

# SUBMISSION TO THE QUALITY INITIAL TEACHER EDUCATION REVIEW

## TEACHERS AND TEACHING RESEARCH CENTRE

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#### **TEACHERS AND TEACHING RESEARCH CENTRE**

The Teachers and Teaching Research Centre (TTRC) welcomes the opportunity to respond to the Quality Initial Teacher Education Review.

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 submission is informed by more than two decades of educational research into initial teacher education, quality teaching, teacher development, school change, leadership, aspirations, equity, and STEM education. We have evidence that addresses questions in both Part A and Part B of the Terms of Reference and offer some recommendations for consideration by the Review Panel.

Our current major research program, *Building Capacity for Quality Teaching in Australian Schools*, is supported by a \$17.1 million grant from the Paul Ramsay Foundation. This program of research represents the largest study of teacher 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.

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

#### Preamble

Agreement on what constitutes quality teaching is sorely needed to enable a more seamless transition between ITE and the workforce and to facilitate ongoing professional growth. Throughout this submission, we argue that the Quality Teaching Model and Quality Teaching Rounds are strong candidates for achieving such a unifying position to support Australian education.

As a profession, Education has struggled to agree on what makes a quality teacher and on what constitutes quality teaching<sup>1</sup>, let alone how to measure quality. Furthermore, there is no defensible consensus on what constitutes effective teacher professional development<sup>2,3</sup>.

This fundamental set of conceptual challenges calls into question the key premise underpinning the QITE Review; namely that beginning teachers are poorer/inferior compared with practising teachers. Empirical evidence to support the premise is weak<sup>4,5,6</sup>. Our own research goes some way in disrupting negative assumptions about the quality of ITE (see Figure 1). Our latest findings suggest that the quality of teaching provided by beginning teachers is, on average, equivalent to that of their more experienced colleagues<sup>7</sup>.

<sup>&</sup>lt;sup>1</sup> Gore, J. (2021) The quest for better teaching, Oxford Review of Education, 47:1, 45-60. DOI

<sup>10.1080/03054985.2020.1842182.</sup> 

<sup>&</sup>lt;sup>2</sup> Gore, J., Patfield, S., & Fray, L. (in press). 'Questioning the consensus on effective professional development'. *International Encyclopaedia of Education* 4th ed. Elsevier.

<sup>&</sup>lt;sup>3</sup> Sims, S. & Fletcher-Wood, H. (2021) Identifying the characteristics of effective teacher professional development: a critical review, *School Effectiveness and School Improvement*, 32:1, 47-63. DOI: 10.1080/09243453.2020.1772841

<sup>&</sup>lt;sup>4</sup> 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

<sup>&</sup>lt;sup>5</sup> 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

<sup>&</sup>lt;sup>6</sup> 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

<sup>&</sup>lt;sup>7</sup> Gore, J., Rosser, B., Jaremus, F., Miller, A., & Harris, J. (under review) Beginning teachers are not the problem: Fresh evidence on the relationship between years of experience and teaching quality. *Australian Educational Researcher*.

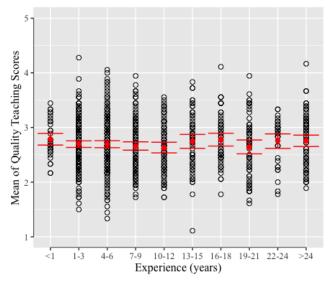


Figure 1 Quality Teaching score by experience category

The challenges of ITE are also exacerbated by differing views on what teacher education should be and do. These tensions arise from enduring differences in the ideological approaches and commitments of teacher educators born out of four major traditions in teacher education, each with a different emphasis:

- a. Disciplinary tradition: emphasises a strong background in the discipline/s one plans to teach.
- b. Scientific tradition: emphasises skills in teaching based on empirical research.
- c. Experiential tradition: favours apprenticeship and learning by doing.
- d. Critical tradition: seeks to develop critical consciousness about the inequitable impact of schooling on children from disadvantaged social circumstances.<sup>8,9,10,11</sup>.

Without a unifying framework, these differences among teacher educators will continue to compromise not only attempted reforms in ITE but also the very quality and coherence of ITE programs<sup>12</sup>. Arguably, recognition of the importance of all four traditions in learning to teach is foundational to quality ITE; an insight that also has implications for how quality teaching is understood.

Our research on Quality Teaching – focused on the Quality Teaching Model and Quality Teaching Rounds approach to teacher development – treats teaching comprehensively and holistically. It addresses the treatment of knowledge, the treatment of students, equity, classroom management and more. It distils the essence of quality teaching while simultaneously being comprehensive enough to encompass teachers' concerns, manageable enough to give focus to their thinking and practice, and open enough to enable their critical engagement<sup>13</sup>.

The Quality Teaching Model is comprised of elements of practice for which there is evidence of impact on student outcomes<sup>14</sup>. It was developed by Associate Professor James Ladwig and Laureate

<sup>9</sup> Liston, D., & Żeichner, K. (1991). *Teacher education and the social conditions of schooling*. Routledge. <sup>10</sup> Feiman-Nemser, S. (1990). Teacher preparation: Structural and conceptual alternatives. In W. R. Houston (Ed.), *Handbook* 

<sup>13</sup> 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

<sup>&</sup>lt;sup>8</sup> Gore J. (2001). Beyond our differences: A reassembling of what matters in teacher education. *Journal of Teacher Education*.52(2):124-135. doi:<u>10.1177/0022487101052002004</u>

of research on teacher education (pp. 212-233). <sup>11</sup> Kirk, D. (1986). Beyond the limits of theoretical discourse in teacher education: Towards a critical pedagogy. *Teaching and* 

<sup>&</sup>lt;sup>11</sup> Kirk, D. (1986). Beyond the limits of theoretical discourse in teacher education: Towards a critical pedagogy. *Teaching and Teacher Education*, 2, 155-167.

