

EVALUATION OF THE IMPACT OF SELECTED REFORMS

IMPROVING TEACHER QUALITY NATIONAL PARTNERSHIP

**Abridged Report
(June 2015)**

**Report to the Advisory Council of the Centre for Education
Statistics and Evaluation**

The SiMERR National Research Centre
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Glossary

ACARA	Australian Curriculum and Reporting Authority
ACER	Australian Council for Educational Research
AITSL	Australian Institute for Teaching and School Leadership
ANOVA	Analysis of Variance
AP	Assistant Principal
APST	Australian Professional Standards for Teachers
AQF	Australian Qualifications Framework
AQFC	Australian Qualifications Framework Council
ATSI	Aboriginal and Torres Strait Islander
C4E	Centre for Excellence
Classroom teacher ACC	NSWIT accredited teacher
COAG	The Council of Australian Governments
Construct	A variable that is not directly observable
DASA	Data and School Analysis
DP	Deputy Principal
Early career teacher (ECT)	A graduate teacher working towards full registration in the first three-to-five years of teaching
Estimate reliability	This assesses the extent to which item-location estimates would be replicated if the study were to be repeated with a different sample of respondents. A measure of survey reliability in Rasch is expected to be greater than 0.7
GTIL	<i>Great Teaching, Inspired Learning: A Blueprint for Action</i> (NSW DEC, 2013)
HAT	Highly Accomplished Teacher
HSC	Higher School Certificate
infit and outfit mean scores	Expressions of the extent to which the data fit the Rasch model. A mean measure close to 1.00 is anticipated
ICT	Information and Communication Technology

ILP	Individual Learning Plan
ITQ NP	Improving Teacher Quality National Partnership
LBOTE	Language Background other than English
LOP Leader of Pedagogy	A HAT equivalent title used by the Catholic sector
Low SES	Low Socio-economic Status
MANOVA	Multivariate Analysis of Variance
MCEETYA	Ministerial Council on Education, Employment, Training and Youth Affairs
NAPLAN	National Assessment Program – Literacy and Numeracy
NESB	Non-English Speaking Background
New Scheme teacher (NST)	Teachers employed to teach in NSW after October 1 2004 or who have re-entered the teaching workforce having been out of the classroom for more than five years
NP	National Partnership
NSWIT	New South Wales Institute of Teachers
Paraprofessional	An operational or educational support (non-teaching) role in the classroom
PISA	Programme for International Student Assessment
PLP	Personalized Learning Plan
PRG	Project Reference Group
PST	Preservice Teacher
QTF	Quality Teaching Framework
QUEST	A software package developed by ACER for item analysis using the Rasch model for partial credit scoring. It is used extensively in social science research
RAP	Results Analysis Package
Rasch analysis	Rasch analysis allows data to be expressed on an interval scale that permits the subsequent use of powerful parametric techniques for analysis. It represents a breakthrough in qualitative research in the social sciences because it can reveal relationships and patterns among the data that would be masked by less powerful techniques

SC	School Code: SC codes were used to differentiate commentary across schools while maintaining the confidentiality of the school identity.
SiMERR	The SiMERR National Research Centre
SMART	School Measurement, Assessment and Reporting Toolkit
SPO	Structure, Process and Outcome
TARS	Teacher Assessment and Review Schedule
Teacher PA/PL	Teacher who has achieved Professional Accomplishment or Professional Leadership career stages of the NSWIT <i>Professional Teaching Standards</i> . A HAT equivalent term used in the independent sector
TEI	Teacher Education Institution
TPL	Teacher Professional Learning
Turn	The Turn Numbers indicated in in-text citations specify the speaking turns in which the quoted material was stated, enabling the quoted material to readily located for future reference if required.
under-fit and over-fit items	Item estimates that do not meet the expectations of the Rasch model. Under-fit items show more variance than predicted by the model and in the over-fit items show less variance than predicted by the model

Research Team

This Evaluation project represents a genuine collaboration of academic staff from three NSW universities. The research team comprises members from the SiMERR National Research Centre at the University of New England, and senior researchers from the Australian Catholic University – Strathfield Campus and University of Western Sydney. The Evaluation team brings to this project a mix of quantitative and qualitative research techniques and skills, as well as experience in large-scale national and international research initiatives.

Prior research undertaken by team members enabled the application of proven analytical frameworks, current evaluation techniques and extensive experience working with professional standards for teachers both within Australia and overseas. Members of the Team are:

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Executive Summary

Background

The *National Partnership Agreement on Improving Teacher Quality* (COAG, 2009) was designed to improve teacher and school leader quality to sustain a quality-teaching workforce. It aimed to deliver system-wide reforms targeting critical points in the workforce to attract, train, place, develop and retain quality teachers and leaders in schools and classrooms.

The evaluation, referred to as the Evaluation of the Impact of Selected Reforms of the Improving Teacher Quality National Partnership (hereafter referred to as the 'ITQ NP Evaluation'), incorporates seven main Evaluation Questions bearing on six themes:

1. Centres for Excellence (C4E): An investigation of the effectiveness of C4Es in terms of improved teacher capacity, improved student performance, and collaboration with other schools and partner universities
2. Highly Accomplished Teacher¹ (Impact): An investigation of the effectiveness of the role of HATs (or equivalent) across a number of areas, including their: impact in hard-to-staff schools; facilitation of improvements in the capacity and effectiveness of other teachers; support for improved student performance; and contributions to school planning
3. Highly Accomplished Teacher (Attributes): An investigation of the characteristics of the role of HATs (or equivalent) through their own perceptions and feedback from others
4. Paraprofessionals: An investigation of the impact of the support provided by paraprofessionals to teachers and students, and the possible career aspirations associated with the role
5. Professional Experience: An investigation of the roles and responsibilities of school leaders, HATs (or equivalent) and universities in preparing high quality teacher education graduates
6. Additional Areas of Interest: An investigation of a range of contextual and policy issues that might impact on the implementation, transferability and scalability of initiatives.

The Final Report of the ITQ NP Evaluation details the data collection approaches, data collected, modes of analysis, findings and implications for practice. The research design to address the Evaluation Questions involved four broad data collection tools. These were:

- Surveys of staff within ITQ NP schools in which there were opportunities for Likert-scale responses and written comments on selected questions
- Site visits to a sample of C4E schools where principals, executive staff members, HATs (or equivalent), teachers and paraprofessionals were interviewed
- Surveys of preservice teachers concerning their professional experience in which there were opportunities for Likert-scale responses and written comments
- Professional experience reports for preservice teachers from the three universities involved in the evaluation.

¹ HAT (or equivalent)

The commentary from Surveys 1 and 2 comprised written responses from 162 respondents who completed Survey 1 and 177 respondents who completed Survey 2, with 97 respondents in common. The interview corpus from the site visits, which comprised more than 680,000 words, was obtained from 104 interviewees across 22 sites, and the Professional Experience Report corpus, which contained more than 215,000 words, was compiled from 550 reports.

The analyses presented in this report, therefore, have been based on substantial data sets, and the conclusions and implications are based on analyses across all data sets. The summative findings below sequentially address each of the Evaluation Themes, although it is acknowledged that there are relationships within, across and between many of the Evaluation Questions.

Findings

A high-level summary of the key findings for each evaluation theme is presented in dot-points below each evaluation question.

1. Centres for Excellence Theme

EQ 1a: To what extent were Centres for Excellence effective in achieving improved teacher capacity and improved quality of teaching in hub and spoke schools (and other schools availing themselves of support from 'virtual' or thematic Centres for Excellence)?

- The C4E structure was seen to positively address inhibitors of teacher capacity by: making time available for development; establishing communication channels; focusing on professional learning; and ensuring shared responsibility, vision and priorities.
- The evaluation identified improvements in targeting professional learning through mentoring and peer coaching, and working with performance data.
- In relation to support for individual teachers, action research was reported as a particular useful practice that was able to target professional learning to meet individual teacher needs and opportunities.
- A range of areas of improved teacher capacity were identified and included: improved teacher feedback; better assessment practices; improved teacher reflection; increased teacher professional dialogue; better teacher collaboration
- Schools reported that they predominantly focussed on whole-school improvement strategies that were seen to make a difference in terms of teacher professional learning, building networks and improved pedagogy. These strategies were seen as critical in achieving long-lasting change.
- Respondents reported that HATs (or equivalent) were driving teacher capacity to use data to inform programming and teaching at both class and group level. Data analysis allowed expertise to be better targeted to the most vulnerable students.
- The Professional Standards for teachers were reported to provide a strong basis for improving and/or enhancing teaching practice.

EQ 1b: To what extent are Centres for Excellence effective in achieving improved student performance in both hub and spoke schools?

- The views of school leaders and teachers were canvassed to determine whether student outcomes had improved and they responded positively citing the results of a variety of forms of informal and formal in-school indicators.

- The establishment of C4E led to an enhanced focus on aspects of teaching known to improve learning. In particular, having a school-wide focus on professional learning for teachers was reported to have a positive impact upon student performance.

EQ 1c: To what extent are Centres for Excellence effective in applying network learning principles where schools collaborate and share?

- The C4E initiatives were reported to contribute to the development of professional networks both within and across schools, many of which focused on professional learning or improved pedagogy.

EQ 1d: To what extent did Centres for Excellence achieve effective relationships with partner universities?

- Partnerships with universities were predominantly focused on support for preservice teacher education, although some schools had broader relationships.
- Schools reported that it was more difficult to develop a deeper relationship with universities that would improve the quality of teaching in the school, outside of the research-based interests of universities.
- Where strong relationships were built, these were established on the basis of reciprocal benefits (i.e., having a clear focus and structured actions/outcomes).

2. Impact of the HAT (or equivalent) Theme

EQ 2a: To what extent has the HAT (or equivalent) initiative achieved effective career progression within the classroom for skilled teachers?

- Survey respondents indicated that the HAT (or equivalent) role resulted in more effective career progression for beginning, early career and experienced teachers through coordinating mentoring, collaboration and classroom observations.
- The HAT (or equivalent) role was also found to provide the opportunity for demonstrating leadership in the classroom and facilitated the building of a positive culture through professional dialogue within and across school networks.
- The HAT (or equivalent) also provided schools with a resource to implement school improvement strategies.

EQ 2b: To what extent has the HAT (or equivalent) initiative been effective in attracting and retaining skilled teachers in hard to staff schools? Note: Commentary for this aspect of the HAT (or equivalent) role was offered from the perspective that no respondents viewed their school as hard-to-staff. The commentary provided was advisory and directed at other perceived hard-to-staff schools.

- The HAT (or equivalent) role was attractive for people with the requisite skill set and aspirational goals to focus on teaching and learning issues regardless of the setting.
- Respondents indicated that HATs (or equivalent) who displayed motivation and a sense of community would be effective in meeting context-specific priorities in hard-to-staff schools.

EQ 2c: To what extent has the HAT (or equivalent) initiative been effective in achieving improved capacity and effectiveness of other teachers in ITQ NP hub and spoke schools (as well as in relevant Low SES NP schools)?

- The HAT (or equivalent) initiative resulted in effective professional learning for beginning, early career and experienced teachers through the coordination of mentoring, collaboration and classroom observations.
- Survey and interview data results revealed that the HAT (or equivalent):
 - contributed ‘extensively’ or ‘considerably’ to improved support for teachers and to improvements in the quality of teaching within the school;
 - was central to implementing an improvement agenda based on mutual advantage, role flexibility and effective relationships; and
 - was responsible for building teaching and learning cultures that promoted confidence, facilitated teachers sharing of practice and opened up classrooms and encouraged teachers to develop best practice.

EQ 2d: To what extent has the HAT (or equivalent) initiative been effective in achieving enhanced capacity of teachers to utilise student attainment data to help them more effectively meet individual student needs?

- There was significant commentary from respondents to suggest that the HATs (or equivalent) contributed to improvements in the capacity of teachers to use student attainment data effectively (with respect to relevance, access, reflection and application of data to inform practice), and to provide professional learning that acknowledged different levels of staff engagement and/or facility with data usage.

EQ 2e: To what extent has the HAT (or equivalent) initiative been effective in achieving improved student performance?

- The HAT (or equivalent) role was reported to have a positive influence on student retention and learning outcomes.
- The HAT (or equivalent) role was seen to strengthen the teaching and learning environment and to be a pre-cursor to achieving improved student-learning outcomes.
- The HAT (or equivalent) was also reported to enhance teacher reflection, teacher expectations, student engagement, and feedback, all of which are regarded as essential ingredients in achieving improved student learning outcomes.

EQ 2f: To what extent has the HAT (or equivalent) initiative been effective in achieving sustainable improvements in teaching and learning through changes in school planning and management practices?

- In contexts where HATs (or equivalent) were effective in establishing sustained improvements, they tended to display the following attributes:
 - They impacted on school and staff culture positively through modelling and demonstrating quality teaching, supporting the quality of professional learning, establishing collaborative networks within and between schools, working collaboratively with members of the school executive, and mentoring/coaching and supporting individual teachers;
 - They were the catalyst for achieving ‘collective capacity’ within a school and enabling others to focus on the core business of their roles; and
 - They reflected on existing practices and processes, adopted a whole-school focus for professional learning, and addressed contextual needs within and across schools.

3. Attributes of the HAT (or equivalent) Theme

EQ 3a: How is the role of the HAT (or equivalent) defined by characteristics that include their qualifications, work experience, professional backgrounds and career ambitions?

- The HAT (or equivalent) role was shaped by three considerations, namely, previous roles held, a well-developed skill set – particularly people management and classroom skills, and contact with stakeholders from within the profession and the wider school community
- The HAT's (or equivalent) professional perspective was shaped by a number of influences that included personal professional growth, working with peers, adapting to new contexts, improved learning outcomes for students, and engagement with the profession.

EQ 3b: How is the role of the HAT (or equivalent) defined by characteristics that include the reasons they applied to become a HAT (or equivalent) and whether aspirations have been realised?

- The reasons HATs (or equivalent) consistently gave for taking on the role were to collaborate with colleagues, to develop professionally, and to improve learning outcomes for students.
- HATs (or equivalent) were in general agreement that the role was a rewarding one in terms of opportunities and by way of receiving professional feedback.

EQ 3c: How is the role of the HAT (or equivalent) defined by characteristics that include their perception of their roles and the impact they are having in both hub and spoke schools, as well as in relevant Low SES schools, on teacher capacity and quality as well as student performance?

- The HATs (or equivalent) perceived a key aspect of the role as being relevant to the needs of their stakeholders, a readily accessible resource person with the requisite skills and expertise to plan, implement and support an improvement agenda, as well as to facilitate a culture of continuous improvement.

4. Paraprofessionals Theme

EQ 4a: To what extent has the paraprofessional initiative been effective in achieving improved support for individuals or groups of students?

- Some, but not all, Educational Paraprofessionals were reported to have improved the support given to students.
- The majority of paraprofessionals were Operational Paraprofessionals and these did not directly offer in-class support to students, although those engaged with technology support and community engagement were reported to have indirectly supported students.

EQ 4b: To what extent has the paraprofessional initiative been effective in achieving improved support for teachers?

- The success of the paraprofessional role was attributed to the support that it provided to teachers in the areas of administration, event management, technology, and community engagement responsibilities.

- While such support for teachers could impact on the quality of teaching and learning, few respondents reported an explicit connection between the paraprofessional role and these outcomes. Respondents were more inclined to observe that the support enabled teachers to concentrate more on the core business of teaching.

EQ 4c: To what extent has the paraprofessional initiative been effective in achieving improved student performance?

- Ninety percent of the survey respondents indicated the paraprofessional role had improved student-learning outcomes. However, there was little direct evidence that the paraprofessional role contributed directly to student-learning outcomes in the site visit interviews. There was recognition that they helped teachers and families, which has the potential to improve student outcomes indirectly.

EQ 4d: To what extent has the paraprofessional initiative been effective in achieving enhanced job satisfaction of teachers and leaders?

- Overwhelmingly, survey respondents indicated that the paraprofessional role had enhanced job satisfaction of teachers and leaders (43% of respondents indicated that paraprofessional role had enhanced the job satisfaction of teachers and leaders 'extensively' or 'considerably').

EQ 4e: To what extent has the paraprofessional initiative been effective in achieving pathways for paraprofessionals into teaching?

- While there was evidence for support of the idea that a paraprofessional role could lead into teaching, the evaluators were not made aware of any Educational Paraprofessionals enrolling in a preservice teacher program during, or as a consequence of, their current appointment.
- The Operational Paraprofessional roles were not designed to provide a pathway into teaching and this was confirmed in the findings.

5. Professional Experience Theme

EQ 5: Do C4Es prepare higher quality teacher education graduates who are better equipped and prepared to teach in NSW schools?

- C4Es provided environments where support for the professional experience is augmented and focused through the HAT (or equivalent) role to provide an increased emphasis on quality teaching and collaborative practices. This emphasis is fundamental to strengthening the capacity of supervisors to effectively support of the professional experience.
- Preservice teachers indicated that supervising teachers have the greatest influence on the success of their professional experience and as such should be the focus of any initiatives to improve the professional experience.
- Supervising teachers were not a homogeneous group in terms of articulating appropriate, Standards-referenced teaching practice. The analysis showed high variation amongst teachers to use the Standards to make judgements about the capacity of preservice teachers.

EQ 6: What constitutes an effective relationship between schools, training institutions and employers in the development and delivery of high quality professional experience?

- Generally, partnerships between schools, universities and employers focused on supporting the delivery of professional experience
- Dialogue, the development of shared understandings, university responsiveness and reciprocity are the key characteristics of effective school-university relationships
- Diverse professional learning programs for supervising teachers, teacher educators and/or preservice teachers were associated with effective relationships.

6. Additional Areas of Interest Theme

EQ 7a: What are the similarities and differences across settings with respect to the importance of contextual factors in the impact of C4Es, HATs and Paraprofessionals?

