Education's Strategic Research Fund Reporting Template

Annual Progress Reports and Final Reports are a legal requirement under the Funding Deed. Reports are an essential source of information about the research the Department funds, including outcomes achieved by project teams, and information contained in the reports may be displayed on the Department's website and used for other communication purposes.

When completing the report, please ensure you:

- complete all sections (enter 'N/A' if applicable).
- use plain English throughout, so that it is accessible to a broad audience (in cases where a scientific or academic term is used, please include a clear definition of that term)
- refer specifically to the project described in the application form, including its progress and research outcomes and outputs.

How to submit

The Lead Researcher and the Administrating Institution must both certify each report, confirming it is an accurate report for the period covered. Signatures are not required.

Submit a word or pdf version of each report, including electronic copies of publications or other research outputs for the reporting period, to higher.education@det.nsw.edu.au.

Section 1

Funding stream	Strategic Research Fund: Leveraging Grant ARC Ref. No. DP180100285	Report Type (Annual Progress OR Final)	Final

Lead Researcher	Laureate Professor Jenny Gore

Project Title	Investigating the efficacy, complexity and sustainability of teacher change – casual teachers.

Section 2 – Progress in the reporting period

1. **In plain language, summarise the progress of the last 12 months, focusing on key results, achievements, and translation activities (around 600 - 900 words)**

This project investigated the impact of Quality Teaching Rounds professional development (QTR PD) on 32 casual relief teachers (CRTs) in primary schools. The headline result is that participation by CRTs in QTR PD was found to be associated with improvements in quality of teaching, teaching efficacy, job satisfaction, confidence, morale, and sense of belonging to the profession.

During the last 12 months, the in-school QTR PD intervention took place and all remaining data were collected, including post-intervention lesson observations, surveys and interviews with the CRTs and interviews with school principals. It was a major achievement to complete this study despite the disruptions caused by the pandemic and to obtain clear evidence of positive impact.

To our knowledge, structured PD for CRTs focused on pedagogy, has never been trialled before on such a scale, in Australia or elsewhere. Our project establishes that: (1) CRTs can benefit substantially from the provision of quality PD and (2) it is possible to engage CRTs as active participants in important school-based research with principal support and valuing of the research agenda.

The project also demonstrates that schools can engage CRTs in QTR PD with little inconvenience. The principals involved in this research all agreed that implementing QTR PD 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 outcomes.

To date, translation activities have consisted of an online presentation to the Department of Education, in December 2022, and two 30-minute presentations of the research and preliminary findings at:
- the Quality Teaching in Practice (QTiP) conference, May 2022, Sydney, Australia; and
- the Australian Association for Research in Education (AARE) conference, November 2022, Adelaide, Australia.

2. **Did the research project proceed as planned?**

If yes, please include elements of your project plan that have been successful. If not, describe any delays or challenges to the planned activities, and how you managed them or plan to manage them (around 600 - 900 words)

Before the effects of the pandemic were widely felt, the early phases of the project were completed on time:
- successful recruitment of 32 CRTs from 8 Hunter/ Central Coast schools;
- pre-intervention data collection involving 32 pre-intervention interviews, 32 surveys and 64 lesson observations (two per teacher), using the QT Model; and

- provision of a two-day QTR PD workshop for 32 CRTs at the University of Newcastle.

The QTR workshop was well received, with participants reporting that it made them feel "valued" and provided multiple networking opportunities with other CRTs. QTR workshops are structured to be respectful of teachers and enabled the development of positive professional relationships. Given that the workshops typically rate highly among teachers and school leaders (with an average Net Promoter Score of 74), we were not surprised that CRT participants, who often miss out on PD, also appreciated the workshop.

Despite unavoidable delays caused by the pandemic, most schools required an additional term to complete the intervention. This extra time enabled the in-school QTR experiences to proceed smoothly in 5 of the 8 schools during Term 4 of 2021.

