TIME CAPSULE

REFLECTING ON AND COMMEMORATING OUR PAST

This year marks the 40th Anniversary of the formation of the first computer education group in Victoria. Computer Education Group of Victoria was formed in 1978 and was the fore-runner for Digital Learning and Teaching Victoria.

To commemorate this anniversary we republish an article from 2000 by two of the founding members of CEGV, Barry McRae and Anne McDougall. In future editions we will explore the more recent history of computer education groups in Victoria.

From CEGV 1979 to ACEC 2000: Australian computers in education conferences come of age

Anne McDougall & Barry McCrae

This paper describes the events leading to the formation of the Computer Education Group of Victoria and its organisation of the first "national" computers in education conference in 1979. It outlines the establishment of the National Committee for Computers in Education (now the Australian Council for Computers in Education), and looks at the series of Australian Computers in Education Conferences which have been hosted by six of the eight states and territories throughout the following 21 years, commenting on their significance in the development of educational computing in this country.

Schools' computing in Victoria in the 1970's

In Victoria during the mid and late 1970's there was a growing interest in schools in the use of computers for both teaching and administration. Few schools actually had computers, but some had access to mini or mainframe machines in tertiary institutions. Monash University developed a system, MONECS, using mark-sensed cards which enabled students to program, initially in FORTRAN and later in COBOL, BASIC and Pascal. Teachers would collect students' programs, deliver them to the university to be run during quiet times overnight, and pick them up on the way to school the following morning.

A "computing option" had been available within the Victorian Year 12 General Mathematics course since the mid 1970's. The course gained popularity, and by 1979 was offered at many schools, though often students drew flowcharts without ever running the programs they represented, or ran interactive processes on calculators as they did not have adequate access to real computers. Larkin (1979, p.10) expressed concern that "the subject is now being taught by computer amateurs who,

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by Courtesy of Edible Electronics

One of the aims on the newly formed group was to continue the publication of the COM 3 journal

although keen, may not necessarily have a strong computer science background". He described problems with interpretation of the syllabus and difficulties associated with the absence of a suitable practical manual for the subject.

During 1978 work was proceeding on a new Year 12 H.S.C. subject, Computer Science. The course was approved for implementation to start in 1981. Textbooks were written to assist in teaching the subject (Mongomery & Juliff, 1981; Woodhouse, Johnstone & McDougall, 1982); all but one of the authors were university academics. It was at that time quite unclear where schools were to find teachers with adequate qualifications and experience to teach the subject.

The advent of microcomputers, developed in the U.S.A. in the early 1970's and available in this country at the end of the decade, meant that schools could now obtain computers of their own; this happened in an essentially unplanned way in Victoria. Walker (1991) quotes Bill Bainbridge, then a senior bureaucrat in the Victorian Department of Education, comparing the situation in 1979 in this state very unfavourably with those in South Australia and Tasmania at the time.

In the early months of 1979 the situation was thus - all technical colleges equipped, and supported by TEAC, some twenty high schools with microcomputers of nine different types; a small group of inspectors of schools trying to spread the gospel; a travelling road show to convince school principals and teachers that the machines don't bite; a small number of highly enthusiastic [sic] and an unknown number of teachers with a variety of relevant experiences and qualifications; and as a looming threat, accreditation by VISE [Victorian Institute of Secondary Education] of the projected Year 12 course in computer studies.

(Bainbridge, 1980, cited in Walker, 1991)

Walker (1991) also provides a description of the first school microcomputer project, begun by two science teachers, Greg Johnstone and Tim Mowchanuk, at Essendon Grammar School, on a Commonwealth Schools Commission Innovations Program grant in late 1976.

