



**Submission regarding the Teacher Education Expert Panel
Discussion Paper**

TEACHERS AND TEACHING RESEARCH CENTRE

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The Teachers and Teaching Research Centre (TTRC) welcomes the opportunity to contribute to the Teacher Education Expert Panel's reform efforts.

Established in 2013, the TTRC is led by Laureate Professor Jenny Gore and sits within the School of Education at the University of Newcastle. The TTRC is an Australian leader in high quality, high impact educational research into initial teacher education, quality teaching, teacher development, school change, leadership, student aspirations, equity, and STEM education.

Our submission addresses several of the key questions outlined in the discussion paper where our large and unique evidence base can inform policy decisions. We also make three key recommendations (see final page).

1. Classroom ready graduates

Two fundamental challenges prevent reforms in initial teacher education (ITE), and education more broadly, from achieving their intended outcomes. First, as a profession, Education has failed to agree on what constitutes quality teaching¹, let alone how to measure it. Second, evidence-based teaching practices are often simplified and pitched in opposition to each other (for example, explicit instruction versus inquiry approaches) when what matters most is the quality of the pedagogy². Without overcoming these fundamental challenges, the current reform agenda risks similarly unsatisfactory outcomes.

The Discussion Paper overlooks the fact that it is possible to teach well or badly using any method (including explicit instruction and inquiry approaches). Effective teaching requires more than knowledge of and skills in delivering specific practices, derived from brain and learning science. Quality and context matter. Classroom practice matters, not just practices.

Effective teaching also requires understanding of the social and emotional contexts of schools and classrooms, and the capacity to adapt to students' needs and to classroom dynamics. It requires an understanding of how to employ specific techniques in ways that deliver quality learning outcomes. This means graduate teachers should be equipped with a broad range of knowledge and skills for the classroom. Most importantly, graduates require a comprehensive understanding of high-quality pedagogy to underpin their teaching and ensure their readiness for the classroom.

Despite being subjected to more than 100 reviews in the past four decades³, ITE suffers from a lack of trust by policy makers that is not experienced in other fields and professions⁴, and the perpetuation of views about ITE that are simply inconsistent with what happens in university programs. For example, criticisms of the field often centre on a perceived lack of theory-practice connection, failure to highlight particular strategies (such as those privileged in the discussion paper), and/or over-emphasis on history and philosophy⁵.

Such views are borne of differing ideological views on what teacher education should be and do, arising from the four distinct major traditions in teacher education, each with a different emphasis:

1. Disciplinary tradition: emphasises a strong background in the discipline/s one plans to teach.

¹ Gore, J. (2021) The quest for better teaching, *Oxford Review of Education*, 47:1, 45-60. DOI 10.1080/03054985.2020.1842182

² Gore, J. (2022) Ideological battles over the curriculum and pedagogy miss the complexities of teaching, *EducationHQ*. <https://educationhq.com/news/ideological-battles-over-the-curriculum-and-pedagogy-miss-the-complexities-of-teaching-113237/>

³ William Louden (2008) 101 Damnations: the persistence of criticism and the absence of evidence about teacher education in Australia, *Teachers and Teaching*, DOI: 10.1080/13540600802037777

⁴ Simpson, A., Cotton, W., Gore, J. (2021). Teacher Education/ors in Australia: Still Shaping the Profession Despite Policy Intervention. *Teacher Education Policy and Research*. https://doi.org/10.1007/978-981-16-3775-9_2

⁵ Cassidy, C. (2023). Student teachers should spend more time on practical skills, less time on philosophy of education, panel recommends. <https://www.theguardian.com/australia-news/2023/mar/23/students-teachers-should-spend-more-time-on-practical-skills-less-time-on-philosophy-of-education>

2. Scientific tradition: emphasises skills in teaching based on empirical research.
3. Experiential tradition: favours apprenticeship and learning by doing.
4. Critical tradition: seeks to develop critical consciousness about the inequitable impact of schooling on children from disadvantaged social circumstances^{6 7 8 9}.

Arguably, all four traditions in learning to teach are foundational to quality ITE. A unifying framework that brings greater coherence to teacher education while also clearly and comprehensively articulating good teaching, based on robust evidence, would ensure teachers graduate with the knowledge and skills needed for the modern classroom¹⁰.

Backed by two decades of rigorous research, the Quality Teaching (QT) Model offers such a framework. **It is an evidence-based model of pedagogy of the kind sought in Reform Area 1, discussion question 1.** The QT Model complements rather than replaces other teaching practices by focusing on the *quality* of instruction rather than prescribing specific approaches to teaching.