- The level of choice and/or involvement of C4Es in the initial application was identified as a key contextual factor that affected whether spoke schools would engage with projects or become members of the learning communities' initiatives
- The commentary indicated that strategic planning and action from C4E Principals and HATs (or equivalent) was required to overcome any reluctance towards, or resistance from, spoke schools.
- The level of commitment and continuity of school leadership to the ITQ NP project were presented as important to the success of the initiative.

EQ 7b: What are the similarities and differences across settings with respect to the preparation of higher quality teacher education graduates who are better equipped to teach in NSW challenging schools, such as, those that are remote or which have high Aboriginal or Torres Strait Islander (ATSI) enrolments?

- The need for teacher education graduates to have greater knowledge and understanding of ATSI education was prominent in the commentary due to: more students identifying as ATSI; schools broadening responsibilities for ATSI support from specialised units to all teaching staff.

EQ 7c: What are the similarities and differences across settings with respect to the needs of new teacher education graduates for successful teaching in challenging schools?

- According to the C4E (or equivalent) school personnel who were interviewed, there appears to be very little difference required as far as preparation goes for preservice teachers appointed to challenging, remote or metro schools.
- Commentary identified required knowledge and personal attributes that are mirrored in the expectations of the Australian Professional Standards for Teachers.

EQ 7d: What are the similarities and differences across settings with respect to the particular training needs of teachers in schools with high ATSI enrolments?

- Interviewees at the site-visit schools reported that preservice teachers need greater understanding of ATSI culture and learning differences, especially awareness of successful ways many teachers are approaching these critical issues².

² It should also be noted, however, that ATSI education has been stipulated as a priority area in initial teacher education and that "Initial Teacher Education programs [must] ensure that all graduates gain

EQ 7e: What are the similarities and differences across settings with respect to the factors in their training that lead to the higher retention of high quality teachers in challenging schools?

- While interviewees did not identify any specific contextual factors that relate to teacher retention, they did suggest strategies to improve retention, including school-based incentives and support, more flexible career pathways, increased opportunities for collaboration and networking across schools.

EQ 7f: What are the similarities and differences across settings with respect to the factors in the professional experience that contribute to the attraction and retention of high quality mathematics and science teachers?

- Attraction of science and mathematics teachers, especially outside metropolitan areas, was presented as a more fundamental issue than retention.
- Interviewees identified that a constant challenge in retaining high quality mathematics and science teachers was the more attractive salary and conditions found in other employment sectors.

EQ 7g: What are the similarities and differences across settings with respect to the factors affecting sustainability of the initiatives?

- Varying levels of confidence were expressed about the long-term sustainability of initiatives. Nevertheless, most principals outlined management plans aimed at sustaining or replicating the initiatives as much as possible by utilising remaining financial and human resources.

EQ 7h: What are the similarities and differences across settings with respect to models and strategies adopted within C4Es, and involving HATs (or equivalent), and paraprofessionals, which can be generalised across contexts?

- Across the three sectors, three C4E models were trialled: Hub and Spoke; Thematic; and a Centralised model.
- The HAT (or equivalent) role across all contexts was structured around responsibilities to work at a school level to improve teaching quality, to develop networks and learning communities, to support the analysis of student achievement data and to lead and support the teaching and assessment practice of other teachers.
- Paraprofessionals undertook a range of roles including supporting the engagement of Aboriginal and/or Non English Speaking Background students and their communities.

Recommendations

To assist with the synthesis of the multiple data sources and to help lay a platform for the implications of the research leading to recommendations, the Evaluation Questions were further considered in terms of three organising principles: structures, processes and outcomes. These three perspectives are the key elements of the Donabedian Framework

knowledge and skills in the priority areas” in order to be accredited under the new national accreditation requirements (AITSL, 2013, D1; see also D2).

(Donabedian 1966, 1988), which offers a unifying perspective. Specifically, the Donabedian Framework provides further insights into the sustainability of initiatives within and across contexts and helps address the notion of quality – the core and underlying construct of ITQ NP initiatives.

The Implications that are the basis for the Recommendations provided below are detailed in the main body of this Report under *Implications for Practice taking into account the policy context* that can be found in Chapter 11.

Centres for Excellence Theme

The following recommendations arose from the data and analyses associated with Evaluation Question 1.

Recommendation 1.1 It is recommended that systems support schools to adopt longitudinal school-based professional learning in the three priority areas: (i) developing whole-school improvement strategies; (ii) supporting individual and groups of teachers to enhance professional practice; and (iii) working with performance data to improve teaching and learning outcomes.

Recommendation 1.2: It is recommended that systems encourage by providing resource support for HATS (or equivalent) in the establishment and ongoing development of professional needs-based connected learning networks of schools or groups of teachers across schools to undertake collaborative curricular and pedagogical planning.

Recommendation 1.3 It is recommended that systems adopt action research methodologies as a priority in system-wide professional learning agendas.

Impact and Attributes of the HAT (or equivalent) Themes

The following four recommendations arose from the data and analyses associated with Evaluation Questions 2 and 3.

Recommendation 2/3.1³ It is recommended that systems support schools (possibly in collaboration with universities) to develop case studies of successful induction programs that were facilitated and coordinated by HATs (or equivalent) in ITQ NP and Low SES NP partnership schools to identify best practice in the provision of professional experience and entry, or re-entry, into the teaching profession.

Recommendation 2/3.2: It is recommended that HATs (or equivalent) be encouraged and supported to share their insights and learnings concerning the certification process to help motivate others to consider applying for certification at the voluntary career stages of professional attainment

Recommendation 2/3.3: It is recommended that systems need to explore ways to establish the HAT (or equivalent) role as a clearly defined position within a school's leadership team and this position has a primary focus on classroom teaching and learning.

³ Implication 2/3.1 denotes the first implication arising from Themes 2 and 3.

Recommendation 2/3.4: It is recommended that in the appointment of a person into the role of HAT (or equivalent that due consideration is given to attributes, such as, the ability to negotiate, develop and maintain effective professional relationships at the school and school-network levels in order to engage staff in sharing the responsibilities for whole-school improvements.

Paraprofessionals Theme

The following recommendation arose from the data and analyses associated with Evaluation Question 4.

Recommendation 4.1: It is recommended that systems and/or schools seek ways to define more clearly the role of paraprofessionals in how they might best support the core work of teachers in areas such as administration, technology use, student learning and community engagement according to individual school contextual needs.

Professional Experience Theme

The following two recommendations arose from the data and analyses associated with Evaluation Questions 5 and 6.

Recommendation 5/6.1: It is recommended that systems need to ensure that supervising teachers are provided with the necessary professional support on how to better assess and describe teaching practice against the professional standards, with a view to providing a productive professional experience that clearly documents preservice teachers' accomplishments and needs.

Recommendation 5/6.2: It is recommended that schools presently designated as C4Es and, where applicable, schools presently designated as spoke schools should sustain the current collaborative networking presently facilitated by HATs to strengthen the mentoring capacity of supervising teachers in the provision of the professional experience.

Additional Areas of Interest Theme

The following three recommendations arose from the data and analyses associated with Evaluation Question 7.

Recommendation 7.1: It is recommended that Systems need to consider ways in which school groupings (e.g., C4E and spoke schools) are determined to achieve full, immediate and cohesive involvement from both school administrators and teaching staff.

Recommendation 7.2: It is recommended that systems work with schools to develop flexible staffing strategies that take into account geographical location and/or teacher shortages in particular subject areas.

Recommendation 7.3: It is recommended that systems develop mechanisms and/or processes that continually monitor change agency within schools with a view to supporting long-term sustainability of school improvement initiatives at the local level (tailored to contextual needs). They should consider one or more of the following courses of action:

- ways of retaining or extending HAT (or equivalent) roles in schools;
- appointing personnel who have performed the role of HAT (or equivalent) to assist non-C4E schools in developing local school initiatives of their own; and/or
- encouraging schools to develop local school partnerships and co-operative projects

within the confines of their own school budgets in order to benefit from economies of scale.

Concluding Remarks

The similarities and differences that can be drawn across the C4E contexts amount to three considerations. The first concerns the pivotal role of the HAT (or equivalent). The second encompasses the importance of developing effective relationships between personnel within and across school networks, which include the wider school community as well as universities. The third affirms differences, and relates to the importance of identifying relevant contextual needs as the basis for developing strategies that support whole-school improvements.

In conclusion, the most significant finding from this evaluation is that long-term employment of instructional leaders in schools would be a positive influence on the goals of the *National Partnership Agreement on Improving Teacher Quality* (COAG, 2009) and *Great Teaching, Inspired Learning: A Blueprint for Action* (NSW DEC, 2013). Because of its whole-school, teaching and learning focus, the HAT (or equivalent) role emerged as the major quality assurance mechanism in the development of effective relationships and the management of a school's and network's core improvement agendas.

1 Introduction

1.1 ITQ NP evaluation in NSW

The evaluation, referred to as the Evaluation of the Impact of Selected Reforms of the Improving Teacher Quality National Partnership (hereafter referred to as the 'ITQ NP Evaluation'), incorporates a number of related Evaluation Questions to elaborate six Evaluation Themes, namely:

1. Centres for Excellence Theme: An investigation of the effectiveness of C4Es in terms of improved teacher capacity, improved student performance, and collaboration with other schools and partner universities;
2. Highly Accomplished Teacher (HAT, or equivalent) Theme (Impact): An investigation of the effectiveness of the role of HATs (or equivalent) across a number of areas, including their: impact in hard-to-staff schools; facilitation of improvements in the capacity and effectiveness of other teachers; support for improved student performance; and contributions to school planning;
3. Highly Accomplished Teacher Theme (Attributes): An investigation of the characteristics of the role of HATs (or equivalent) through their own perceptions and feedback from others;
4. Paraprofessional Theme: An investigation of the impact of the support provided by paraprofessionals to teachers and students, and the possible career aspirations associated with the role;
5. Professional Experience Theme: An investigation of the roles and responsibilities of school leaders, HATs (or equivalent) and universities in preparing high quality teacher education graduates; and
6. Additional Areas of Interest Theme: An investigation of a range of contextual and policy issues that might impact on the implementation, transferability and scalability of initiatives.

The seven Evaluation Questions related to each of the six Research Themes are provided below. It should be noted that Research Theme 5 (concerning Professional Experience) has two Evaluation Questions.

Theme 1: Centres for Excellence

1. To what extent are Centres for Excellence effective in achieving:
 - a. improved teacher capacity and improved quality of teaching in hub and spoke schools (and other schools availing themselves of support from 'virtual' or thematic Centres for Excellence);
 - b. improved student performance in both hub and spoke schools;
 - c. effective application of network learning principles where schools collaborate and share; and
 - d. effective relationships with partner universities?

Theme 2: Highly Accomplished Teacher (Impact)

2. To what extent has the HAT (or equivalent) initiative been effective in achieving:
 - a. effective career progression within the classroom for skilled teachers;

- b. attraction and retention of skilled teachers in hard to staff schools;
- c. improved capacity and effectiveness of other teachers in ITQ NP hub and spoke schools (as well as in relevant low SES NP schools);
- d. enhanced capacity of teachers to utilise student attainment data to help them more effectively meet individual student needs;
- e. improved student performance; and
- f. sustainable improvements in teaching and learning through changes in school planning and management practices?

Theme 3: Highly Accomplished Teacher (Attributes)

- 3 How is the role of the HAT (or equivalent) defined by characteristics that include:
 - a. their qualifications, work experience, professional backgrounds and career ambitions;
 - b. the reasons they applied to become a HAT (or equivalent) and whether aspirations have been realised; and
 - c. their perception of their roles and the impact they are having in both hub and spoke schools, as well as in relevant low SES NP schools, on teacher capacity and quality as well as student performance?

Theme 4: Paraprofessional Role

- 4 To what extent has the paraprofessional initiative been effective in achieving:
 - a. improved support for individuals or groups of students;
 - b. improved support for teachers;
 - c. improved student performance;
 - d. enhanced job satisfaction of teachers and leaders; and
 - e. pathways for paraprofessionals into teaching.

Theme 5: Professional Experience

- 5. Do C4Es prepare higher quality teacher education graduates who are better equipped and prepared to teach in NSW schools?
- 6. What constitutes an effective relationship between schools, training institutions and employers in the development and delivery of high quality professional experience?

Theme 6: Additional Areas of Interest

- 7 What are the similarities and differences across settings with respect to:
 - a. the importance of contextual factors in the impact of the three initiatives⁴;

⁴ Standard ANOVA techniques were used to identify significant differences amongst the mean responses of each of the groups surveyed and to identify difference in mean responses arising from differentiation of the data on the basis of demographic characteristic. In cases where the data were homogeneous, the relevant tests for identifying homogeneity and post hoc differences were the Levene statistic and Tukey's HSD method. Where equal variances could not be assumed the relevant tests were the Welch test of robustness of the data and the Games-Howell method for identifying post hoc differences.

- b. the preparation of higher quality teacher education graduates who are better equipped to teach in NSW challenging schools, such as, those that are remote or which have high Aboriginal or Torres Strait Islander enrolments;
- c. the needs of new teacher education graduates for successful teaching in challenging schools;
- d. the particular training needs of teachers in schools with high Aboriginal or Torres Strait Islander enrolments;
- e. the factors in their training that lead to the higher retention of high quality teachers in challenging schools;
- f. the factors in the professional experience that contribute to the attraction and retention of high quality mathematics and science teachers;
- g. the factors affecting sustainability of the initiatives;
- h. models and strategies adopted within C4Es, involving HATs (or equivalent) and paraprofessionals, that can be generalised across contexts

2 Evaluation Context

2.1 Introduction

This document reports on the evaluation of reforms implemented in selected NSW schools as part of the *National Partnership Agreement on Improving Teacher Quality* (ITQ NP) (COAG, 2009). The ITQ NP Agreement was designed to improve teacher and school leader quality to sustain a quality-teaching workforce. It aimed to deliver system-wide reforms targeting critical points in the workforce progression to attract, train, place, develop and retain quality teachers and leaders in schools and classrooms. The outcomes identified in the Partnership Agreement were:

- (a) attracting the best entrants to teaching, including mid-career entrants;
- (b) more effectively training principals, teachers and school leaders for their roles and the school environment;
- (c) placing teachers and principals in schools to minimise skill shortages and enhance retention;
- (d) developing teachers and school leaders to enhance their skills and knowledge throughout their careers;
- (e) retaining and rewarding quality principals, teachers and school leaders; and
- (f) improving the quality and availability of teacher workforce data.

Longer-term foci associated with these outcomes include:

- (a) new professional standards to underpin national reforms;
- (b) recognition and reward for quality teaching;
- (c) a framework to guide professional learning for principals, teachers and school leaders;
- (d) national accreditation of preservice teacher education courses;
- (e) national consistency in teacher registration;
- (f) national consistency in accreditation/certification of Accomplished and Leading Teachers;
- (g) improved mobility of the Australian teaching workforce;
- (h) joint engagement with higher education to provide improved preservice teacher education; new pathways into teaching; and data collection to inform continuing reform action and workforce planning;
- (i) improved performance management in schools for teachers and school leaders; and
- (j) enhanced school-based teacher quality reforms.

The Improving Teacher Quality reform agenda in NSW involved government, Catholic and independent schools. Broadly, the initiatives pursued were focused on the:

- establishment of schools as Centres for Excellence (C4Es);
- employment of Highly Accomplished Teachers (HATs or equivalent) in mentoring and teacher support roles;
- preparation, by school and university staff, of high-quality teacher education graduates; and
- employment of paraprofessionals.

The ways in which these initiatives were implemented and managed differed across the three schooling sectors, enabling a broad range of models to be trialled and tested. However, consistent with the strategy adopted for the broader range of evaluations being pursued as part of the implementation of National Partnership on Improving Teacher Quality, all three sectors are collaborating on this evaluation.

2.1.1 Centres for Excellence (C4Es)

A central objective of the establishment of the C4Es across all sectors was the encouragement of schools to build sustainable professional networks. However C4Es also provide a context for trialling other initiatives including HATs (or equivalent), paraprofessionals, professional experience initiatives and stronger relationships between schools and universities.

In the government sector, two tranches of schools were funded as C4Es through the National Partnership to operate in a hub and spoke model initially for two years with 13 schools commencing in 2010 and 22 schools commencing in 2011. In addition to programmatic funding, all government school C4Es were allocated a HAT (or equivalent) position and a 1.0 FTE paraprofessional position for the two years of planned program operation.

2.1.2 HATs (or equivalent)

Although HATs (or equivalent) role were seen as key drivers within schools for improving teacher quality reforms, the HAT (or equivalent) position was also fundamental to pay dispersion reforms aimed at rewarding quality teaching.

The 2012 SSNP Annual Report (Australian Government, 2012, p.24) indicated:

As at December 2012, 256 quality teaching positions had been appointed in NSW schools across all Partnerships – 117 in government schools, 97 in the Catholic sector and 42 in the independent sector. This achievement contributes to reform by identifying, rewarding and retaining quality teachers in the classroom and provides opportunity for them to work with other staff to further improve teaching quality in schools.

The creation of additional HAT roles in NSW DEC schools directly rewards quality teachers by awarding them with a salary that positions HATs between Assistant Principals/Head Teachers and Deputy Principals on the current pay scale (based on the NSW teachers in schools and related employees award 2009).

2.1.3 Paraprofessionals

All three NSW school sectors appointed paraprofessionals to schools as part of the reform initiatives to provide support within and outside the classroom. Paraprofessionals were engaged in a wide range of roles including: assisting teachers within the classroom and in the implementation of individual intervention programs; supporting the operation of specialist learning centres; providing administrative support and providing technical expertise to embed more effective use of technology in classrooms. Some 156 paraprofessionals were employed in NSW schools in 2012.

2.1.4 Quality professional experience placements

Within the government schools, reforms aimed at improving the quality of professional experience placements were primarily focused on C4Es operating in a hub and spoke model, building on the support for the professional experience provided by HATs (or equivalent). C4Es also provided an infrastructure for developing relationships with university partnerships to enhance professional experience placements.