<sup>&</sup>lt;sup>12</sup> 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

<sup>&</sup>lt;sup>14</sup> 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.

Professor Jenny Gore, commissioned by the NSW Department of Education, extending the work of Professor Fred Newmann on 'authentic pedagogy'<sup>15</sup> and refining the work of the chief investigators on the Queensland School Reform Longitudinal Study (QSRLS) (Associate Professor James Ladwig, Professor Bob Lingard, Professor Allan Luke and Professor Jenny Gore) on 'productive pedagogy'<sup>16</sup>.

The Quality Teaching Model is at the core of our current program of research. It honours the complexity of teaching in ways that resonate with, challenge, and support teachers. The Model focuses on what teachers do in the classroom rather than who they are. In other words, it examines the quality of teach*ing* not teach*ers*. Such a focus positions 'outputs' from ITE programs (graduates) as the primary target rather than 'inputs' (recruits). It recognises that teaching can be taught/ learned and teacher education matters.

The Quality Teaching Model focuses on three key concepts:

- 1. Intellectual Quality pedagogy focused on deep understanding of important ideas.
- 2. Quality Learning Environment pedagogy that creates productive classrooms focused on learning.
- 3. Significance pedagogy that helps students see value in what they are learning.

We have found that, on its own, the Model is insufficient for achieving widespread change. A powerful process is required to support teachers to use the Model for the collaborative improvement of their teaching practice. Our approach to teacher development, Quality Teaching Rounds (QTR), employs powerful structures and processes to enable deep analysis, discussion and enhancement of classroom and assessment practice, using the Quality Teaching Model.

Collaborating in professional learning communities of (typically) four participants, teachers conduct a set of Rounds whereby they observe and analyse each other's teaching using the Quality Teaching Model to provide a common language. The process is repeated until all members of the professional learning community have hosted a lesson observed by their peers.

Because of its focus on pedagogy, QTR is applicable for teachers of every grade, subject and career stage, including preservice teachers. Our most recent randomised controlled trial found that student achievement growth in mathematics was two months greater in the eight-month study period when teachers participated in QTR compared to the control group<sup>17</sup>. This result solidifies earlier research that shows QTR improves the quality of teaching, teacher morale and school culture<sup>18</sup>.

While more than 3,000 teachers have participated in QTR to date, the approach has not yet been applied systematically in the ITE environment (see overview of our pilot study – TOR 7). We strongly recommend that it should be trialled, given its demonstrable significant effects on improved student academic achievement and improved outcomes for both beginning and experienced teachers in diverse schooling contexts<sup>19,20,21,22</sup>.

<sup>&</sup>lt;sup>15</sup> Newmann, F., Marks, H., & Gamoran, A. (1996). Authentic pedagogy and student performance. *American Journal of Education*, *104* (4) pp. 280-312, 10.1086/444136

<sup>&</sup>lt;sup>16</sup> Lingard, B., Ladwig, J., Mills, M., Bahr, M., & Chant. D. (2001). *Queensland school reform Longitudinal study: Final report.* https://www.academia.edu/28465220/Queensland\_School\_Reform\_Longitudinal\_Study

<sup>&</sup>lt;sup>17</sup> 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*, 101. https://doi.org/10.1016/j.tate.2017.08.007

<sup>&</sup>lt;sup>18</sup> 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*, *68*, 99-113, https://doi.org/10.1016/j.tate.2017.08.007.

<sup>&</sup>lt;sup>19</sup>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

<sup>&</sup>lt;sup>20</sup> Gore, J., & Rosser, B. (2020). Beyond content-focused professional development: powerful professional learning through genuine learning communities across grades and subjects, *Professional Development in Education*, DOI: 10.1080/19415257.2020.1725904

<sup>&</sup>lt;sup>21</sup> Gore, J., Jaremus, F., & Miller, A. (in press). Do disadvantaged schools have poorer teachers? Rethinking assumptions about the relationship between teaching quality and school-level advantage. *Australian Educational Researcher*.
<sup>22</sup> 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, 73, 77-88, https://doi.org/10.1016/j.ijer.2015.05.006.

**TOR 1.** How can we further encourage high-performing and highly motivated school leavers to enter ITE and choose teaching as a career?

#### **Recommendations:**

- Capitalise on the widespread interest in teaching among school students by nurturing rather than discouraging aspirations through over-regulation of who can teach.
- Focus policy on target 'outputs' from teacher education programs (graduates) rather than 'inputs' (recruits).

Who enters teaching, and why, are important questions. To inform the agenda for reforming initial teacher education it is critical to understand influences on, and the motivations of, aspiring teachers. Our scoping review of empirical studies published between 2007 and 2016 on why people choose teaching as a career found, overwhelmingly, that intrinsic and altruistic motivations<sup>23</sup> prevail. This finding contrasts with popular views that: (a) young people, including high achieving young people, are not interested in teaching; and (b) teaching is primarily a fallback occupation for those who cannot get into other fields. Our research offers fresh evidence on each of these points.

