

# UNE Mathematics debate widens

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The mathematical sciences community continues to view with dismay the situation at UNE. There is a national problem with the number of students choosing to study the mathematical sciences at senior secondary and university but cutting options for potential students at any institution contributes to the problem.

The new Vice-Chancellor should know this as he comes from administering health and medical research. Australian research in these areas is often of outstanding quality but it is increasingly dependent on mathematical and physical sciences and risks being compromised by medical research institutes not being able to find the expertise they need.

The claim by the Executive Dean in the *Armidale Independent* (19/4/06) that the reduction in staff 'will in no way reduce the quality of UNE's internationally respected mathematics program' would be laughable if it wasn't so serious both for the UNE community and for Australia.

In 2003, UNE had two applied mathematicians on staff. One went



Jan Thomas says that staff remaining at the University of New England's Mathematics department will struggle to maintain the quality after recent redundancies

to a Chair in Canada and the other has now been made redundant.

It had four pure mathematicians and two have been made redundant. In January 2006 the University was lauding one of these because she had won a fellowship to a Swiss institute famous for the number of Nobel prize winners it has produced. At that time UNE was happy to quote her as looking forward to bringing back knowledge and experience.

rience.

A university does not maintain international respect with these kinds of actions. Further, UNE cannot maintain a viable mathematics and statistics program, or sufficient expertise to support the cross-disciplinary input to the centres it boasts about, with the few remaining staff.

What exactly is 'cutting edge' about a National Centre of Science, Information and Communication

Technology if it is devoid of serious mathematical input?

The situation in regard to Mathematics Education for Rural and Regional Australia program is of even more concern. The demise of appropriate courses in mathematics for prospective teachers at UNE and some other universities constitutes a major problem for regional Australia which already finds it difficult, and sometimes impossible, to

recruit the teachers of mathematics they need.

It is great that UNE is hosting a Year 8 Mathematics Day. However will any of these students go on to degrees in mathematics at UNE? As Professors Peter Dodds, Alan McIntosh and Neil Trudinger note in *The Australian* today (HES, 19/4/06), with high results in the NSW school leaving certificate nearly half a century ago, their parents were pleased when they chose UNE. They note that almost a half century later it is difficult to imagine any knowledgeable parent recommending UNE.

What has UNE done to get its own students into mathematics and statistics courses taught by mathematicians and statisticians? Or is it doing what far too many institutions are doing, 'just in time teaching' within other faculties, a process where students learn just enough to get them through their courses but nothing they can apply to solve new problems.

UNE could go back to its proud mathematical traditions. Or it can continue on this backward looking path that will do nothing for its reputation here or overseas and nothing to solve the real problems of Australia - the lack of graduates from a host of disciplines across business, science and the humanities with little or no understanding of the mathematics and statistics that underpin the modern world.

## Coping in the classroom

A project at the University of New England has shown that online mentoring and peer support can be a lifeline for newly-graduated teachers learning to cope with the realities of the classroom.

"Beginning teachers, when they go into a classroom for the first time with full responsibility, are moving into the unknown," explained the project leader, Associate Professor Tom Maxwell. "This can sometimes be very challenging."

The "Educational Alumni Support Project", funded by a competitive Commonwealth Government grant of more than \$29,000, ran throughout last year. It allowed UNE teaching graduates, throughout their first year of service, to access a Web site where they could share experiences and tackle problems by "talking" online to each other and UNE mentors.

Dr Maxwell and his team have just submitted their final report to the Department of Education, Science and Training (DEST). It is located on the Internet at: [http://fehps.une.edu.au/Education/EdASP\\_Final\\_Rpt.pdf](http://fehps.une.edu.au/Education/EdASP_Final_Rpt.pdf)

The participants were UNE graduates of 2004 who took up their first teaching positions at the beginning of 2005. About 50 of them chose to contribute to the online forums, while many more logged on as observers.

Dr Maxwell, together with his UNE colleague Howard Smith, applied for the government funding.

Once that was granted, other academics from UNE's School of Education joined the team to act as mentors. It was the first time such support had been offered to beginning teachers on so large a scale.

Although funding for the one-year project has ended, novice teachers (i.e., those who started work in 2006) and UNE mentors still "talk" to each other via the Web site.

Two discussion forums were established: one for primary and one for secondary teachers. Two-thirds of the active participants were secondary teachers. The report suggests that, among the reasons for this imbalance, could be that there are fewer "team approaches" to teaching - and therefore greater potential for a sense of isolation - among secondary teachers.

"One of our major findings was that Term One is crucial. It's the initial crossing of the line into the unknown," Dr Maxwell said. (He added, however, that "some of the teachers wanted - or needed - support throughout the year".)

Discussion subjects ranged from immediate problems of behaviour management to more general questions of teaching strategies and curriculum content.

"The concerns of the participants tended to change over time. At first they centred on behaviour management, but eventually moved more towards aspects of learning



Dr Tom Maxwell is lending a helping hand to first time teachers

and teaching."

Another important finding was that casual teachers, who experience a greater range of problems than most permanent teachers, can need even more support than their permanent colleagues. The report to DEST says that some people beginning work as casual teachers, with "demands varying from day to day and across schools", were "clearly at risk" of leaving the profession.

"Teachers are in short supply," Dr Maxwell said.

"Our hope is that people joining the profession will be more likely to

remain in it if they can successfully negotiate the first term or two, which can sometimes be most traumatic. At UNE we've shown that, together with the teachers themselves, we can provide an online support network that can help some people through that period."

The report says that most of the participants felt the project had helped them to minimise feelings of "professional isolation", and that several of them believed it had played a significant role in their decision to continue working as teachers.

## ALP Senator coming to UNE Bistro

NSW ALP Senator George Campbell will be in Armidale on Wednesday, May 3 to speak at a Young Labor-sponsored forum in the UNE Bistro on the new Workchoices legislation. The forum will begin at 1pm and all interested residents are most welcome. Questions from the floor will be received.

Local ALP Branch President, Tony Ramsay, thanked North-West Young Labor for their initiative, saying that "The Workchoices legislation clearly discriminates against employees and represents a fundamental turning point in Australian political life".

"A Coalition Government that is allowed to pursue this agenda will preside over a national workforce increasingly characterised by unfair employment termination, excessive disparity in pay, and greater exposure to unreasonable demands," he said.

"The ALP by contrast stands for fairness in employment relations and, in particular, emphasises an ongoing role of unions and the Australian Industrial Relations Commission."

Senator George Campbell will address questions which individuals may have in connection with employment relations in this new regime. He will also speak on these issues at an ALP New England Electorate Council Forum to be held that evening.