Letter to the editors

A Cinderella existence

Mathematics and Statistics at the University of New England

No doubt our tale of woe is one we share with colleagues elsewhere.

About 15 years ago, our Department was buoyant. We were adequately staffed, had healthy student numbers and taught courses available to students in all the degrees UNE offered, several designed to meet specifications set by other departments. We taught three of the largest four courses in our Faculty, and these were amongst the largest taught at the university at all.

As the 'Dawkins Reforms' started to bite, pressures of funding led other departments to wean their students away from courses we offered.

Economics and commerce students had been required to take an entire year of mathematics. This is now a one-semester optional course, the justification being that these students are weak in mathematics anyway. We went from having 400–500 students for a whole year to having 70–80 for one semester by 2006. At the same time the Economics Faculty attempted to introduce courses in 'Quantitative Methods', indistinguishable from the course we offered.

Numbers had been sufficient for us to offer biology students their own second-year courses. As a result of various changes, biology students now take one semester of mathematics, and one of statistics, even though biology is far more mathematical, and uses more sophisticated statistics than ever before.

Chemistry and physics students were required to take significantly more mathematics. They are now only required to take the one-semester mathematics course intended for biology students. Pre-requisites have been abandoned. Students are now allowed to take 'quantum mechanics' in third year, without ever attending a course in either differential equations or linear algebra. Relativity theory is not offered. 'Science' teachers cannot generate interest, when they are ignorant of the two most important and exciting revolutions in science.

Computer science students are now only required to take a one-semester introduction to discrete mathematics, and there are moves to make even this optional.

The Faculty of Arts eliminated the mathematics major, without discussion with us.

These assaults on the student base notwithstanding, our School was able to buck the trend at UNE and in the period 2000–2005 senior mathematics student numbers increased significantly, despite an overall decline in science enrolments. In this period we were able to hire two permanent statisticians, in part to increase statistical consulting across the faculty and university, and four permanent mathematicians, albeit one in only a half-time position. This was possible because the

Dean at that time revealed that the previous Dean had been syphoning money away from our School to support other parts of the faculty, and he stemmed this.

A new Dean arrived just as the two most recent appointees took up their positions, and within one semester of her arrival, began to plan major cuts, based on a 'financial crisis' in our School. As a result, departing staff were not replaced and another 2.5 positions in mathematics declared redundant, leading to a loss of 4.5 positions in mathematics and statistics. Retrenchment notices were issued on 5 April 2006 to three mathematics staff. Two appealed against the retrenchments, and there was a protracted review, during which time the Dean insisted on restructuring our School's offerings and degrees, arguing that because of the three retrenchments, we no longer had the staff to cover our offerings and again citing alleged acute financial difficulties. It should be noted that at the Review Panel's meeting on 17 November 2006, management claimed to be unable to say what our School's closing balance had been for 2005.

The Vice-Chancellor rescinded the retrenchments on 17 April 2007, writing that the Head of Human Resource Services would contact the mathematicians concerned, in order to negotiate details of their return to UNE. There has been no significant progress in these discussions since.

In the meantime the Dean has withheld from the School the additional funds provided by the Federal Government for mathematics and statistics. She has forced the merger of the mathematics courses for economics students with that for biology students, and is in the process of replacing the introductory statistics course with a 'Scientific Practice' course, for which the Dean wanted 'tenders' from across the university for teaching it, offering the money for this from mathematics and statistics cluster income. The Dean also proposed establishing a centre for statistics outside the School, even though all SSAI accredited statisticians at UNE are members of the School.

UNE's BMath/BTeach and BSc/BTeach programmes were initiated and planned from our School and Faculty. The various submissions were prepared by our then Head of School, Chris Radford, and our then Dean, Peter Flood. Yet the credit and students are attributed to the School of Education. The students are seen as education students taking science, rather than science students preparing to teach.

The above explains our concerns for the future, for it seems that our Dean may be intending to do by stealth at UNE what USQ has publicly announced: cut basic science, cut mathematics, cut statistics, yet maintain education, especially of mathematics and science teachers, as well as intensifying activity in various fields of applied science and technology, which rely more than ever on the basic sciences, but especially mathematics and statistics.