Our *Aspirations Longitudinal Study* found teaching to be the second most popular career aspiration for young people (students in Years 3-12 in NSW government schools), demonstrating the continuing high value placed on teaching as a career<sup>24</sup>. Prior academic achievement (based on NAPLAN results) was not a significant predictor of interest in teaching – in fact, there was slightly more interest in teaching among students from the higher two NAPLAN quartiles, compared to the lower two quartiles.

These data provide a counter-narrative to the primacy, in policies for teacher recruitment and selection, of needing to attract 'better' students.

Enthusiasm for teaching already exists. We argue that heavily regulating who can teach – and the associated public discourse that devalues the quality of teachers, their work, and their sense of professional identity – works against the aims of policy makers.

Policies for improving teacher quality should capitalise on the widespread interest in teaching among school students. We caution that current attempts to attract the 'best and brightest' risk undermining the very goals espoused, by mis-representing teaching as a field dominated by low-achieving students.

<sup>&</sup>lt;sup>23</sup> Fray, L., & Gore, J. (2018). Why people choose teaching: A scoping review of empirical studies, 2007–2016, *Teaching and Teacher Education*. 75: 153-163. https://doi.org/10.1016/j.tate.2018.06.009

<sup>&</sup>lt;sup>24</sup> 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*. 43: 527–549. https://doi.org/10.1007/s13384-016-0221-8

**TOR 3.** How can we increase ITE completion rates so that quality ITE students graduate and pursue careers as quality teachers?

#### **Recommendations:**

- Implement a framework that articulates what constitutes quality teaching to provide a unifying language and concepts for ITE.
- Extend this framework into the professional growth and development of practising teachers to better align ITE with the realities of beginning to teach.

The Quality Teaching Model provides an excellent example of such a framework and Quality Teaching Rounds provides a demonstrated mechanism for translating the model into effective practice.

The ITE curriculum is often crowded and fragmented, making it hard to discern the 'wood from the trees'. The Quality Teaching Model provides a common language and set of concepts that teacher educators can use to underpin and articulate what constitutes quality teaching for their students.

The Model links theory with practice and could be a framework through which to organise the vast theoretical material and demanding practical requirements of teacher education programs while building program quality and coherence. It references multiple disciplines. It is adaptable enough to accommodate diverse teaching situations. Used in Quality Teaching Rounds, the Model has demonstrably empowered and built the confidence of beginning teachers<sup>22</sup>.

Without such a framework, reforms for improvement will continue to be compromised, tinkering around the edges without building a shared vision of quality teaching. As others have argued, a first step to systematically scaling up quality is developing a shared vision of what constitutes good teaching<sup>25</sup>.

We suggest that such clarity could help build the confidence of ITE students (see TOR 7) and their confidence in the profession in ways that impact on completion rates and the quality of graduates.

<sup>&</sup>lt;sup>25</sup> City, E., Elmore, R., Fiarman, S., & Teitel, L. (2009). *Instructional rounds in education: A network approach to improving teaching and learning.* Harvard Education Press.

**TOR 5**. How can we attract a more diverse cohort into ITE so that teachers better mirror the diversity in school students and society?

#### **Recommendation:**

#### Attend to broader issues of equity and access to attract a more diverse cohort into • ITE.

It should be acknowledged that attracting a more diverse cohort of students is a challenge across the board in the higher education sector, not just in teaching. Our research on factors that affect students' capacity to 'choose' higher education<sup>26</sup> highlights the challenge in ITE and other disciplines.

Only one in four Australian adults holds a bachelor-level or higher qualification. A young person with a university-educated parent has almost double the odds of attending university. In contrast, students from socially disadvantaged groups remain less likely to go to university than their more advantaged peers and, when they do, they are more likely to enrol in less prestigious institutions and degrees (such as teaching)<sup>27,28</sup>. Such facts help explain lower average ATARs, given the long-standing association between socioeconomic status and achievement - also explained by the relative number of places available for ITE compared with other fields of study such as Medicine.

Since the Bradley Review of 2008, government policy has focused on six 'equity target groups' underrepresented in higher education:

- Indigenous Australians
- People from low socioeconomic status (SES) backgrounds
- People from regional and remote areas
- People with disabilities
- People from non-English-speaking backgrounds (NESB)
- Women in non-traditional areas of study.

Our research<sup>29</sup> shows first-in-family students (those without a parent with a university education) and others such as young people in care, are largely overlooked in this equity agenda. For example, while many prospective first-in-family students belong to multiple equity groups, around 12% do not fit within these categories. Prospective first-in-family students are much less likely to aspire to university than those with university-educated parents, with a clear gap evident at every stage of schooling, from Year 3 to Year 12 (see Figure 2).

Many prospective first-in-family students, like other disadvantaged students, begin to rule out the idea of higher education from an early age, which clearly impacts on the diversity of the university student population.

Improving access to university for all underrepresented groups is vital for a fair and just society. However, equitable access is often seen simplistically as overcoming 'crude' barriers such as money, distance, and prior achievement. Access is much more complicated. It is profoundly shaped by enduring structural and cultural inequalities.

