

Churchill Fellowship rewards science teacher's passion

Nicci Hilton is helping to transform science teaching

It hasn't taken long for science teacher Nicci Hilton to put her stamp on the way the subject is being taught in Australia.

In the four years since graduating, in 2006, from the University of New England with her Bachelor's degree (she's currently studying for a Masters in Education at the university), she has won a swag of awards for science teaching, the latest being a Churchill Fellowship. It will take her on a six-week tour of the United States to visit science teaching facilities and allow her to further explore her interest in how a scaffold can be created to encourage experimentation and self directed learning in science.

Her first teaching appointment at Cowra High culminated in recognition at the Australian Government Quality Schooling Awards in 2008 and the Minister for Education's Medal of Distinction, not to mention the University of New England Distinguished Alumni award for that year.

She says, "The appointment at Cowra was a long way from home, so I decided to make the most of it and really apply myself."

Seeing that the school had a strong, perhaps too strong, focus on rugby league, which doesn't rate among Nicci Hilton's interests, she went about transforming the way science was taught and regarded at the school.

She started with a science quiz with a prize incentive in every school newsletter. It was a hit and the ball was set rolling. Building on the enthusiasm, she entered Cowra in every science award program available. The Cowra science students began to do very well, placing in or winning some 15 science competitions including the Rio Tinto Big Science Competition and The International Competitions and Assessments for Schools Science Competition.

She says that the impact of her efforts really struck home though when a student approached her while she was doing her shopping and said, "We're going to become known as the science school".

She was also instrumental in setting up a science club at the school, which has proved to be something of a leveller, "The club was not only a hit with the quicker students who needed extra work and stimulation but also with the less academic kids who were encouraged into scientific experimentation and research."



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Her successes attracted the attention of some very heavy hitters in education, with Prof Denis Goodrum approaching her personally to contribute to the framing paper for the national science curriculum.

"He wanted the opinion of a young science teacher and invited me to Canberra to take part in the creation of the framing paper, which was really exciting."

Keeping up with the assembled luminaries was challenging but exhilarating nevertheless, "Sometimes even understanding the language they were using was a challenge."

Her major contribution to the paper was the idea that science be taught holistically, "all sciences are related so teaching science in stand alone topics is a bit redundant," she says.

Encouragingly, the data indicate that while open-ended investigation advocated by the framing paper has always been good in NSW, its popularity as an approach is gathering pace everywhere else.

That interest in open-ended research was at the centre of Nicci Hilton's application for the

Churchill Fellowship, "encouraging students to conduct research and experimentation is one thing, but the danger is that students will be somewhat lost, we need to set up a scaffolding which will give them a pathway through research," she said.

She takes off for the US in March with mum in tow to visit six states in six weeks. Landing in California, she will travel to Arizona, Georgia, Florida, Washington DC and New York City.

She will visit the National Sciences Resource Centre in Washington and will present at the annual National Science Teachers Association Conference.

Her success in winning the Churchill Fellowship has been the result of hard work paying off and some gentle prodding by Cheryl O'Connor, the then CEO of the Australian College of Educators.

"Cheryl took me aside at a party where there were a lot of successful young people, I remember her telling me, 'The thing that all these people have in common is travel' and encouraged me to apply for a Fullbright Scholarship. I ended up applying for the Churchill Fellowship after some research. I was rejected the first time on the grounds that I didn't have enough experience but I reapplied this year and got it," she says.