3 Research Design

3.1 Introduction

The research design to address the Evaluation Questions involved four broad data collection tools. These were:

1. Surveys of school staffs in which there were opportunities for Likert-scale responses and written comments on selected questions.
2. Site visits to a sample of C4E schools where principals, executive staff members, HATs (or equivalent), teachers and paraprofessionals were interviewed.
3. Surveys of preservice teachers concerning their professional experience in which there were opportunities for Likert-scale responses and written comments.
4. Professional experience reports for preservice teachers from the three universities involved in the evaluation.

The data were subjected to both quantitative and qualitative analyses. The evidence arising from these analyses contributed to a broader evaluation framework designed to test, through triangulation of evidence, the validity and reliability of findings and conclusions.

This Chapter considers these aspects of the evaluation.

3.2 Surveys of school staff

Two surveys of school staff were conducted. Registration for Surveys 1 and 2 commenced in September 2012 and August 2013, respectively. The surveys were each open to respondents for a six-week period.

The two surveys were aligned through common questions and Evaluation Themes. Each Survey comprised a suite of similar survey instruments that were customised to address the views and interests of different groups within a school, namely, principals, HATs (or equivalent), executive members, teachers and paraprofessionals. The survey instruments were designed to be applicable across sectors concerning the interpretation and implementation of the ITQ NP initiatives.

Numbers of respondents to the two surveys by analysis subcategory (role) are summarised in Table 3.1.

Table 3.1: Responses to Surveys 1 and 2 by groups surveyed

Analysis subcategory	Survey Instrument/Group	Respondents completing Survey 1	Respondents completing Survey 2	Respondents completing Survey 1 and Survey 2
Principal/Executives	Principal	68	64	
	Executive	42	42	
HATS	Principal/Executive subtotal	110	106	53
	HAT ITQ (or equivalent)	21	25	
	HAT low SES	20	17	
	HAT (or equivalent) subtotal	41	42	24
Classroom teachers	Experienced Teacher	36	20	
	Early Career Teacher	18	5	
	Classroom teacher subtotal	54	25	11
Paraprofessional	Paraprofessional subtotal	6	4	
All responses		211	177	88

The response rates for the two surveys were low, given the numbers of teaching staff in schools involved in the ITQ NP reforms. The relatively low number of responses constrained the form of the analysis and the extent to which the data could be reliably disaggregated for analysis. Approximately 18% of Principals and approximately 16% of HATs (or equivalent) at schools involved in the initiatives responded to the surveys.

3.3 Site visits

The research design included visits to a sample of C4E schools and a sample of schools participating in the Low SES NP by the evaluation team. Twenty-two one-day site visits were undertaken during which 104 interviews were conducted. Seventeen government, five Catholic and two independent schools were included in the site visit sample frame, which was reasonably representative of the proportion of government, Catholic and independent schools involved in the ITQ NP. Sector and personnel information for completed interviews are provided in Table 3.2 and Table 3.3 respectively.

Table 3.2: Site visits: Site type and location

Sector	Site Type				Location		Total
	Primary	Secondary	K-12	Other	Metropolitan	Provincial	
Government (C4E Tranche* 1)	4	3	–	–	5	2	7
Government (C4E Tranche 2)	3	3	–	1	2	5	7
Government (Low SES)	1	1	1	–	1	2	3
Catholic	1	3	–	1	3	2	5
Independent	–	–	4	–	2	2	4
Total	9	10	5	2	13	13	26

*The term Tranche refers to two roll outs of the program. Tranche 1 occurred in 2010 when 13 schools commenced the program. Tranche 2 began in 2011 with 22 government schools.

Table 3.3: Site Visits: Personnel interviewed

Sector	Personnel Interviewed					
	Principal	Executive	HAT (or equivalent)	Teacher	Paraprofessional	Total
Government (C4E Tranche 1)	6	5	8	8	4	31
Government (C4E Tranche 2)	5	8	6	15	6	40
Government (Low SES)	3	1	3	1	–	8
Catholic	5	6	5	1	1	18
Independent	2	–	3	2	–	7
Total	21	20	25	27	11	104

The interviews were semi-structured using interview protocols based on the Evaluation Themes and associated Evaluation Questions. As an indication of the interview structure, the protocol used for Principals and School Executive is provided in Appendix A.

When scheduling interviews, a time of 40-45 minutes was suggested. In practice, some interviews lasted for less than this time and some longer.

3.4 Professional experience

A critical aspect of the ITQ NP reforms was support for initiatives aimed at improving the quality of professional experience provided to preservice teachers. This evaluation incorporated a number of questions aimed at evaluating the impact of these initiatives. In particular,

Do C4Es prepare higher quality teacher education graduates who are better equipped and prepared to teach in NSW challenging schools?

The issues embedded in this question are multifaceted and complex. They concern judgements about the nature of the professional experience and its relationship to effective teaching throughout a teacher's career.

Notwithstanding the complexity of issues involved in defining what constitutes more effective practice and the nature of the related judgements, the time frame for this evaluation did not enable a longitudinal study of differences in the relative efficacy of teachers who undertook their professional experience in C4E and other schools. Consequently, the intent of this question was inferred to mean:

Have the teacher quality initiatives implemented by C4Es enabled them to provide higher quality professional experience for preservice teachers than schools that have not participated in the initiatives?

Two data collections were used to evaluate this aspect of the C4Es: professional experience reports, and surveys of preservice teachers and recent graduates working towards accreditation.

3.4.1 Analysis of professional experience reports

This aspect of the evaluation focused on the analysis of supervising teachers' comments in professional experience reports that provided formal feedback to preservice teachers during their professional experience placements. In particular, the focus of the analysis was to explore how supervising teachers articulate and describe professional practice against the Graduate Teacher Standards (NSWIT, 2005).

The *Professional Experience Supplementary Documentation* (NSWIT, 2009) provided universities with guidance about the form of professional experience to universities seeking accreditation of their courses. These guidelines offered a framework for universities to comment on the preservice teachers' development against the 46 Standards, grouped under seven Elements of the *Professional Teaching Standards* (NSWIT, 2005) at the Graduate Teacher career stage. This framework offered universities some latitude in the form of the preservice teacher reports to be completed by supervising teachers.

Hence, whilst all universities provide a summative commentary as part of a preservice teacher report, the structure of the reports differs across universities. For some universities, a written comment was expected against each of the individual Standards of the seven Elements of the Professional Teaching Standards (NSWIT, 2005), while other institutions provide the option for supervising teachers to either tick a box to rate achievement of an Element (or Standards) or to provide a comment on an Element (or Standards).

The quality of the professional experience provided by schools is determined, in large measure, by the extent to which supervising teachers are able to guide and support preservice teachers effectively during their professional experience. The ability of supervisors to articulate current, clear and consistent views about teaching practices is therefore important. This ability should be reflected in the formal reporting of teaching practices within the professional experience reports.

There are two aspects to the design of the evaluation of this area. First, in reports where a written comment was expected against a particular Element, the focus was directed at the

correspondence of the comment and the Standard to which it referred. Second, in all reports provided, each summative commentary was interrogated to investigate which Standards were referenced, and whether there was a pattern of response evident within the commentary across the sample, and if so, the characteristics of the pattern.

Professional experience reports were collected for analysis from the three universities involved in the evaluation. The professional experience reports indicated the courses in which preservice teachers were enrolled, namely postgraduate diplomas, education degrees, combined degrees and master of teaching courses.

A stratified random sample approach was adopted. The sampling frame was designed to ensure that the reports were representative of the range of courses and course stages in which preservice teachers could be enrolled and, importantly, that the reports were written by supervising teachers in a range of schools, including C4E and spoke schools.

Professional experience reports were provided by the Professional Experience Offices of each of the three universities. The 550 reports collected were de-identified during the transcription process to protect the identity of the preservice teachers to whom they referred and to conform with ethics committee application requirements.

The distribution of reports by university and course type is presented in Table 3.4. Although the form of the professional experience was not recorded, they include reports written for block experience and internship programs. They report on the outcomes of professional experience programs completed at various stages of the course.

The distribution of reports in Table 3.4 indicates that the sample includes a range of teacher preparation course types across the three institutions.

Table 3.4: Distribution of reports by university and course type

University	Postgraduate diploma	BEd/BTeach	Combined degree	MTeach	Total
University 1	70	131	51	80	332
University 2	62	50	12	16	140
University 3	–	24	–	54	78
Total	132	205	63	150	550

Reports were collected for preservice teachers that undertook professional experience in C4E schools, spoke schools and schools not participating in the initiatives. It should be noted that the distribution of reports by school sector and participation in the initiatives was a function of the quantum of reports provided by each of the Professional Experience Offices of the participating universities.

3.4.2 Quantitative analysis

The quantitative analysis comprised a descriptive analysis to provide summary information in the form of frequency counts, means and standard deviations of the responses overall and of each of the groups. Inferential analysis of these data was undertaken firstly using Rasch analysis, which allows data to be expressed on an interval scale that permits the subsequent use of powerful parametric techniques for analysis. Following this, these different types of questions were separated so that questions requiring specific responses could be analysed quantitatively using SPSS statistical software.

The question and respondent estimates developed from the Rasch analysis provide a range of variables for investigating the sources of differences amongst the scores. In these cases ANOVA and MANOVA were used to investigate and identify differences in the data that may be related to the characteristics of respondents (role, highest qualification, age, experience and prior participation in surveys) and the contexts (school sector, geolocation, school level and status of participation in the initiatives) of respondents.

Correlation analysis was used to examine the relationships between responses and the demographic characteristics of respondents⁵.

3.4.3 Overview of analyses undertaken

Three major data collections were analysed quantitatively. These were: Survey 1 and 2 responses; the Professional Experience Reports; and the responses to the Professional Experience Survey. Two forms of analysis were undertaken in each case. The first reported on:

1. respondent characteristics, such as age group, role, highest educational qualification, teaching experience and number of years teaching in current school;
2. contextual factors, such as school sector, geolocation and the extent to which respondents' schools had participated in the reform initiatives (Hub C4E, spoke school, non participating school); and
3. responses to the survey questions.

The second analysis involved Rasch analysis of (i) survey questions that required respondents to make a judgement or decision on a Likert-scale items and (ii) the presence or absence of a comment about Standards in the Professional experience Reports. In each case these data were coded and converted to a text file for analysis using QUEST software.

The analyses used a Partial Credit Model to determine survey question and respondent fit statistics, reliability and consistency indices, question and respondent estimates and maps showing differential item functioning. The analysis identified a strong statistical construct providing question and respondent reliability estimates in excess of 0.7 for all analyses. This indicated that the estimate scores for each analyses were reliably separated on a uni-dimensional scale.

3.4.4 Qualitative analysis

In the case of site visit interviews, each interview was electronically recorded and transcribed for analysis, with members of the Evaluation Team using the same independent transcription service. Thematic analysis of the interview transcripts involved coding the commentary against each evaluation question.

⁵ Standard ANOVA techniques were used to identify significant differences amongst the mean responses of each of the groups surveyed and to identify difference in mean responses arising from differentiation of the data on the basis of demographic characteristic, i.e., school location, school type (primary or secondary), age group, highest qualification, and number of years the respondent has taught. In cases where the data were homogeneous, the relevant tests for identifying homogeneity and post hoc differences were the Levene statistic and Tukey's HSD method. Where equal variances could not be assumed the relevant tests were the Welch test of robustness of the data and the Games-Howell method for identifying post hoc differences.

The Evaluation Team conducted preliminary coding sessions to establish inter-rater reliability. This was an iterative process, comprising independent coding followed by comparison and discussion of codings. Coding of two sets of site visit interviews was undertaken, taking into account two considerations to address inter-coder reliability. Evaluation team members coded:

- a transcript of an interview conducted by another member of the Evaluation Team and an interview that they had conducted; and
- entire transcripts against all Evaluation Questions.

Once inter-coder reliability was reached at the question level, further coding was carried out at the sub-question level. An iterative process of coding, comparison and shared discussion was again adopted. Once inter-coder reliability was achieved at both the question and sub-question levels, each member of the Evaluation Team then proceeded to code each interview transcript for his or her respective Evaluation Questions.

In the case of survey questions and professional experience reports, responses to questions enabling free-text responses were analysed qualitatively using nVivo software. This program enabled the survey responses to be entered as text in its table format and analysed question by question. Common themes and issues amongst the responses to each question were coded and aggregated for deeper analysis and reporting. The use of nVivo also enabled the professional experience reports to be analysed against the *Professional Teaching Standards* (NSWIT, 2005) at the Graduate Teacher Key Stages. The outputs of these qualitative analyses are reported with the quantitative findings to inform their analysis and the broader evaluation.

4 Evaluation Question 1: Centre for Excellence Theme

This Chapter addresses the first Evaluation Theme, which considered Centres for Excellence. The Evaluation Questions, were:

To what extent are Centres for Excellence effective in achieving:

- a. improved teacher capacity and improved quality of teaching in hub and spoke schools (and other schools availing themselves of support from ‘virtual’ or thematic Centres for Excellence);
- b. improved student performance in both hub and spoke schools;
- c. effective application of network learning principles where schools collaborate and share; and
- d. effective relationships with partner universities?

This Chapter provides an overview of the findings from analyses of commentary provided in the questions in two rounds of on-line surveys and during semi-structured interviews undertaken with school personnel in selected sites.

4.1 Evaluation Question 1(a): To what extent are Centres for Excellence effective in achieving improved teacher capacity and improved quality of teaching in hub and spoke schools (and other schools availing themselves of support from ‘virtual’ or thematic Centres for Excellence)?

A key aspect of the first evaluation question is the notion of improvement, both teacher improvement and teaching improvement. The following extract has been selected as a lead in to the discussion of the question for the way in which improvement is described.

A huge shift, a paradigm shift, in the way teachers think about their work, and think about their colleagues ... they no longer look at it as “This is my job, this is my classroom, these are my students, this is how I teach”. It’s about “What can we do to meet the needs of our students, and how can we build that capacity collectively?” (HAT (or equivalent), SC.16⁶, Turns 205 & 405)

Many respondents reported a similar experience of increased collaborative practice. There is also a shift in the language used, from ‘my’ to ‘we’, which is reinforced with the acknowledgement of collective capacity building, and these shifts have an underlying rationale in meeting the needs of students.

Strategies used by schools to bring about these changes provide insights into the improvement agenda of C4Es. Improved pedagogy and professional learning were reported to be the predominant foci. Surveys provided the initial data collection instruments. Commentary from Surveys 1 and 2 was collected from personnel in stand-alone C4E schools, Low SES Communities National Partnership schools and schools that were part of a C4E hub-and-spoke school network.

⁶ SC codes (School Codes) were used to differentiate commentary across schools while maintaining the confidentiality of the school identity.

The Surveys collected commentary concerning particular strategies for their perceived importance in improving teacher capacity and quality teaching in individual schools as well as hub and spoke schools. The three most important strategies were reported to be:

- developing whole-school improvement strategies;
- supporting individual teachers; and
- working with performance data to improve learning outcomes.

Survey responses indicated that curriculum development, improved pedagogy and professional learning were interrelated.

In relation to whole-school improvement strategies, respondents made reference to the need for shared understandings, collective responsibility and commitment to whole-school change. They presented collective responsibility for improving the learning outcomes of all students as foundational. Lasting change was reported to be dependent upon whole-school strategies that ensure the support and participation of the entire school community.

Others presented a whole-school focus as creating a common purpose and common language for professional dialogue on specific school development priorities. The general view articulated was that a focused, consistent and whole-school approach was conducive to substantial and sustainable change.

The notion of staff supporting each other was raised as a second fundamental aspect of improvements in teacher capacity and the quality of teaching more generally. This support was evidenced through the use of terms and expressions, such as ‘collaboration’, ‘mentoring’, ‘collegial support’, ‘substantial professional conversations’, and ‘professional learning teams’.

Principals presented the C4E initiative as providing new opportunities for teacher professional learning and for pedagogical leadership. They spoke about increased teacher expertise in practices such as lesson observations, increased reflection, and professional dialogue amongst colleagues and they presented the HATs (or equivalent) as being a central resource. School Executive members also provided positive assessments of the C4E initiative and the HAT (or equivalent) role in improving teacher capacity in areas, such as, collaborative networks, mentoring, and student engagement.

Measuring teacher capacity was identified as being an important aspect of gauging the extent to which C4Es are effective. Initiatives such as observations, instructional rounds, mentoring programs (with HAT (or equivalent) in support and/or co-ordinator role) and team teaching with the HAT (or equivalent) were reported to be important to measuring teacher capacity in terms of improved pedagogy. Another very often-cited measure was the quality of professional dialogue within the school. Staff feedback on teacher professional learning provided another measure.

The third aspect of improved teacher capacity related to aligning evidence and professional practice, which was indicated by expressions such as, “using evidence and data to inform planning”, “knowledge of students”, “data-driven planning”, “analysis of where students are at”, and “working with performance data to improve learning outcomes”. The commentary was underpinned by the view that student attainment data provide the necessary feedback for school personnel to monitor the teaching and learning environment.

Overall, the commentary indicated that long-lasting change associated with any improvement agenda within C4Es required a whole-school approach that was supported by the HAT (or equivalent) role. The role was reported to provide the opportunity to facilitate a range of professional learning strategies that included the purposeful use of data as feedback to monitor the teaching and learning environment at two levels, i.e.:

- (i) the school level, at which the focus was building collective responsibility, shared purpose and a common language; and
- (ii) the teacher level, at which the focus was developing collaborative networks, collegial support and professional conversations.

4.2 Evaluation Question 1(b): To what extent are Centres for Excellence effective in achieving improved student performance in both hub and spoke schools?

The discussion of improved student performance emphasises three key areas for consideration. These are large-scale, standardised measures of student attainment, such as NAPLAN results, the use of internal indicators of student performance in the classroom, and the importance of teacher practice and/or professional learning to address perceived areas of need.