In the context of ITE, we found that gender (a higher proportion of girls), age (fewer students in the middle years of schooling) and Indigeneity (a higher proportion of Indigenous students) are predictive of who is interested in teaching<sup>23, 24</sup>.

<sup>28</sup> Reay, D. (2017). *Miseducation: Inequality, education and the working classes*. Policy Press.

<sup>&</sup>lt;sup>26</sup> Patfield, S., Gore, J. & Fray, L. (2021). Stratification and the illusion of equitable choice in accessing higher

education, International Studies in Sociology of Education. DOI: <u>10.1080/09620214.2021.1912633</u> <sup>27</sup> Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). Review of Australian higher education: Final report. Department of Education, Employment and Workplace Relations. http://hdl.voced.edu.au/10707/44384

<sup>&</sup>lt;sup>29</sup> Patfield, S., Gore, J. & Weaver, N. (2021). On 'being first': the case for first-generation status in Australian higher education equity policy. Australian Educational Researcher. https://doi.org/10.1007/s13384-020-00428-2

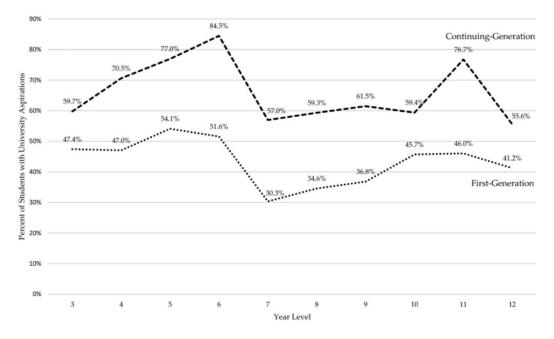


Figure 2: Overall percentage of students with university aspirations

However, we also found that Indigenous students in the highest NAPLAN quartile (quartile 4) were far less likely to desire to go to university than non-Indigenous students (see Figure 3) – a result that highlights deep-seated cultural and historical factors that shape interest in attending university<sup>30,31</sup>.

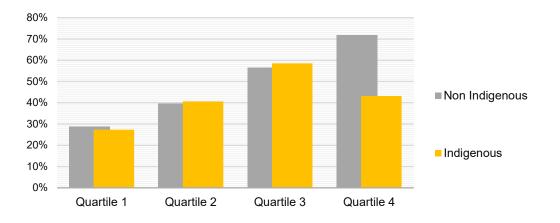


Figure 3: Percentage of indigenous students who aspire to higher education by NAPLAN quartile

Therefore, attracting a diverse cohort into ITE is complex. Possible strategies 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 students.

<sup>&</sup>lt;sup>30</sup> 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, 61*(2):164-183. doi:10.1177/0004944117710841

<sup>&</sup>lt;sup>31</sup> Gore, J. (2017). Why many high-achieving Indigenous students are shunning university. *The Conversation.* https://theconversation.com/why-many-high-achieving-indigenous-students-are-shunning-university-79749

**TOR 6.** What more can we do to ensure that ITE curriculum is evidence-based, and all future teachers are equipped to implement evidence-based teaching practices?

#### **Recommendations:**

- Invest in the production of a robust body of evidence to:

   inform ITE programs and practices; and
  - guide ongoing teacher professional development.
- Prepare ITE students to identify quality research evidence to guide their ongoing professional practice.

Evidence-based practice has become a mantra of education systems and schools. However, 'evidence' comes in a variety of forms and ranges in quality. Historically, evidence in education and teacher education derives too often from small scale and/or methodologically weak studies<sup>32</sup> – partly due to limited funding available for research in the field. Robust evidence to inform programs and practices is a major need of the education system, broadly. We recommend serious investment in high quality programs of research to inform the powerful education of teachers from recruitment into ITE through to retirement.

Incorporating the Quality Teaching Model in ITE programs and providing opportunities for ITE students to participate in Quality Teaching Rounds have clear potential to ensure students are equipped to implement evidence-based teaching practices when they enter the profession.

In July, we conducted a pilot Quality Teaching pre-internship workshop with 37 preservice teachers, to begin to test the effectiveness of the Quality Teaching Model in fortifying students' readiness to implement evidence-based practices. The pilot took place during the week before they commenced their internship. The very positive results of this study are detailed in the next section (TOR 7).

The Quality Teaching Model is addressed in the University of Newcastle teacher education programs. However, the potential for fuller integration is clear in the responses of pilot study participants when asked to identify their current level of engagement with the Quality Teaching Model. Participants responded on a scale from 1-to-5, with 1 being "I have had limited or no engagement with the Quality Teaching Model" and 5 "I could confidently run PD for colleagues based on my deep understanding of Quality Teaching and how it can improve practice".

Prior to our pilot workshop, students' average rating on this scale was 2.2 ("I can name the dimensions and some elements of the Model"). After the workshop the average rating increased to 4.0 ("I have confidently coded classroom practice using the Quality Teaching classroom practice guide"). Only 6.1% of participants rated themselves a 4 prior to the workshop. After the workshop, 97.0% rated themselves 4 or better.

QTR processes were used throughout the workshop providing opportunities for deep engagement with the Quality Teaching Model. As detailed in the preamble, participation in QTR improves the quality of teaching and student achievement. It is applicable for all teachers in any grade, subject area or career stage. Given this rare and rigorous evidence of impact, we suggest that the Model and QTR could be embedded in initial teacher education, with examples of how this could be achieved outlined in the following sections.

