses computer assisted learning and self study techniques extensively in their education programs,

and some use of these techniques may well prove to be advantageous to Chisholm.

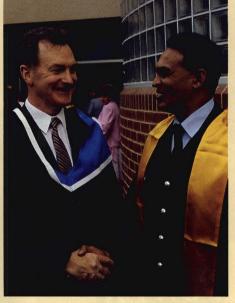
Since joining Chisholm in 1979, Gerry Middleton has been heavily involved in the teaching of computer programming and COBOL, and part of his professional experience program has taken him to Teaside Polytechnic in England to investigate the use of COBOL 85.

"The lectureship scheme is a key element in Computer Power's commitment to provide students with the most up-to-date and relevant

May graduations

Federal police Sergeant Lawrence D'Ekenaike graduated from a three-and-a-balf year, part-time Associate Diploma in Police Studies. Sergeant D'Enenaike said that the practical application of his increased knowledge from the course would be through Investigator Trainees where he will be able to heighten their cognitive skills. He is shown here (right) being congratulated by the Assistant Commissioner for the Southern Region, Walter Williams.





Students proudly display their testamurs for the cameras after their graduation ceremony.

course. Access to a leading expert in the software development field will assist Computer Power to remain the forerunner of providing leadingedge computer education", said Mike Clugston, General Manager of the Training Institute.

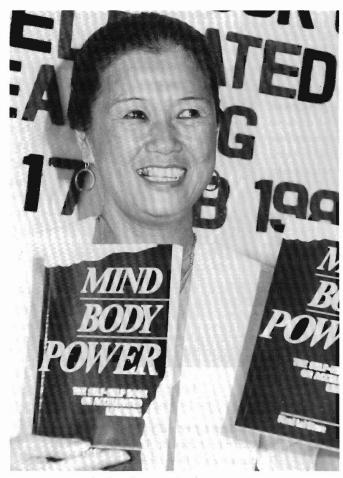
Phillip Steele, head of the Software Development Department at Chisholm, believes that the sponsorship will help maintain the high reputation of the School of Computing and Information Systems as one of Australia's top providers of commercially relevant computing education.

From left: Mike
Clugston, General
Manager of the
Computer Power
Training
Institute, new
senior lecturer
Gerry Middleton
and Head of the
Software
Development
Department,
Phillip Steele.



Unleashing your brain

-Moni Storz' new book



Dr Moni Storz displays her new book.

Dr Moni Storz, senior lecturer in the School of Social and Behavioural Studies, has recently released her first book entitled *Mind Body Power: The Self-Help Book on Accelerated Learning*.

Known originally as "Suggestopedia", accelerated learning was founded by Dr Georgie Lozanov, a Bulgarian psychotherapist. Moni's philosophy of learning springs from the unity of a person's conscious and unconscious minds. The conscious, however, only represents one per cent of the total, and the remaining uncon-

scious 99 per cent must be tapped to realise one's full potential.

"The process of learning must firstly be fun", Moni says.

"There should be joy and relaxation, which comes from being able to know how to relax too.

"A teacher must impart knowledge with authority

and love, for ideal teaching to take place", she says.

"You can fake interest, you can fake sexual satisfaction, but of all the emotions in the world, love is the only one you can't fake."

Moni maintains that children are the best gauges of love. "They know by instinct if you really love them or not; it's more like they sense it. You can pick up a child and pat it all you want, but if you don't really love it, there's no fooling the child."

The techniques a teacher uses are also important contributors to the process of learning. Ideally, the teacher uses three disciplines: physical exercise, mental exercise and positive suggestion, both directly and indirectly.

For physical exercise, Moni prescribes any aerobic exercise which will increase the heart rate – even sex, provided it's not traumatic.

"Physical exercise also works to dissipate hostility in a crowd environment. We could use games as exercise when wanting to loosen people up."

Next comes mental exercises – "mind-calming exercises", as Moni calls them. This is the first step in stress management and involves creative visualisation, but Moni cautions that someone needs to

start you off if you don't know anything about it.
Self-suggestion exercises attempt to meet problems, issues and goals at two levels, conditioning both the body and the subconscious. Moni uses as an example her attempt to quit a twenty-year smoking habit.

"The first time I gave up, I decided to go cold turkey. That didn't work, so I knew I had to try harder and use techniques to work on my subconscious.

"It worked – I just gave up smoking altogether. And it's so powerful now, I can hold workshops for people who want to kick the habit."

Moni advocates the use of music as an aid to learning, not just as a background, but as a stimulus. Seventeenth-century Baroque music, says Moni, is good because it soothes the listener, and it has the effect of slowing certain brain waves.

"A relaxed brain absorbs knowledge better", she says.

"The brain makes the body release chemicals like endorphins, which is healthy", Moni explains.

Mind Body Power is aimed at both the learner and the teacher interested in improving their learning capacity.

The book is dedicated to Moni's parents.

Chisholm supports enterprise scheme

The New Enterprise Incentive Scheme (NEIS) is a government program designed to encourage selected people in receipt of unemployment or other benefits to start their own business.

In Victoria, NEIS is jointly undertaken by the Federal Department of Employment, Education and Training and the Victorian Department of Labour.



Chisholm's Centre for the Development of Entrepreneurs provides three services for this program.

Firstly, the Centre carries out the selection procedure for the whole of Victoria, providing initial assessment of written proposals, then selecting participants through a process of assessment centres.

Next, the Centre provides intensive six-week training programs for some intake groups, preparing participants for the final selection process.



The 1989 New Enterprise Incentive Scheme group at their graduation celebration.

The third service is the undertaking of evaluative studies of the success of the new business two years after the launch.

This is the fourth year the Centre has been commissioned to service the

Scheme, with a graduation celebration on 7 April for the 1989 group. Businesses as diverse as an Indian take-away food service and a used British motorcyle parts business were launched this year.

In brief

A busy time for building works at Chisholm!
A disabled-access lift is now operational in building A at Frankston, and fencing has been completed on the railway line boundary. This has allowed a gate in Bloom Street, closed for six months due to security problems, to be reopened. On the Caulfield campus, a

footbridge across
Railway Avenue has
been completed and
renovations are being
made to the ground and
first floors of the
Technical School
building. Work continues
on new parking and open
spaces.

Chisholm's School of Nursing has implemented an "Adopta-Mother" program whereby final-year nursing students are assigned to expectant mothers to help bridge the gap between practical and theoretical aspects of birthing. The program has been beneficial for both students and mothers. and the School is seeking further volunteers who are expecting their babies between July and October. Interested people should contact

Ann Bates at the Frankston campus, (03) 784 4355.

As part of the Federal Government's "Links with Disadvantaged Schools" initiative, Chisholm has been allocated a \$27,000 grant, to be used to promote higher education at nearby schools.

Wouldn't you like to have one of Victoria's biggest businesses behind yours?

No matter what size company you have, there comes a time when you want to get bigger.

But sometimes it's not so easy to find the money you need to grow. It's times like these that you should talk to State Bank Victoria.

Over the past three years we have become very competitive in the business finance market.

We can provide you with overdraft facilities, leasing and general finance, both short and long term. In fact, we'll consider just about any sound business proposition you have to offer.



We never forget it's your money.