



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

5-YEAR PRODUCTIVITY INQUIRY: FROM LEARNING TO GROWTH

TEACHERS AND TEACHING RESEARCH CENTRE

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The Teachers and Teaching Research Centre (TTRC) welcomes the opportunity to respond to the Productivity Commission's *From learning to growth* interim report.

Established in 2013, the TTRC is led by Laureate Professor Jenny Gore and sits within the School of Education at the University of Newcastle. Our current major research program, Building Capacity for Quality Teaching in Australian Schools, is supported by a \$17.2 million grant from the Paul Ramsay Foundation. This program of research represents the largest study of teacher professional development in Australian education history and includes four randomised controlled trials on the impact of Quality Teaching Rounds (QTR) on student and teacher outcomes across New South Wales, Victorian, and Queensland government schools.

This program of research and scaling builds on our development of the Quality Teaching Model, which has been the NSW Department of Education's framework for high-quality pedagogy since its release in 2003. Preliminary studies have demonstrated the relevance of the Model for also addressing the quality of teaching in higher education.

We have also conducted a substantial program of research on student aspirations – including aspirations for teaching – involving students in Years 3-12 in NSW government schools. This longitudinal work conducted between 2012 and 2017 generated more than 12,000 student surveys and interviews/focus groups with more than 1000 students, parents and teachers.

Our submission is informed by more than two decades of educational research into initial teacher education, quality teaching, teacher development, school change, leadership, student aspirations, equity, and STEM education.

In its interim report, the Commission made several requests for information. We have addressed a sub-set of these requests (2.1, 2.2, 2.4, 4.2) where we can provide evidence-backed solutions and informed commentary. We also propose several reform initiatives for consideration.

Overview

Education in Australia currently sits at an important juncture. The nation-wide teacher shortages, which have been exacerbated but not caused by COVID-19, have shone a spotlight on the challenging conditions facing teachers and leaders in schools. Retention rates of initial teacher education students are falling, and teachers – early career and experienced alike – are leaving the profession in droves. Stagnating student achievement outcomes, particularly for students from equity cohorts, have been of concern for several years, growing more urgent in the context of ongoing disruptions to schooling over the past three years. Student wellbeing has spiralled and requires serious attention and investment. Education research remains woefully underfunded and undervalued. Australia's school system remains one of the OECD's most segregated, thanks in a large part to the differential funding model and missed opportunity to implement the Gonski reforms.

At the same time, critical policy work is underway - all of which is underpinned by the Alice Springs (Mparntwe) Education Declaration which "sets out a vision for a world class education system that encourages and supports every student to be the very best they can be, no matter where they live or what kind of learning challenges they may face". Following the Quality Initial Teacher Education Review, the government has committed to implementing several of its recommendations, including an expert panel for Initial Teacher Education Quality Assessment. A key outcome of the recent Teacher Workforce Roundtable is the commitment of state and federal education ministers to develop a new National Teacher Workforce Action Plan with the aim of increasing the number of people entering and remaining in the profession. As well as reviewing the National School Reform Agreement, the Productivity Commission is undertaking its flagship national productivity review – in which both education and higher education play key roles.

Right now, we have a rare opportunity for education reform that genuinely supports teachers and lifts outcomes for millions of students. To capitalise on this opportunity, we must adopt a system-wide approach that considers the entire teacher lifecycle. Genuine reform that will make a lasting difference to educational outcomes in Australia requires that policy is informed by research and practice; practice is supported by research and policy; and research is valuable for policy and practice.

1. Building capacity for quality teaching in Australian schools

Information request 2.1 asks about the most effective ways to spread evidence-based teaching practices - our research on Quality Teaching Rounds offers an evidence-backed policy opportunity.

The Quality Teaching (QT) Model is comprised of elements of practice for which there is evidence of impact on student outcomes¹. It was developed in 2003 by Associate Professor James Ladwig and Laureate Professor Jenny Gore at the University of Newcastle. The QT Model was commissioned by the NSW Department of Education and has been its endorsed pedagogical framework ever since.

The QT Model focuses on three key concepts:

1. Intellectual Quality - pedagogy focused on deep understanding of important knowledge.
2. Quality Learning Environment - pedagogy that creates productive classrooms that boost student learning.
3. Significance - pedagogy that connects learning to students' lives and the wider world.