<sup>&</sup>lt;sup>32</sup> Murray, S., Nuttall, J. & Mitchell, J. (2008). Research into initial teacher education in Australia: A survey of the literature 1995–2004. *Teaching and Teacher Education*, 24(1), 225-239. https://doi.org/10.1016/j.tate.2007.01.013

**TOR 7.** What more can ITE providers and employers do to ensure ITE students are getting the practical experience they need before they start their teaching careers?

### **Recommendations:**

- Fund a study across multiple universities and jurisdictions to investigate the impact for ITE students of engagement with the Quality Teaching Model and Quality Teaching Rounds.
- Draw on lessons from previous initiatives designed to increase practical experience to avoid repeating past mistakes.

Our response to this question has two parts. First, we provide details of the Quality Teaching preinternship pilot study that not only highlights a specific mechanism for providing powerful practical experience but signals the potential of more fully integrating QTR into ITE. Next, we outline some previous approaches that have been tried in the sector, touching on some lessons learned. We conclude that QTR offers an alternative and potentially more powerful path to ensuring appropriate practical experience. We also contend that quality matters more than quantity.

#### The pilot study

On 7-8 July 2021, the Teachers and Teaching Research Centre conducted a pilot Quality Teaching pre-internship workshop with 37 University of Newcastle final year preservice teachers.

All workshop places filled within 24 hours of the announcement, signalling a high level of interest. Thirty-four participants completed both days, voluntarily, during their semester break in the week before internship commenced. Three participants completed only one day of the course due to changed personal circumstances.

The pilot involved a two-day tailored workshop focused on the Quality Teaching Model as it relates to both classroom and assessment practice and on the processes of Quality Teaching Rounds. The workshop was held online and involved a combination of facilitator-led sessions, independent offline work and collaborative work in breakout rooms.

Over the course of the two days (10 hours), participants engaged in:

- Facilitator-led sessions outlining the Quality Teaching Model, using practical examples of how the elements manifest in classroom and assessment practice.
- Sessions based on Quality Teaching Rounds processes that involved watching, coding and participating in extended discussions about two lesson videos (Year 9 science and Kindergarten literacy).
- A facilitator-led session providing an overview of the two decades of research into the Model and QTR.
- Analysis activities using the Model (both individually and in pairs) of lessons and assessments they planned to deliver on internship.

The pilot study was approved by the University of Newcastle's Human Research Ethics (H-2019-0318).

#### Results

The students were asked to complete a series of surveys: (1) in the days before undertaking the workshop; (2) immediately after the workshop; and (3) when their internship finishes. The pre- and post-workshop surveys asked a range of questions about students' feelings of preparedness for their forthcoming internship and views on the teaching profession. The post-workshop survey added questions about their perceptions of the workshop.

Promising changes were evident between the pre- and post-workshop surveys. Immediately after the workshop, participants indicated greater confidence in their ability to teach <sup>33</sup>, including confidence in motivating students, using a variety of teaching and assessment strategies, and successfully managing student behaviour (See Table 1).

Aspect of teaching	Pre-workshop mean	Post-workshop mean
Motivate students	6.5	7.5
Encourage students to value their learning	6.8	7.7
Craft good questions	7.4	8.2
Provide alternative examples to explain ideas to students	7.5	8.4
Use a variety of teaching strategies	6.7	7.9
Implement a variety of assessment strategies	6.8	8.0
Successfully manage behaviour in classrooms	6.6	7.6

Students also reported a decrease in their stress levels post workshop (pre 6.6, post 5.2) and, importantly, there was a decrease in the number of participants indicating the higher levels of stress on a 1-9 scale.

In response to the statement, '*The workshop prepared me for my internship*', 100% of participants agreed (48.5% strongly agreed, 51.5% agreed). And in response to the statement, '*The QTR workshop was a valuable professional learning experience*', 100% of participants agreed (72.7% strongly agreed, 27.3% agreed).

In the open response section of the survey, the following statements illustrate the overwhelmingly positive response. Several examples are included to provide a sense of how consistently participants valued the experience as preparation for their internships and careers.

This experience was absolutely fantastic. I entered the webinar stressed and nervous about my internship ...., I came out of the experience feeling empowered, excited and inspired for my upcoming coding. I have a much stronger grasp on the concepts of the model ...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... (Secondary)

This course is amazing for all teachers, but what a great course for preservice teachers. To be able to apply things we have learnt about the QT model at University and have it in time to apply it to our internships is also such a huge bonus.... It's incredibly applicable across primary and high school, and really could make such a difference for all the kids we care for and teach - which is the ultimate point as teachers! (Primary)

The QTR model builds confidence, common language and profoundly experienced guidelines within clear and well-defined parameters for improving teaching quality and practices. The model is empowering and practically implementable (Secondary)

This workshop has provided me with insight into what quality teaching requires, how it affects the students, and why it is important. The workshop equipped me with practical and implementable ideas and strategies that can be used in a classroom and school-wide context. It gave me confidence in my own teaching practice, as well as my ability to connect with other colleagues as a professional. (Primary)

<sup>&</sup>lt;sup>33</sup> Mean responses to the pre- and post-workshop surveys using a scale of 1 'Nothing' to 9 'A great deal'.

