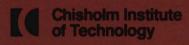
Chisholm

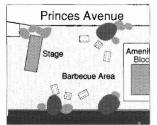
March 1989
Volume 6 Number 1

Chisholm's Solar Vehicle attracts US attention



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Chisholm Gazette Volume 6, Number 1 March 1989

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Chisholm Institute of Technology

Chisholm Institute of Technology is a multi-disciplinary 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 7,750 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.

EDITORIAL

Government pressure forces change on Chisholm

The funding formula introduced by the Department of Education, Employment and Training (DEET) has put Chisholm under enormous pressure. Chisholm joined the Unified National System (UNS) established by the Ainister for Education, the Hon. John Dawkins, as part of reforms to tertiary education which would bring an end to the binary system, as detailed in the White Paper "Higher Education – a Policy Statement".

The Institute will, however, increase its total student load, which reflects the increased retention rates in higher education and some funded growth has been given by DEET. This growth is restricted to the technologies and

Although the Victorian Post-Secondary Education Commission's educational profile assessed Chisholm as underfunded over the last few years, the DEET formula requires Chisholm to absorb the costs of about 300 students in order to reach the above position.

Chisholm could also be faced with a reduction in

the number of higher degree students, since under the UNS the existing universities will be given preference for higher degree quota places, with Institutes of Technology only maintaining quota in a limited range of circumstances.

Although Chisholm has had a good record in research and coursework higher degrees in the past, the DEET rules mean that there could be fewer Masters and PhD students at Chisholm in the future. Everything hinges on the future of higher education in Victoria.

Given the Government's overt commitment to an overall growth in tertiary education places, and the great need Australia has for strategic research to become more competitive at the international level, I believe more consideration could be given to student numbers at Chisholm, an institution that has shown it can react to government initiatives.

The great danger is that the binary system, although dead in name, will be reintroduced through Catch 22 rules that say unless one is big enough one cannot get more undergraduate and higher degree places funded. Naturally, this means one can never get big enough.

In joining the UNS, Chisholm is seeking to benefit from more effective resourcing arrangements and to share in the growth of the education system. Had it remained outside this system, Chisholm would be funded only on specific teaching activities and would have no guaranteed Commonwealth funding base. This would have made it impossible to plan ahead and to share in what should be an exciting future for higher education in Australia.

ASSOCIATION WITH MONASH

Chisholm is moving towards a formal association, and the sharing of resources, with Monash University through an agreement being developed by the Councils of each institution. Mr Evan Walker, the Minister with Responsibilities for Higher Education, has announced the Victorian response to the White Paper and has set out a master plan for

Victorian institutions. Under this plan, Chisholm will merge with Monash University. This had already been recognised by the Institute Council as the preferred position for Chisholm at the time of the earlier Green Paper and in response to the White Paper.

Considerable discussion has already taken place with Monash over the last twelve months. Both institutions are well placed to move quickly from this point to meet the challenges which now face higher education in Victoria and Australia.

Dr Geoff Vaughan Director



New open space and parking facilities at Caulfield

Chisholm is to make the area around its Caulfield Campus more pleasant with the construction of an open space for students with an auditorium and barbecue facilities on the grounds of the property at 10 Princes Avenue.

The project is being jointly funded by the Student Union and the Institute. All care is being taken to maintain the flora of the grounds, including all the substantial trees, in the landscaping. The space will be open to Princes and Queens Avenues. The space will also be available for public use. Bookings should be made through the Student Union on 573 2003.

An amenities block, with a small serving area, will be built, along with a small stage, eight gas-fired barbecues and six bench tables. The house on the property now contains Chisholm's Premises Branch and the Equal Opportunity Office.

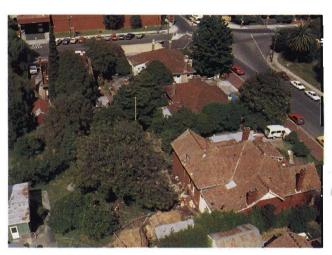
An adjoining building, 2 Queens Avenue, has been demolished along with three buildings on Railway Avenue, to create parking facilities for tenants of the "Technology Tower", the building which Chisholm owns opposite the Caulfield Railway Station. This will make over 100 parking places available

for Institute use next to the Caulfield Plaza Shopping Centre, where the tenants now park, lessening the pressure on parking availability in the

The Institute is presently pursuing discussions with the appropriate authorities in an effort to arrange more student carparking around the campus, especially after hours to serve the Institute's several thousand part-time evening students.

WALKWAY OVER RAILWAY AVENUE

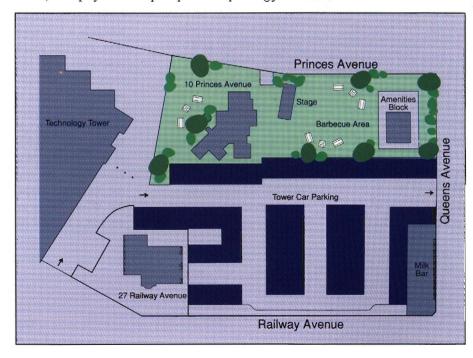
In other works, Chisholm commenced the year with the use of the third floor of the Caulfield Technical School building in Railway Avenue. The Institute is acquiring the



Above, a view of the area to be landscaped.

property and will gradually refurbish it for teaching space, including a second-level walkway over busy Railway Avenue for students and staff. The Caulfield Secondary College is still using the building until a new building is completed at their Neerim Road campus.

Below, a map of the new open space and parking facilities.



US students study Chisholm's solar project

Three American engineering students visited Chisholm to learn more of the "Desert Cat", the Institute's high-placing solar vehicle entrant in the 1987 Pentax World Solar Challenge.

The Cat finished second in its class and was designed and raced largely by third and fourth year Chisholm engineering students.

Chris Coumou, Kristin Baierlein and Maureen Kelly are third year Bachelor of Science students at Worcester Polytechnic Institute (WPI), 48 km west of Boston, Massachusetts. Chris's major is in management with computer science, Kristin's is mechanical engineering and Maureen's is industrial engineering. Their visit to Chisholm was organised by their supervisor, Dean Ed Clarke of the Centre for Solar Electrification. Dean Clarke was a member of the General Motors "Sunraycer" team, which won the Solar Challenge.