The QT Model provides concepts and language with which to define and understand quality. Having a quality teaching framework is a partial step to improving teaching practice. When combined with the powerful processes of Quality Teaching Rounds professional development, we find significant positive effects on student academic achievement² and the quality of teaching³. Just as importantly, in the face of the current alarming teacher shortages, when teachers participate in QTR they experience enhanced morale and stronger individual and collective efficacy, and the culture of their schools improves^{4 5 6}.

QTR has impact on teachers at every stage of the teaching career lifecycle (based on a model adopted by AITSL⁷), as demonstrated in the table below. If QTR was implemented systematically it could support reform efforts, addressing urgent government objectives to:

- Raise the status of the profession
- Reform initial teacher education
- Improve retention in ITE and the teaching workforce
- Support teacher and student wellbeing
- Lift student achievement

Attract	Presents teaching as intellectually challenging and rewarding work
Prepare	Strengthens ITE program quality and coherence
Place	Builds graduate confidence and preparedness for diverse teaching contexts
Induct	Supports high quality teaching practice in collaborative professional cultures
Develop	Improves student achievement, teaching quality, teacher morale and school culture
Recognise	Supports teacher accreditation and promotion
Retain	Increases job satisfaction and wellbeing

¹ Ladwig, J., and King, M. (2003). "Quality teaching in NSW public schools: An annotated bibliography." Ryde: NSW Department of Education and Training Professional Support and Curriculum Directorate.

² Gore, J., Miller, A., Fray, L., Harris, J., Prieto, E. (2021). Improving student achievement through professional development: Results from a randomised controlled trial of Quality Teaching Rounds. *Teaching and Teacher Education*, <https://doi.org/10.1016/j.tate.2017.08.007>

³ Gore, J., Lloyd, A., Smith, M., Bowe, J., Ellis, H., Lubans, D. (2017). Effects of professional development on the quality of teaching: Results from a randomised controlled trial of Quality Teaching Rounds, *Teaching and Teacher Education*. <https://doi.org/10.1016/j.tate.2017.08.007>

⁴ Gore, J. Rickards, B. (2020). Rejuvenating experienced teachers through Quality Teaching Rounds professional development, *Educational Change*, <https://doi.org/10.1007/s10833-020-09386-z>

⁵ Gore, J., Rosser, B. (2020). Beyond content-focused professional development: Powerful professional learning across grades and subjects, *Professional Development in Education*, <https://doi.org/10.1080/19415257.2020.1725904>

⁶ Gore, J., Bowe, J. (2015). Interrupting attrition? Re-shaping the transition from preservice to inservice teaching through Quality Teaching Rounds, *International Journal of Educational Research*, <https://doi.org/10.1016/j.ijer.2015.05.006>

⁷ AITSL's phases of the teaching career lifecycle: <https://www.aitsl.edu.au/teachingfutures>.

QTR is unique in its applicability for teachers across all school types, grades and subject areas. Linking beginning teachers with more experienced colleagues through QTR helps build a shared vision of quality teaching, a strong sense of professionalism, and deep collaborative relationships among teachers in ways that are critical to better retention. Reform efforts that improve early career teachers' access to high quality induction programs like QTR are likely to have broad impacts for teachers, their students and the wider community.

Better use of existing funding

In NSW and Victoria, education departments have rolled-out large-scale tutoring programs aimed at providing intensive targeted support to students at risk of falling behind. While these programs have not been systematically or rigorously evaluated, anecdotal evidence is that they have had a positive impact on the students able to access them. However, this has come at substantial cost – both financially, in the hundreds of millions dollar price-tags, and in human resource terms by massively depleting the available casual teacher workforce at a time of acute teacher shortages. The targeting of the program itself has been managed on a local level and there are concerns about inequities in the system.

In our 2019 RCT on QTR, the improvement in student achievement in mathematics was slightly stronger among students in schools with an ICSEA below 950 – indicating a level of community disadvantage. This important finding signals the potential of Quality Teaching Rounds to help narrow equity gaps and boost achievement, equitably, on a large-scale. In an independent cost-benefit analysis, Deloitte Access Economics reported that QTR is low cost and returns between \$40 and \$150 to the economy in gross state uplift for every dollar spent on direct program costs⁸. By comparison, government investment in higher education returns around \$3⁹.

Supporting teachers in rural and remote schools

Information request 2.2 asks about using digital technologies to support teaching out of field.