It's quite hard, in some ways, to see in our data, our NAPLAN data that there's been a huge shift, but it actually allowed us to really focus on what the needs were for the kids and then build that ownership within our staff, of 'OK, what are you seeing in your classroom and what difference can you make in your room?' and that's been our key to what we believe is our success. (HAT (or equivalent), SC.13, Turn 40)

Across the surveys and interviews, the most common change identified amongst students was academic change. A number of respondents commented on their school's implementation of strategies targeting individual students. For some schools, the priority was to support the learning of academically challenged students as a means to reduce disruptive behaviour within the school. For other schools the priority was to support such students in the classroom as a means to improve the school's NAPLAN and other public assessment results. Comments indicated that performance data were being widely used to focus school planning, to identify the student needs to be addressed in teaching and learning programs, and to identify teacher development needs.

During interviews, some principals made reference to NAPLAN data as indications of the efficacy of funded programs or targeted interventions. Performances above State averages, percentages of students in high Bands, cohort improvements over time, and the performance of groups of students with particular learning needs, such as LBOTE students, ATSI students, gifted and talented students and low SES students, were cited by principals as instances of impact.

Three objections were expressed at other sites, however, to the use of data such as NAPLAN as a measure of student improvement. These were:

- that the time period of the C4E initiative was too short to show growth;
- that one measure alone could not capture improvement; and
- that NAPLAN could not measure what they identified as key areas of improvement.

Where NAPLAN was not used, means of measuring student improvement were largely gathered internally. These could include student surveys, individual student profile data and Individual Learning Plans (ILPs). The following examples give a sense of the range of measured (and measurable) data that teachers used as examples of student improvement as a result of ITQ NP participation:

- teacher records of observations showing more positive classroom relationships;
- writing measured by the nature of rubrics used in a classroom that focused on engagement, self-regulation and collaboration;
- student improvement, effort and quality measured in examinations;
- student confidence in expressing and substantiating their ideas in classroom discussion;
- engagement through improved use of technology in the classroom;
- drops in the number of student discipline referrals and in suspensions;
- improved retention;
- attendance, both whole day and period-by-period;
- fewer students 'at risk';
- improved student self-assessment, student reflection and student response to feedback; and
- higher proportions of students going on to higher education.

Respondents frequently provided commentary about HATs when asked about C4Es, indicating that the HAT role was perceived to be integral to and/or indissociable from the C4E structure. From the survey data, principals and members of the school Executive from C4E and low SES schools indicated that the HAT (or equivalent) role had increased the focus on student performance. On questions about student performance and the role of the HAT (or equivalent) in improving these, the mean score of responses from low SES schools is significantly higher. This suggests that teachers in low SES schools may have a more positive attitude about the impact of relevant initiatives. Commentary from principals indicated conviction about the link between teacher learning and student improvement; principals frequently referenced the role of the HAT (or equivalent) and their work with teachers concerning the quality of classroom practice, lesson observations, and internal assessments.

Overall, the data indicated that the focus on student improvement in C4Es has furnished an approach to the use of data, which is context specific and, therefore, beneficial for students within particular teaching and learning environments. The purposive use of data, either on the basis of large-scale standardised testing or a range of school-identified targets, in relation to different learner needs was identified as a common element across different schools. The use of data as feedback provided the motivation and justification for directed professional learning for teachers. Whilst there were many references to the link between teacher professional learning and student improvement, the time frame of the ITQ NP initiatives was often reported to be too short to observe long-term sustainable improvements.

4.3 Evaluation Question 1(c): To what extent are Centres for Excellence effective in achieving effective application of network learning principles where schools collaborate and share?

The discussion of collaboration and sharing through networks emphasised three key areas. These were:

- the basis of the network, e.g., the identification of a need matched with available resources;
- mutual advantage or reciprocity between contexts; and
- the purposive provision of support.

The following extract illustrates these three key areas.

[The school] has a large proportion of younger New Scheme Teachers on its staff, and it doesn't have ... a middle leadership tier of KLA co-ordinators or subject co-ordinators, or HATs if you like. So part of the partnership work was to utilise [our] resources to provide assistance where there was that gap in the provision of support ... And I think that's why partnership, rather than outreach, is the aim of the game. (HAT (or equivalent), SC.3, Turns 4 & 78)

Across Surveys 1 and 2, 85.7% and almost 80% respectively of respondents indicated that they and/or their school had been involved in a learning network with improved pedagogy and professional learning reported as being the main foci of these networks.

Responses provided insights into issues that supported and hindered the establishment of collaborative networks. In Survey 2, factors that supported the establishment of networks included, in priority order:

1. making the time available (82.6% of respondents);
2. allocating specific funding to support the network (74.6% of respondents);
3. establishing a clear purpose (73.2% of respondents); and
4. utilising the HAT (or equivalent) role (71.0 % of respondents).

The first three of these had also been identified as the key factors in Survey 1. Survey 1 had also elicited commentary on the importance of: sharing personnel and undertaking joint activities; the use of virtual networks; focusing on professional learning, leadership and coordination; shared responsibility, vision and priorities, and communication and dialogue.

In Survey 1, the strategy most selected by respondents as hindering, and continuing to hinder, the establishment of networks was 'time'. Almost one third of survey respondents indicated that 'time' was an impediment to collaborative activities – by far the most commonly identified factor. For some, the issue was competing demands on their time within the school day. Taking up opportunities for collaborative networking is just one amongst many competing demands on teacher time. While it is easy to play down these demands and assert that it is just a matter of setting priorities, the reality is, that for many teachers these competing demands all have priority. The next most important factor was lack of funding. Despite ITQNP schools receiving significant funds to pursue teacher quality initiatives, these funds were reported to be insufficient to: pay for the casual relief needed to replace teachers released from classroom duties to participate in networking activities, or meet the cost of increased demand for professional learning. Other issues were: distance, workload, different priorities among stakeholders, staff turnover, the availability of casual relief and access to relevant professional learning.

In Survey 2, four strategies stood out as hindering, and continuing to hinder, the establishment of networks. These were:

1. workload (70.5% of respondents);
2. lack of time (67.0% of respondents);

3. different priorities amongst stakeholders/staff members (54.5% of respondents); and
4. lack of funding (42.0% of respondents).

Differences amongst responses from different groups were investigated using Differential Item Function analysis. This analysis provided further insights into priorities and influences across contexts. Thus for example, considerations that supported the operation of networks within schools related to network purpose, and access to resources (HAT (or equivalent) and professional learning). Considerations that did not support the operation of networks within schools included different priorities amongst staff, access to relevant professional learning, and staff engagement.

Survey data indicated that networks between schools were positively supported where there was access to online technology – such as that provided by virtual networks, effective leadership and coordination, and shared responsibilities. As with networks within schools, networks between schools were hindered by different priorities amongst staff or poor access to relevant professional learning. In addition, distance, availability of relief staff and staff engagement had the potential to have a detrimental impact on the effectiveness of the network.

Interview data provided the opportunity to consider the nature of network relationships more deeply. The issue of being involuntarily assigned to relationships was reported to have had a deleterious effect on early relationships and time for the C4E initiative was sometimes reported to lapse before network relationships could best be strengthened. HATs (or equivalent), in particular, presented positive commentary about the potential of collaboration across hub-and-spoke clusters. Some relationships across hub-and-spoke clusters, however, were reported to need more nurturing than others. Commentary concerning network relationships was polarised: network relationships were appraised as being either 'successful' or 'unsuccessful', and appraisals were frequently related to how the hub-and-spoke relationships began.

Some recurring aspects emerged from sites where the network relationships were described as being more difficult to establish. Reported reasons at interview for these difficulties included: schools having network relationships imposed upon them; spoke schools' perceptions that they were implementing the hub school's priorities, while the spoke schools had different goals; an over-reliance on key personnel to make the groups work; differing contexts between hub schools and spoke schools, e.g., whether low SES/PSP schools or Central schools, while others in the network were not these. In these instances, it was generally reported that the HAT (or equivalent) eventually made these networks function effectively by identifying an agreed purpose for professional learning that could be shared.

In many instances it was reported that the HAT (or equivalent) had to work hard to break down barriers, particularly around perceptions of status arising from the designation of schools to a particular hub and spoke arrangement. As articulated by one principal, some communities of schools were ready for collaboration, others were not.

Overall, the opportunity to develop links between schools was reported to focus attention on contextual considerations that supported or hindered the establishment and continued functioning of effective networks. Whilst the reported foci of school planning and professional learning varied, there were reported elements of success that were common across contexts, namely:

- making the time available to develop the network and forge relationships;
- allocating funding to support the network;
- establishing a mutually advantageous purpose for the network; and
- utilising the HAT (or equivalent) resource.

Repeatedly, the single most important influence on the effectiveness of any network reported in the commentary was the HAT (or equivalent) – their expertise, time, commitment and capacity to build strong relationships.

4.4 Evaluation Question 1 (d): To what extent are Centres for Excellence effective in achieving effective relationships with partner universities?

The following extract highlights two main considerations that emerged in the discussion of university partnerships, namely, the importance of professional experience as a basis for consolidating school-university relationships, and the opportunities for drawing on expertise from different universities to support in-school professional learning.

We have developed a relationship with [the university] ... that has been really supportive of us ... it's a reciprocal thing, because we take on a lot of [their preservice teachers] ... and s/he [lecturer] has come and done professional learning with us ... we have a good relationship ... we can talk and we talk about students. [S/he's] come out to see students and things like that, so that's been really good. The other thing that we do is the learning circles, where we've basically developed a program, which we get all of the preservice teachers from around the area ... and we cover things that have... seem to ... there seem to be gaps ... (HAT (or equivalent), SC.15, Turns 52-60)

In some schools, successful relationships were reported to extend beyond the provision of professional experience for preservice teachers. Examples of academics working closely with schools in a number of areas were detailed in survey responses. The proportion of survey responses from C4E schools indicating formal arrangements or ongoing and significant engagement with Universities was greater than the proportion from spoke schools or low SES schools. The data suggest that initiatives to develop collaborative partnerships with universities are largely confined to C4E schools.

At interview, principals reported professional learning connections with universities as being significant to achieving effective relationships, increasing professional conversations and improving teacher and preservice teacher capacity. The professional learning described by the Principals encompassed:

- teacher professional learning sessions/programs with university academics; and
- workshops and demonstration lessons facilitated by C4E staff (teachers including HAT (or equivalent) and early career teachers).

At interview, school personnel discussed factors that had impacted adversely on the particular relationships which their school had had with university partners. Though no one issue was dominant in these discussions, three examples of issues included: having the university partner imposed on them ;

- lack of reciprocity between school and university contribution to the relationship;
- logistical constraints regarding joint timetabling of activities; and

- differences in school and university ‘cultures’(such as universities needing to prioritise research.

An additional perspective concerning the lack of financial rewards for university-school partnerships that lie outside research interests provided an additional challenge in the development of relationships intended to improve the quality of teaching in schools.

Overall, relationships with universities were reported to encompass opportunities for teacher professional learning. Where successful relationships were established and developed, the efforts of the HAT (or equivalent) were identified as being an essential component in managing the dynamics associated with professional learning priorities. A number of influences that impacted on the effectiveness of the school-university relationship were identified; however, some of these were presented as being beyond the scope and time-frame of the C4E initiatives.

5 Evaluation Questions 2: HAT (or equivalent) Impact Theme

5.1 Introduction

This chapter addresses the second Evaluation Theme that considers the role of the HAT (or equivalent). This Theme comprised six question parts that focus on the impact of the role. This Evaluation Theme, together with its respective question parts, are:

HAT Theme (Impact), Evaluation Question 2: To what extent has the HAT (or equivalent) initiative been effective in achieving:

- a. effective career progression within the classroom for skilled teachers;
- b. attraction and retention of skilled teachers in hard to staff schools;
- c. improved capacity and effectiveness of other teachers in ITQ NP hub and spoke schools (as well as in relevant Low SES NP schools);
- d. enhanced capacity of teachers to utilise student attainment data to help them more effectively meet individual student needs;
- e. improved student performance; and
- f. sustainable improvements in teaching and learning through changes in school planning and management practices?

5.2 Evaluation Question 2(a): To what extent has the (HAT or equivalent) initiative been effective in achieving effective career progression within the classroom for skilled teachers?

The following extract has been selected to reflect important considerations related to the career progression dimension of the HAT (or equivalent) role. The comment makes reference to acquired expertise and skills, their application in the role and the notion of professional growth, each of which contributed to the effectiveness of the role as a classroom-based career option.

I've learnt so much through this and it's used everything I've ever learnt previously in terms of my pedagogy knowledge, knowledge about how kids learn, leadership skills, interpersonal skills, it's all ... I've had to use everything I have in this job, and it's developed me in all those areas as well. (HAT (or equivalent), SC.13, Turn 57)

The response to this question addresses opportunities made available to demonstrate the skills that were considered particular to the HAT (or equivalent) role, and how those skills were evident and applied within classroom contexts. Consequently, effectiveness of career progression for HATs (or equivalent) is elaborated in terms of these two considerations of inherent skills, as articulated in an agreed set of criteria for the teaching profession, and their application, as documented by colleagues.

The HAT (or equivalent) role was situated, from a remuneration perspective, between the salary of an executive teacher and a deputy principal. The intention of the role was to provide a pathway by which a quality teacher could be recognised with a higher salary while remaining classroom focused. More aligned with professional growth than school management, the role enabled the application of a broad skill set that was identified as

fundamental to creating a teaching and learning environment that was conducive to enhancing professional practice for individuals, teams and networks.

The interview and survey data provided a clear view of 'skilled teachers'. In particular, the specification of the HAT (or equivalent) role aligned with the representation of the practices of 'skilled teachers' at the Professional Accomplishment and Professional Leadership key stages (NSWIT, 2005). In addition, the activities engaged in by HATs (or equivalent) reflect a focus on working with others to enhance professional practice.

In terms of supporting career progression for the HAT (or equivalent), a difference was noted in those activities regarded as inherent in the role and the opportunities for them to be realised. The emphasis that respondents placed on *Working with other members of the school executive to strengthen teacher development structures and initiatives within their teams* provides one strategy for addressing the notion of opportunity.

Hence, the scope of the role and the skills associated with the role describe a career transition where the focus within and across school networks is on:

- enhancing professional practice;
- supporting teachers at different career stages;
- collaborating with staff to share best practices; and
- building strong professional relationships.

5.3 Evaluation Question 2(b): To what extent has the HAT (or equivalent) initiative been effective in achieving attraction and retention of skilled teachers in hard to staff schools?

The following extract highlights a particular approach to the resourcing of 'hard-to-staff' schools. In some instances, where access to personnel with expertise is not an option, schools may need to build capacity from within.

We try to build the capacity of the teachers who are in the schools already, and because they've chosen to be in those schools ... I guess our philosophy is that we build up the people who are already there so that everybody's got the, has been sort of strengthened, rather than just dropping somebody in, because these people have chosen to work in these schools. (HAT (or equivalent), SC.17, Turn 176)

Commentary for this aspect of the HAT (or equivalent) role was offered from the perspective that no respondents viewed their school as hard-to-staff. The commentary provided was advisory and directed at other perceived hard-to-staff schools. The key requirement for attracting HAT (or equivalent) applicants to such schools was perceived to be the status of the role, i.e., making the role attractive enough that it would appeal to the aspirations of high-calibre personnel. A possible mix of considerations for attracting skilled staff raised in the commentary included:

- personal attributes that would support the transition to a 'hard to staff' context;
- motivation to focus on professional learning;
- a desire to empower individuals and communities;
- the ability to balance the management of difficult contexts and teaching and learning aspirations; and
- an appropriate financial incentive.

5.4 Evaluation Question 2(c): To what extent has the HAT (or equivalent) initiative been effective in achieving improved capacity and effectiveness of other teachers in ITQ NP hub and spoke schools (as well as in relevant Low SES NP schools)?

The following two extracts have been selected to highlight the collaborative dimension of the HAT (or equivalent) role within and across school contexts. Drawing on established relationships or developing new ones was perceived to be an essential ingredient in facilitating an agreed professional focus and, hence, a key aspect of the effectiveness of the initiative.

Because our HAT was the senior section coordinator [s/he] already had credibility and the authority and the relevance to staff. So therefore when [s/he] could say “OK we’re going to be doing this”, [s/he] could sit back and link it and say “That’s because as you all know in the Modern History program this is what’s needed to be done here, here and here”. [S/he] had enough positive relationship obviously with all the other senior coordinators in subject areas so [s/he] would draw those things together. (Principal, SC.22, Turn 82)

We’ve developed a learning community with our partner primary schools ... we’re scoping and sequencing, not from year seven to nine, but from years five to nine, you know? ... so there’s team teaching between primary and secondary teachers, because I believe they teach in a very, very different way, and I believe both have something to learn from the other. (HAT (or equivalent), SC.7, Turn 117)

Improved capacity and effectiveness of teachers was considered from two perspectives, namely, aspects of the school environment or people that provided a basis for improvement, and the way improved capacity and effectiveness were observed in practice. Considerable commentary was devoted to attributes of the HAT that were associated with teaching improvements and these included:

- credibility;
- expertise;
- professional involvement;
- communication skills;
- capacity to build relationships;
- organisation skills;
- building confidence in others;
- collaboration; and
- approachability.

From the surveys, there was a high degree of consistency amongst responses that acknowledged the HAT (or equivalent) as integral to:

- improvements in the quality of teaching (66.9% ‘Extensively’ and ‘Considerably’);
- improved support for teachers in the school (75.2% ‘Extensively’ and ‘Considerably’);
- improved student learning outcomes (54.3% ‘Extensively’ and ‘Considerably’); and
- enhanced job satisfaction of teachers and leaders (47.4% ‘Extensively’ and ‘Considerably’).

Also from survey responses, four activities in particular were identified as embedded in the role, namely:

- modelling and demonstrating quality teaching to peers and others;
- supporting the quality of professional learning offered to teachers across the school/school cluster;
- working collaboratively with members of the school executive to plan and initiate whole-of-school teacher quality improvement strategies; and
- mentoring/coaching and supporting individual teachers to provide professional feedback.