The QT Model was developed by Associate Professor James Ladwig and Laureate Professor Jenny Gore and centres on three dimensions of quality teaching derived from research:

1. Intellectual quality - developing deep understanding of important ideas.
2. Quality learning environment - ensuring positive classrooms that boost student learning.
3. Significance - connecting learning to students' lives and the wider world.

Underpinning each of these dimensions are elements of teaching practice for which there is evidence of impact on student outcomes¹¹. The QT Model was developed for the NSW Department of Education, has been its framework for quality pedagogy since 2003, and has been subjected to extensive and rigorous testing during the past two decades.

The QT Model honours the complexity of teaching and treats teaching practice comprehensively and holistically. **Reform Area 1** proposes four types of content that should be prioritised in ITE programs. Inclusion of the QT Model in ITE programs should also be a key recommendation because it provides a framework for translating content to quality practice and for addressing quality in relation to each of the content types. Across the three dimensions of the QT Model, elements attend to:

- 'The brain and learning' such as Deep Knowledge, Deep Understanding, Problematic Knowledge, Higher-Order Thinking and Explicit Quality Criteria;
- 'Classroom management' through Engagement, Social Support, High Expectations, Students' Self-regulation and Inclusivity; and
- 'Enabling factors for learning' such as Background Knowledge, Cultural Knowledge and Connectedness.

These concepts are elaborated in detail in the QT Classroom Practice Guide¹². In short, the QT Model underpins 'effective pedagogical practices' by ensuring that quality learning experiences are central. The QT Assessment Practice Guide¹³ provides a framework for also ensuring that high quality formative and summative assessment tasks are developed.

Reform Area 1 discussion question 3 asks about ensuring that curriculum-specific ITE content embeds evidence-based practices. Again, the QT Model offers a solution that treats the practice of teaching holistically and is applicable to all areas of the curriculum. The QT Model attends to disciplinary knowledge and curriculum content through its focus on Intellectual Quality. Critically,

⁶ Gore J. (2001). Beyond our differences: A reassembling of what matters in teacher education. *Journal of Teacher Education*.52(2):124-135. doi:10.1177/0022487101052002004

⁷ Liston, D., & Zeichner, K. (1991). *Teacher education and the social conditions of schooling*. Routledge.

⁸ Feiman-Nemser, S. (1990). Teacher preparation: Structural and conceptual alternatives. In W. R. Houston (Ed.), *Handbook of research on teacher education* (pp. 212-233)

⁹ Kirk, D. (1986). Beyond the limits of theoretical discourse in teacher education: Towards a critical pedagogy. *Teaching and Teacher Education*, 2, 155-167.

¹⁰ Gore, J., Griffiths, T., & Ladwig, J. (2004). 'Towards better teaching: productive pedagogy as a framework for teacher education', *Teaching and Teacher Education*, 20 375-387. <http://dx.doi.org/10.1016/j.tate.2004.02.010>

¹¹ 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.

¹² (2020) *Quality Teaching Classroom Practice Guide 3rd edn.* (c) State of NSW, Department of Education

¹³ (2020) *Quality Teaching Assessment Practice Guide 3rd edn.* (c) State of NSW, Department of Education

many graduate teachers begin their teaching careers on casual or fixed-term contracts, in hard-to-staff or regional and remote schools, where teaching outside their field of specialisation is common¹⁴. In supporting teachers with this out-of-field practice, the emphasis tends to be on curriculum expertise. However, teaching out of field or in new contexts can be greatly enhanced if teachers can identify key concepts and their relationships to each other (QT Intellectual Quality dimension), relate lessons to the wider world (QT Significance dimension), and engage students in productive, safe classrooms (QT Quality Learning Environment dimension).

Underpinning ITE programs with this framework for quality provides a mechanism for graduate teachers to be confident in the quality of their teaching regardless of the contexts in which they teach.

2. Professional experience and transitioning into the classroom

Using the QT Model, we have been able to analyse the quality of teaching in a range of contexts¹⁵. Pertinent to this panel's remit, recent research shows that beginning teachers deliver, on average, the same quality of teaching as their more experienced colleagues¹⁶, as measured by the QT Model. While somewhat counterintuitive, this finding is consistent with several other studies^{17 18 19}.

We provide two possible explanations for this result. First, while also acknowledging much-needed reform in ITE, the result suggests ITE programs are preparing graduates to make a positive impact in the classroom right away. Second, throughout their careers, teachers receive little professional development that has a material impact on the quality of the teaching they deliver.