Worcester is the third oldest engineering college in the US, and one of the most prestigious. Its courses include a major project work component and a strong emphasis on technology and society. The three were able to use their humanities as well as technological studies in their project. By interviewing most team



From left, Christine, Kristen and Maureen, with a wind-tunnel model of a design for Chisbolm's next Solar Vehicle.

members and sponsors they gained a broad understanding of the organisational and interpersonal aspects of the Desert Cat's development, as well as its technical design.

The three women then travelled along the Stuart Highway in the Northern Territory and South Australia, which was the route of the race.

Worcester is considering building its own entrant for the GM-sponsored "Tortoise Sol" event, the top three winners of which will be brought to Australia at GM's expense to compete in the next Solar Challenge, due for 1990. Chisholm's next challenger is also at the design and testing stage.

Asian languages offered to Business students

Chinese and Japanese are being offered as business languages to Bachelor of Business students from the beginning of first semester.

The languages are taught in conjunction with Monash University and Victoria College, and are available at both the Caulfield and Frankston campuses of the institute. The Victorian Education Foundation contributed \$1.2 million for the introduction of the languages into the curriculum.

All four David Syme
Business Schools of
Accounting, Banking &
Finance, Management,
and Marketing will offer
Mandarin and Japanese,
along with their business
and social cultures, for
study by students whose
courses will bring them
into likely contact with
the Pacific Rim.

Two new language laboratories are to be built at a cost of around \$100,000 each, one at Chisholm's Caulfield campus and one at its Frankston campus. Japanese will be taught by staff from Monash's Department of Japanese and Chinese will be taught by staff from the Faculty of Arts at Victoria College. Both institutions have appointed new staff for this purpose.

Acting Head of the School of Banking and Finance, Ms Denise Wheller, said that introducing the new business languages mirrored the thrust of the federal government's White Paper on Education.

"This is the first instance of three tertiary institutions working together to provide language education to business students in a way which makes efficient use of higher education resources and extends the range of studies available to students from the southeastern suburbs of Melbourne and the Mornington Peninsula", she said.

"Comprehension of other business languages and cultures is essential in the competitive international business environment. This initiative will supply high calibre business students with the necessary skills to deal with Australia's current economic problems."

The new languages complement the international flavour of Chisholm's business education: the banking and finance degrees already have subjects covering international trade law, banking practices, and economics, and treasury management. The marketing degree also has a strong international strand. Enquiries concerning the business courses should be directed to the Admissions Office on 573 2000, or to the Assistant Registrar, Business on 573 2497.

Full degree in Police Studies starts

A full bachelor degree designed specifically for professional police is being offered by Chisholm from first semester this year.

The Bachelor of Arts (Police Studies) is a logical extension of the successful Associate Diploma in Police Studies that Chisholm has offered since 1977, the first tertiary course for police in Australia. Both courses are unique in Australia in that they are designed specifically as police studies courses rather than being adaptations for police use of existing courses.

The Associate Diploma course has students from both the Victoria Police force and the Federal Police, and is open only to serving members of a police force. The course accreditation committee included senior personnel from the Federal Police, Victoria Police, and the

Police Association of Victoria.

For further information regarding either course, contact Mr Robert Smith, Senior Lecturer, Police Studies, on 573 2367.

Eight new Schools established

Chisholm Institute of Technology has created eight new Schools in two Faculties in response to the rapid growth of student numbers in existing departments and divisions.

The two faculties are the Faculty of Business (3,500 students), and the Faculty of Technology (2,200 students).

FACULTY OF BUSINESS (COMPRISING THE DAVID SYME **BUSINESS SCHOOLS**)

The Faculty has been formed out of the David Syme Business School, established in 1978, which in 1989 bas approximately 2,000 equivalent full-time student enrolments (EFTSU's). This is approximately 32 per cent of Chisholm's total enrolment. The Faculty of Business bas an annual budget in excess of \$6.5 million.

The new Schools in the Faculty have been formed from the previous departments:

- The School of Accounting offers courses accredited by the Society of Accountants.
- · The School of Banking and Finance conducts courses directed to the banking industry.
- The School of Management offers courses in the areas of management and business planning, and office administration.
- The School of Marketing offers marketing, logistics management and agribusiness courses.

THE FACULTY OF TECHNOLOGY

Although the Faculty of Technology has

existed for several years following the convergence of technology education at Chisholm, its four previous divisions have now become fully fledged Schools:

- The School of Applied Science teaches biology, chemistry, and mathematics.
- The School of Computing and Information Systems teaches computer technology, information systems and software development.
- · The School of Digital Technology teaches applied physics, robotics and microchip design and manufacture.
- The School of Engineering teaches civil, electrical and electronic, industrial and mechanical engineering, all with a computing stream.

In addition, the Faculty offers a Bachelor of Technology degree that commences at several TAFE Colleges and which incorporates various streams from the Schools. The Faculty of Technology accounts for approximately 2,200 EFTSU's in 1989, over 35 per cent of the Institute, and has an annual budget in excess of \$10 million.

PHENOMENAL GROWTH

The changes follow a consultant's report in 1987 and extensive consultation with staff and students. The move will allow greater representation of staff and students in these Schools within the Institute, and recognises the phenomenal

growth at Chisholm in businessrelated and technological education. In addition, the restructuring allows more autonomy to the Faculties and Schools in their administration.

"The establishment of the Faculties and Schools has the support of the Schools' Boards and staff within the affected areas", said the Director, Dr G.N. Vaughan. "It recognises the functions carried out by the earlier departments and divisions, and allows for future growth and adapation to changing circumstances. For instance, the new Schools within the Faculty of Business already have high reputations throughout industry, and there is fierce competition for places in their courses."

"Our new Computing School, which celebrates its 25th year of computer education in 1989, is Australia's largest educator of computing, and our Engineering School was praised for its work despite difficult funding circumstances by the recent Review of Engineering", he said. "All of these newly established Schools are contributing heavily to the goals of the current education reforms by the Commonwealth Government."