Whilst the HAT's (or equivalent) substantial skill base had the potential to inspire others to change, it was also recognised that professional resistance to change was the main barrier to improvement. Across each of the groups, commonality was expressed about the features of needs-based professional learning that facilitated improvements, namely, collaborative reflection that included:

- mentoring;
- coaching and team teaching;
- strategic feedback;
- focused conversations;
- networking;
- collaborative planning; and
- developing the repertoire of teaching and learning strategies.

Professional growth and intra- and inter-school connectedness were identified as two of the major outcomes of the HAT (or equivalent) initiative.

5.5 Evaluation Question 2(d): To what extent has the HAT (or equivalent) initiative been effective in achieving enhanced capacity of teachers to utilise student attainment data to help them more effectively meet individual student needs?

The first of the following two extracts makes explicit reference to setting and monitoring a very clear student learning agenda involving the use of attainment data. The second implicitly indicates the needs of teachers in utilising student attainment data. Taken together, the extracts highlight the importance of personnel with the necessary expertise and perspectives to articulate that agenda and to provide staff support for accessing, analysing and using student attainment data.

... here's the data, they're your students you're focusing on, there's your higher end, there's your lower end, here's the middle, set your target, set your goals and let's see where we're at half way through and at the end of the year. (HAT (or equivalent), SC.1, Turn 328)

... by modelling it, it really gave you [teachers] confidence to then go access the data, analyse your [their] own student data ... I'd probably say that for me the biggest thing was that the HAT made that data convenient for everyone to access. (New Scheme Teacher, SC.14, Turn 274)

Key considerations in the use of data were identified as:

- (i) its purpose, mainly to inform classroom practice and to develop an improvement agenda for both teachers and students; and
- (ii) processes to support teachers to engage with data, principally facilitated by the HAT (or equivalent).

In the provision of support for staff, the commentary indicated that the HAT (or equivalent) needed to demonstrate a capacity to operate at various levels. These levels needed to accommodate:

- reluctant users of data;
- confident users of data; and
- those who planned their teaching practice using a comprehensive range of indicators

within an overall approach of establishing a culture of sharing and collaboration.

5.6 Evaluation Question 2(e): To what extent has the HAT (or equivalent) initiative been effective in achieving improved student performance?

5.6.1 Introduction for Evaluation Question 2(e)

Collaborative professional practices and conversations, together with the purposeful use of feedback are highlighted in the following extract as elements that were perceived to be important antecedents of improved student learning.

[The HAT (or equivalent)] worked with teachers to develop strategies for different groups ... mentoring with the teachers and the feedback, providing information for them to provide for their students, the data analysis which was not just NAPLAN, and the others with their writing, they actually analysed writing samples and, "OK, these kids need to move here; these kids needs to be here; this is an area of weakness across the board," so there was that. So, yes, there was improvement for the students. (Deputy Principal, SC.8, Turn 146)

Improved student performance was presented as being influenced by the curriculum-specific and student-related strategies that a HAT (or equivalent) implemented to strengthen the teaching and learning environment. In addition, the role required a capacity to accommodate a range of stakeholder priorities that included providing feedback, enhancing student engagement, promoting student confidence, and reflecting on attainment data.

5.7 To what extent has the HAT (or equivalent) initiative been effective in achieving sustainable improvements in teaching and learning through changes in school planning and management practices?

Capacity building was presented as one of the foundational aspects of sustainable improvements. HATs (or equivalent) in particular articulated this view and the following extract presents the perspective of one HAT (or equivalent) who, acknowledging the fixed-term nature of the role, perceived the role to encompass the development of shared responsibility amongst school personnel.

So I'm sort of withdrawing the support because they've ... so I've worked with them on how to plan staff meetings, and how to work with teachers in the classroom, and all that sort of stuff, so I can see gradually releasing that responsibility to them. I did a lot more modelling at the start, and then I've done a lot more teaming with them as time's gone on, and now I'm sort of, "Yeah, you've sort of got it up and running," ... I know other schools have put like highly accomplished teachers in schools, but if they get put in and then they get pulled out, well then they're gone. But if we work really

closely side by side with the principal and the lead teacher, then we're building their capacity, as well as the teachers' capacity in the school, that they can then keep on keeping on, if that makes sense. (HAT (or equivalent), SC.17, Turn 24)

The HAT (or equivalent) role provided the opportunity for a school to develop a sustained focus on a key aspect of the core business of schools, namely, classroom-based, collaborative professional support. This focus was, in part, facilitated by the HAT's (or equivalent) workload and timetabling flexibility. In addition, the role stimulated purposeful organisation of professional practice and positioned teachers to make improvements and to continue to pursue professional learning as a routine component of professional practice.

The commentary indicated that the sustained facilitative role of the HAT (or equivalent) had the potential to bring people together within individual or collective school networks and to support the achievement of specified goals. The promotion of a shared vision (referred to as 'collective capacity') concerning school improvement, relationship building – both within and beyond the school, as well as consolidating strategies that could be taken up by others in a school were three additional planning and management outcomes identified.

6 HAT (or equivalent) Theme – Attributes

6.1 Introduction

This Chapter addresses the third Evaluation Theme that considered the role of the HAT (or equivalent). This Theme comprised three question parts that considered the attributes of the person undertaking the role. The Evaluation Theme, together with its respective questions, are:

HAT (Attributes), Evaluation Question 3: How is the role of the HAT (or equivalent) defined by characteristics that include:

- a. their qualifications, work experience, professional backgrounds and career ambitions;
- b. the reasons they applied to become a HAT (or equivalent) and whether aspirations have been realised; and
- c. their perception of their roles and the impact they are having in both hub and spoke schools, as well as in relevant Low SES schools, on teacher capacity and quality as well as student performance?

6.2 Evaluation Question 3(a): How is the role of the HAT (or equivalent) defined by characteristics that include their qualifications, work experience, professional backgrounds and career ambitions?

The following extract highlights three key elements that have the potential to position the HAT (or equivalent) to undertake the role effectively, in terms of the scope of this particular evaluation question. Those elements are the prior experience, which aligns with the strategic level at which they might operate, the engagement in collaborative practice that is associated with mentoring and which has the potential to inform much of the HAT's (or equivalent) role, and a clear professional focus on sharing successful classroom practices.

[the role has] used everything I've ever learnt and I'd relieved a bit as an AP so I'd had some leadership experience but not permanently. But I'd done a lot of mentoring I guess just in my normal classroom role of the teacher next door and I'd had quite a few prac students. So I already knew that I enjoyed leading others in their teaching and sharing what I'd experienced myself in terms of what's successful in the classroom. (HAT (or equivalent), SC.13, Turn 82)

From online survey commentary, specific skills that were identified as being integral to the role covered three main areas. The skills encompassed three main areas of:

- Professional expertise or credibility;
- Communication with a range of stakeholders; and
- Capacity to build relationships.

Skills that found expression in the role were reported to include those acquired in previous roles, skills that might facilitate collaboration, such as interpersonal skills, classroom pedagogy skills, the ability to liaise with a range of professionally based organisations, and well-developed communication skills:

- previous roles held – Assistant Principal; subject coordinator; professional learning coordinator; action research coordinator; literacy facilitator; professional development and review coordinator; practitioner reflection coordinator; transition learning programs coordinator;
- collaboration skills – interpersonal; leadership; mentoring; people management and communication;
- particular classroom skills – catering for students with special needs; catering for disengaged students;
- contact with the profession beyond schools – subject specific consultancy; syllabus writing; subject associations; NSWIT; and
- contact with the school community – extensive contextual knowledge; working with parents.

HATs (or equivalent) identified a number of influences that they regarded as important in shaping their current professional perspective, namely, ongoing personal professional learning, being both a mentor and a mentee, experiencing a range of teaching and learning contexts, maintaining contact with student learning, and engaging in professional networks:

- professional focus and commitment that made reference to personal professional growth and the importance of remaining informed;
- working with peers, which involved discussion of mentoring from both the mentor and the mentee perspective;
- new contexts and roles, which encapsulated the notion that the person in the HAT (or equivalent) role has the motivation to transfer skills and expertise across contexts;
- teaching and learning, which highlighted the importance of engagement to support improvements in student learning; and
- practices beyond the school, whereby involvement with external organisations played a part in the affirmation of professional strengths or attributes, such as, subject expertise.

The role was reported to prompt deep reflection about professional identity and career transitions, in which a key consideration was the choice between becoming a Deputy Principal or looking for opportunities to consolidate the opportunities experienced in the role.

6.3 Evaluation Question 3(b): How is the role of the HAT (or equivalent) defined by characteristics that include the reasons they applied to become a HAT (or equivalent) and whether aspirations have been realised?

6.3.1 Introduction to Evaluation Question 3(b)

The opportunity to work with colleagues within and across schools and to make a difference in teaching and learning practices were commonly cited reasons amongst those given by HATs (or equivalent) for taking up the role. Both of these reasons are expressed in the following extracts, the second of which highlights the notion that the associated professional learning is a proxy for realised aspirations.

I feel I can make the biggest difference in working alongside teachers to improve everybody's learning. (HAT (or equivalent), SC.17, Turn 160)

When I put my hand up for this role, which was prior to this project, obviously, because I was already employed here, I was an Assistant Principal, as I said, and I was in a coaching role, and when I saw this role come up I thought I had the chance to do this across more schools, so that I could I guess make a bigger difference than I was making in my own school. Like, sort of raise the bar with my own teach ... like the teachers at my own school, and had that, so I could go to another school and do the same there, but this way I get to work across multiple schools ... And the learning that you get, which I didn't realise you'd get quite as much learning as you get in the role. (HAT (or equivalent), SC.17, Turn 212)

In terms of the motivational and perceived professional rewards that were inherent in the HAT (or equivalent) role, there were three recurring themes articulated by HATs (or equivalent) in the online surveys and during site visit interviews. These themes summarise influences on decision(s) to apply for the role, and these were:

- (i) opportunities for collaboration with others to improve teaching and learning;
- (ii) professional motivations to apply skills acquired, to engage in ongoing professional learning and to give to the profession; and
- (iii) the desire to improve student learning outcomes.

HATs (or equivalent) expressed general agreement that the role was a rewarding one in terms not only of opportunities, but also in terms of professional feedback.

6.4 Evaluation Question 3(c): How is the role of the HAT (or equivalent) defined by characteristics that include their perception of their roles and the impact they are having in both hub and spoke schools, as well as in relevant Low SES schools, on teacher capacity and quality as well as student performance?

The following extracts from HATs (or equivalent) highlight four core aspects that, in their view, have characterised the role, namely, its teaching and learning focus, its whole-school (or network) scope, its facilitative dimension, and its attention to consolidating existing quality practices.

[The HAT role is] the focus keeper. (HAT (or equivalent), SC.14, Turn 531)

A HAT has to be whole school. (HAT (or equivalent), CD.12, Turn 417)

I've been the driving force for all the things that have happened, but ... it was a collective action by the whole staff. (HAT (or equivalent), SC.5, Turn 8)

I saw around me that there were excellent Teachers who had fabulous quality programs and I wanted to be able to tap into that and to support those Teachers. It was never about me; it was about me being really passionate about the fact that I see all these teachers around and how are we supporting them and what are we doing to value that? (HAT (or equivalent), SC.15, Turn 82)

Much of the role description that was provided by HATs (or equivalent) in their commentary focused on their professional practice and the associated outcomes.

HATs (or equivalent) qualified the support dimension of the role by referring to their work with teachers at different career stages within and across networks of schools. Whilst much of the commentary concerning HATs' (or equivalent) work reflected the support provided to

Early Career Teachers, there was also a whole-school consideration evident in the comments about opportunities to focus on particular teaching and learning targets that included:

- documenting Professional Competence;
- providing quality professional experience placements for preservice teachers;
- working with Early Career Teachers to increase their confidence in the classroom;
- developing quality teaching and learning programs;
- sustaining peer coaching, mentoring, team teaching and lesson study practices;
- motivating experienced teachers to achieve specific professional learning goals; and
- sharing practices across schools and respective networks of schools.

Collaboration with staff was described in terms of how HATs (or equivalent) worked with individuals, small groups of teachers, school networks and universities to sustain improved pedagogies and to share best practice. References were made to establishing networks, working with KLA teams, identifying professional learning goals, peer coaching, mentoring and modelling lessons. A pertinent comment relating to collaboration included the notion that the professional learning needs of staff were diverse, e.g., classroom management for New Scheme Teachers, and pedagogical practices that would enhance student learning for experienced teachers. Addressing the diversity of professional learning needs meant that the role was perceived to be a facilitative role, one which enabled teachers to better support themselves and their school.

An integral part of working with colleagues was described in terms of building strong and productive relationships. Reported amongst the perceived associated benefits were the preparedness of staff to contribute to discussions of professional practice, the collective valuing of sustained professional learning, and the trust developed within groups of colleagues.

Some of the outcomes enumerated by HATs (or equivalent) included:

- improved teacher confidence;
- increased teacher and students expectations in teaching and learning;
- enhanced job satisfaction on the part of teachers;
- improved teacher dialogue; and
- changed attitudes towards professional learning.

Unequivocally, HATs (or equivalent) presented the role as embodying support and the collaborative building of relationships to support enhanced teacher practice within and across schools. HATs (or equivalent) presented the purpose of the role in terms of aspects related to people, activities, their own attributes, and the scope of the role, which brought them in contact with a wide range of personnel and professional organisations.

Whilst many tangible instances of impact were identified, they can be generalised as empowering and supporting others to take personal and shared responsibility for enhancing teaching and learning. An additional impact was stated as a consequence of building capacity in others, namely, improvements in student learning.

7 Evaluation Question 4: Paraprofessional Theme

7.1 Introduction, Background and Research Implications

This Chapter addresses the fourth Evaluation Theme, which considered the Paraprofessional Role. The Evaluation Questions for Theme 4 are:

To what extent has the paraprofessional initiative been effective in achieving:

- a) improved support for individuals or groups of students;
- b) improved support for teachers;
- c) improved student performance;
- d) enhanced job satisfaction of teachers and leaders; and
- e) pathways for paraprofessionals into teaching?

The ITQ NP provided the opportunity for schools to employ Paraprofessionals in support roles. There are two broad categories of paraprofessional roles available to schools: Educational and Operational Paraprofessional roles. Educational Paraprofessionals are classroom-based and work under the guidance of teachers to assist in areas, such as, literacy and numeracy to support teaching and learning in the classroom. Operational Paraprofessionals are non-classroom based positions designed to enable teachers to focus more on teaching and learning activities. Two types of Operational Paraprofessional roles were represented in the study: Operational Technology Learning and Operational Community Engagement.

It needs to be noted that not all sectors and schools acted upon the opportunity to introduce the Paraprofessional role. Paraprofessionals were employed in 14 sites for which there were site visits: 13 out of 21 schools and one non-government learning centre. A further four schools had employed Paraprofessionals earlier in the C4E initiative, but had discontinued the role. The 13 schools that employed paraprofessionals at the time of the site visits were all government schools. Therefore, the school interview data concerning paraprofessionals are predominantly specific to the government sector and they predominantly reflect the nature of the Paraprofessional roles as specified by the then Department of Education and Training (NSW DET, 2010).

In relation to the Educational Paraprofessional role, the guidelines for NSW DET schools specify that:

the type of activity an educational paraprofessional could do to support student learning and assist the classroom teacher, is to collate student results for spelling or mathematics tests across a school term. The classroom teacher would then analyse these results and use their professional judgement to complete term reports. (NSW DET, 2010, p. 3)

In relation to the Operational Paraprofessional roles, the guidelines specify that the roles were designed to:

- *provide support for teachers to complete general educational support tasks, e.g., monitor and record student assessment tasks;*
- *assist in developing effective home, school and community partnerships to enhance student achievement;*

- *provide technology and connected learning support for teachers in the classroom;*
- *help develop and implement data management systems, assisting teachers to plan and modify curriculum and learning activities for individual students; and*
- *assist with the coordination of professional experience (practicum) placements for teacher education students and assist to strengthen partnerships between the school and universities. (NSW DEC, 2010, p. 4)*

7.2 Evaluation Question 4(a): To what extent has the paraprofessional initiative been effective in achieving improved support for individuals or groups of students?

It is important to acknowledge that the evaluation data reflects the type of Paraprofessional role that was introduced in the respondents' respective schools. The commentary related to the Paraprofessional role highlighted the indirect supportive dimension of the role.

The information management paraprofessional contributed to improved student outcomes by collating large volumes of data using specialised software, therefore providing staff with detailed pictures of student progress and allowing changes needed in teaching program. Also finalised and published on a wiki all resources related to the maths curriculum created by the members of the numeracy team from across six schools. (HAT (or equivalent) Survey 2, Comment 6.9-25)

When asked how paraprofessionals engaged in activities with students, those who provided commentary directly focused upon particular curriculum support, such as literacy support. Much of the extended commentary detailed how paraprofessionals contributed indirectly to improved student outcomes through the management and organisation of information, such as student progress data and curriculum-specific resources created by school networks.

Operational Community Engagement paraprofessionals were reported as providing very successful indirect support for students through the support provided for parents. Some support within classrooms was reported, where, for example, Educational paraprofessionals worked with students to support reading and enhance their projects using technology. Generally, in-class support was reported as provided by paraprofessionals who were trained teachers.

7.3 Evaluation Question 4(b): To what extent has the paraprofessional initiative been effective in achieving improved support for teachers?

The commentary indicated that the main outcome of the appointment of paraprofessionals was the improved support provided to teachers.

Well even just administration of like here's one less job I have to do which means you could focus on something else. In the CEO position, that to me has been a really effective role, partly has been in reducing the workload, or reducing some of the tasks for the HAT, myself, the deputy and other executives, so it's been, to some degree it's been like your own personal PA at times, I have to say. But what that's done is freed up time ... It certainly has improved support for teachers. (Principal, SC.19, Turns 142 & 152)

Improved support for teachers was perceived by survey participants as being the main outcome of the appointment of paraprofessionals. Survey respondents also enumerated activities that paraprofessionals performed. Such activities align with and sometimes go beyond the NSW DET guidelines (2010) concerning the activities specified for Educational, Operational Teaching and Learning, and Operational Community Engagement Paraprofessional roles. Activities included;

- liaising between schools and their communities;
- organising assemblies;
- participating in transition days; and
- helping with university and school cluster co-ordination.