In early 1976, Mowchanuk had imported an Altair 8800, one of the first available microcomputers, for his own use. Subsequently the two teachers applied for and received a Commonwealth Schools Commission Innovation Program grant to develop their interest in microcomputers into an educational initiative in the school in which they both worked. The funded project required them to undertake a number of activities. First, they were to locate hardware suitable for use in the school. Secondly, they were to produce software, practically all of which had, in the beginning, to be written personally. Finally, they were required to publish a newsletter to promulgate their activities. This newsletter was called COM-3 (standing for Computer Community Communications) and edited by Mowchanuk. ...The first issues appeared in August 1977. By May 1978 COM-3 circulated to approximately 400 personal and educational microcomputer users in Australia and New Zealand.

(Walker, 1991, p. 296)
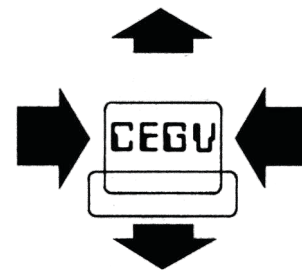
COMPUTER EDUCATION GROUP OF VICTORIA

The CEGV and the first "national" conference – 1979

In 1978 Barry McCrae, a lecturer at Melbourne College of Advanced Education, who had recently been in the United Kingdom and observed the activities of the British Computer Education Group, saw a need for a similar organisation in Victoria. He approached Johnstone and Mowchanuk about using COM-3 as the journal for such a group. Then he called a public meeting, with the support of the Mathematical Association of Victoria (MAV), to consider formation of a Computer Education Group. Part of the text of the announcement of the meeting, a typed foolscap sheet, was as follows.

Special announcement

A meeting will be held at the National Science Centre, 191 Royal Parade, Parkville (Melbourne) on Monday, May 1 at 7.45 pm.

The purpose of this meeting will be to establish the Computer Education Group of Australia (CEGA). Business will include the election of an Executive to hold office until the first general meeting of the Group. It is intended that the principal object of the CEGA will be to promote computer education in Australia and that this object will be pursued by:

(i) publishing a regular journal (5 issues/year) - COM-3 in a glossy format and edited by Tim Mowchanuk;

(ii) distribution of a regular newsletter to members (5 issues per year), "Interrupt" (previously produced by MAV) of 4 photocopied pages;

(iii) conducting of biennial conferences - 1st conference: Melbourne, May 1979;

(iv) publishing and selling collections of articles in the general field of computer education ;

(v) establishing local groups throughout Australia which will meet regularly and run in-service education activities from time to time;

(vi) acting as a clearing house for information concerning computer education.

There are two particular points to note here. Firstly, the initial idea was in fact to establish a national association for computer educators. And secondly, the importance attributed from the outset to the role of conferences is clear from its inclusion in the list of activities proposed in this first announcement.

McCrae expected perhaps 20 people to come to the meeting (McCrae, 1979); in the event about 100 attended. The attention of the meeting was drawn to the possibility that similar groups might already exist in other states, perhaps associated with established schools' computing centres in Tasmania, South Australia and Western Australia, and it was decide that this Group should, at least in the first instance, be a Victorian one. A Working Committee was elected, to be convened by McCrae, to develop the form that the Computer Education Group of Victoria should take.

At a second meeting, two months later, the establishment of the CEGV was completed. Aims for the Group were agreed, and an Executive was elected: Barbara Marsh was elected Chairperson with Barry McCrae as Co-Chair and Conference Convenor. Membership was set at $10 for individual and organisational members. This meeting also confirmed that a two-day computer education conference would be held on May 17th and 18th 1979, and that interstate speakers would be invited.

Although the CEGV clearly was seen as a state Group, it saw its first conference, in 1979, as a national event, the first of a series of national computer education conferences which would be run in turn by various states. The conference announcement brochure (a foolscap typed page, with hand-lettered heading) included the following: "The conference is only the first of many. Hopefully future conferences will be held in different states." And in a special conference issue of COM-3 Mowchanuk wrote: " ... the Computer Education Conference sponsored by the Computer Education Group of Victoria. ... hopefully will set a pattern of regular conferences hosted by education groups in all States." (Mowchanuk, 1979, p. 6)

