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

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, 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)


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)

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 decided 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
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.

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

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"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..."
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 state 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).

**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 - CEGO - 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.

**REFERENCES**