The seven years since Chisholm was created from amalgamation between the then Caulfield Institute of Technology and the State College of Victoria at Frankston has seen an increase in business and technology of almost 50 per cent. Much of this growth has occurred at the Frankston campus, which is the only higher education institution

Chisholm serving the Mornington Peninsula and Westernport School of Art & Design The David Syme Business Schools School of Nursing Faculty of Technology School of School of Social & areas. School of Banking & Finance School of Digital Technology School of Computing & Information Systems School of Accounting School of Management School of Marketing School of Applied School of

Indian village potter visits Chisholm

Ceramic Design students recently participated in a lecture weekend at Chisholm's Frankston campus given by Master Craftsman from India, Mohan Lal Kumhar.

Mr Mohan Lal is from the small village of Molela, in Southern Rajasthan. He comes from a family of traditional potters and began learning the craft of terracotta at the early age of seven, from his father.

The village is famous for its potters, who excel at making terracotta icons, primarily related to the religious beliefs of Hindu society.

The people of this region still retain age-old beliefs in supernatural powers and snakes. Gods and goddesses made of clay play a vital role in their life.

Mr Mohan Lal demonstrated the techniques of making icons, and at the same time his interpreter Dr Pramod Kumar explained the rituals which accompany the purchasing, installation and worship of the icons.

Delegates and students at the weekend lecture were also shown how the indigenous potters of northwest India build their kilns. The kiln built was then loaded with work and fired using straw and manure. When the pieces had cooled, delegates were able to take away with them a token from a fascinating and informative weekend on an age-old folk culture.

Mr Mohan Lal also exhibited his work at the Meat Market complex in Blackwood Street, North Melbourne while in Australia.

Visiting UK author and potter

Peter Lane, well-known UK expert potter and author of several highly acclaimed texts on ceramics and pottery, visited Australia under the auspices of Chisholm's School of Art & Design. Peter conducted a two-day seminar and workshop for potters at the Frankston campus of Chisholm on 11–12 March.

Peter Lane is well-known for his books *Studio Porcelain* (Pitman, London 1980 and Chilton, USA 1980), *Studio Ceramics* (Collins, London 1983 and Chilton 1983), and *Ceramic Form* (Pitman 1988 and Chilton 1988). In addition, he is known for his own creative work in porcelain, which is represented in many public and private collections around the world. His ceramics have been widely exhibited in

Australia, Europe, and North America, and he has lectured and given workshop demonstrations in Australia, Canada and America as well as the UK. He is a full member of the Craftsmen Potters' Association of Britain, a Fellow of the Society of Designer Craftsmen and he is also included on the UK Craft Council's selective Index of "Craftsmen of Quality".

In 1987, after thirty years of teaching ceramics as a Senior Lecturer of the University of East Anglia in Norwich, Peter retired to pot full-time near Hawkshead in the English Lake District, among the mountains which have inspired much of his work.

Major software donation to accounting students

Accounting undergraduates at the Institute will learn how to check company accounts for compliance with legislative and other requirements using software donated by Coopers & Lybrand.

One of Australia's largest professional firms of accountants and advisers, Coopers & Lybrand has donated its Australian designed "Koala Software" to Chisholm Institute and over 40 other Australian universities and colleges.

The software will help prepare students for the business world and give them practical experience in learning the new financial reporting disclosure requirements of the Companies Code, Stock Exchange and the Accounting Professional Bodies said Managing Partner of Coopers & Lybrand, Melbourne, Mr Ross Herron.

"It is necessary that students are trained on technology being used by the business community if they are to contribute to their future employer from day one," Mr Herron said.

Koala software is a step-by-step "intelligent" questionnaire on a microcomputer that only asks

questions relevant to the specific company accounts being reviewed. The user answers some preliminary questions and the system automatically selects the relevant detailed questions that the student has to answer to confirm that accounts comply with all applicable legislative and other regulatory requirements.

"It's ideal for training purposes because it includes comprehensive 'help' facilities which avoids the need for time-consuming searches through manuals." Koala Software was first launched on the market in February 1988 after 12 months of national use within Coopers & Lybrand. It is used by other large and small public accounting firms and by public and private companies in industries as diverse as real estate, financial and investment services, food processing, publishing and mining.

The software runs on most IBM personal computers and compatibles.



Graphics student wins national award



First year Chisholm graphic design student, Stephanie Canon, recently won a nation-wide prize for the design of a 1989 calendar for the retail group Artistcare.

Stephanie is studying for the Diploma of Art and Design (Graphic Design) and faced strong competition from other colleges around Australia. The design brief called for students to design either one or both parts of a six month calendar for 1989. Stephanie designed a six month calendar and received a prize to the total of \$750 worth of art supplies from Artistcare for herself and the Graphics Department at Chisholm.

Her design, which is bold and simple, features pencils which Stephanie regards as basic to the graphics area. "It was the first thing I thought of", she said.

Stephanie is interested in typography and would like to illustrate children's books when she finishes her course.

The company printed 10,000 copies of the calendar and distributed it to creative people in the advertising industry in Australia.

Foreign exchange simulations help future bankers

Chisholm's Department of Banking and Finance, in the David Syme Business School, recently purchased a Foreign Exchange – known in the trade as "forex" – simulation program for personal computers.

The program, called Intrade, is one of two educational products from Telerate Australia Pty Ltd. It is used by the major Australian banks to train their forex dealers and

brokers in trading in spot foreign exchange.

Users trade on the latest spot price, quote prices to a "shadow" dealer, and monitor positions, giving them dealing practice without exposing cash. In this way, they develop the understanding and expertise they need, reducing both training time and trading risk.

Chisholm is the first and

so far the only educa-

tional institution in Victoria to have this software. The Department has incorporated Intrade into its international banking and finance subjects in the undergraduate and post-graduate banking and finance programs for 1989. In addition, it is running short courses for the banks that will focus on simulated foreign exchange dealing and exchange rate management.

Staff in the department have honed their skills in forex dealing and the Department now has a group of highly qualified expert forex dealers!