The QT Model can deliver the kinds of improvement in teaching and student learning sought by all systems and governments when it is embedded in teaching practice using the Quality Teaching Rounds (QTR) approach to professional development²⁰. QTR brings teachers at any stage of their careers together, to learn from each other and improve their pedagogy. Rigorous randomised controlled trial research shows that QTR improves the quality of teaching, teacher morale^{21 22 23}, teacher efficacy²⁴, and student academic achievement in both mathematics²⁵ and reading^{26 27}. The

¹⁴ Caldis, S. (2022). Transitioning into the profession with an out-of-field teaching load. In: Hobbs, L, Porsch, R, (eds) Out-of-field teaching across teaching disciplines and contexts. doi.org/10.1007/978-981-16-9328-1_13

¹⁵ 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>

¹⁶ Gore, J., Rosser, B., Jaremus, F. et al. (2023) Fresh evidence on the relationship between years of experience and teaching quality. Australian Education Researcher. <https://doi.org/10.1007/s13384-023-00612-0>

¹⁷ Churchward, P. & Willis, J. (2019). The pursuit of teacher quality: identifying some of the multiple discourses of quality that impact the work of teacher educators, Asia-Pacific Journal of Teacher Education, 47(3), 251-264. <https://doi.org/10.1080/1359866X.2018.1555792>

¹⁸ Graham, L., White, S., Cologon, K., & Pianta, R. (2020). Do teachers' years of experience make a difference in the quality of teaching?. Teaching and Teacher Education, 96, 1–10. <https://doi.org/10.1016/j.tate.2020.103190>

¹⁹ Mockler, N. (2018). Early career teachers in Australia: a critical policy historiography, Journal of Education Policy, 33(2), 262-278. <https://doi.org/10.1080/02680939.2017.1332785>

²⁰ Bowe, J. & Gore, J. (2017). Reassembling teacher professional development: the case for Quality Teaching Rounds, Teachers and Teaching, 23:3, 352-366, DOI: 10.1080/13540602.2016.1206522

²¹ 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>.

²² Gore, J., & Rickards, B. (2020). Rejuvenating experienced teachers through Quality Teaching Rounds professional development. Journal of Educational Change. <https://doi.org/10.1007/s10833-020-09386-z>

²³ 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.2015.05.00>

²⁴ Harris, J., Miller, A., Gore, J., Holmes, M. (2022). Building capacity for quality teaching in Australian schools: QTR Digital RCT final report. <http://hdl.handle.net/1959.13/1471857>

²⁵ 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>

²⁶ Povey, J., Porter, M., Kennedy, L., Hussain, A., Bellotti, M., Cook, S., Austerberry, S. (2023). Building Capacity for Quality Teaching in Australian Schools: Queensland Replication Study Final Report. <http://hdl.handle.net/1959.13/1471855>

²⁷ Ibid

positive effects on student achievement have been demonstrated for students in both Stage 2 (Years 3 and 4) and Stage 3 (Years 5 and 6), and in two states (NSW and QLD), in studies where QTR workshops were delivered by both researchers and trained QTR Advisers, and in an independent trial conducted by the University of Queensland’s Institute for Social Science Research²⁸.

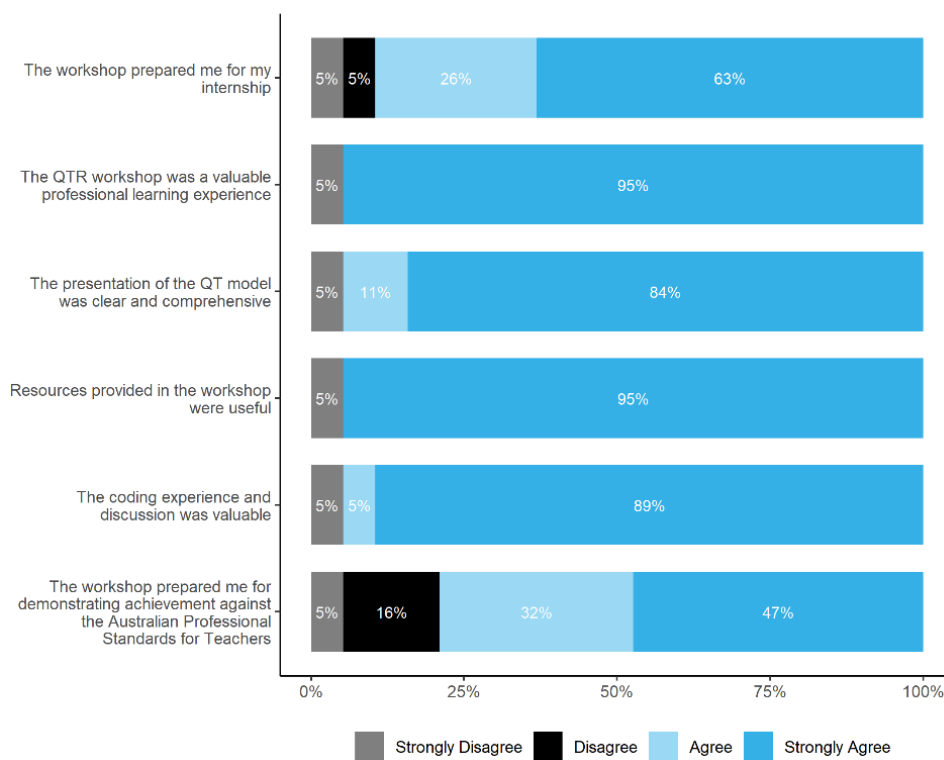
Based on this compelling evidence, two studies were conducted with University of Newcastle ITE students in 2021 and 2022, which sought to test the effectiveness of a Quality Teaching workshop in fortifying students’ preparedness for their final year 10-week internship. These studies provide evidence sought in **Reform Area 3 discussion question 5 on integrating theory and practice** and attend to the QITE Review Expert Panel’s Recommendation 7²⁹.

