Obituary

Peter Reynolds (1932-2000)

Peter Reynolds, who was President of The Mathematical Association 1989-90, died suddenly on 17 September 2000. Though he had retired 10 years earlier, Peter remained active in mathematics education, serving, for example, on the group organising Maths Year 2000 activities in Suffolk. He will be remembered for his sunny disposition and the tremendous work he did for mathematics education in general and for The Mathematical Association in particular. In Suffolk, where he was County Adviser for fifteen years, he worked tirelessly to develop mathematics teaching. Those who recall his influence on the County's schools, teachers and pupils look back on his era as something of a golden age.

Peter was born in Birmingham and attended Waverley Grammar School. He studied at Trinity College, Dublin graduating in 1954. After National Service in the Education Corps he took a PGCE at Birmingham University. He taught in Birmingham for several years, starting at Bourneville Technical School, moving to Handsworth Technical School and then to the Sir Wilfred Martineau School, where he was Head of Department. He joined The Mathematical Association in 1961, attending the Midland Branch meetings for the professional support that was then lacking even in large LEAs like Birmingham. As he wrote later,

> 'This was the only forum available and how valuable it was. Here one could become part of a national network which provided a journal and, most importantly, those excellent Reports'.
>
> [1, p. 215]

Times were changing, however, and the modern mathematics movement of the early sixties ushered in an era of curriculum development, often based on the collaborative work of pioneering teachers. Peter took an active part:

> 'For readers too young to have taught in the 1960s, it is difficult to appreciate the carefree and confident mood of the times.'
>
> [2, p. 33].

Though he was an innovator throughout his career, Peter recognised the difficulty of translating the vision of the leaders into effective and workable classroom practice. In his Presidential Address, he commented on the projects of the 1960s:

> 'It was not just the content that changed: much unstructured "discovery" work took place. "I do and I understand" was a Nuffield slogan which became the rage in the late 1960s. Sadly, many teachers, especially in the primary schools, were carried along uncritically with the enthusiasm of the times. There were plenty of wise prophets, such as Harold Fletcher and Edith Biggs, who were very persuasive at courses, but often misinterpreted in the classroom. . . . Successful innovation requires teachers who understand the philosophical basis of the new regime. We need

> to be aware that, similarly, an imposed national curriculum may not work if its philosophical basis (if there is one!) is not understood by teachers.' [1, p. 215].

Substitute 'National Numeracy Strategy' for 'national curriculum' and the last sentence seems quite apposite. Appropriately enough, his Address was entitled 'Full circle'. I feel sure that Peter would have encouraged today's teachers to consider the good ideas underlying the 'three part lesson' model, rather than seeing it as a format to be imposed on every lesson.

In 1966 Peter moved into teacher education, joining Ponteland College of Education, Newcastle-upon-Tyne. From 1970 to 1976 he was Head of the Mathematics Department at Doncaster College of Education. He believed that 'Good teachers have the confidence to interpret, to wander, to enrich and yet cover the syllabus effectively. . . . Mathematics has a wholeness which is destroyed by a fragmented treatment.' [1, p. 216]. This conviction underpinned his approach to mathematics education and was evident throughout his career.

During the late sixties, Peter became more involved in Mathematical Association activities. At the time, the *Gazette* was the only MA journal and its traditional focus ill-served the needs of teachers in comprehensive schools. In 1971, (to his apparent surprise) Peter was invited, to become the founding editor of *Mathematics in School*, by MA Editor-in-Chief Douglas Quadling. As Peter later recalled, 'It was a wonderful opportunity. I was given a free hand and no firm guidelines were laid down.' [2, p. 34].

In his first editorial he wrote 'this is a brand new venture, seeking as its main aim, to provide teachers of 7-16 year old children with practical and interesting material which has a direct connection with their work in the classroom.' [3].