However, the three schools located on the Central Coast were unable to complete QTR given 14 weeks of closure in 2021 and major staffing difficulties due to positive COVID-19 cases throughout Term 4, 2021 and into Term 1, 2022.

In addition to the 12 CRTs at these schools being unable to complete the Rounds, three additional CRTs left the study at the end of Term 4, 2021, because they moved to different schools during the summer break. These changes reduced the participant sample for final data collection from 32 to 17 CRTs.

The 17 CRTs were observed after completion of QTR by researchers during Term 1, 2022. Interviews and surveys were also conducted at this time.

The principal interviews were delayed by one term and reduced in number from 8 to the 5 principals whose CRTs completed the PD. Despite the reduction in numbers, our mixed methods approach ensured multiple streams of data with which to triangulate results and increase reliability.

3. b) FINAL REPORT

In plain language, summarise key results, achievements, and outputs of this project.

These achievements should outline what the research problem was, what the grant achieved or enabled, and why this is important, including for academics and research end-users (around 600 - 900 words)

Extant research on PD shows scant provision for CRTs, with negative consequences for the quality of their teaching, sense of professional identity, morale, sense of belonging and job satisfaction. This situation has significant implications in NSW and Australia given we have one of the highest daily casual rates within the Organisation for Economic Co-operation and Development with 14% of classes covered daily by CRTs.

Therefore, ensuring that CRTs deliver a high standard of teaching is critical in achieving desirable school and student outcomes. However, CRTs face major challenges in keeping their teaching skills up to date, often with little or no school support.

CRTs also face significant disadvantage in terms of future employment prospects. Having little evidence of PL, CRTs compete for jobs with teachers who participate in regular PD as part of their employment. Furthermore, CRTs are frequently isolated from the larger teaching community, limiting their professional networks. At the same time, concerns about the quality of CRT teaching circulate, while their limited access to PD reinforces the impression they are poorly qualified.

This grant enabled 32 CRTs to engage in the high quality, evidence based form of PD known as QTR. The grant was complemented with in-kind support by the Teachers and Teaching Research Centre at the University of Newcastle, which provided the two-day workshop, with associated resources and catering.

The grant also enabled the collection of data from the 8 participating schools. An amount of $10,000 was provided to each school to cover most of the costs associated with CRT involvement in being observed, interviewed and undertaking a set of four, full-day Rounds. We recognised that it would be financially challenging and inequitable to ask CRTs to participate in the study while unpaid. Without the grant, it is highly unlikely this study would have proceeded at all.

Results

The lesson observations undertaken before and after the QTR intervention provide clear evidence of improvement in the quality of teaching. Using the Quality Teaching Model, mean scores were calculated and, as depicted in Figure 1, indicate overall improvement, demonstrating an effect size in favour of the QTR intervention improving the teaching quality of the participants ($n = 17$) with an increase (adjusted difference) in the Quality Teaching Total (means of all 18 elements) of 0.70 (95% CI [2.07, 3.71], $p = .001$.