In 2021, 37 final year student teachers participated in a pilot two-day Quality Teaching workshop. Given its success, the project was extended into 2022 with an additional 32 student teachers. Insights from participants were gathered from pre-workshop, post-workshop, and post-internship surveys and semi-structured interviews.

While these studies are being expanded upon again this year, the preliminary results establish the workshop as having benefits for pre-service teachers. Major findings of the project to date are:

- Participant satisfaction was high.
- The QT Model helped pre-service teachers to understand important links between theory and practice. The links were made clear through the practical experience of ‘coding’, or using the Model, to assess lesson and assessment task quality in the workshop.
- Following the workshop, participants overwhelmingly reported increased confidence prior to their internship.

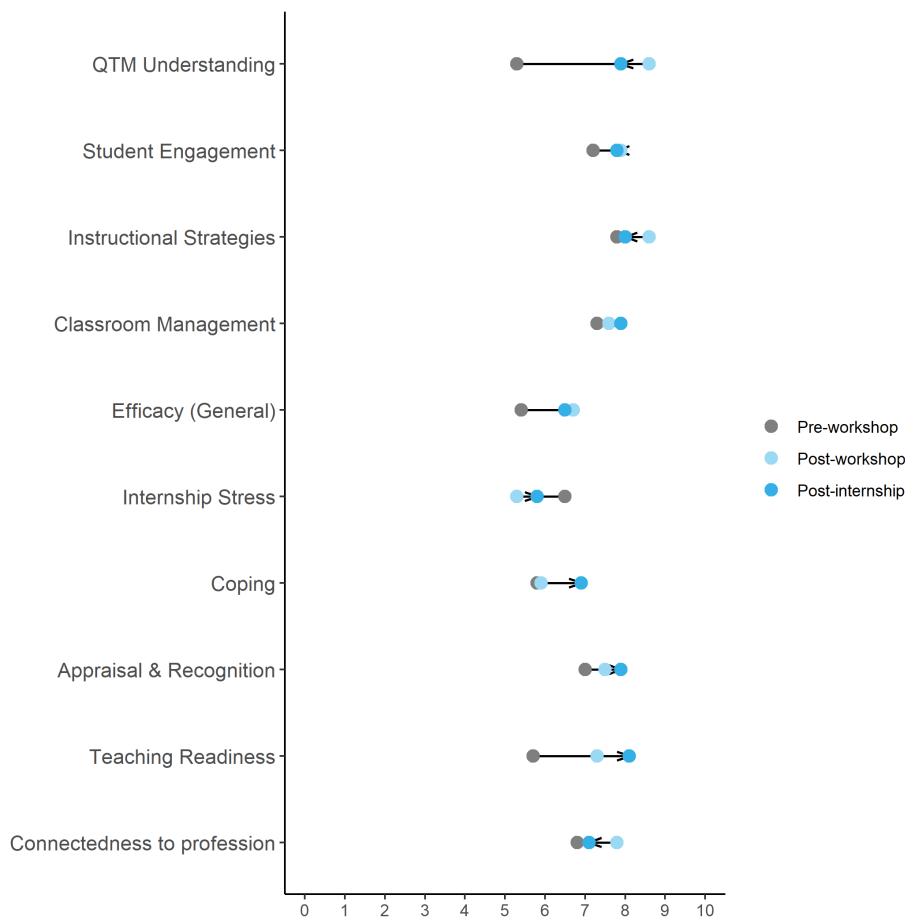
Figure 1: Results of post-workshop survey in 2022



²⁸ Ibid

²⁹ Department of Education (2022). Next steps – report of the Quality Initial Teacher Education Review, *Department of Education*. <https://www.education.gov.au/quality-initial-teacher-education-review/resources/next-steps-report-quality-initial-teacher-education-review>

Figure 2: Results against measures at all three timepoints in 2022.