This course gives you the sustained confidence in your ability as a teacher or student teacher. And is packaged to highlight [that], by following simple process[es] and guidelines you can make major adjustments to your teaching style to be more efficient, detailed and well prepared for the teaching profession. (Secondary)

The data collected so far clearly depict the power of the two-day Quality Teaching experience for graduating students who felt empowered and more confident. We suggest this approach, which helps meld theory and practice at a crucial point in ITE student development, could be replicated across other ITE programs and sites. The data gathered from participants after their internships will provide an important additional layer to this analysis.

#### Other approaches to consider

Over the years, many other approaches to ensuring ITE students are getting the practical experience they need have been tried. All have value. All present challenges. We simply touch lightly on some we know about here:

- 1. Cadetships for high achieving school leavers, employed as paraprofessionals and placed in a school from the time they commence their ITE program.
- Special internships for high achieving final-year teacher education students in areas of workforce need, employed as educational paraprofessionals while undertaking their final year of study.
- 3. The National Exceptional Teachers for Disadvantaged Schools program. which provided additional support for high achieving ITE students in disadvantaged schools, to encourage their willingness to be posted to these harder-to-staff contexts.
- 4. Teach For Australia, which fast-tracks high achieving graduates from other fields of study into teaching.
- 5. Attaching all ITE students to a school throughout their program.
- 6. Teach Outreach @ UON, a volunteer placement program in which schools, early childhood centres, and community organisations advertise activities that would benefit from the support of volunteer ITE students. Students who take up opportunities benefit from additional practical experience, receive a certificate and are recognised on their Australian Higher Education Graduation Statement (AHEGS) for volunteer opportunities they complete. Participating schools and other organisations benefit from assistance they need and want.

Some issues that arise from these approaches include:

- the relative cost of various initiatives;
- a focus on high achievers when all students would benefit;
- students' willingness to volunteer balanced with (perceived) entitlement to payment;
- schools' and teachers' willingness to take on additional students;
- difficulty in providing meaningful learning experiences for large numbers of ITE students in schools; and
- a compliance requirement for days completed versus genuine engagement in additional learning.

In short, there is no simple solution; extra days in schools are not a panacea for ensuring appropriate high quality practical experience.

**TOR 8.** How can Teaching Performance Assessment arrangements be strengthened to ensure graduate teachers are well-prepared for the classroom?

#### **Recommendations:**

- Commission rigorous research on the reliability and validity of TPAs.
- Train supervising teachers, university assessors and ITE students in the Quality Teaching Model and Quality Teaching Rounds processes to facilitate rich and constructive feedback during this capstone assessment and throughout ITE programs.

Importantly, the Quality Teaching Model should NOT be used as a simple assessment tool, without regard to the diverse contexts in which ITE students work.

Teaching Performance Assessment (TPA) arrangements are relatively new in Australia and yet to be adequately tested. We caution against adopting a single national TPA until institutions/consortia and independent assessors have gathered rigorous evidence of their reliability and validity.

Implemented from 2018, the University of Newcastle TPA (NTPA) forms the critical capstone portfoliobased 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 coded by a trained tertiary supervisor using the 1-to-5 coding system for the 18 elements of the Quality Teaching Model. Students' lessons are benchmarked against the average 'QT score' of 2.7 for practising teachers found in our research studies<sup>18</sup>. Achievement of 2.7 or higher (averaged across the 18 elements) is taken as one indication of classroom readiness.

Preliminary analysis of evidence, as reported to AITSL<sup>34</sup>, shows 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 estimates<sup>35</sup>) 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'.

While we strongly reject the use of the Quality Teaching Model for producing simple numerical measures of ITE student performance, given that context matters enormously, the Model does offer powerful feedback that can assist students in improving their practice. Such a mechanism would likely be enhanced by providing ITE students, university assessors, and supervising teachers with training in the Quality Teaching Model and Quality Teaching Rounds as a basis for providing rich and constructive (tripartite) feedback on the quality of teaching.

The Quality Teaching Model and the QTR processes provide both substance and structure for generating rich and comprehensive insights and meaningful feedback on improving teaching practice.

<sup>&</sup>lt;sup>34</sup> Imig, S. & Ladwig, J. (2021). *Newcastle Teaching Performance Assessment*. University of Newcastle, Australia, Report to AITSL (not publicly available).

<sup>&</sup>lt;sup>35</sup> Growth, C. (2015). Using and interpreting Cronbach's Alpha. *University of Virginia Library*. https://data.library.virginia.edu/using-and-interpreting-cronbachs-alpha/

**TOR 9.** How can leading teachers, principals and schools play a greater role in supporting the development of ITE students?

#### **Recommendations:**

- Establish a unified vision of quality teaching to build ITE program coherence and increase effectiveness.
- Strengthen the impact of teachers and principals on the induction of beginning teachers through high impact professional development.
- Train beginning teacher mentors in the Quality Teaching Model and Quality Teaching Rounds to provide rich and constructive feedback.
- Support all newly qualified teachers to participate in Quality Teaching Rounds.
- Provide casual teachers with more opportunities for high impact professional development.

The traditional role of teachers, principals and schools in ITE has centred on the practicum and other in-school experiences for ITE students. The quality of these practical experiences varies enormously, with significant consequences for ITE student development. More could be done to fortify these arrangements, including professional development for teachers who support ITE students and building responsibility for such supervision/mentorship into the role of all teachers.