One note of caution was presented, however, in a comment indicating that a paraprofessional's time had been monopolised by a particular member of staff, which reportedly limited the perceived impact of the paraprofessional role in that school.

In interviews, the commentary across the range of roles within schools provided the most comprehensive picture of the paraprofessional role. Positive evaluations of the paraprofessional role were expressed in the majority of cases. Some negative evaluations were also expressed, however. In a few cases it was reported the role was not successful and/or not the most productive use of funding. In such cases the role was discontinued. It was also reported that the paraprofessional role was superseded and replaced by other roles when the vision and/ or goals of some schools changed.

Principals detailed positive ways the paraprofessional had supported teachers by providing expertise in:

- technology;
- community engagement;
- administration; and
- events management.

An intention to continue with community engagement and high-level technology support was expressed in the commentary from some Principals. The identification of support for teachers in the commentary from members of school Executive and HATs (or equivalent) was generally consistent with the Principals' commentary. They referenced strong support for teachers in technology, learning support, administration and community networking.

Teachers' commentary provided more detailed descriptions of the roles performed by paraprofessionals. All the commentary from teachers evaluated the performance of paraprofessionals positively, with the paraprofessionals' role in the organisation of school activities/events, which had often been undertaken by teachers previously, having the highest profile in the commentary. Teachers articulated a range of support activities that included:

- classroom assistance;
- data entry;
- resource location and management;
- administrative assistance;
- delivery of IT training sessions;
- provision of learning management system training; and
- community engagement.

The reported level of success in supporting teachers was clearly contextual, depending on teachers' needs, the role chosen for the paraprofessional and the attributes of the paraprofessionals themselves. One emerging theme supporting the use of a paraprofessional was that in all cases it relieved teachers from administration, event management, learning new technologies, and/or community engagement responsibilities, thereby enabling them to concentrate more on the core business of teaching.

7.4 Evaluation Question 4(c): To what extent has the paraprofessional initiative been effective in achieving improved student performance?

Links between the roles of paraprofessionals and improved student learning outcomes were primarily indirect as illustrated in the following commentary:

So our community liaison officer paraprofessional has really supported the families in our school really well, which then I see as that providing improved support for our students through their families. That's how I see that has worked, and that's had a huge impact I believe ... the paraprofessional has coordinated ... teaching children how to read, and how you can help with home reading. (Principal, SC.13, Turn 141)

Mixed evaluations were expressed concerning a direct link between paraprofessional activities in classrooms and improved student performance. However, the commentary contained numerous instances of interviewees indicating that paraprofessionals had contributed indirectly to improved student learning outcomes through direct support provided to teachers and community. These actions were presented as contributing to teachers' enhanced classroom practice and greater parental understanding and engagement in the teaching and learning process in classrooms and at home.

7.5 Evaluation Question 4(d): To what extent has the paraprofessional initiative been effective in achieving enhanced job satisfaction of teachers and leaders?

7.5.1 Introduction for Evaluation Question 4(d)

This extract has been presented because it reiterates a recurring support dimension of the Paraprofessional role.

Myself, the way I see it is that we're trying to, we provide a service to teachers and leadership teams in schools, to try and help our teachers to be the best possible teachers that they can be, and to help them to develop their skills and their, you know, their practice, to kind of keep up with a very rapidly changing work environment. (Paraprofessional, SC.17, Turn 8)

During the site visit interviews, paraprofessionals and other personnel provided detailed descriptions of activities that enabled teachers to gain new skills, usually in technology, or more time to concentrate on pedagogy. Particular activities included:

- delivering workshops for technology use in classrooms;
- coordinating the sharing of resources online;
- providing ICT support;
- providing administrative support;
- providing induction programs for new teachers; and

- establishing and providing training associated with an online learning management system.

Direct links to enhanced job satisfaction were indicated in the Survey responses. However, direct links to enhanced job satisfaction were rarely articulated explicitly in the interview commentary.

Nevertheless, based on the interview evidence, it can be argued that without the actions and activities coordinated by paraprofessionals, teachers would have less time to devote to their core business of improving student learning outcomes and would possess less knowledge of and/or expertise in the pedagogical use of ICT. The time made available by the role and the increased knowledge of and/or expertise in the pedagogical use of ICT can be considered proxies for enhanced job satisfaction.

7.6 Evaluation Question 4(e): To what extent has the paraprofessional initiative been effective in achieving pathways for paraprofessionals into teaching?

The following extract has been selected as an instance of how the paraprofessional role was reported to enable a paraprofessional role to clarify his/her career aspirations.

Initially I was interested in possibly pursuing a career in teaching, but as our program continued I've realised that I thoroughly enjoyed the administration side of the education department where I can still liaise with students and teachers. But yeah, more so do the administration side of things. So I probably wouldn't look into teaching now. I've been asked the question quite a few times; I think I like the administration side of it more (Paraprofessional, SC.12, Turn 100)

Divergent perspectives concerning the potential of the Paraprofessional role to provide a pathway into teaching were present in the survey and interview data, and the different perspectives reflect the two broad categories of Paraprofessional role, namely, Educational and Operational Paraprofessional roles.

Commentary that endorsed the potential of the Paraprofessional role to provide a pathway into teaching contained examples and/or justifications that aligned with the Educational Paraprofessional role. Whilst the Educational Paraprofessional role was not designed for teachers, four of the site-visit schools employed or had employed Educational Paraprofessionals that were qualified teachers. Other site-visit schools had employed preservice teachers. In both cases, current and former paraprofessionals provided positive commentary concerning the potential of the Paraprofessional role to provide a pathway into teaching.

Commentary that did not endorse the potential of the Paraprofessional role to provide a pathway into teaching contained examples and/or justifications that aligned with the nature of the Operational Paraprofessional role. Other commentary addressed the personal attributes of paraprofessionals rather than the role. Commentary relating to personal attributes from non-paraprofessionals concerned the perceived lack of capacity of particular Operational paraprofessionals to successfully complete a preservice teacher education course, whereas commentary from paraprofessionals referred to non-alignment of the role with personal priorities; satisfaction with an administrative or other role that supported teachers; and current pursuit of an alternative course of study.

Notably, none of the paraprofessionals at the site-visit schools indicated that they had commenced a teaching qualification since being appointed to the role.

8 Evaluation Question 5: Professional Experience Theme

This Chapter addresses the fifth Evaluation Theme, which considered Professional Experience. The Evaluation Question, was:

Do C4Es prepare higher quality teacher education graduates who are better equipped and prepared to teach in NSW schools?

The Chapter provides an overview of the findings from analyses of commentary provided in the questions in two rounds of on-line surveys and during semi-structured interviews undertaken with school personnel in selected sites, the professional experience reports and the Professional Experience Surveys.

8.1 Do C4Es prepare higher quality teacher education graduates who are better equipped and prepared to teach in NSW schools?

There is significant research concerning the factors that impact on the quality of the professional experience provided to preservice teachers. The findings of much of this research are summarised in Beck and Kosnick (2002), Le Cornu and Ewing (2008) and Ulvik and Smith (2011). Cheng (2012) indicates three main factors impacting on the learning outcomes of the professional experience programs. These are the:

- design of the preservice course providing the theoretical underpinning for teaching practice;
- preservice teachers' self-efficacy; and
- support provided by supervising teachers.

The third of these three factors is most relevant to Evaluation Question 5. Whilst much of the research has focused on the nature of the relationship between preservice teachers and supervising teachers, other research has focussed on the capacity of the supervising teachers, and, in particular, their disposition towards the development of preservice teachers and their own learning. Further, Wang et al. (2008) found that supervising teachers were more effective when supported by a collaborative school environment. Likewise, Le Cornu and Ewing (2008) promoted the formation of learning communities within schools as a means of enhancing the effectiveness of teachers' professional experience. This research suggests that support for the development of learning communities within C4Es provides the environment for enhancing the quality of professional experience outcomes.

Clearly, the responses to Surveys 1 and 2 (See Appendix A) indicate that teachers and other school staff have a strong stake in the quality of the professional experience seeing themselves benefitting from and having responsibility for preparation of the next generation of teachers.

In responding to the question above, the evaluation investigated a range of data including responses to Surveys 1 and 2, an analysis of more than 500 reports on preservice teachers, preservice teachers' responses to a survey about their perceptions of the efficacy of the professional experience and commentary from site visits.

The analyses presented above sought to explore whether the teacher quality initiatives implemented by C4Es enabled them to provide higher quality professional experience for preservice teachers than schools that did not participate in the initiative. The findings from

the different data sets addressed Evaluation Question 5 from a range of perspectives and to varying degrees. Surveys 1 and 2 and the interviews provided qualitative data and descriptive insights into the practices implemented by C4Es. The analysis of professional experience reports provided a different avenue for examining the quality of supervision. Further, responses to the Preservice Teacher Survey provide a balance to the views of teachers about the efficacy of the preservice gained through surveying and interviewing principals, school executives and teachers responsible for providing the professional experience.

The evaluation examined a number of quality frameworks underpinning the professional experience. These included the *Professional Teaching Standards* (NSWIT, 2005), the criteria and guidelines provided by universities, and school-level monitoring processes. Analyses of responses to the Surveys 1 and 2 demonstrated strong support for the use of the *Professional Teaching Standards* (NSWIT, 2005) as a framework for preparing preservice teachers.

The analysis of the summative commentaries in Professional Experience Reports identified the capacity of supervising teachers to articulate detailed and appropriate, Standards-referenced teaching practice as an issue. It also identified that supervising teachers were not a homogeneous group in terms of articulating appropriate, Standards-referenced teaching practice. The analysis showed variable demonstrated capacity amongst teachers to use the Standards to make judgements about the capacity of preservice teachers to work independently. There were also clear patterns amongst the standards referenced by supervisors. Standards concerned with knowledge of content, classroom management and communication skills were referenced most. Standards concerned with working with parents and the wider community and with broader professional responsibilities were among those referenced least.

These findings are corroborated by the analysis of Survey commentary, which found that Survey respondents tended to discuss practice in terms of a subset of the standards within the *Professional Teaching Standards* (NSWIT, 2005).

Analyses of differences amongst groups of survey respondents found differences in the responses of metropolitan and provincial respondents, primary and secondary respondents and HATs (or equivalent) and teachers. There were no differences in the response to the Standards of teachers in C4E and non-C4E schools. Rasch analysis of a text analysis of Professional Experience Reports found differences in the Professional Experience Report commentary on the basis of location, program classification and university. Supervisors from spoke schools demonstrated greater capacity to articulate Standards-based practice than teachers in non-ITQ NP schools.

Other quality frameworks include the guidelines and frameworks provided by universities to support teachers' supervision of the professional experience. Although there was general support for the guidelines provided by universities, the level of support was not rated at the highest level. Although supervising teachers are responsible for making the judgement of whether a preservice teacher has met the graduate standards, just over half of survey respondents thought that the benchmarks set by universities were too low.

Generally preservice teachers provided positive evaluations of the level of support schools provide for the professional experience. Responses from the preservice teachers identified the supervising teacher as the most important influence on the success of their professional experience. Consequently, efforts to improve the quality of professional experience need to

focus on the capacity of supervising teachers to provide effective analysis of teaching practice, guidance and support for quality teaching practices. As noted above, however, the analysis of professional experience reports indicates that this capacity is not uniformly demonstrated, with many supervising teachers demonstrating inability to articulate effective practice against the professional standards.

As with teachers currently practicing, there are divergent views amongst preservice teachers about the extent the professional experience has prepared them to engage with the *Professional Teaching Standards* (NSWIT, 2005). This variability is a function not only of the support they received during their professional experience, but the contexts in which the professional experience occurred.

Rich commentary was provided concerning the context and actual practices of professional experience in C4E schools. The semi-structured interview commentary, for example, reported:

- the importance of the HAT (or equivalent) role;
- the work performed by HATs (or equivalent) in supporting professional experience;
- the high number of preservice teachers undertaking professional experience in C4Es; and
- conducive environments in C4Es.

Interviewees across all roles highlighted the importance of the HAT (or equivalent) role and/or the nature of the work of the person occupying the role in the provision of quality professional experience. The importance of the time and availability of HATs (or equivalent) to work with preservice teachers and supervising teachers was emphasised, e.g.,

the support that was provided to them in the HAT role is something that I think was really valuable ... Someone there who could actually be there and have meetings with them [preservice teachers] on a weekly basis; someone for them to approach and to be able to mentor them when they were having issues, or just to discuss how they were going on a day to day basis was another valuable thing. (Teacher, SC.8, Turns 89 & 91)

Interviewees consistently commented on formal programs that HATs (or equivalent) had designed, developed and delivered to support preservice teachers undertaking professional experience and/or supervising teachers. The programs described frequently involved collaboration or consultation with universities. The importance of the time and availability of HATs (or equivalent) to liaise with universities also had a high profile in the commentary.

Interviewees at many sites indicated that a conducive environment at their respective C4Es enhanced the professional experience for preservice teachers. The features that were identified as providing a conducive environment included:

- supportive and accommodating staff;
- professionalism of supervising teachers;
- high expectations regarding preservice teachers' integration into the life of the school; and
- high quality facilities, e.g. modern, well equipped Science and TAS departments, video/conference recording equipment and modern technology in classrooms.

The commentary also indicated that most C4Es in metropolitan areas hosted very high numbers of preservice teachers undertaking professional experience, and that the numbers

had increased significantly since being assigned C4E status. C4Es have, therefore, been making a very significant contribution to the number of preservice teachers undertaking professional experience.

Commentary from the semi-structured interviews also provided some personal, comparative assessments of professional experience provided in C4E schools and non-C4E schools. Such personal assessments were mixed. Some interviewees claimed that the nature of the professional experience offered in C4Es was superior and this was predominately attributed to the perceived impact of the HAT (or equivalent) role. Other interviewees indicated that quality professional experience was the responsibility of all schools. Additionally, 90.5% of respondents who completed Survey 2 indicated that they agreed or strongly agreed with the statement: “Contributing to the development of new members of the profession is a professional responsibility of *all* teachers” (emphasis added), thereby indicating that school type, i.e. C4E or non-C4E, ought not be a distinguishing factor.

Respondents to Surveys 1 and 2 also provided commentary concerning frameworks and strategies that schools need to provide to ensure that professional experience programs prepare preservice teachers adequately for teaching in the full range of teaching situations that exist in NSW schools. The respondents, all of whom were from C4E, Spoke and Low SES schools, indicated:

- the necessity of structured programs (e.g., induction programs and supervisor training);
- school policies concerning professional experience;
- the allocation of high quality supervising teachers;
- exposure of preservice teachers to a diversity of teaching situations within and across placements; and
- lesson observations both of and by preservice teachers.

Alignment of professional experience with the Standards specified for the Graduate Teacher career stage in the *Professional Teaching Standards* (NSWIT, 2005) was a prominent feature of the analyses of the data from Surveys 1 and 2, the Professional Experience Surveys and the Professional Experience reports. The focus on the Standards enabled assessment of the extent to which professional experience contributed to or supported preservice teachers’ attainment of the requisite knowledge and skills stipulated for the Graduate Teacher career stage.

Aspects of the qualitative analysis of the Professional Experience Surveys also enabled comparative analysis of professional experience undertaken in ITQ NP schools and non-ITQ NP schools. In particular, preservice teachers who had undertaken professional experience in NSW and Graduate Teachers who were working towards accreditation at the Professional Competence career stage and who had also undertaken professional experience in NSW provided commentary concerning feedback they had received. The findings of the qualitative analysis of the Professional Experience Surveys indicated negligible difference between the nature of feedback received at ITQ NP schools and non-ITQ NP schools.

The data concerning the contexts and practices in the provision of professional experience in C4Es is comprehensive. However, the commentary concerning whether the teacher quality initiatives implemented by C4Es enabled them to provide higher quality professional experience for preservice teachers than schools that have not participated in the initiatives is limited.

9 Evaluation Question 6: Professional Experience Theme

This Chapter addresses Evaluation Question 6.

Evaluation Question 6: What constitutes an effective relationship between schools, training institutions and employers in the development and delivery of high quality professional experience?

This Chapter presents an overview of the findings of analyses of responses provided in the suite of online surveys for school personnel and preservice teachers, commentary from semi-structured interviews conducted with school personnel in 22 C4Es, and 550 professional experience reports for preservice teachers enrolled at three universities in NSW. Each of these data sources contributed to Evaluation Question 6 as shown in Table 9.1.

Table 9.1: Contribution of data sets to Evaluation Question 6 and Sub-Questions

	Surveys 1 & 2	Professional Experience Surveys	Site-Visit Interviews	Professional Experience Reports
Evaluation Question 6			✓	
Evaluation Question 6(a)		✓		✓
Evaluation Question 6(b)	✓		✓	

9.1 Evaluation Question 6: What constitutes an effective relationship between schools, training institutions and employers in the development and delivery of high quality professional experience?

Insights into relationships between schools and universities were gained from Surveys 1 and 2 and the semi-structured interviews. Findings concerning relationships other than those involved with professional experience have been presented in Chapter 5. This Chapter deals exclusively with relationships between schools and universities in the development and delivery of high quality professional experience.

Commentary concerning relationships with universities in the design and delivery of professional experience was insightful. It demonstrated that schools were discerning and proactive in relationships, and that there were mutual benefits, as demonstrated by the quotes below.

we built some really good relationships with unis and we also severed some (HAT (or equivalent), SC.11, Turn 97)

I've started conversations with [university name deleted] about sitting down with the Deans, and we're going to find a time to actually nut this stuff out and look at what's still currently working really, really well, and what's, and what are some things that aren't working that well,

or do we need to get rid of them, do we need to introduce new things into the training program and so forth. (HAT (or equivalent), SC.7, Turn 71)

The interview corpus was the main source from which insights were gained in relation to Evaluation Question 6(b), that is, factors and qualities that constitute effective relationships between schools, training institutions and employers in the development and delivery of high quality professional experience for preservice teachers. The interviewees, however, articulated factors and qualities pertaining to relationships with universities only when discussing the delivery of professional experience for preservice teachers.