The conference was held at La Trobe University in Melbourne on 17-18 May, 1979. The title and theme was Students,
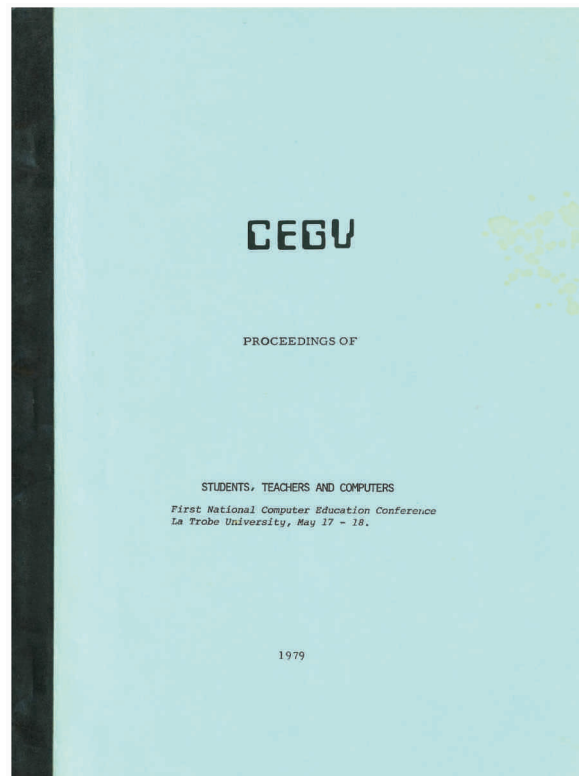

The first CEGV conference was held in 1979 at La Trobe University, Bundoora.

Teachers and Computers. Registration was $15.00, and more than 300 participants attended. An emphasis in the program was on keynote lectures which assessed the state of computer education in the various states, and looked at the likely impact of microcomputers (McCrae, 1979). The keynote speakers were Peter Sandery from the South Australian Education Department, Professor Juris Reinfelds from the University of Wollongong in New South Wales, Sandra Wills from the Elizabeth Computing Centre in Tasmania, David Woodrow from St. Peter's Lutheran College in Queensland, and Dr. Peter Thorne from the University of Melbourne.

The Conference at La Trobe resolved to support the establishment of groups similar to the CEGV in States where they did not currently exist, but deferred consideration of a Computer Education Group of Australia, or affiliation of the state groups with the Australian Computer Society (McCrae, 1979).

Further conferences were run in Melbourne by the CEGV in 1980, 1981 and 1982. The title of the 1980 conference was simply Computers in Education, and again interstate speakers were listed on the program. The 1981 conference saw the introduction of the practice of inviting international keynote speakers; the first was Professor Seymour Papert of the Massachusetts Institute of Technology. One of the authors clearly remembers the conference committee meeting at which it was discovered that this conference, for which the budget and venue were planned for 300 attendees, already had almost 1000 registrations! The 1982 conference featured Professor Jim Howe from the University of Edinburgh as the international keynote. Although it appears that the word "national" was dropped from the titles of these conferences, they continued to include speakers from interstate, and they attracted interstate attendees.

CHOOSING A COMPUTER CAN BE AN "AMAZING" TASK

THE VICTORIAN H.S.C COMPUTER SCIENCE SYLLABUS
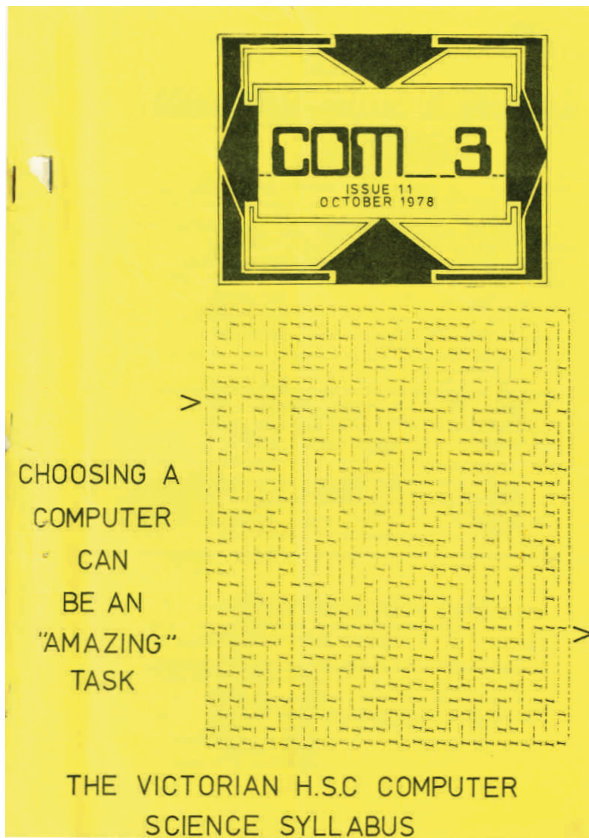
A national umbrella for computer education groups – the ACCE