The students in these studies were about to begin their 10-week final year internship, which is capped by the University of Newcastle Teacher Performance Assessment (NTPA). Both **Reform Area 1 discussion question 2** and **Reform Area 3 discussion question 3** have relevance to the NTPA.

Implemented from 2018, the NTPA forms the critical capstone portfolio-based assessment of performance as a teacher during internship. It is integrated as the final semester component of an existing e-portfolio that students develop. It provides evidence of meeting the Australian Professional Standards for Teachers at Graduate level, classroom readiness, and capacity to positively impact student learning.

To evaluate the classroom readiness component, the NTPA includes a lesson observation by a trained tertiary supervisor using the 1-to-5 coding system for the 18 elements of the QT Model. Students' lessons are benchmarked against the average 'QT score' of 2.7 for practising teachers found in our research studies³⁰. Achievement of 2.7 or higher (averaged across the 18 elements) is taken as one indication of classroom readiness.

Analysis of evidence, as reported to AITSL³¹, showed a correlation between students' QT score during internship and their GPA, and between their QT score and overall performance on the NTPA (which has several other components). These data provide early signs of the validity of the QT score as a measure of ITE quality. Internal consistency for the total NTPA score (using Cronbach's alpha

³⁰ Ibid

³¹ Imig, S. & Ladwig, J. (2021). Newcastle Teaching Performance Assessment. University of Newcastle, Australia, Report to AITSL (not publicly available).

estimates³²) was very high at .90, while the planning (.79), teaching (.81), and assessing (.72) domains obtained alpha measures conventionally seen as 'acceptable' to 'good/excellent'.

Participants in our study commented that the workshop provided them with an 'exponential' rise in their confidence:

"This experience was absolutely fantastic. I entered the webinar stressed and nervous about my internship (particularly, my tertiary supervisor visit and QT coding assessment). I felt as though the QT Model was something abstract and idealised. However, I came out of the experience feeling empowered, excited and inspired for my upcoming [internship]. I have a much stronger grasp on the concepts of the model (including the dimensions, elements and how they may manifest in my classroom) and feel as though my confidence has risen exponentially. I am very grateful for this opportunity and feel as though I will carry what I have learnt with me for the rest of my career. I look forward to accessing the resources and workshops of the QT Academy in the near and distant future."

(Female, Secondary Mathematics Student Teacher)

Participants also reported that they would 'absolutely' use what they learnt in the workshop during their internship:

"I especially liked that we were provided information, then were able to apply that new knowledge either through coding or exploring how we would apply this to our lessons (i.e., assessment). This QT workshop truly was incredible and everyone involved in making this possible should be proud."

(Female, Early Childhood Student Teacher)

While we strongly reject the use of the QT Model for producing simple numerical measures of ITE student performance, given that context must be taken into account in any assessment of relative quality, the Model enables self-assessment and provides a framework for powerful feedback from peers and colleagues that can assist students in improving their practice.

Responding to Reform Area 3 discussion question 3 specifically, ITE students, university assessors, supervising teachers, and others in schools more broadly, would benefit from training in the QT Model and QTR. The Model and the QTR processes provide both substance and structure for generating rich and comprehensive insights and meaningful feedback on improving teaching practice³³.

This approach has been taken up in a federal government initiative announced as one of the 27 actions in the National Teacher Workforce Action Plan³⁴. The project, *Strengthening Induction through Quality Teaching Rounds*, aims to improve the morale, confidence, job satisfaction and retention of 1600 early career and experienced teachers across Australia. It will bring together teachers within the first three years of teaching with at least one more experienced colleague to participate in QTR. The project will test QTR as an induction practice to help in the retention of beginning teachers by enhancing the quality of their teaching, developing their confidence, and ultimately improving student learning. The QTR processes provide a structure for quality feedback that enables beginning and experienced teachers to learn from each other and build networks of support without an overreliance on mentoring-- which is often resource-intensive and unsatisfactory because of its dependence on the mentor's knowledge (of teaching and of mentoring) and on the hierarchical mentor-mentee relationship³⁵.

32 Growth, C. (2015). Using and interpreting Cronbach's Alpha. University of Virginia Library. <https://data.library.virginia.edu/using-and-interpreting-cronbachs-alpha/>

33 Ibid

34 Department of Education (2022). National Teacher Workforce Action Plan. *Department of Education*. <https://www.education.gov.au/teaching-and-school-leadership/resources/national-teacher-workforce-action-plan>

35 Gore, J. (2020) 'Why isn't this empowering? The discursive positioning of teachers in efforts to improve teaching', Knowledge, policy and practice: The struggle for social justice in education, UCL IOE Press.