Alumni news

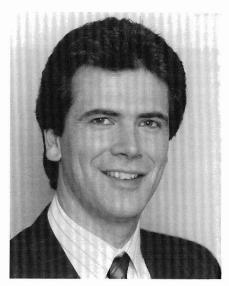
Since the last *Gazette*, the Chisholm Alumni Association has become a reality. The Institute has provided a \$10,000 seeding grant to help with the Association's development, and a Management Committee was established late last year. The Committee has drafted a constitution for the Association and proposed membership donations to the Council of the Institute. The Association is to be formally launched later this year and the first Annual General Meeting will be held, probably in October.

The Alumni Association will continue to work on a range of benefits for its members, and will encourage the creation of new subject-specific chapters. Existing chapters include Accounting, Marketing, several Engineering chapters (Civil, Electrical, Industrial and Mechanical), Ceramic Design and, later this year, Computing. All 1989 graduates will be given a year's free membership of the Association, and membership of the affiliated chapters will include membership of the Association.

Members will receive further information about the Association, its chapters, and any developments and activities on the drawing boards. If you have not received information about joining the Association (and you are not a graduand in 1989) contact Maree Conway on 573 2115, and she will send you a brochure and application form.

WHERE ARE THEY NOW?

This will be a regular feature of *Alumni News*, reporting on the activities and achievements of alumni since their graduation, as we hear about them.



David Brown: Applied Science Alumnus and Channel 10's weather man.

David Brown, BAppSc, is the new weather presenter at Channel 10. David is promoted by his basketball nickname "Stretch", but apart from screen presence, he has his Bachelor of Applied Science degree from the then Caulfield Institute of Technology. He actually was a forecaster in the Bureau of Meteorology when the station hired him to replace Rob Gell, who had left for Channel Nine. David has said that his aim is to educate people to understand more of the processes behind the weather. "It's a high-tech society; we can all understand a bit more", he was quoted as saying in the Sun. If David seemed a bit nervous in the first week, it may have been due to his first child, a son, being born shortly before.

Lyn Pollock, a Computing graduate, is a corporate account representative for WordPerfect Pacific, distributors of the widely

used word processor and other software. Lyn worked as a systems consultant for the Ford Motor Company and as a user-support analyst for Ansett Airlines before moving to WordPerfect.

Max Kaltmann, BBus (Mktg) (1986), recently won the Maurice Solnim Memorial Award for the Young Jewish Australian of the Year for his outstanding commitment to community service. Max is a voluntary Jewish Chaplain at Pentridge Prison.

Geoffrey Edwards, DipArt&Design(Fine Art) (1979) is now the Curator of the National Gallery of Victoria.

Robert Heeps, BBus(Banking & Finance) (1980), is Senior Manager, International Treasury Services, of BA Australia.

Nick Hungerford, BBus(Banking & Finance) (1984) is Manager, Synthetic Products, of First National Ltd.

Peter Goujon, BBus(Accounting) (1985) is now with the Flight Standards Branch of the Department of Aviation.

Phil Irvine, GradDipDP (1982) is Admissions Officer at Chisholm Institute of Technology.

Contributions to this column are welcome from all graduates of Chisholm Institute of Technology, or its antecedent institutions Caulfield Institute of Technology (or Caulfield Technical School), or State College of Victoria Frankston (also known as Frankston Teachers College). Tell us what you, or a friend who is a graduate, have been doing, and include a black and white photograph if you can.

Graduates are responsible for solving world's problems

Graduates, as a select group of educated people, have a responsibility to the world to develop solutions to its many problems, according to Dr Phillip Law, well known Antarctic explorer and physicist.

Dr Law was addressing Chisholm graduands at a ceremony late last year and spoke to graduands on a number of daunting threats to our world that they must analyse and strive to solve.

Dr Law warned that graduates must not believe what they are told or what they read unless their own analysis of the facts lends credence to the point of view.

"Graduates must do their homework as scholars and dig out the facts about particular issues before making judgements on controversial issues", he said.

"This means rejecting emotional and sentimental arguments and making cool, objective judgements. It means being prepared to compromise in order to achieve progress, rather than facing a stalemate because of demanding one hundred per cent agreement with your views."

Dr Law challenged many of the common thoughts on issues such as "solar not nuclear", immigration, and health misconceptions.

"Solar power, while useful, is limited in its application", said Dr Law. "It can be expected to provide only about three per cent of the world's needs.

"It has been calculated that, if solar energy were to replace nuclear energy plants in France, about one third of the surface of that country would have to covered by solar cells. Apart from the enormous cost, imagine the effect on the environment with one third of France in the shade!"

IMMIGRATION ISSUES MISSING THE POINT

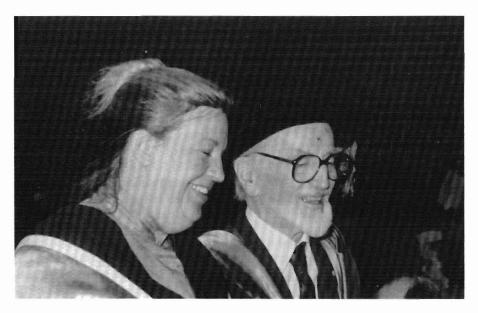
He said that the fundamental issue in the recent debate on immigration was being ignored. "Before arguing about the kinds of immigrants Australia needs, we should be asking 'Is immigration really necessary? Does Australian **need**, and can it support, a larger population? And what sort of Australia would it be if its population were to rise to 30 million?"

"The massive problems of water supply, sewerage, housing, urban sprawl, traffic, pollution, environmental deterioration and over-crowding of recreational resources would all be self-inflicted wounds."

Dr Law also attacked the many theories regarding health that are predominate in our society. "Many people have apprehensively accepted the proposition that salt is dangerous. Yet research has shown that only three per cent of the population need have any concern – for the rest, even excess salt is harmless", he said.

ANTARCTIC EXPLORER

Dr Law, AO, CBE, FRMIT, FANZAAS, FAIP, FTS, FAA, after whom the Phillip Law building at Chisholm is named, was leader of the Australian National Antarctic Research Expeditions from 1949 to 1966, and established the Australian stations of Mawson, Davis and Casey.



Dr Law with Dean of Art and Design, Ms Jenny Zimmer, during the academic procession.