The fore-runner of the Australian Council for Computers in Education, the National Committee for Computers in Education (NCCE), was first established as a result of initiatives of some members of the Australian Computer Society (ACS), in particular Dr. Ian Pirie, Professor Arthur Sale and Sandra Wills. The idea was proposed at an informal meeting with members of state and territory Computer Education Groups at the 9th ACS Australian Computer Conference in Hobart in 1982 (Adams, 1986; Freeman, 2000).

Ian Pirie, the ACS Education representative, was a key advocate for the establishment of a national professional association to represent and support the specific area of information technology in education. Following the Hobart meeting, he convened a meeting in Wollongong in December 1982 for representatives from each of the state organisations. By the end of two days of solid discussion, debate and negotiation, it was resolved to establish the NCCE (Vogler & Wills, 2000). The national group was developed to lobby government, support state groups and undertake projects nationally, to develop statements of national significance, and take a leadership role in helping systems and groups understand learning technology in education
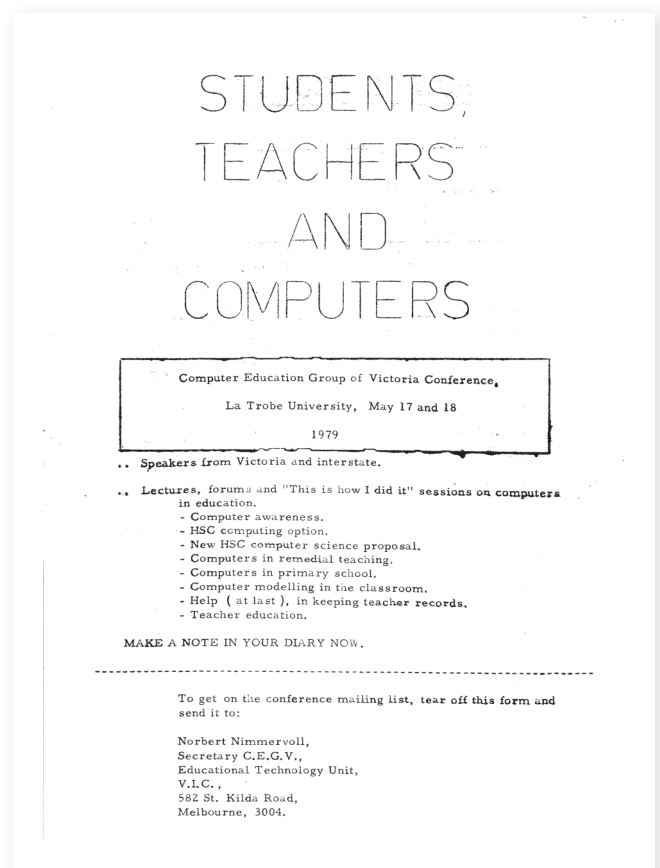
(Williams, 2000).

The first official Australian Computers in Education Conference (ACEC) was held in 1983, hosted on behalf of the NCCE by the CEGV, again at LaTrobe University in Melbourne. International keynote speakers included Professor David Moursund from the University of Oregon, David Squires from Chelsea College, London, and Don Rawitsch from the Minnesota Educational Computing Consortium. Professor R. Preston Rank from the Massachusetts Institute of Technology (aka. professional speechmaker Campbell McComas) entertained attendees at the conference dinner.

