

PROFILE

Judy Paterson



Judy was born in 1948 on a farm in Zambia, going to boarding school and then moving with her family to South Africa. She completed her undergraduate degree and a Masters in Mathematics Education at Cape Town University, before taking a position at Leif College, a school for historically disadvantaged students in post-apartheid South Africa. She married Freddy Paterson and had three children, Katy, Marion and Jonny. Their lives were tragically disrupted when Freddy died in a cycling accident in 1993.

Encouraged by friends who had come to NZ, including Bill Williams (then the University of Auckland Director of Public Relations Office), Judy brought her children here to begin a new life in 1994. She quickly obtained a position at the new Senior College in downtown Auckland under Dawn Jones and John Graham. She and the children settled in Brown's Bay.

The Government demand for competition in teacher education led the Department of Mathematics to launch a pre-service secondary mathematics teacher programme. Judy was appointed to design and teach the programme in 1995. She subsequently ran an innovative programme, initiating a double-major mathematics/mathematics design (all other programmes required two separate major subjects). She made this so successful in turning out leading mathematics teachers that this design is now found nationwide.

Building on this success, Judy applied for funding for a development programme that took top secondary teachers in other subjects and, in a 1-year programme, transformed them into mathematics teachers. Such was the

success of this programme that all of the participants remain teaching, one decade later.

Judy enrolled for a PhD in mathematics education in 2004, exploring her hypothesis that teachers could be led to reconsider their pedagogy by inspiring them with new mathematics content learning. Not only did she prove the hypothesis, but she developed a theoretical model and provided evidence for the causal connections, using her data to identify necessary conditions for teachers to move from their own mathematical learning to thinking about their students as learners. Judy remains well-known by secondary mathematics teachers throughout the Auckland region, due to the programmes which she initiated to keep teachers in touch with the Department of Mathematics through public seminars and talks, workshops and research projects, and maintaining personal contacts. She will be remembered by them as the face of university mathematics for a long time to come.

From 2008 to 2010, Judy also worked under contract to the National Centre of Literacy and Numeracy for Adults (University of Waikato) on professional development for those in the foundation levels of the tertiary sector. Judy brought mathematical rigour, extensive experience with teaching and learning professional development, challenge, bluntness, fun, and her infectious laugh to this team and its work.

Judy's research career became focused on undergraduate mathematics education, an area in which she gained international recognition, particularly in the North American mathematics education community. She gained three major TLRI and Ako Aotearoa-funded research contracts: to explore ways to engage mathematicians in lecturing development; to adapt the model of Team-Based Learning to undergraduate mathematics; and to investigate the full spectrum of learning outcomes (not simply content and skills) that we expect of undergraduates in the mathematical sciences. These projects resulted in her significant publication record, and international invitations to speak and write.

The above factual account does not begin to describe Judy's personal qualities, nor explain the very special role that she played in the Mathematics Education Unit and the wider Department of Mathematics. Judy was a "people-connector" par excellence, being interested in what people were doing and listening to them deeply, particularly when they talked about teaching and learning experiences. Almost always the speaker would receive an e-mail shortly afterwards with her ideas, contacts they might like to use, or resources and references that related to the issue at hand. This knack of taking people seriously extended into personal relations, with the result that Judy was more than a colleague to all of us. She leaves a very large gap in our community, along with a reminder that the philosophical differences and varied approaches to the teaching of mathematics are a richness to be embraced, not a cause for division.

Judy Paterson died peacefully at home, surrounded by her children, on 24th February, 2015.

The Judy Paterson Scholarship was established in 2014 in recognition of the contribution made by Judy to Mathematics Education, and especially her work with secondary school mathematics teachers in the Auckland region. The main purpose of the Scholarship is to support graduate level professional development for a teacher from a decile 1 or 2 school in the wider Auckland region. It is funded by donations to the Mathematics Department General Fund.

The inaugural recipient is Siosiana Taukolo. Siosiana was born in Tonga and was educated at Queen Salote College. She came to NZ with her family in 2003 and continued her education at Birkenhead College. In 2005 Siosiana entered the University of Auckland Tertiary Foundation Certificate programme and subsequently enrolled in a BSc, majoring in mathematics and statistics, and graduated in 2009. A Teaching Diploma followed, after which she taught at Queen Salote College in Tonga, before returning to Auckland. She has been teaching at Otahuhu College since 2012.

Bill Barton