Looking back at the first issue, one is struck by the standards that Peter set for his successors. The use of glossy paper (in the new-fangled A4 format) allowed the incorporation of photographs and gave scope for a page designer to be employed in the production. Its superior production qualities and lively content soon helped *Mathematics in School* to became a vigorous competitor to the ATM's *Mathematics Teaching*. Mike Price interviewed Peter in 1990 and reported

> 'Reynolds vividly recalls his "voyage of discovery" in editing the first 28 issues. He was largely given a free hand to shape the new magazine and, in particular, to pursue a less "authoritative" line than was typified by the *Gazette* and the MA's major reports. ... [He] judged the early supply of material to be adequate in quantity, but added : "there is still a need for more reporting from classroom teachers, who are often too modest to expose their views to public scrutiny".' [4, p. 241].

I feel sure that the present editors would endorse Peter's last remark.

Peter was an early advocate of using calculators in the classroom. His

first *Gazette* article was a report on the use of desk calculators in which he noted the huge variation across the country. One county obviously made a favourable impression:

> 'The best provision is in East Suffolk where 90 of the 150 schools (average size 130) have a machine. It is interesting to note that East Suffolk has a vigorous mathematics adviser: his ambition is one in every primary school by 1971.' [5, p. 42].

A few years later Peter was to join Suffolk as County Adviser, where he encouraged many schools to become involved with Hilary Shuard's CAN project. He also encouraged a practical and investigative approach to mathematics, believing that pupils develop a more secure understanding from concrete experiences and opportunities to think for themselves. However, he recognised that exploration and practical work was only one aspect of learning. As a member of the Cockcroft Committee he was a strong proponent of the famous Paragraph 243 that recommended a varied approach to teaching, defending it vigorously in [6].

After his move to Suffolk, Peter gave up *Mathematics in School*, but remained active in the MA. When the MA Diploma was revived in a new guise, with the MA acting as a validating body for courses run across the country, Peter was chair of its governing committee. The Diploma was highly successful, providing serving teachers with a rigorous course that developed their mathematical and pedagogical capabilities. In the early 1980s the MA launched a Provision for the Lower Attainers Diploma:

> 'This Diploma was the brainchild of Reynolds and it posed a fundamental challenge: the bridging between the two cultures of mathematics and remedial teachers. In Reynolds' judgement, his work here involved "more pioneering, in many ways, than anything else with which I have been associated.' [4, p. 247].

Although he was implacably opposed to much of the Conservative education agenda in the 1980s, Peter agreed to serve on the original National Curriculum Working Party, believing that he could have a stronger influence from within. Peter was a strong advocate of 'Profile Component 3', which later metamorphosed into AT1: Using and Applying Mathematics. He was never afraid to fight his corner. Margaret Brown remembers [7]:

> 'He could get very angry in defence of his cause – at one meeting he had a real set-to with Sig Prais – the only person I have seen take Sig on and win the argument – Sig was so stunned at someone coming back at him, who really knew his ground that he couldn't sensibly reply. Peter also wrote some really good letters to the press to denounce some of the silliness put forward by some university mathematicians.'

I first met Peter at the 1989 Annual Conference, where he took over the Presidency. At the time he chaired an MA group that was discussing mathematics with the National Curriculum Council (a precursor to QCA). He invited me to join the group, marking my first active involvement with

the Association. I have more reason than most to be grateful to Peter: our paths crossed again late in 1989 when I was interviewed at Farlingaye High School. At the time, one of the governors told me that they had been persuaded to 'take a gamble' in appointing me as Head of Mathematics. I feel certain that it was Peter doing the persuading – his influence on appointments being considerable. In fact, I was possibly his last Head of Department appointment in Suffolk, as he retired early in 1990. In later years we used to meet now and then for few beers and a chat – occasions that we liked to call meetings of the 'MA Felixstowe branch'.