Graduates of the Associate Diploma in Police Studies course with Victoria's Commissioner of Police, Kel Glare, third from left, and course coordinator, Mr Rob Smith, sixth from left.

In all, 344 students received their testamurs, marking the end of years of hard work for each of them.

A Master of Arts student, Ian McLaren, 76, was awarded his Masters on the basis of his publications, another first for Chisholm (see October 1988 edition). He is a past member of Malvern Council, of the Legislative Assembly, and has written five definitive biographies of prominent Australians – Adam Lindsay Gordon, Marcus Clark, John Dunmore Lang, Henry Kendall and C.J. Dennis.

He undertook numerous voyages to explore the coast of Australia's Antarctic Territory, and was Director of the then Antarctic Division of the

Ms Suzanne Shipton graduated with a Bachelor of Business in Banking & Finance. Her husband Roger is the federal member for Higgins.

Department of External Affairs from 1949 to 1966.

The ceremony was significant because it was the first time Chisholm was able to graduate students who completed their courses at the end of first semester, in the same year. Previously, graduands have had to wait until the following year. This was possible due to the completion of the new graduation hall last year.

Graduands at the ceremony were predominantly Bachelor of Business students, a large number of whom completed Graduate Diplomas in Logistics Management, Banking and Finance, Marketing, Computing, and Project Management.

The Welfare Studies course graduated 16 of its students, and 26 Bachelor of Arts students also received their degrees.



Ian McLaren, 76, was awarded his Master of Arts on the basis of his publications, including five difinitive biographies of prominent Australians.

Jocelynne Scutt speaks at Chisholm

Australia's reportedly mostqualified lawyer, Dr Jocelynne Scutt, gave the 1988 Caroline Chisholm Oration on the topic "The Gerrymander of Sex: Women, Men and the Politics of History".

Dr Jocelynne Scutt is a lawyer and author and held the position of Deputy Chairperson of the Victorian Law Reform Commission from 1984 to 1986. She was Director of Research of the Victorian Parliament's Legal and Constitutional Committee in 1983 and 1984, prior to which she was an Associate to the Hon. Justice Murphy of the High Court.

In her talk Dr Scutt covered the rise of the rights of women in Australia from the early days of colonisation to the bicentennial year. She argued that history has tended to ignore the contributions of women,

except where, as in the case of Caroline Chisholm, Truganini, Florence Nightingale and so on, it is impossible to do so.

This "historical gerrymander" has led to the censorship of examples of courage by women in Australia: Dr Scutt cited the example of one Sarah Davenport in the Ovens River region in the nineteenth century. In a published version of her diary, she recorded her fears of an attack by some men on the road, and how she and her husband waited armed until daylight. In the original manuscript, another historian found that someone had deleted in blue pencil the reasons for this: the men wanted to rape Mrs Davenport.

Dr Scutt said that women had to learn to re-assess history and their place in it, and to overcome the gerrymander against women.



Dr Scutt speaking with member of Council of Chisholm, Don Peebles (left), and Director, Dr Geoff Vaughan.

In brief

Bridging the gap

Caulfield Council last year passed an application by Chisholm to build a 25 metre pedestrian bridge in Railway Avenue to link two sections of the Caulfield campus divided by a busy road.

The 1.5 metre wide structure will join the Phillip Law building with the former Caulfield East Technical School near the intersection with Queens Avenue. The bridge will be five metres above ground level.

Chisholm designed PC system takes off

Mechanical Engineering lecturer, Dan Phelan, is esponsible for the design and production of an IBM PC based materials selection system for the Australian Institute of Metals and Materials which is being marketed throughout Australasia.

Currently, about 50 of the systems have been sold to a wide cross-section of industry and educational institutes. One of the users of the system, Hawker De Havilland Australia says the

IMMAMAT is a far superior system to an American equivalent. IMMAMAT was the topic of a talk and demonstration given to the South Australian Institute of Metals and Materials by Peter Kentish of Australian Mineral Development Laboratories.

The Materials Engineering and Standardisation section of the Department of Defence plan to use the system's editing facilities to incorporate additional comment on particular alloys and use it to develop a ranking system as part of their material selection process.

The system was initialised during PEP in 1986 and was developed with the Australian Institute of Metals and Materials, Standards Association of Australia and other industries.

Chisholm sponsors future engineers

Chisholm's involvement in the Shell Mileage Marathon extends to more than just competing. The Mechanical Engineering Department of Chisholm last year sponsored the St Albans Technical
School year 12
engineering workshop
crew in their first attempt
at the schools section of
the marathon. The
sponsorship proved
fruitful when the St
Albans team won second
prize of \$500 in the event.

Conference invitation

Division of Information Technology Senior Lecturer, Graeme Shanks, was invited to present a paper to the South Australian Branch of the Australian Computer Society after a successful presentation to the Victorian Branch.

The paper, "Analyst Workbenches – The New Wave", was well received and is enhancing Graeme and the Institute's reputation interstate.

Funding for business languages

The Victorian Education Foundation is providing up to \$1,043,226 for a business languages program at Chisholm. This will cover the costs of course development and delivery, equipment and library resources for

three years from 1989 to 1991.

Two business languages will be offered at the Frankston and Caulfield campuses. A tripartite system is being established with Monash University and Victoria College where Monash will teach and develop Business Japanese and Victoria College Business Chinese (Mandarin) to David Syme Business School students.

Pregnant women needed

Why was Chisholm's Nursing School recently asking for pregnant women who are due between March and June and live in the Mornington Peninsula area? The School was seeking a number of pregnant women to assist third year students with their studies in the area of "Birth and Parenting". All information is held in strictest confidence and privacy is maintained.

Distribution: the "dark continent" of business

The following is an edited version of a talk given by the Dean of Chisholm's David Syme Business Schools, Mr Peter Chandler, to the Logistics Management Conference in August.

Way back in 1962, Peter Drucker published an article entitled "The Economy's Dark Continent", lamenting the neglect of distribution by managers. Drucker wrote:

We know little more about distribution today than Napoleon's contemporaries knew about the interior of Africa. We know it is there, and we know it is big; and that's about all.

Drucker's solution to this problem was to develop new concepts of economic theory and analysis. Most concepts focused on production or on the stream of money and credit rather than the flow of physical goods and their economic characteristics. He argued that the onus was on business to create this data.