Figure 1

QTM coding before and six months after QTR
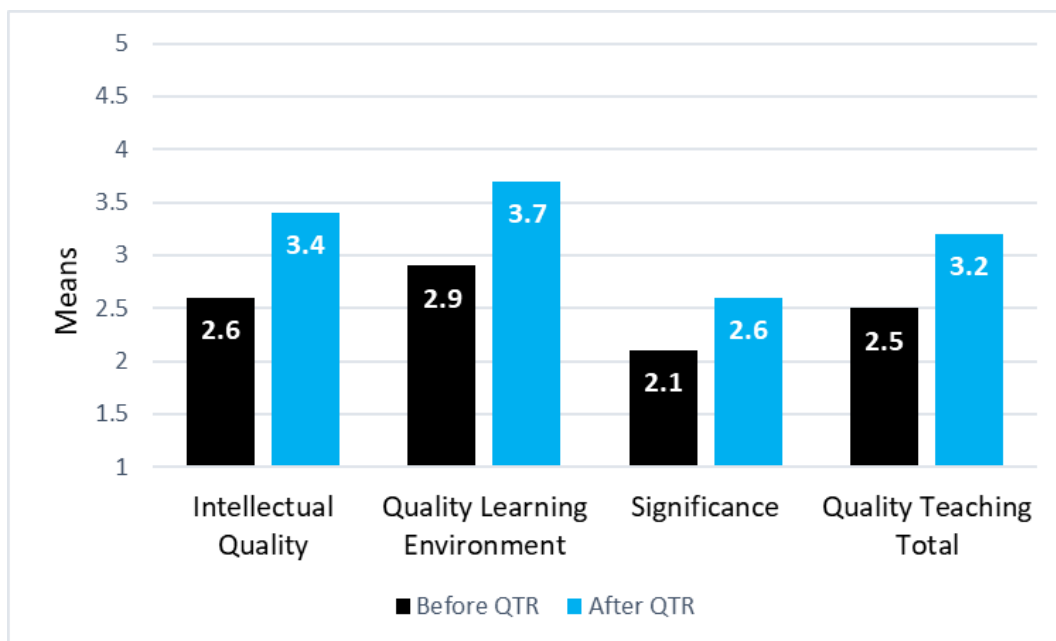
This result is comparable with a 2017 study with tenured teachers ($n = 64$), who participated in QTR PD. Participants showed a six-month score of 2.84 (95% CI [2.67, 3.01], $p = 0.01$) with a medium Cohen's d size effect 0.4. An increase of 0.15 from a baseline of $M = 2.69$ increasing to $M = 2.84$ post-intervention. This compares favourably with the current study with an increase of 0.7 from a baseline of $M = 2.5$ increasing to $M = 3.2$.

The CRTs reported that QTR PD helped them to reflect on their teaching practice and how they could enhance the lessons they were asked to deliver:

> You get given a piece of paper with a basic overview of what you're meant to do and it's usually simplified down for a casual teacher. So, [now] you're thinking how could you extend that lesson to make it more interesting … making sure some of the [QT] elements are being used where they probably weren't [before]. (Amber)

The surveys also provided evidence of positive effects on the efficacy of participating CRTs (see Figure 2), with improvement in overall efficacy as well as the sub-categories of efficacy in classroom management, instructional strategies and student engagement.

Figure 2

CRT survey results before and six months after intervention
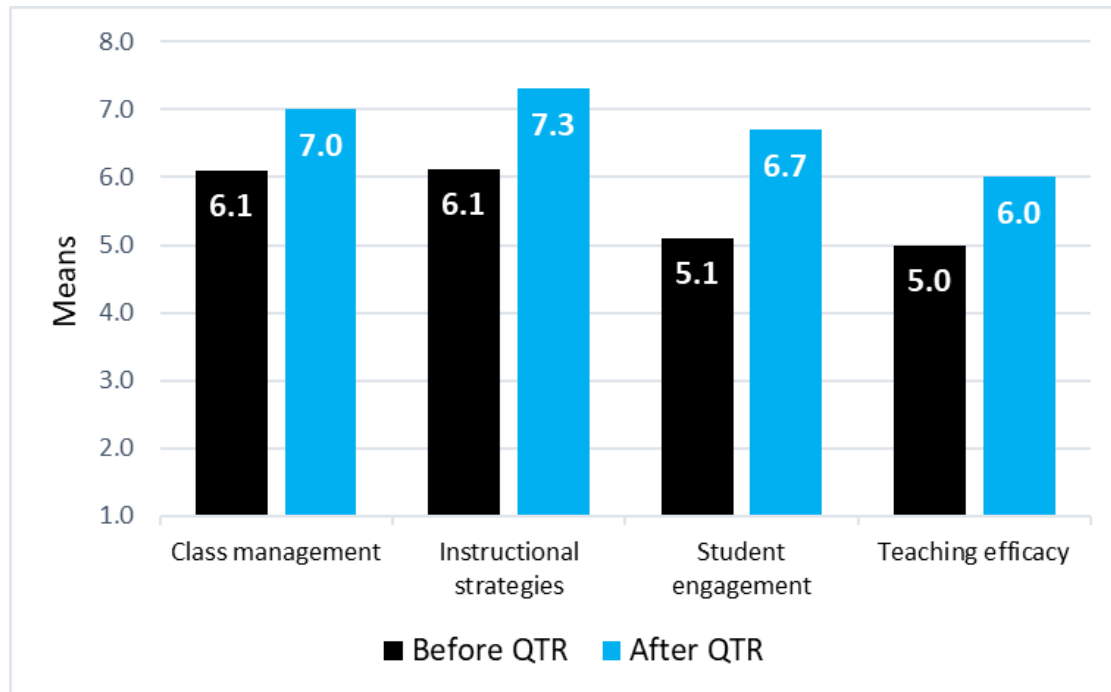
The interview data suggest related improvements in CRTs' morale and confidence.