While this project will support early career teachers in full time positions, another recent study we conducted, with funding from the NSW Department of Education's Strategic Research Fund, trialled the experience of QTR for 32 casual teachers in eight primary schools. To our knowledge, structured PD focused on pedagogy for casual relief teachers (CRTs) has not been trialled before on such a scale in Australia or elsewhere. Our project established that participation by CRTs in QTR was associated with improvements in quality of teaching, teaching efficacy, job satisfaction, confidence, morale, and sense of belonging to the profession.

The project also demonstrated that schools can engage CRTs in QTR with little inconvenience. The principals involved in this research all agreed that implementing QTR for CRTs was easily achievable and rewarding for the participants. Principals identified that their schools also benefitted from an improved and rejuvenated casual workforce which, they reported, contributed to enhanced student outcomes³⁶.

The QT Model and QTR have been mapped against the Australian Professional Standards for Teachers³⁷, the National School Improvement Tool³⁸, and the NSW School Excellence Framework³⁹. These documents could be considered, or further work undertaken to meaningfully include QT in relevant ITE policy documents.

3. Building the evidence base

Too often, evidence in education and initial teacher education comes from small scale and/or methodologically weak studies⁴⁰. Often studies lack adequate sample sizes to generate generalisable findings, they measure proximal outcomes which are easier to change (for example, incorporating feedback after doing PD on feedback) but less likely to demonstrate broad impact than distal outcomes (such as student achievement on NAPLAN or Progressive Achievement Tests), and they apply correlational or quasi-experimental designs which are more prone to bias than experimental research, particularly randomised controlled trials⁴¹.

The prevalence of low-quality research in Australian education is not a slight on researchers – Australia has a great number of eminent researchers undertaking world-leading research in education. Rather, educational research is limited by the funding available in the field. Over the past 20 years, education has received just 1.6 per cent of all grant dollars provided by the ARC⁴². The average grant in education over that same period is \$358,164 (compared to \$472,273 for all fields), which is wildly insufficient to carry out the kind of large-scale, systematic research required to genuinely inform education policy and practice. In Australia, large scale research in education is undervalued, under resourced, and rarely undertaken. While the Discussion Paper outlines evidence-based practices that are supported by research, there are many questions about teaching, learning and schooling more broadly for which the field does not yet have answers. Ongoing research and evaluation must be a central part of any reform effort.

³⁶ Briskham, J., Gore, J., Harris, J., Fray, L., Miller, A. Prioritising Casual Relief Teachers through the provision of Quality Professional Learning. Australian Association for Research in Education (AARE), November 2022, Adelaide, Australia.

³⁷ QT Academy (2023). QTR and Australian Professional Standards for Teachers. <https://qtacademy.edu.au/what-is-qtr/#apst>

³⁸ QT Academy (2023). Aligning Quality Teaching Rounds with the National School Improvement Tool. <https://qtacademy.edu.au/wp-content/uploads/2022/03/NSIT-print-friendly.pdf>

³⁹ QT Academy (2023). Quality Teaching Rounds and school excellence. <https://qtacademy.edu.au/wp-content/uploads/2020/10/QTA-School-Excellence-Brochure-Final.pdf>

⁴⁰ Miller, D., Ho, P. (2020). Effect sizes in education: bigger is better right?, Evidence for learning, <https://evidenceforlearning.org.au/news/effect-sizes-in-education-bigger-is-better-right>

⁴¹ Miller, D. (2021) Effect sizes: Bigger is better, right? ACER Teacher https://www.teachermagazine.com/au_en/articles/effect-sizes-bigger-is-better-right

⁴² Australian Research Council (2022) NCGP Trends: Areas of Research, accessed 13 October 2022

<https://www.arc.gov.au/funding-research/funding-outcome/grants-dataset/trend-visualisation/ncgp-trends-areas-research>

While randomised controlled trials (RCTs) are expensive to conduct, they provide one of the most rigorous ways to measure the impact of interventions. Unlike in other parts of the world, however, in Australia there appears to be little appetite for, or understanding of, RCT research in education. The TTRC is a leader in conducting large-scale, experimental research in this field. Over the past 10 years we have conducted seven major RCTs investigating the impact of QTR, all of which have also gathered qualitative data designed to provide deeper insight.