For all the talk of logistics being the last pioneering opportunity for management to gain a competitive advantage, nothing much has changed since the early days, and yet we have seen a total revolution in virtually every other aspect of management practice.

Few companies think of their distributors when they talk of "our business". Their horizon is set by the legal boundaries of their company. Few companies know how large their distributors' inventories are and what is in them – an ignorance that is a major cause of inventory booms and busts. In other words, we do not take into account the entire flow of product from raw material to customer, regardless of lines of ownership and legal responsibility. I want to suggest that the revolution

of understanding that Drucker called for is arriving at last – not because managers think it is a good thing but rather because of unrelated movements affecting traditional logistics systems.

There are three forces changing the role of logistics: a drive towards customer focused organisations, changed economic circumstances, and accounting systems.

CUSTOMER-DRIVEN BUSINESSES

Companies tend to allow their marketing decision makers to cause production or procurement of inventory, based on unreasonable pessimism or undue optimism about the market, or both.

We are on the verge of an era when traditional marketing practices will be replaced by a new concept some call the development of customer-driven organisations. The supply of service is becoming a basis for gaining a competitive edge, and for companies to effectively compete they need their major internal functions to work more closely, to develop the linkages between the organisation and it suppliers and customers.

To do this, senior management must develop a greater degree of understanding, awareness and recognition of the logistics function and its impact on service levels as well as liquidity and the profitability of the enterprise.

CHANGED ECONOMIC CIRCUMSTANCES

In recent years we have experienced higher interest rates, generally slower growth, and uncertainty in demand. This makes investment decisions all along the supply chain riskier than ever, whether in capacities, systems or inventory. In

this environment, some competitors do a better job of providing a high level of customer service while simultaneously keeping inventory costs down. A recent study of over a thousand companies in 18 industries showed that among Japanese firms inventory turnover had increased 31 per cent over a nine-year period, compared with an increase in the United States of only 20 per cent, and a drop in Europe of two per cent

It is not feasible to suggest that Western firms should slavishly mimic the Japanese, either in terms of particular features of their production operations, or their managerial style. Neither do the historical and environmental factors that shaped Japanese industry have much relevance for most Western firms. Japan has been almost completely dependent on imported raw materials, and with a limited domestic market has had to build a strong international presence.

However, there **are** certain characteristics that American and European firms which are successful in supply chain management have in common with Japanese firms, and these can and probably should be emulated. Highly relevant is the strategic balance of supply and demand, based on company-wide objectives, and also a systems approach that ensures fast transfer and accessibility of information across functional barriers.

While "natural" conflicts between functions may be inevitable, common and shared data encourage the development of a broader perspective on supply chain management and foster decision-making that is more likely to be keyed to the overall objectives of a



Peter Chandler, Dean of the David Syme Business Schools.

keyed to the overall objectives of a business. There is nothing like harsh economic times for corporate executives to realise they are all in the same boat and need to pull together.

CURVIVAL OF THE FITTEST

Robert Rae, writing in the Financial Review on 28 June this year, said

Australia as an exporter faces problems. Its biggest problem is that it is a large island. Everything has to be transported over vast areas of land and then over vaster areas of ocean. If one accepted Darwin's theory of evolution and especially his concept of survival of the fittest, Australia should have developed the most efficient handling systems in the world

He goes on to argue that we have done exactly the opposite, citing examples such as a container leaving Sydney that is three times more expensive than a container leaving Perth.

I believe that Darwin's theory has not operated in Australia because the pool in which we have lived in Australia has been so benign and warm. As the water gets colder, which it inevitably will as we are forced to compete head-on in international markets, the areas available to improve efficiency and performance will be addressed in ways that we have not experienced in our lifetimes. There has already been much evidence of this in the last three years.

In this environment, the logistics function is destined to play a much greater role and, developing on Rae's thesis of the special disadvantages of distance and remoteness that we have in Australia, it should play a more important role than in most other countries — "survival of the fittest", as he said.

COST ACCOUNTING

Bookkeeping methods have not kept pace with the times, particularly in manufacturing and service industries.

Process such as "Just In Time", Numerical Control and Computer Integrated Manufacturing were not uppermost in accountants' minds after World War I, when most of today's cost management systems were designed.

For years cost accountants in manufacturing dealt with mature products based on stable technologies. Their rules worked well in old-fashioned factories where mass production was the order of the day. However, in today's factories, where the crucial factors are quality, variety, response

and speed of delivery – and how best to use costly equipment – these traditional procedures have had their day.

THE DAWN OF LOGISTICS

Drucker's call of 26 years ago for a greater recognition of logistics is at last reaching the morning of its day. The catalysts for this change are the rise of customer-driven organisations, where firms are competing on the basis of service, the advent of tougher economic times (and in Australia a reorientation towards international markets), and from an accounting perspective the emergence of financial tools that will help management value the performance of the logistics function.

Innovative Product Design degree in 1989

Chisholm is planning to offer a specialised course in product design from 1989. The proposed Bachelor of Technology (Design) is an innovative mix of design, industrial and business skills education making use of the different strengths of the School of Art & Design and the Faculty of Technology.

Graduates of the proposed course will, after six semesters, have the aesthetic, planning, technical, marketing and entrepreneurial skills needed to design products for manufacture in a highly competitive and export-oriented environment. The program will offer the six semesters in two calendar years, utilising Chisholm's resources efficiently and allowing students to graduate one year earlier than normal. Because of the nature of the course, the number in each group has to be kept reasonably low to enable full access to the technological and staff resources necessary in this project-oriented program.

There will be a high degree of hands-on competency required of the students in the technologies, including materials technology and computer aided design, as

well as the traditional abilities of creativity, aesthetic judgement and design literacy. They will develop entrepreneurial skills and learn about industry needs, exporting, business efficiency and manufacturing processes.

The Institute has created a Design Group, headed by Leo Bonollo, who was Senior Lecturer in Charge of Industrial Design at the Royal Melbourne Institute of Technology. In addition to his involvement on the Council of the Design Institute of Australia, both federal and state, Leo is a member of the Editorial Advisory Board of the Design World Journal and has been preparing courses in industrial design for undergraduates for several years, including the one at RMIT.