Throughout his life, Peter had great respect for teachers. He railed against the administrative burdens placed upon them and is remembered in Suffolk for the immense practical support he gave to teachers. Shortly after his retirement, he wrote:

> 'Despite the views of politicians, the teachers I meet are, almost without exception, dedicated and committed. They strive to do the best for their pupils. Many of our members welcome the National Curriculum in principle. The low morale relates to several aspects: the absurdly short time scale for both consultation and implementation, without any proper development of teaching materials, the lack of adequately funded INSET, the massive burden of record-keeping, all of which is superimposed by a grotesque system of assessment at ages 7, 11, 14 and 16. Is it surprising that teachers are leaving the profession, sometimes after many years of excellent service, sometimes early in their careers?' [1, p. 220].

Margaret Brown summed him up thus [7]:

> 'In the end what was really impressive was that he cared so much about mathematics education, and often worked to the limit – at times endangering his own health – in supporting teachers and others. He was also of course just a lovely man – kind and thoughtful and enjoying good stories and good company.'

Peter was buried in a non-religious ceremony at the green burial ground at Wrabness in Essex. He had only recently visited the site, a field overlooking the River Stour, and liked to imagine how the trees planted at each burial would gradually develop into Oakfield Wood. Those of us attending the ceremony were invited to think about a time we had spent with Peter, to mourn him for a while, but not for too long, and to remember him occasionally in the future. Our mood was lifted by Peter's choice of funeral music: his beloved traditional jazz reminded us all of his indomitable spirit. Margaret Brown and I attended his funeral on behalf of the Association.

References

1. Peter Reynolds, Full circle: 1990 Presidential address, *Math. Gaz.* **74** (October 1990), pp. 211-223.

2. Peter Reynolds, A sister for *The Mathematical Gazette*, *Math. Gaz.* **80** (March 1996), pp. 33-34.
3. Editorial, *Mathematics in School*, **1**(1), (November 1971), p. 1.
4. Michael H. Price, *Mathematics for the multitude? A history of The Mathematical Association*, Mathematical Association (1994).
5. P. Reynolds, Hand calculators: a 1969 report on their use in schools, *Math. Gaz.* **54** (February 1970) pp. 41-44.
6. P. Reynolds, That impostor 1.4142136, *Math. Gaz.* **79** (November 1995) pp. 533 – 536.
7. Margaret Brown, Private communication (December 2000).

STEVE ABBOTT
91 High Road West, Felixstowe IP11 9AB

Memories of Peter Reynolds

I first came across Peter in the 1960s. Both he and his wife Marion were regular attenders at mathematical conferences particularly those of the MA and ICME.

We worked together closely on the Mathematical Association Diploma Board in the 1970s and early 1980s. Peter, as chairman, guided the work of the Board with care, patience and skill – at one time some 60 to 70 colleges and other institutions were offering the Association's diploma and the organisation of visits and validation required a huge amount hard work and effort. Peter was always proud of the success of this diploma.

After his 'retirement' we worked together on the Nuffield National Curriculum Mathematics Project, with Peter as director, for 5 years in the 1990s. The project experienced the frustrations of much political meddling with the curriculum and often, as fast as material was produced, the curriculum was changed!

After serving the Mathematical Association in many capacities (including that of President) for some 35 years, Peter was still, as a member of Council, more than willing to take on tasks that others shunned – he spent much time after his presidency guiding the Professional Development Committee.

He was always prepared to support both his subject and teachers against bureaucratic interference and was justly proud of his work on the Cockcroft committee and the National Curriculum Working Party.

Aside from mathematics, Peter and Marion were close personal friends and my wife and I enjoyed many evenings of good food, drink and conversation with them. Peter was never happier than when he was sitting in the sun watching a cricket match unfold; we spent many pleasant hours together at grounds in Chelmsford, Bath, Taunton and elsewhere. He will be much missed both as a friend and as a servant to mathematical education.

MIKE CORNELIUS
7 David's Close, Sidbury, Sidmouth EX10 0QS