



# Research needs in the school sector

**An interview with  
Dr Adrienne Alton-Lee**

**Chief adviser on the Ministry of Education's Iterative Best  
Evidence Synthesis programme**

February 2008



I don't think a dollar should be spent on [a] Teaching and Learning Research Initiative [project] that doesn't have a research design linked to student outcomes. That's what applicants should be thinking about. This is not a fund for academics who have an interest in something, it is to improve teaching and learning outcomes.

Researchers need to read and build on the Iterative Best Evidence Synthesis programme (BES), which is a body of knowledge that the New Zealand educational and research community has worked on together. It tells us where the knowledge is at now —what we then have to do is build on it and take it further. Applicants need to be familiar with that work so that we can move beyond a 'rediscovering the wheel' approach and focus development in ways that make a bigger difference for diverse learners.

The biggest gap we have found in the BES is in outcome-linked evidence about educational leadership. We've got virtually no research and development on this. Through the BES work we know there are PhDs on leadership, but they do not explore the link between leadership and outcomes. We found so few New Zealand studies that we had to take the professional development studies that have had good outcomes, and look what they told us about educational leadership. With school self-management, getting fruitful research and development in educational leadership in the local context is so important. We need to understand a lot more about this area. Other countries have research programmes running on educational leadership.

The next biggest gap is research and development on what works for Pasifika students. Graham and Linda Smith developed a big strategy at The University of Auckland to build expertise in Māori education research. But there is a big difference between Māori and Pasifika research. There is a plethora of studies that have done surveys of what people think, giving an appearance of research, but there is a need for extensive research and development about what works.

In general within the BES project it's been much harder to find outcomes-linked evidence about what works in the secondary school context than in primary schools. The secondary school work is sometimes very low level and doesn't provide material that is going to help practitioners. We need a lot more research and development at secondary level, particularly around NCEA.

There's also a paucity of research on Māori-medium education. There's some evidence of students doing much better in Māori-medium settings than English-language settings—and some strong research—but this area needs a big boost.

There needs to be a research focus on particular curriculum areas. With the addition of the learning area of languages in the new curriculum, now would be a good time to do some research and development on that. Also in the arts—we have had very little outcomes-linked research on teaching the arts.

More work is needed in the social sciences, because we have evidence of counterproductive practices that do harm; especially where social studies inadvertently promotes racism, peer conflict, and "othering". We need to extend the knowledge about what works and what doesn't, for example in health education where there is also evidence of outcomes counter to teaching aims—for example, in drug education.

We need a strand of work on how you can have the most impact on students. For some reason much of the TLRI projects have taken the view that research must be about something new. Yet a project such as the complex instruction work at Stanford University gives us an example of a very powerful intervention, with multiple academic and social outcomes. That Stanford University project was very complex, involving experts in science and maths, experts in co-operative learning, community people. What we need is to try to develop the capacity to do that kind of research in New Zealand. We need to be able to look at the important research that has been done over many years overseas, with big impacts on students, and develop it for the local context, adapt it for our own language. The TLRI should also be about promoting research and

development for New Zealand around what makes a bigger difference (compared, for example, with unhelpful continuing work on Bloom's Taxonomy) .

We could find no research on professional development and the use of ICT and linking it back to student outcomes. There are some wonderful things going on that are linked to student outcomes, but researchers haven't focused on those. A huge amount of money has been spent on professional development on ICT but there is some suggestion it is being used for administrative supportive rather than innovative teaching.

In terms of the style of research applicants should be thinking about, rigorous eclecticism that answers the questions that will take practice forward is the way to go—multiple-method studies. One of the things that has prevented some educational research from being useful is that people have used research methodologies, rather than worked out first what questions they want to ask and then working out the methodology. In the BES we put a lot of weight on case studies and vignettes. There's good evidence that people learn from stories. There must be good analysis but then it can be turned into a story. And with the maths BES, we tried to have vignettes of real children and real experiences.

Modest case studies linked to outcomes are worth a lot. Sometimes even doing a study of a very few students is worth it, if it helps take our knowledge forward in ways that can improve things for teachers and students.

I think it would be useful for researchers to think about embedding dissemination into their projects. They need to think early on about how this might be shared with teachers and taken forward.

The BES series should be a catalyst for people thinking about their approach. For example, there are more than 1000 studies in the social sciences—social studies, economics, classical studies. There are four findings about how people learn in this area. I'd like to see a project with a particular focus on Pasifika. You could take the four findings and work with teachers to adjust their teaching to incorporate Pasifika into it.