Chisholm's project received special funding of over half a million dollars from the Victorian Education Foundation. It will capitalise on Chisholm's acknowledged strengths, such as its research and consultancy centres in commercial and industrial fields including Entrepreneurial Development, International Business, AutoCAD Training, Robotics and Automation,

Timber Technology, and Ceramic Design (with R&D facilities in glass, concrete and ceramics). Members of the Course Committee have been drawn from within Chisholm and from Industry and other tertiary institutions, including the Australian Design Council, Birko Australia, the Canberra Institute of the Arts, the Cement and Concrete Association of Australia, the Commission for the Future, the Ford Motor Company of Australia, Invetech Ltd, Neo-Technics, and the Victorian Education Foundation.

Prospective students will need to satisfy general entry requirements to Chisholm (mainly completion of VCE) and will be interviewed to determine their suitability. Applications and enquiries are invited from normal VTAC category students, those who have completed or partly completed tertiary qualifications in fields related to art, technology, architecture and engineering, as well as those mature age students who have the relevant background and experience.

Entry to the program is expected to be available

in Spring (July-September), Summer (November–December) and Autumn (February-March). Enquiries concerning the course should be directed to Leo Bonollo, Executive Director - Design Group, Chisholm Institute of Technology, PO Box 197, Caulfield East 3145, telephone (03) 573 2087. Applications from overseas students should be directed to Chisholm's Overseas Students Office on (+613) 573 2005.



Leo Bonollo, Director of Chisholm's new Design Group, which is planning the innovative new Bachelor of Technology (Design) course which allows a three-year qualification to be completed in two years.

New phone system spans the distance

Thirty-five kilometres separate the two campuses of Chisholm – a distance which has previously presented formidable difficulties and costs in communications.

Chisholm has now taken steps to eliminate at least some of these problems by selecting two Integrated Services Digital Exchange (iSDX) telephone systems from GEC Plessey Telecommunications (GPT) manage its communications.

The two campuses will be hooked together by a two million bit per second link, and will operate as if run by a single PABX system. As an added bonus, the Institute is enhancing the performance of one of its operators, who is blind, by installing the GPT Blind Operator Console.

The Head of Chisholm's Department of Robotics and Digital Technology, Mr Jim Breen, said Chisholm selected GPT's iSDX because it offered many features.

"It is especially good at data handling, which is important to us, and is the system being installed in number of other tertiary institutions, such as Monash University and RMIT, which could

have strategic implications for cooperative ventures in the future.

"Chisholm has the largest commercial computing school in Australia, with a teaching staff of 50 and hundreds of graduates each year. Data traffic between the two campuses is heavy, and therefore expensive.

"The iSDX gives us a very cost effective way of handling data transmission. We will have permanent digital connections between the two campuses, initially using two 64Kb channels. With the iSDX and the digital link we will get 15 times the data and voice transmission capacity for an extra Telecom bill of only \$10,000 a year."

Mr Breen said Joan Groves, a Caulfield campus operator who has worked with Chisholm for the last 14 years, is legally blind.

"She was very impressed with the GPT blind operators console. She said the voice synthesiser gave her plenty of information which she could turn off if required", Mr Breen said.

"At the moment we need three operators between the campuses. With the iSDX systems installed, we



Eileen Cieslak, Senior Telephonist, at the Plessey switchboard console.

could have a single operator at offpeak times handling both campuses, if necessary."

Mr Breen said the iSDX system would provide increased efficiency and give better service to callers. The Institute would also be able to achieve better accounting of the cost of both local and trunk calls.

Latest books

The book Money and Banking, cowritten by Linda Nicholls of the Bank of New Zealand and Eric Smith, Acting Head of the School of Accounting, has been published by Thomas Nelson Australia. The first text book in its area to be published since the deregulation of the banking industry, it covers many aspects of finance including regulation of money supply, fiscal policy, financial institutions and the future of banking. Eric has indeed been busy lately, and he will have more books published during 1989. Also published by Nelson is the third, completely revised edition of Jack Larkin's highly regarded introductory graphic design text,

Manipulating Space.



Applied Science awards

Twelve Applied Science students who excelled during 1987 were recently given awards from Chisholm and various companies to recognise outstanding work. They carry cash prizes of varying amounts. From left: Dean of the Faculty of Technology, Dr Roy Williams, Ivan Brooks and Robert Parker who share the Applied Physics award, Paul Blyth (Computer Imaging award), Thi My Hanh Nguyen (City of Caulfield award and Jennings Industries award), Damian Martin (Ogden Industries award, Chemplex Australia Ltd award and Water Studies Centre award), Diedre Hotchin (NSR Aquatic Chemistry award), Paul Lochert, course leader of the Bachelor of Applied Science (multi-discipline) degree, Graham De Hoedt (Ajax Fasteners Australia Pty Ltd award and Centre for Applied



Mathematical Modelling award), Greg Hall (Advanced Computer Imaging award), Alan Morgan, now a Masters student at Chisholm (Statistics and Operations Research award), and Graeme Ross, Acting Head of the School of Applied Science.

Out to lunch on Asian business cultures

Exporters and business executives dealing with Asian markets, and tourism and hospitality managers who cater to Asian visitors, learnt more about cross-cultural communication at a recent workshop held by Chisholm.

Australian business women, who face not only the normal sexist barriers, also face crosscultural pitfalls. The workshop aimed to strengthen their position in the Asian markets by preparing them with the information and skills for more effective interaction.

Led by Dr Moni Storz, senior lecturer in applied sociology, the seminar was run by the International Business Centre, a subsidiary activity of Chisholm with a range of successes in encouraging export growth.

The workshop was designed to suit the needs of exporters, executives elocating to Asia,

managers in tourism, and international banking and trade executives. It covered the differences in a range of Asian business cultures – in Japan, Taiwan, Hong Kong, Brunei, Thailand, Indonesia, Malaysia and Singapore.

"Learning about the business cultures of these target markets strengthens the negotiating position of an Australian exporter," says Dr Storz.