Over many decades, however, initiatives designed to improve this component of ITE have been tried, often with limited success. Examples include stronger partnerships between schools and ITE providers, preparatory sessions at universities for cooperating teachers, and teacher input into ITE curriculum. Time constraints and resources rather than goodwill or commitment are usually cited to explain the termination of these arrangements.

Increasing the input of teachers and principals in ITE program delivery is another strategy that has had limited success to date. It favours the apprenticeship approach to learning to teach and depends heavily on the quality of input, which is at best uneven. These weaknesses draw our attention back to the fundamental issue of how quality teaching is understood and conveyed across the learning-to-teach lifecycle.

Challenging workloads of leading teachers and principals have been highlighted in numerous recent reports and reviews<sup>36,37</sup>. In this context, the feasibility of increasing teacher and principal input into ITE programs is questionable, especially given limited evidence of its positive impact. Instead, improving ITE through a unifying vision of quality teaching would enhance ITE program coherence and fortify the role of teachers and principals in the practical experiences of ITE students.

A shared vision of quality teaching would enable a more seamless transition between ITE and the workforce, helping to translate theory into practice<sup>38</sup>, reducing the 'reality shock' when graduates enter schools<sup>39</sup> and supporting their socialisation into teaching <sup>40</sup>.

At a school level, we contend that policy and resources would be better directed to strengthening the role of teachers, principals and schools in the induction of beginning teachers.

Mentoring is often taken for granted as a necessary support in the induction of beginning teachers. As highlighted in the QITE discussion paper, TALIS data show that 37% of graduate teachers have

<sup>&</sup>lt;sup>36</sup> Gallop, G., Kavanagh, T., & Lee, P. (2020). *Valuing the teaching profession – an independent inquiry*. https://www.nswtf.org.au/inquiry

<sup>&</sup>lt;sup>37</sup> Weldon, P. & Ingvarson, L. (2016). School staff workload study: Final report to the Australian Education Union. ACER Teaching and Learning and Leadership. https://research.acer.edu.au/tll\_misc/27/

<sup>&</sup>lt;sup>38</sup> Mayer, D., Dixon, M., Kline, J., Kostogriz, A., Moss, J., Rowan, L., Walker-Gibbs, B., & White, S. (2015). *Studying the Effectiveness of Teacher Education - Early Career Teachers in Diverse Settings*. Springer Singapore. DOI 10.1007/978-981-10-3929-4

<sup>&</sup>lt;sup>39</sup> Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research, 54* (2) 143-178.

<sup>&</sup>lt;sup>40</sup> Zeichner, K. & Goré, J. (1990). Teacher socialization. In Houston, W R (Ed). *Handbook of research on teacher education*, Macmillan.

access to a mentor in Australian schools, which is higher than OECD average of 22%<sup>41</sup>. However, the quality of the mentor matters enormously. One beginning teacher participating in a study we conducted many years ago provides a stark example. Working at a challenging high school in the northwest of NSW, he recounted that the single piece of advice he had received, in three terms of teaching, from his assigned Mentor Teacher was "perhaps you could try moving around the classroom a bit more". We contend that mentoring would be greatly enhanced if mentors were trained in the Quality Teaching Model and Quality Teaching Rounds.

An alternative to mentoring is to enable all beginning teachers to participate in a set of Quality Teaching Rounds where they have safe and structured opportunities to observe their colleagues and engage in deep discussions of practice, including their own. Participating in QTR increases beginning teachers' confidence, quality of teaching and capacity to learn with and from colleagues<sup>22</sup>. Beginning teachers report having clearer direction for their work and a deeper commitment to delivering good teaching after participating in QTR. QTR helps develop their pedagogy and supports their growth as teachers.

Consideration should be given to supporting all newly qualified teachers to participate in Quality Teaching Rounds, working with colleagues, including leading teachers and principals where possible.

Additionally, many beginning teachers start their careers as casual relief teachers during the period of conditional registration, often continuing to work in the schools where they undertook their internship. However, casual teachers are routinely overlooked for professional development<sup>42</sup>. Providing such support is critical because, on average, over the course of their schooling, Australian students spend an entire school year being taught by casual teachers<sup>43</sup>.

One of our TTRC PhD students is investigating the impact of QTR on casual teachers' practice, their morale, and outcomes for the schools in which they teach. This study is poised to identify strategies for mitigating attrition and more systematically supporting the professional development of casual teachers.

<sup>&</sup>lt;sup>41</sup> OECD (2019). *TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners*, TALIS, OECD Publishing, Paris.

<sup>&</sup>lt;sup>42</sup> Uchida, M., Cavanagh, M., & Lane, R. (2020). Analysing the experiences of casual relief teachers in Australian primary schools using practice architecture theory. *British Educational Research Journal*, *46*(6), 1406–1422.

<sup>&</sup>lt;sup>43</sup> Australian Institute for Teaching and School Leadership. (2019). *Professional learning for relief teachers*.

https://www.aitsl.edu.au/docs/default-source/research-evidence/spotlight/spotlight---professional-learning-for-relief-teachers.pdf

**TOR 10.** Can ITE providers play a stronger role in ongoing professional development and support of teachers?

#### **Recommendation:**

## • Support wide-scale implementation of Quality Teaching Rounds professional development for all ITE candidates and practising teachers.

