

WFNMC 25 years on: some experiences

Peter Taylor



Peter Taylor graduated with a Ph.D. in Applied Mathematics in 1972 at the University of Adelaide. He is a Professor of Mathematics at the University of Canberra, Executive Director of the Australian Mathematics Trust and Chairman of the Education Advisory Committee of the Australian Mathematical Sciences Institute. He is a Past President of WFNMC and was Co-chair of ICMI Study 16 “Challenging Mathematics in and beyond the Classroom”.

I first met Peter O’Halloran in February 1972. I had just graduated with a PhD and was fortunate to get a job at the Canberra College of Advanced Education, later to become the University of Canberra. I was the most junior of a mathematics department of five. Peter was the second most senior in this new institution, which was degree granting, but we were not allowed to do research. I proved this by giving a research paper I wrote to a typist and five minutes later was hauled in to the Head of School, who made it quite clear I should not do research. I took my manuscript to the Australian National University and paid a mathematical typist to prepare the paper, which was published in the *Journal of Ship Research*.

I looked for other outlets and in the 1970s found a nice involvement in the Open University, in England, where I went for sabbatical and wrote a couple of their books. But Peter had taken an interest in me and we spent many morning and afternoon teas together discussing the possibility of us founding an Australian Mathematics Competition similar to those he had seen on his sabbatical at the University of Waterloo, competitions run from there and the MAA competitions. I had seen the value of

competitions in my home town of Adelaide, where my honours class seemed to be dominated by students from two schools who seemed to have benefited from a local Olympiad-type competition and the training associated with it.

So Peter had me on board. He also seemed to have a colleague Jo Edwards, and Warren Atkins from the School of Education, interested in the idea. (I should note that another important colleague, Peter Brown joined us the following year.) On 11 April 1976 he decided to hold an impromptu meeting, involving about 12 teachers and academics in Canberra, and we decided to run a competition which attracted entries from all high schools in Canberra. This event grew exponentially each year, becoming national in 1978 and soon generating hundreds of thousands of entries from Australia and other countries in our region.

In 1983 Peter took another sabbatical during which I was acting director of the competition, and I learned a lot of unexpected things. I had to deal with security problems, manage committees and communicate with the University hierarchy and significant personalities further afield. Peter returned at the end of 1983 and took me to dinner relating his newest idea. Why not have a World Federation of National Mathematics Competitions? We could ensure that significant organisers from other countries could be enticed to attend ICME-5 in Adelaide in 1984, and we could found the organisation then. Why not, indeed?

It is now history that WFNMC was founded by an international band of enthusiasts. The first activity was to be a newsletter. This job was allocated to Warren Atkins. The story of this can be told elsewhere, but I note this grew in popularity so that it soon became a journal. Warren remained its editor, and a member of the WFNMC through to 2004, when Jaroslav Švrček took over. The other main activities were to be the awards and the conferences. The awards were the brainchild of Peter O'Halloran. He first founded a David Hilbert Award based on popular voting on the best journal articles. A small number of these awards were made in 1991, but a new version of the award and a new Erdős Award based on general contribution to mathematics enrichment on a national or international scale became the high profile acknowledgement of WFNMC accepted internationally outside the organisation. By 1996 the distinction between the two awards became blurred and so were

merged into just the Erdős Award and with a strict quota of three every two years. A strong refereeing system was also developed.

The other major activity became the conferences. Until 1990, WFNMC was meeting only every four years at ICME. It was the brainchild of WFNMC's second active President, Ron Dunkley of Canada, to initiate conferences to be held every four years from 1990.

I will now give some chronological recollections of significant and some light-hearted moments from each conference (and the related awards).

1988 ICME-6 Budapest

This was a wonderful event for those lucky enough to attend. Unfortunately Peter O'Halloran could not attend because he had the exciting job of hosting the IMO in Canberra, which almost overlapped. As a result I missed most of the IMO although delegates had started arriving when I left Canberra. I attended ICME instead. The WFNMC meetings were highly congenial. Strong bonds developed between many people from different countries.



The photo shows the WFNMC group, which if you were able to enjoy in high resolution would find great interest in identifying the characters. This photo can be found in better detail on the WFNMC website <http://www.amt.edu.au/wfnmc.html>.

1990 WFNMC 1 Waterloo

This was the initiative of Ron Dunkley and many of those who attended still say it was the best conference they ever attended. There was a busy workload of excellent lectures and social activities, with all participants enjoying the benefit of staying together at the one location, which has generally become a tradition, more or less a rule.

Again I have a group photo which I produce here, thanks to my friend Cheung Pak-Hong, but it can be found better annotated at the WFNMC website.



1992 ICME-7 Quebec

This conference saw the first awarding of Hilbert and Erdős Awards under the new criteria. Nikolay Konstantinov was a winner but he arrived after the normal ceremony so we convened a special ceremony where, as the photo below shows, he was seen by most for the only time in their lives wearing a collar and tie.