This program of research has only been possible given: a) our strong relationship with departments of education, b) significant funding from the philanthropic Paul Ramsay Foundation, and c) internal expertise in running RCTs that is rare in the field of education. From this experience, we've learned several key lessons:

- Strong buy-in is needed from system leaders if RCTs are to succeed. System leaders need to consider such evidence to be worthwhile and support recruitment of participants through internal communication channels.
- Opt-out consent for student participation (in non-invasive testing) is critical. Sample sizes and generalisability are negatively impacted by opt-in consent requirements (which are the norm in many state departments).
- The cost of conducting RCTs must be recognised, and funding provided, if such rigorous evidence is to be obtained.
- Access to existing national datasets could dramatically reduce costs and administrative burden on schools. We see this a key opportunity for AERO to take the lead on managing and negotiating with state departments and other key stakeholders.
- Other forms of evidence are also necessary. Our RCTs are always complemented by qualitative research. Bayesian analysis and other statistical methods for drawing causal inferences hold potential, but still rely on access to data that is not readily available.

Reform Area 3 proposes the establishment of Centres of Excellence, such as hub schools. We argue that any Centre of Excellence should also place research at its core. Such a model would be multi-institutional, supported by state, territory and federal education systems, and build the evidence base across the teaching career lifecycle.

This aligns with Recommendation 14 of the QITE Review⁴³ which called for the creation of a Centre for Excellence in ITE to provide “a model for evidence-based ITE and for research into which elements of selecting ITE students, preparing them and supporting them once in the classroom best contribute to school students’ learning”.

Such a Centre of Excellence would develop the evidence base for practices and programs, establish a national framework for high quality pedagogy, and help to provide a seamless transition from ITE (for both undergraduate and postgraduate students, including mid-career transfers) to induction and throughout all other teaching career phases (as adopted by AITSL⁴⁴). Research could address each of the following phases and focus on specific topics such as those outlined in Table 1.

⁴³ Ibid

⁴⁴ AITSL (2021) Teaching Futures: Background paper. <https://www.aitsl.edu.au/teachingfutures>

Table 1: Program of research by teaching career phases that could be undertaken by proposed Centre of Excellence.

Attract	Investigate ITE selection processes, including motivations and characteristics of students
Prepare	Implement and evaluate reforms in ITE
Place	Evaluate graduate preparedness for teaching in diverse contexts
Induct	Evaluate mechanisms and initiatives to support induction
Develop	Evaluate professional development
Recognise	Investigate accreditation and promotion systems
Retain	Investigate teacher retention

Reform Area 2 seeks to improve accountability and performance of ITE. While these are important goals, data should also be made available for researchers to generate the kinds of rigorous evidence that can inform improvement efforts into the future. We see AERO playing an important role here.

Universities, with their experienced researchers and strong institutional processes, such as ethics review committees and peer-review processes, are best placed to conduct research. AERO, following the successful model of the UK’s Education Endowment Foundation, and to a lesser extent, Evidence4Learning in Australia, should commission and fund rigorous, independent, peer-reviewed evaluations of interventions and initiatives in education to build the evidence base for policy and practice. Through its national profile, AERO is well positioned to synthesise and disseminate the research undertaken by the proposed Centre of Excellence to ensure that both schools and ITE providers have the latest in evidence-based understanding in accessible formats.

A visionary Centre for Excellence, such as the one described, could roll out evidence-based initiatives across the ITE sector with ongoing evaluation, making an important contribution to the Australian Teacher Workforce Database and the field more broadly.

4. Valuing the profession and supporting aspirations

In the context of a nation-wide teacher shortage, it is perhaps unsurprising that the Panel has focused on pathways into the profession for mid-career entrants through **Reform Area 4**. However, with this focus on only one section of the potential workforce, the Panel omits the important supply of high school students into undergraduate teaching degrees as part of the entire education ecosystem.

Based on our world-leading longitudinal study of student aspirations in Years 3-12, two issues are critical in encouraging students into teaching; first, enhancing the status of the profession; and, second, supporting students’ educational and career aspirations.

Despite challenges facing the teacher workforce, enthusiasm for teaching exists among high school students⁴⁵. We argue that the relentless policy and media discourse on needing “better and brighter teachers”⁴⁶, devalues teachers, their work, and their sense of professional identity, ultimately working against the aims of policy makers to attract high achieving and diverse cohorts into teaching.

Our research found teaching to be the second most popular career aspiration among students in NSW government schools in Years 3-12. Prior academic achievement (based on NAPLAN results)

⁴⁵ De Bortoli, L. (2021) What are the occupational aspirations of Australian 15-year-olds? *ACER* <https://research.acer.edu.au/cgi/viewcontent.cgi?article=1014&context=snapshots>

⁴⁶ Gore, J., Mockler, N. (2022). Teachers the fall guys for a failing system. *Sydney Morning Herald*. <https://www.smh.com.au/national/teachers-the-fall-guys-for-a-failing-system-20220623-p5avxb.html>

was **not** a significant predictor of interest in teaching^{47 48} – meaning that many high achieving students want to pursue teaching as a career.