"It also improves the communication skills of executives and managers who must confront problems in a range of inter-cultural situations, both in Australia and overseas," she said.

The workshop was designed to create confidence when dealing with Asian clients and colleagues, to avoid the common pitfalls that cause offence (and lose contracts), to educate about the range of Asian markets, and to be an enjoyable training experience that will actually improve participants' rententive ability and reduce their stress levels.

As part of the workshop, participants enjoyed a lunch with Japanese, Chinese, Indonesian, Malaysian and Thai cuisine, during which a consultant demonstrated the cultural significance of wining and dining in cross-cultural situations.

During Dr Storz's 18 years of teaching, she has gained extensive experience in Asia and Australia and has drawn on this experience to prepare and run programs for Australian and international public and private organisations.

Dr Storz specialises in inter-cultural communication skills as an education and management consultant. She conducted in-house training for such bodies as Shell Malaysia, Tadika, Krisalis Kuala Lumpur, the Victorian Police Force, Caulfield Hospital, Prince Henry's Hospital and many Australian companies.

Workshops she has conducted have been attended by business and professional people from Sportsgirl, the Department of Trade, Industry and Resources, the SECV, BP Australia, the State Bank, and the Australian Conservation Foundation, among others.

First graduates of intensive English course



The first Certificates of Completion of Chisholm's Intensive English courses were handed out recently. Students from Hong Kong and China attended the course and over the tenweek period they experienced a wide range of activities and language opportunities, ranging from weekly excursions to a most enjoyable few days at Chisholm's Portsea annexe. Students also enjoyed the hospitality offered by staff members and outside hosts and their knowledge of Australian ways. Staff of the Chisholm English Language Centre are confident that those students who will now proceed to other Chisholm courses are better equipped to handle their studies – and the Australian accent!

Left, Ms Kit Wah Choi receives ber certificate from the Dean of Education, Dr Ray Anderson.

Maths program for science and engineering

Chisholm Institute of Technology has been offering students without the usual mathematics prerequisites an opportunity to study science or engineering with improved chances of success.

Chisholm recently enrolled a group of students in a special-entry first year course in engineering. These students undertook an extended 45 week program in mathematics and some other basic subjects while doing a normal program in the remaining first year subjects.

This is one of a number of similar courses running at institutes around Victoria sponsored by the Victorian Post-Secondary Education Commission as part of the Victorian government's Economic Strategy Initiative.

Some students will enter the course next year from summer bridging courses in mathematics (and other subjects) which will also be conducted at Chisholm.

In recognition of problems currently encountered in teaching first year mathematics for courses in technology, the Victorian Education Foundation has made grants of approximately \$750,000 to a number of projects concerned with overcoming these problems.

The largest single grant of \$287,850 was awarded to a joint project involving Chisholm and Monash University which is primarily concerned with developing and delivering a range of bridging and supplementary programs in mathematics. These programs are designed to improve the mathematical competency of students wishing to undertake tertiary courses in science, engineering or other technology-related disciplines.

The project aims to attract more students into such courses, and to increase the retention and completion

rates. Of particular concern is the raising of participation levels of girls and educationally disadvantaged groups. Those who have not completed the normal prerequisite mathematics subjects at Year 12, but who have passed VCE (or equivalent) may be admitted to courses in Engineering at Chisholm or Monash or Applied Science at Chisholm.

The project is based at Chisholm's Caulfield campus, at a new mathematics training centre which will provide microcomputer laboratory facilities, learning resource material, and other student support services.

COMPUTER MANAGED LEARNING

Dr Ken Mann, Senior Lecturer in Computational Mathematics, is developing a Computer Managed Learning (CML) course as part of the activities of the Centre, designed to overcome mathematics deficiencies in students entering the technologies.

The CML includes the availability to students of a database of questions for on-the-spot tests. The results are immediately available to student and lecturer, allowing progress to be monitored and the student to be assisted at the proper level. Statistical analysis of items in the test "bank" is also easily available, enabling them to be refined.

Dr Mann is currently investigating a unified national system of CML-based bridging mathematics. The aim of this is to allow a national certification of mathematics proficiency irregardless of State or international methods of assessment. It will also address the need for tertiary institutions to determine what a student knows under the new and more general VCE mathematics syllabus.

Marketing students study tour



Seen here is Peter Chandler, Dean of the Faculty of Business and Chris Kimberley, Lecturer in Marketing with Mr Spielvogal, chairman of Backer, Spielvogal and Bates, which is one of the three largest advertising agencies in the world. The photo was taken at the Chrysler Building in New York during a visit by marketing students as part of their three-week study tour around North America in January.

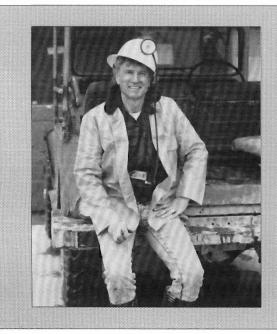
Student ceramics show



From left to right: the main organisers of the exhibition, Clare Belfrage, Jenny Stevens, Monica Busby and Lisa Martin.

A highly successful exhibition of ceramics and glass work held at Chisholm at the end of last year was entirely the work of the students themselves. Twenty seven students of the Bachelor of Arts (Ceramic Design) course at Chisholm got together to exhibit their pottery, hot glass and cold glass work at the end of their final year.

The ceramic design course at Chisholm is highly regarded, and graduates have the choice of a career as self-employed designers and artists, or of adding an education qualification and becoming design teachers. The students involved in the display said the experience had been a pleasure and they were proud of the result.



Accounting lecturer visits Irian Jaya

Left, Laurie Webb during his visit to Freeport Indonesia's Erisberg copper mine in Irian Jaya, Indonesia's largest province. Laurie says his motives for the trip were two-fold. 'Professionally, I hoped that the David Syme Business Schools could establish a toehold in this region and offer a range of business and computer courses to employees of Freeport. At a personal level, I was there because I was curious – the same curiosity that had taken me round the world a number of times, particularly to unusual places."



Six Chisbolm graduates recently exhibited their fine art works at Sydney's Coventry art gallery in Paddington. Clockwise from top left are works by Benedict Lines, 27, Mark Evans, 25 and David Munro, 37.