Principals, HATs (or equivalent) and other executive members provided commentary on both formal and informal relationships. Formal relationships often involved the design, development and delivery of structured programs. The nature of the programs differed considerably, but professional learning for supervising teachers, teacher educators and/or preservice teachers was a common feature. Dialogue, shared understandings and expectations, university responsiveness and reciprocity/mutual benefits were also identified as important features within and/or in addition to structured programs. These findings aligned with the features identified in open response question 7.8 in Surveys 1 and 2, which encompassed the importance of two-way communication, knowledge about university curricula and priorities, and the allocation of specific personnel to liaise with universities.

10 Evaluation Question 7 – Additional Areas of Interest Theme

10.1 Introduction

This Chapter reports on the site visit interview data, the data from Surveys 1 and 2 and their qualitative summaries, and examines themes that emerged from evaluations of the ITQ NP initiative in relation to Evaluation Question 7.

10.2 Evaluation Question 7(a): What are the similarities and differences across settings with respect to the importance of contextual factors in the impact of the three initiatives?

The data makes reference to the rate of school improvement, and how establishment criteria for schools implementing ITQ NP initiatives could substantially impact on an improvement agenda. The time frame required to consolidate effective working relationships is a key consideration raised in the following extract.

“I know some of the Centres for Excellence got to choose their schools that they worked with, but ours were given. Like, we were told, “These are your spoke schools”. I think because we’re in Tranche One, yeah, and so they’re quite, very like disparate from us, you know, like very totally different context. So, but I think we were able to, sort of, in the third year, we’d built enough of a rapport and, you know, we could, sort, of share our resources.” (HAT (or equivalent), SC.16, Turn 70)

Comparing some of the reported similarities and differences across school settings and roles revealed a number of aspects about the ways ITQ NP funding was utilised at both the sector and the individual school levels. Key contextual factors tended to cluster around the following:

1. The involvement of the school in its own nomination for funding. This aspect appears to have affected the speed with which school administrators both selected projects and were able to involve the teaching staff. Where there was reported to be little school involvement in the application process, obtaining staff commitment to the funded projects was described as a lengthy undertaking. Further, where the engagement of partner schools was reported to be based on a directive, collaborative work within the network of schools was described as either non-existent or at best mixed. The commentary indicated that the most successful projects were those that were well thought through prior to the application, and in which all contributing parties participated in the identification and development of the project/s.
2. The commitment and continuity of school leadership to the projects. The commentary indicates that this aspect was dependent upon the degree to which school personnel were involved in the application for funding. Where schools had a change of principal, it was reported that the incoming principal did not necessarily display the same commitment to the original project. This suggests there may be a degree of ‘fragility’ in relation to the relocation of key personnel during the rollout of this particular funding model.

3. The suitability of the HAT (or equivalent) appointment. A clear pattern in the commentary indicates that ITQ NP projects were gauged to be successful when the appointment of a HAT (or equivalent) was also gauged to be successful.

10.3 Evaluation Question 7(b)/(d)⁷: What are the similarities and differences across settings with respect to: (b) the preparation of higher quality teacher education graduates who are better equipped to teach in NSW challenging schools, such as those that are remote or which have high Aboriginal enrolments; and (d) the particular training needs of teachers in schools with high Aboriginal enrolments?

The following extracts encapsulate an important link that needs to be achieved in practice between experienced advice and desirable support when addressing the needs of new graduates. The second extract also highlights the pivotal HAT (or equivalent) role in transforming informed advice into enhanced teacher practice, whilst the third extract raises the notion that shared responsibility, i.e., school culture, is fundamental to addressing contextual similarities and/or differences.

One of the big things you miss when you go from being a Prac Teacher to a fulltime, you know, paid, real Teacher, is not having that support from your, you know, when you're doing your prac teaching you've got your Advisor and your Supervisors to give you the feedback. So, having ... the HAT coming into the classroom and making suggestions and, yeah, just basically helping out, was really valuable, helped me become more confident, gave me new ideas and, yeah, it was great. (Early Career Teacher, SC.5, Turn 6)

I've got to say in terms of our Aboriginal students and their needs and addressing their needs and the Aboriginal education documents and everything that goes along with that, it is very much, as it should be in every school, an accepted part of the culture of the school. (Executive, SC.12, Turn 250)

Commentary from interviewees demonstrated a considerable degree of agreement about many of the considerations deemed to be important for meeting the needs of new teacher education graduates in order to ensure success in their teaching appointments. In addition, respondents suggested that very little difference exists between preparing teachers for metropolitan school appointments and those in rural and/or remote locations. Respondents' commentary espoused the need for graduate teachers to receive:

- greater and earlier exposure to school classroom contexts than currently experienced by the majority of preservice teachers;
- a mentoring process from that supported graduate teachers in the transition from university to school context; and
- assistance for preservice teachers to assemble resources appropriate to their teaching, prior to their first appointment.

There was relatively little commentary concerning what teachers need to know about teaching in schools that are remote and/or that have high numbers of Aboriginal students. Principals generally expressed appreciation of funding that allowed them to expand or

⁷ Additional themes (b) and (d) were merged into the one response as both related to Aboriginal and Torres Strait Islander education and interviewees' responses invariably conflated the themes.

intensify programs established prior to ITQ NP funding, but little commentary addressed what the teachers should/could know. The general view expressed in the commentary was that if teachers had more preservice knowledge of Aboriginal and Torres Strait Islander cultural and learning differences, they would be more able to implement the sorts of programs many schools have initiated and to embed cultural sensitivities in their own teaching practices. It should be acknowledged, however, that preservice teachers will be graduating with increased knowledge of Aboriginal and Torres Strait Islander cultural and learning differences following mandatory accreditation requirements to include study of Aboriginal education (NSWIT 2007) and Aboriginal and Torres Strait Islander education (AITSL, 2013) in all preservice teacher education programs.

10.4 Evaluation Question 7(c): What are the similarities and differences across settings with respect to the needs of new teacher education graduates for successful teaching in challenging schools?

The following extracts have been selected to reflect important considerations related to the needs of new teacher education graduates. The comments make reference to both extrinsic and intrinsic considerations, namely, preparation for entering the teaching profession, the nature of support when transitioning into the teaching profession, relevant innate skills, and contextual awareness.

... A certain personality type works best, who can build relationships. Some of our most successful teachers were students in this area... (WS.6, Principal, Turn 108)

When we see them come in here, you know my view on them is that they're underprepared. Some Universities do it better than others, like the schools. But overall I believe that we could be doing a lot better in how we actually structure the program. (SC.7, HAT (or equivalent), Turn 141)

There was general agreement about three areas deemed to be important considerations in meeting the needs of new teacher education graduates in order to ensure success in their teaching appointments, namely:

- preparation for entering the teaching profession (extrinsic consideration),
- the nature of support when transitioning into the teaching profession (extrinsic consideration), and
- innate skills and contextual awareness (intrinsic considerations).

Attention focused on a greater and earlier exposure to school classroom contexts than currently experienced by the majority of preservice teachers, the importance of some sort of mentoring continuity role from university to school context and the need to assist young teachers to assemble resources appropriate to their teaching, prior to their first appointment. The role of mentoring during transition into the teaching profession provides one option for ensuring that the innate skills and dispositions for teaching are consolidated.

10.4.1 Evaluation Question 7(e) What are the similarities and differences across settings with respect to the factors in their⁸ training that lead to higher retention of high quality teachers in challenging schools?

The following extract addresses training needs at the school level and provides one approach that incorporates four important elements:

- (i) a sense of perspective;
- (ii) planning;
- (iii) pace; and
- (iv) an appropriate mentor-mentee relationship.

I think it's, in order to retain them it's that not burning them out, so really trying to balance change with what's possible, and with their own work/life balance. I think that was tricky. 'Cause I think when we did some of the planning, they were, we, I sort of said, "Well where would you like to be in four years' time? What would you like?" If we were talking, about what science would be like in four years' time, what would it look like? And they came up with all of these ideas. And then we talked about what we were going to put in place over that time to try and bring this about. And initially they were saying "Well no, let's do it next year." And I ended up being the one to pull them back and say: "No, really, you've got to teach, you've got to report, you've got to do all of these things, so let's look at what's possible." So it was really looking at putting small steps in place so that they could do that and embed it, and then move on to the next thing. (HAT (or equivalent), SC.21, Turn 177)

Comparisons were difficult to make between locations as the issues of teacher retention appeared to be either non-existent in schools or a major consideration. There did not seem to be much middle ground, and it was clear that interviewees from schools in regional or remote locations had far more to say about and to offer solutions concerning teacher retention than did their metropolitan counterparts. Of those who offered any extended commentary, similarities were more prevalent than differences in ways teacher retention might be achieved. A similar view emerged from the commentary, which can be summarised as the notion that quality support and mentoring of early career teachers provide environments that lead to higher retention of high quality teachers in challenging schools.

10.5 Evaluation Question 7(f): What are the similarities and differences across settings with respect to the factors in the professional experience that contribute to the attraction and retention of high quality mathematics and science teachers?

The following two extracts highlight the notion of access, as both a problem and a solution, in the attraction and retention of teachers. The problem, mainly experienced by regional schools is one of limited access to suitably qualified teachers due in many instances to the perceived professional isolation in these contexts. Access to a learning environment, i.e., online or virtual faculties, was presented as a means to overcome professional isolation.

I know just recently we were advertising for a Maths-Science person and we had this young guy apply, and I nearly jumped through the phone to offer him the job and he

⁸ 'Their' is a reference to teachers.

was sounding fantastic but you know he got an inner city job, much more appealing. So it's attracting them ... (Principal, SC.21, Turn 220)

For a beginning teacher coming to a school ... and being the only science teacher and having to be responsible for the entire programming and having no other faculty members around them, all of a sudden was in a unit of work that was able to see assignments that were being submitted by kids in all the schools and then we were doing peer marking between the teachers that was all set up in an online environment. So it automatically made a teacher here, a beginning teacher or any kind of teacher, have an instant six other teachers around them supporting them with programming and assessment tasks and peer marking and those kind of things and we ... never expected the, real increase in student growth particularly from some of, the lower kids in the class. (HAT (or equivalent), SC.20, Turn 20)

Issues raised in relation to the retention of mathematics and science teachers related mostly to rural and remote school contexts. Attraction to these schools in the first place was presented as the key issue; once teachers established themselves in these schools and communities, the commentary suggested that it would be easier to retain new teachers.

It was reported that science teachers were difficult to secure, however, the attraction of mathematics teachers was reported to be an even more pressing need. Whilst the respondents outlined a number of initiatives implemented by schools and/or HATs (or equivalent) for retaining these teachers once appointed, less clarity was expressed about reversing the problem of attracting them to the schools in the first place.

HATs (or equivalent) expanded the commentary on the retention of science and mathematics teachers provided by Principals. School support, particularly in extending opportunities for demonstrating expertise and leadership potential, mentorship and encouragement to become involved in initiatives across KLAs and across multiple school contexts were strategies that were reported to enhance the retention of science and mathematics teachers,

The teacher perspective concerning retention echoed the commentary of HATs (or equivalent). School support – and in particular the mentorship roles played by HATs (or equivalent) across a range of schools, and the advantages of collegial and collaborative projects were the major themes in teachers' commentary linked to retention of mathematics and science teachers.

10.6 Evaluation Question 7(g): What are the similarities and differences across settings with respect to the factors affecting sustainability of the initiatives?

The following extract encapsulates some key features presented concerning sustainability, namely, a whole-school plan, a management plan, identified expertise from within the school, commitment, an evaluation plan, and, above all, someone to coordinate the school improvement agenda and bring disparate elements together. A recurring theme throughout the commentary is the notion of collaboration and someone to 'drive' initiatives and, in this extract, the HAT (or equivalent) is represented as a resource that can be linked to a school's core business conscience, providing the necessary sustainable 'drive'.

But instead this year we actually broke it into, well this is our school management plan, you need to all become teams and you need to help drive what is going to, so we tried it a different way this year with [name deleted], sort of, obviously, and myself,

but the execs were very interested in doing it that way as well ... But it's been great because we had a couple of classroom teachers, one of them only works two days a week but [s/he]'s one of those real goers, put up their hands and say, "I want to manage that team." And the other ... [teacher has] only been teaching for a couple of years and said, "Yeah, well I'll manage that team." So they're just in the process now of evaluating how they've gone and to meet with their teams and putting together proposed budgets for next year to continue any programs and things. But a lot of that has come through the HAT, sort of, saying we have all these little separate things happening but none of it pulls together. We need to pull it together and try some different things. So it'll be interesting what feedback we get when we really have a look at that. (HAT (or equivalent), SC.11, Turn 133)

Sustainability is one of the key yardsticks for measuring most change agency projects. The establishment of C4Es under the ITQ NP funding model is no exception; ensuring the sustainability of structures and processes to continue building teacher quality and capacity was a prominent theme in the commentary. Interviewees articulated a keen awareness of the need for sustainability of the initiatives that were devised in each school. Different school personnel consistently presented different interpretations of sustainability, but there was a high level of agreement across roles concerning how this might be achieved.

Principals proposed a number of strategies to ensure that selected projects in their respective schools would continue. These strategies can be summed up in the following five ways:

- (i) stretching existing budgets or substituting funding from other projects to continue those ITQ NP initiatives now believed to be crucial to the core business of the school;
- (ii) restructuring of the executive roles within the school and redistributing roles;
- (iii) establishing a part-time appointment of someone to oversee the major projects stemming from the ITQ NP funding;
- (iv) embedding initiatives in line with the increased capacity of teachers on staff, who might take on additional leadership responsibilities; and
- (v) incorporating the HAT (or equivalent) plans into the overall school plan.

10.7 Evaluation Question 7h: What are the similarities and differences across settings with respect to the cost effectiveness of the three initiatives?

The following extract encapsulates an important consideration related to cost effectiveness, namely the costs associated with not sustaining initiatives.

Unfortunately this model is costing \$200,000 a year ... Next year we go from prawns to devon ... You know, how can we sustain it? It's – the key is what can we do to influence teachers in their classroom, to make them a better teacher, that's where the future lies. If we can get in and do that then we're highly successful, 'cause that will mean the children are being taught by a better teacher and the results will be better as a result of that. (Principal, SC.13, Turns 86-90)

The discussion around cost effectiveness focused on the consequences of not preserving a role, e.g. the HAT and Paraprofessional roles, and the consequent effect(s) of a diminished staff/organisational structure. The costs were seen, in part, in terms of reduced opportunities for shared professional learning and support for building a 'quality profession'.

Central to maintaining a focus on enhanced professional teaching and learning was the preservation of the HAT (or equivalent) role.

10.8 Evaluation Question 7(i): What are the similarities and differences across settings with respect to models and strategies adopted within C4Es, involving HATs (or equivalent) and Paraprofessionals, that can be generalised across contexts?

A recurring theme throughout survey and site visit commentary was the notion that context determines needs, and needs determine relevant planning and strategies. This theme is encapsulated in the following extract, which acknowledges differences across settings in terms of an initial planning perspective, but which also makes reference to similarity of outcome in the form of a learning community that was established.

I think that the work that we've done over the last two years between all three schools has resulted in some surprising secondary outcomes ... initially, we thought that it was going to be a top-down model that we were the big schools ... we were going to support and work with our 'poor cousins' ... but it hasn't been like that at all and it's been a real professional learning community that's been established. (SC.3, HAT (or equivalent), Turn 18)

Generalising strategies across contexts has resulted in the identification of three elements that schools, at the individual school and/or network levels might incorporate into planning. These were:

- strong school and network relationships;
- a facilitator with appropriate expertise, such as a HAT (or equivalent); and
- a clear teaching and learning improvement agenda at all teacher career stages based on team planning and a collaborative school culture.

11 Evaluation Summary

11.1 Introduction

The analyses presented in this Report have been based on substantial data sets, and the conclusions and implications are based on analyses across all data sets. The summative findings below sequentially address each of the Evaluation Themes, although it is acknowledged that there are relationships within, across and between many of the Evaluation Questions.

11.2 Overall findings

This Section considers the overall findings for the Evaluation Themes. In an attempt to minimise duplication, Evaluation Theme 2 and Evaluation Theme 3, and Evaluation Theme 5 and Evaluation Theme 6 are considered together, respectively.

11.2.1 Evaluation Theme 1: C4Es

Evaluation Theme 1 concerned the extent to which C4Es have been effective in achieving improved teacher capacity and improved quality of teaching in hub and spoke schools (and other schools availing themselves of support from 'virtual' or thematic Centres for Excellence). Insight into this evaluation question was gained through perceptions conveyed through Surveys 1 and 2 and site visits interviews.

Principals and HATs (or equivalent), in particular, evaluated the role of C4Es positively in this regard. They highlighted the many opportunities that C4Es presented for teacher professional learning, especially through the introduction of the HAT (or equivalent) role.

Considerable commentary addressed the perceived extent and effectiveness of C4Es for building teacher capacity and improving the quality of teaching in hub schools. Interviewees did comment, however, on instances where time lost to the C4E. Most commonly when these comments were made it was concerned with the way in which the hub and spoke (or equivalent) initiative was implemented, namely, through the external specification of schools to be involved in particular hub and spoke clusters.

The evaluation participants also referred to a wide range of performance measures when commenting on whether C4Es improved student performance in both hub and spoke schools. References to external standardised testing as quantitative measures were often reported to be problematic, but other performance measures were used, such as student surveys and individual student profile data, internal assessment task results, and changes in the nature of rubrics used for tasks. In addition, Principals, HATs (or equivalent), executive members and teachers frequently referred to the quality of classroom work and student engagement as evidence of improved student performance. It was presented, often implicitly, that student success arose from teachers' increasing expertise in particular areas of pedagogy. Areas highlighted by respondents included improvement in:

- student's confidence to engage in learning;
- student feedback;
- reflection;
- strategic questioning;
- student engagement;

- purposeful assessment; and
- pedagogical expertise in particular targeted subject areas.