> I think [QTR]'s definitely made me feel more confident and more comfortable teaching
> in front of other people that's for sure. (Brendan)

Forming professional learning communities for QTR was seen to have additional benefits in terms of improved professional networks, sense of belonging and connection to the education workforce.

Participating school principals commented on the growing confidence of CRTs and the benefits they derived from involvement in the project:

> Coming back to that sense of belonging, it's really made them feel part of the whole … it
> really did cement that ability to fit in and feel part of the team. (Principal Tim)

Principals valued both the positive impact on teaching quality for their own school and for the CRTs in terms of increased job opportunities. Indeed, many participants were offered contract work after completion of the PD.

In summary, participation in QTR PD appears to have benefitted CRTs in terms of:
- improved quality of teaching;
- enhanced professional identity; and
- increase in professional networks.

Significance

This study adds to the relatively small body of research that has been undertaken with CRTs. It draws attention to the inequitable PD conditions facing CRTs which can negatively impact their quality of teaching and teaching careers.

The findings have significant implications for the NSW Department of Education and other employers of casual teachers, by demonstrating that high quality PD can lift teaching quality, confidence and sense of belonging among CRTs. Fundamentally, the provision of additional PD support for CRTs is an investment in the development and retention of casual teachers, which is particularly salient at a time when the strength of the CRT workforce in NSW (and beyond) is more critical than ever.

3. **Do the results of this research have specific relevance to, or implications for any of the following groups or communities? If yes, briefly specify benefits, outcomes, or significance of your findings below.**

Aboriginal and/or Torres Strait Islander populations	No
Culturally and linguistically diverse populations	No
Rural and/or regional populations	No
Students with additional needs	No, except for the extent to which CRTs work with all of these groups and communities.

4. **Budget and expenditure in this reporting period**

Please indicate your labour and other project costs. The 'Budgeted' column should reflect figures your project proposal included in the funding deed. Please indicate actual project costs.

Research project costs in this reporting period	Budgeted	Actual
Labour costs related to this research project	$ 0	$ 0
Other costs directly related to the research project	$ 107,232	$ 107,232
Total research project expenditure	$ 107,232	$ 107,232

If you spent less than 80% of budgeted project costs, please indicate:

i)   why the project is underspent;
ii)   risk mitigation strategies that will enable the project outcomes to be achieved

iii)   how the underspend will affect the project's timelines and deliverables; and

iv)   how the unspent monies and any further grant payments will be spent next year.

Monies spent in full.

5.

6. b) FINAL REPORT ONLY: Outline your goals for the future of this research. This could include:
-   **further expected publications, reports, conference papers, or research collaborations**
-   **planned or potential engagement with research end-users**
-   **further research project scoping and scaling, including development of further grant applications to national competitive grants programs (around 600 – 900 words)**

Anticipated outputs include:

- a paper in a Q1 journal such as *Australian Educational Researcher;*
- a piece in *The Conversation*;
- presentations to educators, particularly school principals and NSW Department of Education representatives, including a presentation for the Teaching Quality Practice unit of the Department, in February 2023 ;
- a thesis to be submitted by PhD candidate, Jacqueline Briskham, by the end of 2023; and
- conference presentations at the Quality Teaching in Practice conference in Newcastle, in May 2023, and the Australian Association for Research in Education (AARE) Annual Conference, in Melbourne, in November 2023.