“QTR Digital,” a wholly online version of Quality Teaching Rounds, was developed in 2018 to ensure teachers in small, rural and remote schools could access the same high quality professional development as their colleagues in regional and metropolitan areas. In our 2021 randomised controlled trial, we found that QTR Digital – like the traditional version of Quality Teaching Rounds – improved teaching quality and teacher efficacy. We also found two-month's growth in reading achievement for students whose teachers participated in the program compared to the control group.

By developing a deep understanding of the QT Model, QTR (and QTR Digital) provides a powerful way for teachers to understand good teaching. For those teaching out-of-field (which is more common in small, rural and remote schools), the emphasis tends to be on disciplinary knowledge and curriculum. But teaching out of field also depends on being able to relate lessons to the wider world and engage students, while also homing in on key concepts.

QTR prepares teachers and graduates for all contexts of teaching and helps them develop real confidence in providing powerful learning experiences through intellectual quality, a quality learning environment and high levels of significance, or making learning meaningful to students.

Assumptions about quality teaching

Using the QT Model we have empirically tested assumptions about teaching quality in different contexts – such as rural and remote schools and hard-to-staff schools in disadvantaged communities. This evidence is of great importance given these contexts experience higher rates of attrition, more

⁸ Deloitte Access Economics (2020) Quality Teaching Rounds – Cost benefit analysis <https://qtacademy.edu.au/wp-content/uploads/2020/10/Deloitte-Access-Economics-QTR-Cost-Benefit-Analysis-Final-report-9-Sept.pdf>

⁹ Deloitte Access Economics (2020) The importance of universities to Australia's prosperity, *Universities Australia*. <https://www.universitiesaustralia.edu.au/wp-content/uploads/2022/04/Report-The-importance-of-universities-to-Australias-prosperity.pdf>

difficulties in recruitment, and are more likely to employ beginning teachers and teachers teaching out of field.

- Experience¹⁰: we found no significant difference between beginning and experienced teachers in the quality of teaching delivered. Two possible explanations with merit are: a) universities are doing an increasingly good job at preparing graduates; and, b) most current professional development is not having a meaningful impact on the quality of teaching practice.
- Disadvantage: we found a statistically significant relationship between quality of teaching and school-level advantage using ICSEA as a measure. However, the relationship is primarily leveraged by the poorer schools. In schools with an ICSEA above 950 the relationship no longer exists¹¹, that is, there is no difference in quality of teaching delivered between mid-ICSEA and high-ICSEA schools.
- Location: we found a small but significant difference in the quality of teaching between rural and urban schools. However, in our sample there were no urban schools at the lower end of the ICSEA range and no rural schools at the upper end. When we only look at schools with overlapping ICSEA, the relationship no longer exists.

Given that teachers in all ICSEA bands produced higher quality teaching after participating in Quality Teaching Rounds, the result in low-ICSEA (and rural) schools suggests that the issue is less about the quality of teaching or teachers and more to do with enduring and pervasive structural disadvantage.

2. National strategy for teacher and school leader development

Information request 2.4 asks about strategies and policies for progressively developing the role of teachers.

As evidenced by the rhetoric surrounding the National Teacher Workforce Roundtable, education reform in Australia is highly focused on initial teacher education (inputs and outputs). However, reform in ITE impacts a small minority of the workforce and most changes will take decades to show effects.

We argue that attention to building the capacity for quality teaching of the more than 300,000 teachers currently in the workforce is a better strategy for achieving the core goals of quality and equity.

We believe addressing school leadership as part of the entire teaching career lifecycle is an important opportunity for meaningful reform. **A National Strategy for Teacher and School Leader Development** could provide both a unifying framework for understanding and delivering quality teaching and a clear pathway from ITE to beginning teacher induction and ongoing teacher and leader development.

Adopting such a strategy would achieve two overarching goals (aligned with the Alice Springs Education Declaration's Goals for Young Australians):

1. The Australian education system values teachers and supports them to promote excellence and equity.
2. All Australian teachers:
 - become confident and creative practitioners
 - have time to teach, plan and collaborate in ways that support career-long professional growth
 - are treated as professionals and as respected members of the community.

¹⁰ Gore, J., Rosser, B., Jaremus, F., Miller, A., Harris, J. (under review). Fresh evidence on the relationship between years of experience and teaching quality.

¹¹ Gore, J., Jaremus, F., Miller, A. (2021). Do disadvantaged schools have poorer teachers? Rethinking assumptions about the relationship between teaching quality and school-level advantage. *Australian Education Researcher*. <https://doi.org/10.1007/s13384-021-00460-w>

At every stage of the teaching career lifecycle (based on a model adopted by AITSL¹²) a national strategy for teacher and school leader development could support reform efforts, addressing urgent government objectives to:

- Raise the status of the profession
- Reform initial teacher education
- Improve retention in ITE and the teaching workforce
- Support teacher and student wellbeing
- Lift student achievement.