The University of Newcastle provides powerful ongoing professional development and support for teachers through its Quality Teaching Academy (and other specialist PD opportunities).

While improving student outcomes is the fundamental goal of professional development, its impact is inconsistent and evidence of its effects is contradictory<sup>44</sup>. One analysis found a third of interventions designed to improve student achievement actually had a *negative* effect when evaluated under rigorous research conditions<sup>45</sup>. This evidence makes our rigorous research into the impact of Quality Teaching Rounds on teacher and student outcomes all-the-more significant and rare.

The Quality Teaching Academy, housed within the TTRC, is a 'for-purpose'/'non-profit' research commercialisation initiative designed to support the sustainable scaling of Quality Teaching Rounds to teachers across Australia. It aims to ensure that all teachers, no matter where they are based, have access to high impact professional learning. With a particular focus on overcoming disadvantage, it seeks to ensure quality teaching for every student, every day. The Quality Teaching Academy hosts a growing catalogue of resources on quality teaching, including readings, research summaries, video content and webinars, and a community forum for members. Our commitment to nurturing the next generation of teachers is demonstrated through the provision of complimentary membership to the Quality Teaching Academy for all ITE students. Many of the resources are also publicly available.

Supporting the wide-scale implementation of Quality Teaching Rounds professional development would have significant positive effects for teachers, students, and society. At a minimum, as detailed in our responses to TORS 7, 8, and 9, ITE students, graduates, TPA assessors, mentors and supervising teachers can all benefit from dedicated professional development that focuses on the Quality Teaching Model and Quality Teaching Rounds.

Systematic implementation would have immediate impact on the 300,000 teachers already in the Australian workforce. As evident in our two-day Quality Teaching pre-internship pilot, learning about the Quality Teaching Model and experiencing QTR processes generates transformational effects quickly. As one Deputy Principal evocatively concluded: *This is the first time in my career I feel I'm actually teaching students. Until now I've just been giving them work to do.* This poignant statement of transformation highlights the immense value of the conceptual framework for helping teachers understand what it means to teach and teach well.

The fast impact of QTR contributes to the cost effectiveness<sup>46</sup> of the approach and signals its clear scalability. A cost benefit analysis conducted by Deloitte Access Economics found that "the cost of QTR is categorised as very low under E4L [Evidence for Learning] guidance" and that for each dollar spent on QTR, the lifetime uplift to the Gross State Product is at least \$40.

Engagement in the Quality Teaching Model and Quality Teaching Rounds by the existing teaching workforce and ITE students could make precisely the kind of difference sought by government<sup>47</sup> – to rapidly improve the quality of teaching and learning in Australia.

<sup>&</sup>lt;sup>44</sup> Guskey, T. (2003). What makes professional development effective? *Phi Delta Kappan, 84* (10), pp. 748-750, 10.1177/003172170308401007

<sup>&</sup>lt;sup>45</sup> Lortie-Forgues, H., & Inglis, M. (2019). Rigorous Large-Scale Educational RCTs Are Often Uninformative: Should We Be Concerned? *Educational Researcher*, *48*(3), 158-166. doi:10.3102/0013189x19832850

<sup>&</sup>lt;sup>46</sup> 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
<sup>47</sup> Tudge, A. (2021). Being our best: Returning Australia to the top group of education nations.

https://ministers.dese.gov.au/tudge/being-our-best-returning-australia-top-group-education-nations

#### SUMMARY OF RECOMMENDATIONS

- 1. Capitalise on the widespread interest in teaching among school students by nurturing rather than discouraging aspirations through over-regulation of who can teach.
- 2. Focus policy on 'outputs' from teacher education programs (graduates) rather than 'inputs' (recruits).
- 3. Implement a framework that articulates what constitutes quality teaching to provide a unifying language and concepts for ITE.
- 4. Extend this framework into the professional growth and development of practising teachers to better align ITE with the realities of beginning to teach.
- 5. Attend to broader issues of equity and access to attract a more diverse cohort into ITE.
- 6. Invest in the production of a robust body of evidence to:
  - a. inform ITE programs and practices; and
  - b. guide ongoing teacher professional development.
- 7. Prepare ITE students to identify quality research evidence to guide their ongoing professional practice.
- 8. Fund a study across multiple universities and jurisdictions to investigate the impact for ITE students of engagement with the Quality Teaching Model and Quality Teaching Rounds.
- 9. Draw on lessons from previous initiatives designed to increase practical experience to avoid repeating past mistakes.
- 10. Commission research on the reliability and validity of TPAs.
- 11. Train supervising teachers, university assessors and ITE students in the Quality Teaching Model and Quality Teaching Rounds processes to facilitate rich and constructive feedback during this capstone assessment and throughout ITE programs.
- 12. Establish a unified vision of quality teaching to build ITE program coherence and increase effectiveness.
- 13. Strengthen the impact teachers and principals have on the induction of beginning teachers through high impact professional development.
- 14. Train beginning teacher mentors in the Quality Teaching Model and Quality Teaching Rounds to provide rich and constructive feedback.
- 15. Support all newly qualified teachers to participate in Quality Teaching Rounds.
- 16. Provide casual teachers with more opportunities for high impact professional development.
- 17. Support wide-scale implementation of Quality Teaching Rounds professional development for all ITE candidates and practising teachers.