

Teacher training must focus on school requirements

Dr Ben Jensen & Danielle Toon

6 December 2017

Sam is studying at an Australian university to be a primary school teacher. He was great at maths in school and he is excited about passing on his love of maths to young people. At university he learns general theories about teaching and some about maths education. But when he begins his first student teaching placement, he gets a shock.

He knows by heart how to multiply fractions, but he struggles to teach it to a room of 11-year-olds. Some students keep getting the answers wrong and he can't work out why. The theories Sam learned at university don't help him. His mentor teacher tells him to forget the theories, as "most lecturers haven't been inside a classroom for 20 years". In desperation, Sam goes online and downloads activities for teaching fractions from Pinterest, a multimedia sharing website.

This scenario is all too common in Australian schools. OECD data shows that new Australian teachers feel far less prepared to teach specific subjects than do many of their international peers. The cost is high. A 2015 global assessment of Australian primary students showed that only three English-speaking countries perform worse in mathematics than we do.

These findings should have profound implications for the work of teacher education faculties, schools and state departments of education. But will they?

Since 1980, more than 20 state and federal reports have called for university education faculties and schools to forge stronger links in order to improve teacher training. Yet nearly all these reports have stayed generic, providing few details of how schools and universities should work together. As a result, for years the system has barely improved.

Governments are trying to fix the problem. But while there are some bright spots of practice, progress is halting. Schools and universities have different priorities, cultures and language. Universities are funded by the commonwealth, schools by the states. Most teacher educators are academics, with incentives to prioritise publication of research over training. Most schools see teaching children as their core business and have neither the time nor the expertise to train new teachers from scratch.

Many state education leaders, for their part, are unsure of their role in improving teacher education. All players feel they have little say over what others do. The upshot is that Sam and many other novice teachers feel ill-equipped for the classroom.

Sam's lecturers might think they are preparing him well, but they rarely get to see whether he can practise their theories in a classroom. And if Sam asks his lecturers what curriculum materials or textbooks to use, he will likely be told that it is up to him and his school; they don't tell teachers what materials to teach.

In recent years Australia has implemented teacher education reforms. The 2014 Teacher Education Ministerial Advisory Group review established stricter quality assurance of teacher education programs and selection of entrants. The new literacy and numeracy test for teacher candidates puts pressure on universities to ensure their trainees have a basic level of knowledge.

Yet such external accountability measures can only do so much. Trainees like Sam regularly pass the test, without learning to teach well. Teachers need specialised knowledge to explain topics to children. Teaching is about understanding other people's thinking, not just your own.

To really help Sam we need to go deep into the detail of how teachers help students to learn, and how schools, universities and education departments can help them. This is precisely what a project funded by the Bill & Melinda Gates Foundation aims to do.

For the past two years, the foundation has funded Melbourne-based school education consultancy Learning First to work with university and school system leaders from Australia, Brazil, Finland and the US. Teams recently gathered in Memphis to discuss their experience piloting a reform to improve teacher education in their system. Two lessons emerged.

First, teacher preparation must be directly linked to practice — it cannot ignore what teachers need to learn in order to teach students. Progress comes when teachers are trained in how to select and use high-quality curriculum materials, how to teach them to students of different age levels and abilities, and how to assess what students have learned.

Second, none of the system leaders who took part in the project thought they could drive change with top-down reforms, guidelines or accreditation. All believed that schools and universities had to work together on the details of teacher learning, so that university faculty understood the challenges facing teachers such as Sam.

The Memphis meeting set out what successful partnerships between universities and schools look like, and then developed a road map for how to get there. In the best partnerships, universities and schools learn from each other how to design, deliver and evaluate the beginning teacher's journey, from university to practical training to early professional development.

That means joint review of state curriculum resources and how to incorporate them into university coursework. It means designing pedagogies that help novice teachers research, practise and reflect on how to teach a curriculum. It means evaluating whether coursework helps teachers in the classroom.

The University of Michigan, for example, works with partner school districts in the town of Ann Arbor. A teacher candidate learns core curriculum content. She analyses videos of her teaching with peers, mentor teachers and university faculty. She is taught by a clinical professor who has been promoted for his ability to train teachers and to research how school students learn.

Australian universities such as Deakin and Melbourne are bringing mentor teachers and university faculty together to assess student teacher practice. Many education leaders know that deeper partnerships are the answer, but struggle to make them happen across the board.

The good news is that a mountain of research and work around the world shows a way forward. Golden opportunities now exist to forge lasting partnerships among teacher educators, schools and departments of education. It is high time we took them.

Link to article in *The Australian*

<https://www.theaustralian.com.au/higher-education/teacher-training-must-focus-on-school-requirements/news-story/755e45ceec918d527bab9579a5f75bca>