Our research found a higher proportion of female students than male students and a higher proportion of Indigenous students than non-Indigenous students were interested in teaching, whereas students in the middle years of schooling showed less interest in this career than students in lower primary or upper secondary years. In a separate study, however, Indigenous students in the highest NAPLAN quartile were far less likely to desire to go to university than non-Indigenous students – a result that highlights deep-seated cultural and historical factors that shape interest in attending university⁴⁹.

The student population in Australia is diverse. It is important that our workforce of teachers and school leaders is representative of the wider society. Our research shows that equitable access to higher education is more complicated than overcoming crude barriers such as money, distance, and prior education. It is important that initiatives are targeted and considerate of the cultural and socio-economic complexities of attracting a more diverse cohort into ITE, with implementation strategies that include:

- allocating places for students from underrepresented groups (at all universities, including prestigious institutions);
- offering targeted early entry schemes that do not rely solely on academic measures; and,
- providing financial support through scholarships and fellowships for disadvantaged students⁵⁰.

Policies and initiatives should also be developed that capitalise on the widespread interest in teaching among school students. One positive initiative designed to nurture students' interest in teaching is Macquarie Fields High School's "*future teacher program*" which takes students between Years 8 and 12 through a structured program where they have opportunities to teach in local primary schools and learn more about what it is to teach and what it takes to become a teacher. Such career specific programs can take various forms but play an important role in attraction and recruitment.

Based on our existing research, and funded by the Australian Department of Education, we developed a free 10-hour accredited online professional development course⁵¹ that explores how students form their career and educational aspirations and provides strategies for teachers, career advisers, and school leaders to nurture meaningful post-school aspirations in their students. This course offers an inexpensive, research-based approach to capitalising on the existing interest in teaching in our schools.

This ground-breaking research could be extended and/or updated, since it was conducted between 2012 and 2017, to understand the impact of the pandemic, recent natural disasters, and the changing technology driven labour market on student aspirations for teaching.

It is pleasing, in its discussion of **Reform Area 4, better pathways for mid-career entrants**, that the Panel is not seeking to recommend a return to a one-year Graduate Diploma. We share the view that the Master's degree recognises the professionalism, complexity, and status of teaching. As the discussion paper showcases, the University of Newcastle has a model for an accelerated Master's

⁴⁷ Gore, J., Barron, R.J., Holmes, K., Smith, M. (2016). Who says we are not attracting the best and brightest? Teacher selection and the aspirations of Australian school students. *Australian Educational Researcher*. <https://doi.org/10.1007/s13384-016-0221-8>

⁴⁸ Fray, L., Gore, J. (2018). Why people choose teaching: A scoping review of empirical studies, 2007–2016, *Teaching and Teacher Education*. <https://doi.org/10.1016/j.tate.2018.06.009>

⁴⁹ Gore J, Patfield S, Holmes K, et al. (2017). When higher education is possible but not desirable: Widening participation and the aspirations of Australian Indigenous school students. *Australian Journal of Education*. <https://doi.org/10.1177/0004944117710841>

⁵⁰ Jackson, J., Tangalakis, K., Hurley, P., Solomonides, I. (2022) Equity through complexity: Inside the "black box" of the Block Model. *NCSEHE*. <https://www.vu.edu.au/mitchell-institute/tertiary-education/inside-the-black-box-of-the-vu-block-model>

⁵¹ University of Newcastle. (2018). Aspirations: Supporting Student Futures <https://www.aspirations.edu.au>

degree, and we recommend endorsing that widely. It is important that decisions made about both undergraduate and postgraduate ITE programs maintain the balance between theory and practice, flexibility and integrity, and support initiatives across the sector to raise the status of the teaching profession.

KEY RECOMMENDATIONS

In the light of the evidence and arguments outlined above, we offer the following recommendations for consideration:

- 1. Embed the Quality Teaching (QT) Model in initial teacher education by:**
 - a. Commissioning a multi-institution trial of the effects of a QT workshop for final year students**
 - b. Endorsing the NTPA model and support the training of assessors, supervisors and students in the QT Model**
 - c. Supporting widescale engagement in the federal government's *Strengthening Induction through QTR* project as a mechanism for improving ITE transition and the application of evidence-based practices in the classroom**
 - d. Recommending the QT Model as a central component of all ITE programs.**
- 2. Commission comprehensive programmatic research on teacher education, possibly through a Centre of Excellence such as that proposed by the QITE Review.**
- 3. Extend research on aspirations for teaching and invest in programs and initiatives aimed at enhancing the status of teaching and improving the pipeline of students from high school into undergraduate teaching degrees.**