A formal statement in the Proceedings of the 1983 conference, by the inaugural Chairperson of the NCCE, states:

> The N.C.C.E. intends to arrange an annual national computer education conference, the venue rotating among the states and territories. The present conference, hosted by the Computer Education Group of Victoria, is the first of these national conferences. At each national conference the N.C.C.E. will meet, and the host state for the next year will be decided.
>
> (McDougall, 1983, p. 93)

At the 1985 conference it was decided that the organisation should be formalised. In November of that year, a meeting of Computer Education Group state presidents was held in Melbourne, and a number of fundamental decisions were made. A constitution was formulated, a secretariat was established, and the Committee took on a new name: the Australian Council for Computers in Education (ACCE). The meeting also decided to establish a national journal, Australian Educational Computing, under an editorial board (Adams, 1986; Freeman, 2000) .

STUDENTS, TEACHERS AND COMPUTERS

Computer Education Group of Victoria Conference,
La Trobe University, May 17 and 18
1979

.. Speakers from Victoria and interstate.

.. Lectures, forums and "This is how I did it" sessions on computers in education.
- Computer awareness.
- HSC computing option.
- New HSC computer science proposal.
- Computers in remedial teaching.
- Computers in primary school.
- Computer modelling in the classroom.
- Help (at last), in keeping teacher records.
- Teacher education.

MAKE A NOTE IN YOUR DIARY NOW.

To get on the conference mailing list, tear off this form and send it to:

Norbert Nimmervoll,
Secretary C.E.G.V.,
Educational Technology Unit,
V.I.C.,
582 St. Kilda Road,
Melbourne, 3004.

Registration for the first conference was $15.00, and more than 300 participants attended

Australian computers in education conferences 1983 – 2000

The planned series of Australian Computers in Education Conferences has stretched now over 21 years, annually until 1996, and more recently biennially. The following list of host Computer Education Groups, and corresponding conference themes, shows that six of the eight states and territories have hosted ACECs. And at the time of writing, the seventh is expected to become involved in 2002, with a return to Tasmania where the initial meeting about the NCCE took place.

1979   CEGV - Students, Teachers and Computers (First "national" conference) 1983 - CEGV - Could You Use a Computer? (First official ACEC)

1984   CEGNSW - Computers in Education: Dreams and Reality 1985 - CEGQ - The Information Edge: The Future for Educational Computing

1986   CEGV - Computers in Education: On the Crest of a Wave?

1987   CEGSA - Tomorrow's Technology Today

1988   ECAWA - Golden Opportunities

1989   CEGACT - Australian Computer Education Conference

1990   CEGNSW - World Conference on Computers in Education (WCCE90)

1991   CEGQ - Navigating the Nineties

1992   CEGV - Computing the Clever Country?

1993   CEGNSW - Sharing the Vision

1994   CEGQ - Asia-Pacific I.T. in Training & Education Conference (APITITE)

1995   ECAWA - Learning Without Limits

1996   CEGACT - Get with IT 1998 - CEGSA - Australian Computers in Education Conference

2000   CEGV - Learning Technologies, Teaching and the Future of Schools

Throughout the years these conferences have acted as a forum for teachers to exchange information on classroom activities, and to make contact with each other and with experts in the field. They present the current state of educational computing in this country, and provide a forum for the sharing of innovation, ideas and practices in the use of learning technologies. They have proved to be a vital part of the professional development of educational computing practitioners at all levels.

In 1988, one of the authors was invited to edit a special bicentennial issue of Australian Educational Computing, reviewing the national conferences to date. Working through the conferences' proceedings to select papers for reproduction in the journal, she was struck by the extent to which these proceedings provided a comprehensive contemporary history of computing in education in Australia. These national conferences, and the associated proceedings produced by the constituent state and territory groups within the ACCE, are building a valuable record of the development of educational computing in this country.

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