This project could be expanded to:

- engage a larger sample throughout NSW and/or in other Australian states and territories;
- examine the impact of QTR PD on early career CRTs given high rates of attrition among early career teachers;
- include high school CRTs, given that the initial study was conducted with primary teachers only; and
- explore the impact on students in relation to number of days spent with CRTs and CRT opportunity to participate in QTR.

We plan to explore opportunities to fund such expansion of the research, including further partnering with the NSW Department of Education, if possible. Both the completed study and additional research such as that outlined above are critical for: (1) ensuring the success and retention of high quality CRTs; and (2) advancing effective PD policy for CRTs.

Whether or not additional research is undertaken, QTR PD for CRTs could readily be scaled through the University of Newcastle's not-for-profit social enterprise, the Quality Teaching Academy. All members of the NSW Department have free membership of the Academy and access to reduce workshop costs. We recommend that the Department engages in such scaling activity and associated longitudinal evaluation to track effects on CRTs, their colleagues and their students.

Section 3 – Research Outputs

List all publications and research outputs the past 12 months, resulting from the Grant.

1. Journal Articles

List all publications (including in press, e-published and published). If published in an Open Access journal, place an asterisk at the start of the citation. For published articles, <u>attach a copy of each article</u> with your Report.

Publication Status	Full Citation	Pub date (if known)	Was NSW Education acknowledged?
Example: Published	** Brinkman SA, Gialamas A, Rahman A, et al. Jurisdictional, socioeconomic and gender inequalities in child health and development: analysis of a national census of 5-year-olds in Australia. BMJ Open 2012;2:e001075. **DOI**:10.1136/bmjopen-2012-001075*	*31 Jul 2019*	*Yes*
N/A			

2. Conference Presentations (e.g. invited, keynote, oral, poster)

Type	Full Reference	Was NSW Education acknowledged?
Example: Oral	*Green, J. Developmentally-focused early intervention for Autism. World Association for Infant Metal Health: 17th World Congress, June 2020, Brisbane, Australia*	*Yes*
Oral	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.	Yes
Oral	Briskham, J., Gore, J., Harris, J., Fray, L., Miller, A. Prioritising Casual Relief Teachers through the provision of Quality Professional Learning. Quality Teaching in Practice (QTiP), May 2022, Sydney, Australia.	Yes

3. Other outputs (e.g. reports, datasets, key engagements with research end-users, non-traditional research outputs)

If the output - such as a dataset - is publicly available, place an asterisk at the start of the reference.

Type	Full Reference
Example: *Culturally appropriate curriculum support resources*	*NSW Department of Education in consultation with the Association of Independent Schools of NSW and Catholic Schools NSW. Anti-bullying Strategy. NSW Department of Education, 2018, Sydney. Available from: https://antibullying.nsw.gov.au/*

4. Do you anticipate conducting any media promotion or engagement related to this project in the next 12 months? This could include opinion pieces, radio appearances, podcasts, articles in *The Conversation*, etc.

We anticipate articles in *The Conversation* and other media outlets, for example, the *Quality Teaching Academy newsletter* and *EduResearch Matters*.

5. Do you have any other comments?

We are grateful for the opportunity to conduct this important study.

Section 4 – Certification

1. Certification by Lead Researcher

I certify that this report and the details it contains are accurate for this reporting period.

Name: Jennifer Gore	Date: 30 January 2023

2. Certification by Administering Institution

I certify that this report and the details it contains are accurate for this reporting period.

Name: *J. Alexander*	Date: 31/1/23