Nikolay Konstantinov—the second one from the left side of the photo

1994 WFNMC-2 Pravets

This excellent conference is memorable for two main reasons in addition to the Bulgarian hospitality. First it is memorable because it was attended by Paul Erdős, who participated in all activities and presented the awards. For some it was their only opportunity to spend time at all with this great man, who was there for the whole week.

On a sadder note, all could tell that Peter O'Halloran was very ill. He returned to Canberra and then disappeared for a few days. It seems he was undergoing serious medical testing. About a week after our return he telephoned me to say he had a serious form of cancer and had just six weeks to live. Then followed a remarkable period in which he held court at his home, receiving visitors and phone calls from his friends all over the world. During this period the Executive decided unanimously to present him with a Hilbert Award which he received at his home.

He had also, independently, been awarded the World Cultural Council's Jose Vasconcelos Award. This was to be presented to him in Switzerland. Being too ill to travel himself, two of his children went to Switzerland

to receive it. He died the day after they had returned home to give it to him.



Peter O'Halaran receives Hilbert Award

1996 ICME-8 Seville

This conference was held in very hot, dry weather, similar to the summer heat of Adelaide, but seemingly even hotter. By this time Ron Dunkley had become President and at this time Ron, after wide consultation, devised the first WFNMC constitution. The constitution has since received two or three amendments, but the original structure survives, and it is of great necessity for the future development of WFNMC through personnel and other changes.

1998 WFNMC-3 Zhong Shan

This was a pleasant experience in which the participants met first in Hong Kong and then travelled together over the Pearl River estuary to Zhong Shan, an important city of China, the birthplace of Sun-Yat Sen.

This conference was held at a nice retreat and under the leadership of Professor Qiu Zhonghu, with his charming manner, all the ingredients of WFNMC conferences were present. This conference was attended by a large number of IMO Team Leaders, who were able to piggyback on the IMO which had just been held in Taipei.

2000 ICME-9 Tokyo

This was held at a major conference centre at Makuhari, between the Narita airport and Tokyo, and on the bay of Tokyo. Ron Dunkley stepped down as President and I was elected. The facilities were excellent and we ran a good program of lectures which attracted a loyal following.

2002 WFNMC-4 Melbourne

This was our opportunity to host the event in Australia. We invited John Conway to be our principal plenary speaker. He carried out a similar role to Paul Erdős in Pravets. John Conway's lecture was also a public lecture at the University of Melbourne and it attracted a large crowd. John diligently contributed to all the sessions and many enjoyed the opportunity to meet him and discuss mathematics with him.

2004 ICME-10 Copenhagen

At this conference we were fairly well spread out over various parts of the city. The conference centre was at a university a little distance out and, even for many westerners, was very expensive, but we overcame these obstacles. The facilities and the program were very good. We were not however able to run our lectures in the usual way in a Topic Group, and instead adapted to a Discussion Group in which individual lectures were not given. We moved a change to the Constitution to ensure that Presidents changed every four years. Petar Kenderov was elected.

2006 WFNMC-5 Cambridge

Tony Gardiner and some wellknown colleagues (Howard Groves, Bill Richardson and Adam McBride) hosted this conference. We all lived in

Robertson College, one of the newer ones, and this proved an excellent and appropriate venue. The opportunity to stay in one of the world's most pristine academic locations was enough to ensure success. There were some notable English speakers but María de Losada and Jozsef Pelikan, among the plenary lecturers, gave compelling presentations.

2008 ICME-11 Monterrey

Once again, at these types of conferences we were well spread out. To make up for not having lectures in the normal format at the previous ICME, we had developed a new idea, to have our own mini conference the day before ICME started. Perhaps this was copied from other ICMI Affiliated Study Groups, but it was logical since it only cost an extra night's accommodation. The day we spent together was highly successful and is a tribute, again to María, and the excellent local support from within Mexico.

As in Copenhagen and other ICMEs the main venue was well away from the centre, but it was easily accessible by train and the facilities were excellent. There was also an excellent program within ICME to discuss competitions and related matters.

María de Losada was elected the new President and will be so until 2012. The presentation of awards was made by ICMI President Michelle Artigue. One of the Erdős Award winners, who could not attend two years previously was Ali Rejali, who went to great lengths to bring his wife and son from Iran to see him receive his well-earned award, a very big moment.

2010 WFNMC-6 Riga

We look forward to this meeting. Knowing Agnis Andjans' well-established organising ability, we all have high expectations of this conference to be held in the historic city of Riga.

I conclude this brief article, I exhort all readers to try to attend this conference to establish new friends and contacts in other countries and to exchange your ideas on not only how to organise competitions, but to

discuss the mathematics and how we can improve the world by having more students enjoy our beloved subject, which surely benefits them in their everyday lives.

There are many challenges for the organisation as a whole, but it is evident that it is surviving personnel changes in recent years with a number of younger members on the new Executive, and I am sure they will make certain the next 25 years are just as productive.

Peter Taylor
Australian Mathematics Trust
University of Canberra ACT 2601
AUSTRALIA
email: pjt013@gmail.com