Attract	Develop a national approach to teacher recruitment
Prepare	Strengthen mechanisms for ensuring ITE program quality
Place	Strengthen mechanisms for placement across jurisdictions
Induct	Guarantee induction supports and conditions
Develop	Build capacity in teaching and leadership
Recognise	Expand national system for recognising teachers including clear leadership pathways
Retain	Expand national system for retaining teachers and school leaders

Importantly, this strategy would need to be underpinned by an agreed definition of quality teaching. One empirically tested and powerful framework for defining and understanding quality teaching is the Quality Teaching Model.

Teacher development requires serious investment. Participation in Quality Teaching Rounds at all career stages is precisely the kind of activity teachers are crying out for. Teachers are rejecting recently announced reform proposals such as rewarding excellent teachers (performance pay) and the development of lesson resources. Instead, they are calling for time to collaborate, plan, and review their work. A one-off experience of QTR (which takes four days of teachers' time spread over a school term) has transformative effects on the quality of teaching, teacher morale and teacher efficacy. Such valuing of professional growth should be fundamental to any teacher and leader development strategy.

3. Quality teaching in tertiary and higher education

Recommendation direction and information request 4.2 asks about supporting ongoing improvement in the quality of teaching in higher education – our study on *QT in Higher Education* offers a pathway forward.

Corporatisation of the higher education sector has intensified in recent decades thanks to New Public Management techniques and policies. In Australia, we have seen increased emphasis on performance and productivity, heightened competition for students and funding, growing wage disparities between senior management and other employees, and substantial cuts to staff who perform the core work of universities – teaching and research. In Australia, the *Higher Education Standards Framework (Threshold Standards) 2021* mandates that academics should not only have relevant disciplinary knowledge but also skills in contemporary teaching, learning and assessment. Yet as a sector we continue to fail academics, with little government or institutional policy focused on enhancing the quality of teaching.

Within this current context, it is not surprising that student evaluations have become the dominant mechanism for signifying and addressing the quality of teaching in universities. After all, students are positioned as a key “customer” that university management must satisfy. Unfortunately, however, valuing student reviews as the main mechanism for improving teaching in universities has left the sector with a warped understanding of quality teaching.

¹² AITSL's phases of the teaching career lifecycle: <https://www.aitsl.edu.au/teachingfutures>.

Student evaluations typically take up “quality” as a form of accountability, emphasising the delivery of products and services. Here, the *management* of teaching ends up being emphasised, however, rather than the *practice* of teaching.

“Excellence”, like student evaluation, is another visible approach to addressing teaching quality in the academy. Academics who win institutional and national teaching awards are recognised as “good teachers”. Ultimately, however, such approaches often fail to address what actually constitutes effective teaching. They provide little or no support for academics seeking to understand and refine their practice.

Even when teaching and learning are touted as the intended focus of academic development program, the pragmatics of teaching tend to dominate, with an emphasis on policy, logistics, and course management.

In a recent study¹³, we trialled an evidence-based pedagogical framework, the Quality Teaching Model, to enhance conceptual understandings of quality teaching in the academy. The wide-reaching benefits reported by participants signal a potential way forward. Academics from a range of disciplines and from associate lecturer to professor levels attended a short workshop introducing the QT Model and then used the framework for self-assessment, peer review, or within a community of practice.

In our study with academics, participants reported direct benefits for analysing practice, course planning, collegial collaboration, and improving the student experience. Importantly, the QT Model provided a much-needed conceptual and practical way for academics to understand the practice of teaching, with fresh insights about what constitutes quality. It provided a new lens with which to reflect on, challenge and enhance ways of working.

Quality teaching in higher education remains a pressing issue. Genuine improvement requires a shift away from proximal measures of “quality” (i.e., student evaluations of teaching) toward approaches that offer clear insight into how teaching can be enhanced. Institutions, employers, students and society at large would benefit from transformative approaches, such as engagement with the QT Model, that get to the heart of quality teaching.

¹³ Patfield, S., Gore, J., Prieto, E., Fray, L., Sincok, K. (2022) Towards quality teaching in higher education: pedagogy-focused academic development for enhancing practice, *International Journal for Academic Development*, DOI: 10.1080/1360144X.2022.2103561