A number of effective relationships with partner universities were reported as consequences of the C4E initiative. Improved relationships were reported concerning preservice teachers undertaking professional experience (this is addressed separately below). Stronger relationships were also reported concerning professional learning for teachers based on workshops and action research projects, often in areas regarding the improvement of students' literacy and numeracy and the Quality Teaching Framework.

11.2.2 Evaluation Themes 2 and 3: HAT (or equivalent) role and attributes

Evaluation Themes 2 and 3 concerned two overarching perspectives linked to the HAT (or equivalent) role in schools, namely, the impact and attributes of the person in the role. Insight into these two related evaluation questions was gained through the elicited commentary during site visits interviews and data from Surveys 1 and 2. It should be noted that in commentary concerning the HAT (or equivalent) role, the attributes of persons undertaking that HAT (or equivalent) role, the activities performed by HATs (or equivalent) and the role per se were frequently conflated.

The HAT (or equivalent) position was perceived to be located on the career continuum between a Head Teacher and Deputy Principal. The role was reported to provide promotional opportunities for experienced teachers not wishing to leave the classroom for an executive role, as well as a structure for enhancing teaching and learning across the school. Within the operational time frame of the HAT (or equivalent) initiative in schools, the issue of its potential to attract teachers to a range of contexts remains largely unresolved. Nevertheless, particular attributes possessed by a HAT (or equivalent) identified in this evaluation suggest that they would be predisposed to make the successful transition to schools that are classified, for example, as hard to staff.

Considerable commentary was devoted to discussions of initiatives at the individual, group, whole-school and interschool levels that were designed to impact positively on student achievement. Of these, the use of attainment data was discussed widely. The commentary revealed a spectrum of approaches, the boundaries of which were comments on the improvement of student engagement, as a precursor to improvements in achievement overall, to improvements in results from external testing protocols. In all cases, a clear purpose and sustained expert support from the HAT (or equivalent) were identified to be essential components that facilitated an improvement agenda and engagement by staff in data use.

Moving beyond data use as a focus, the HAT (or equivalent) role also provided the opportunity for a school to develop a sustained focus on a key aspect of the core business of schools, namely, classroom-based, collaborative professional support. This focus was, in part, facilitated by the HATs' (or equivalent) accessibility. In addition, the role stimulated purposeful organisation of professional practice and positioned teachers to make improvements generally and to continue to pursue professional learning as an integral component of professional practice.

More aligned with professional growth than school management, the HAT (or equivalent) role enabled the application of a broad skill set that was identified as fundamental to creating school cultures that reflected sharing and collaboration by enhancing professional practice for individuals, teams and networks. Relevant skills was reported to include subject

and curriculum expertise, highly developed interpersonal skills, the ability to support and engage others, capacity to maintain focus on professional learning, capacity to empower individuals and communities, the ability to balance the management of difficult contexts and teaching and learning aspirations.

The sustained facilitative role of the HAT (or equivalent) had the potential to bring people together within individual or collective school networks to advance the pursuit of goals. The promotion of a shared vision (referred to as 'collective capacity') in relation to school improvement, relationship building – both within and beyond the school, as well as consolidating strategies that could be taken up by others in a school were additional planning and management strategies that reportedly characterised operationalisation of the role.

While the guidelines about teaching load for HATs (or equivalent) were clear in that the position statement, these guidelines were often interpreted differently in order to maximize the time HATs (or equivalent) spent with teachers. This resulted in divergent responses based on contextual needs to the question of whether the HAT (or equivalent) role should include a teaching load. One argument was that HATs' (or equivalent) 'credibility' depended on this; the counter argument was that the reduced availability and accessibility of the HAT (or equivalent) would constrain the range of their work. The discussion was really about the *kind* of teaching in which the HAT (or equivalent) should engage: having their own classes, or spending time demonstrating in other teacher's classes.

Commentary from the HAT (or equivalent) group provided insights into how they saw the role defined in terms of their respective professional backgrounds, aspirations and the impact they were having on teacher capacity. Skills that found expression in the role were reported to include:

- those acquired in previous roles;
- skills that might facilitate collaboration;
- classroom skills;
- the ability to liaise with a range of professionally-based organisations; and
- well-developed communication skills.

The HAT (or equivalent) role was reported to prompt deep reflection about professional identity and career transitions. Influences that HATs (or equivalent) presented as important in shaping their current professional perspective included:

- ongoing personal professional learning;
- being both a mentor and a mentee;
- experiencing a range of teaching and learning contexts;
- maintaining contact with student learning; and
- engaging in professional networks.

There were three main reasons that HATs (or equivalent) enumerated as influencing their decision to apply for the role and these were:

- (i) opportunities for collaboration;
- (ii) personal conviction and motivation; and
- (iii) the desire to improve student learning outcomes.

HATs (or equivalent) evaluated the role as being rewarding in terms not only of opportunities, but also in terms of feedback. HATs (or equivalent) presented the role as being one that embodied support and the collaborative building of relationships to support enhanced teacher practice within and across schools.

HATs (or equivalent) presented the purpose of the role in terms of aspects related to people, activities and their own attributes, and engagement with a wide range of personnel and professional organisations. Whilst many tangible instances of impact were identified, these can be generalised as empowering and supporting others to take personal and shared responsibility for enhancing teaching and learning. An additional impact was stated as a consequence of building capacity in others, namely, improvements in student learning.

11.2.3 Evaluation Theme 4: Paraprofessionals

Evaluation Theme 4 provided insights into the Paraprofessional initiative. Insights into this Evaluation Theme were gained through Surveys 1 and 2 and the semi-structured interviews. The extent to which the paraprofessional role had been 'effective' in achieving improved support for individuals or groups of students, however, did not have a high profile in the commentary. Nevertheless, the respondents provided commentary on the activities of paraprofessionals that supported students both directly and indirectly.

As was the case with the HAT (or equivalent) role, it should be noted that during interviews or commentary on the paraprofessional role, the attributes of persons undertaking the paraprofessional role, the activities performed and the role were frequently conflated.

The role of the Educational Paraprofessional was an in-classroom role to support teachers. Nevertheless, there was some evidence to suggest that Community Liaison and ICT Paraprofessionals provided support to students as well. The direct support of paraprofessionals for students received mixed evaluations. The support provided by Community Liaison Paraprofessionals and ICT Paraprofessionals, however, was evaluated as indirectly having positive impact on students through the support that the roles provided to parents and teachers, respectively. The commentary, however, indicated that school personnel did not perceive that the paraprofessional role directly improved student performance.

In all cases, the improved support for teachers provided by the paraprofessional initiative was attributed to relieving teachers from:

- relieving teachers from administration;
- event management;
- learning new technologies; and
- community engagement responsibilities.

Thus, the commentary indicated that the paraprofessional initiative enabled teachers to concentrate more on the core business of teaching.

The extent to which the paraprofessional initiative had been effective in enhancing job satisfaction of teachers and leaders did not have a high profile in the commentary. The evidence concerning the support that enabled teachers to concentrate on pedagogy, however, enables the inference that the role may have enhanced job satisfaction of teachers.

The commentary did not provide evidence that the Educational Paraprofessional role had provided an effective and beneficial pathway into the teaching profession. Within a highly competitive employment market it was those people who already held or were working toward a teaching qualification who were successful in attaining positions. As a result in the sites visited, the paraprofessionals who had made or who were in the process of making the transition into teaching already had teaching qualifications. None of the paraprofessionals who did not hold teaching qualifications commenced teacher education courses during their appointment.

11.2.4 Evaluation Themes 5 and 6: Professional Experience

Evaluation Themes 5 and 6 concerned professional experience for preservice teachers and insights were gained from all data sets under examination. Insights into whether C4Es prepared higher-quality teacher education graduates, who were better equipped and prepared to teach in NSW schools, were gained from site interviews, professional experience reports and professional experience surveys. Such insights were necessarily partial because the time frame for the evaluation did not enable a longitudinal study of difference in the relative efficacy of teachers who undertook their professional experience in C4E and other schools.

Consequently, the intent of Evaluation Theme 5 was inferred to mean:

Have teacher quality initiatives been implemented in C4E schools, enabling them to provide higher quality professional experience for preservice teachers than schools that have not participated in the initiatives?

The interview commentary partially addressed the inferred Evaluation Theme. The commentary provided information concerning practices that were reported to be implemented in C4E schools to support preservice teachers undertaking professional experience and outlined factors that were reported to contribute to environments that were conducive for preservice teachers' growth. The commentary indicated that various programs were implemented to support preservice teachers and/or supervising teachers. The role of HATs (or equivalent) in facilitating initiatives that supported preservice teachers and/or supervising teachers was emphasised.

It was also reported that most C4Es in metropolitan areas were hosting very high numbers of preservice teachers, and that the numbers had increased significantly since being assigned C4E status. Commentary from a small number of C4Es reported that no special provisions had been implemented to support preservice teachers and that most C4Es in provincial areas hosted low numbers of preservice teachers.

Some interviewees offered comparative assessments of the performance of C4Es and non-C4Es in the provision of high-quality professional experience for preservice teachers, but the comments expressed personal opinions only. Some expressed positive assessments; others were ambivalent; none were negative.

The response estimates were grouped into five bands according to their location on each of the Rasch scale bands. The location bands of each group were then compared with the survey question estimates to identify the knowledge and valuing specific to each location band. These data provide a means of describing in qualitative terms a hierarchy of respondent 'knowing' and 'valuing'. This hierarchy, which represents a developmental picture of respondent knowing and valuing of the ITQ NP initiatives, has the potential to

inform ways in which this and other improvement strategies are introduced and enacted in schools.

Commentary from the professional experience reports enabled some comparative insights into the professional experience offered in C4Es and spoke schools and schools not participating in the ITQ NP reforms. Professional experience reports from C4E and spoke schools had higher mean summative commentary detail estimates, i.e., which measure the extent to which individual Standards are referenced by supervising teachers', than reports from schools not participating in the ITQ NP reforms, although the difference was significant only for spoke schools. These findings suggest that teacher quality initiatives focused on collaborative networking and mentoring in spoke schools have impacted positively upon supervising teachers' capacity to articulate and describe teaching practice in terms of the Graduate Teacher Standards specified in the *Professional Teaching Standards* (NSWIT, 2005).

The quantitative analysis performed on the professional experience reports concerned the number of Standards referenced per summative commentary in professional experience reports. This analysis provided information concerning the comments and the extent that supervising teachers were able to use the existing reporting frameworks to describe the practices of preservice teachers. Aspects of preservice teaching practice that supervising teachers were able to more commonly identify and describe were also identified. Finally, the analysis determined differences amongst teachers' summative commentary that described teaching practices against the professional standards.

The findings indicated that teachers are more commonly wrote about: the social aspects of the teaching role (rapport with students, teamwork, involvement in the wider aspects of the school and community); the visible artefacts of teaching (lesson plans, resources, use of information technology); the level of control and order the preservice teachers are able to maintain over their classes; preservice teachers' self-efficacy and demeanour as demonstrated in their 'professionalism', that is, dress, manner and behaviour; and their willingness to engage with colleagues, to listen to and accept advice, and to learn and develop.

While not pertinent to the Graduate Teacher Standards, supervising teachers also provided commentary on characteristics such as dispositions relating to professional capacity (e.g., being flexible, organised), tenacity (e.g., being committed, resilient, proactive) and affect (e.g., being passionate, confident).

The areas of the standards that supervising teachers least referenced were concerned with relationships with parents and caregivers, knowledge of literacy strategies, catering for diversity in the classroom, knowledge of student development, outcomes-based approaches to learning and assessment, use of educational research and knowledge of the professional standards to inform teacher development.

Given that advice to preservice teachers will always be contextually motivated, i.e., in response to how the preservice teacher responds to the teaching and learning context in a particular school, the advice/report from supervising teachers represents an implicit prioritising of the Standards. For some standards the level of commentary could be perceived to be related to the opportunity for a preservice teacher to demonstrate the Standard in the context in which they were working. A further caveat to the findings is that the analyses only provide information on the degree of referencing of Standards in the summative commentary with the implication being that these report summaries correlate with what occurred in practice.

The apparent differences, however, suggest the need for further discussion, and analyses of ways supervising teachers might improve preservice mentoring and report detail further. This implies that intervention by the Board of Studies, Teaching and Educational Standards (BOSTES), universities, school systems and schools to provide practical advice could be in the long-term interests of all stakeholders.

Findings from the qualitative and quantitative analyses of Surveys 1 and 2 and the qualitative analysis of the semi-structured interviews provided insights into elements of effective relationships with universities. The findings identified the importance of both formal and informal relationships. Formal relationships often involved the design, development and delivery of structured programs.

The nature of the programs differed considerably, but professional learning for supervising teachers, teacher educators and/or preservice teachers was a common feature. Dialogue, shared understandings and expectations, university responsiveness and reciprocity/mutual benefits were also identified as important features within and/or in addition to structured programs. The role of HATs (or equivalent) in facilitating and maintaining effective relationships with universities was emphasised.

In relation to Evaluation Theme 6, participants enumerated various costs associated with providing professional experience for preservice teachers in C4Es, although commentary that specifically addressed the explicit question concerning the notion of *cost effectiveness* in the interview protocol was not forthcoming. Costs that were enumerated included:

- increased workload associated with mentoring;
- report writing and processes associated with preservice teachers that may not be performing well;
- fatigue resulting from mentoring preservice teachers;
- the adverse effect that 'at risk' or failing preservice teachers can have on relationships within the school; and
- costs to universities' reputations if preservice teachers are not performing well.

The notion of cost, however, was often counterpoised by discourses of commitment to future generations in the profession and responsibility to provide high quality professional experience, as well as explicit acknowledgement of reciprocal benefits for schools.

11.2.5 Evaluation Theme 7: Additional areas of interest

Other features of interest in the evaluation concerned: contextual factors; the preparation of teacher education graduates who are better equipped to teach in NSW challenging schools, such as, those that are remote or which have high Aboriginal enrolments; the needs of new teacher education graduates for successful teaching in challenging schools; teacher retention; ATSI education; and factors affecting sustainability of the initiatives. Data concerning these other features of interest were located in all data sets under examination. Each of these features is addressed below.

The degree of direct involvement of the C4E or spoke school in the original nomination for funding was reported to directly impact upon the speed of implementation and depth of project engagement. The following issues were identified.

- Where C4E schools had little choice or involvement in the initial application, the risk that their spoke schools would not engage with the project/s or become immersed in the learning communities initiatives increased.
- Where C4E schools were involved in the preparation and direction of the ITQ funding application but their spoke school 'partners' were co-opted or directed to join with them, the chance of spoke school involvement being slow or reluctant increased.
- Where spoke schools were involved in the project from the start, the likelihood that the program/s themselves would flourish in a far more cohesive and timely fashion increased.

The level of commitment and continuity of school leadership to the ITQ NP projects was also presented as being important to the success of the initiative. For example:

- principals who were involved throughout the successful application for ITQ NP funding as well as the implementation process were reported to largely remain engaged with, committed to and supportive of the project/s throughout the funding cycle; and
- personnel in schools that experienced a change of principal during the period of the project sometimes reported that the project direction itself was altered, marginalised or compromised in some way.

The commentary indicated that the suitability of the HAT (or equivalent) appointment was pivotal. For example:

- HATs (or equivalent) were described by most school personnel as the chief drivers/participants in the various ITQ NP projects initiated by each school, so the suitability of their appointment was more critical to the project's success than perhaps initially considered by school leadership; and
- HATs' (or equivalent) appointments were reported to range from prime considerations in the planning of some schools to what amounted to after-thoughts in others. The commentary indicates that this, in turn, impacted upon the speed of an appointment and appeared to influence the way in which that HAT (or equivalent) was initially perceived by school staff, particularly if s/he was an external appointment.

Another issue identified in the interview and survey data related to the dynamics of the hub and spoke clusters. This was repeatedly presented as a key contextual issue. Key factors that reportedly affected the dynamics of this issue were whether:

- capable and suitable HATs (or equivalent) had been appointed;
- schools had been involved in the ITQ NP application process;
- schools had been involved in the application process, but had had other schools in the hub and spoke cluster externally assigned;
- there was full and willing involvement of all schools in the hub and spoke clusters; and
- the initiators of the involvement remained at the school for the duration of the project.

A second area of interest that was repeatedly presented in the commentary indicated that participants did not distinguish perceived needs of new teacher education graduates

teaching in challenging schools from teaching in other settings. Needs that had a high profile in the commentary for all graduates included:

- more extensive professional experience placements, involving increased frequency and/or duration;
- higher levels of personal literacy and/or numeracy;
- greater knowledge of legal responsibility, especially with respect to complex parenting and family contexts; and
- greater knowledge and understanding of, and greater expertise in, classroom management, and differentiated teaching and assessment.

Teacher retention had a high profile in the commentary on additional areas of interest. In relation to the retention of science and mathematics teachers, the participants repeatedly re-directed attention to the issue of attracting science and mathematics teachers in the first instance, especially outside metropolitan areas. More attractive terms and conditions in positions other than teaching were repeatedly presented as a perceived source of attrition for science and mathematics teachers.

Beyond these specific instances, the participants focused on general factors affecting teacher retention. Such factors included:

- school location;
- favourable work conditions;
- the rewarding nature of teaching itself, including ‘making a difference’;
- increased levels of professional support available in the school, specifically mentoring provided by the HAT (or equivalent);
- greater incentives for teachers, such as financial compensation, especially in rural and remote locations; and
- increased opportunities for teachers to become experts in particular school curriculum operations and to share that expertise in leadership roles other than school administration positions.

However, the participants did not address fully factors in preservice teacher education that would increase the retention of high quality teachers in challenging schools. With respect to the retention of early career teachers, the participants articulated the need for preservice teacher education courses to incorporate more professional experience in order to better prepare graduates for the career of a teacher.

Commentary concerning ATSI education indicated that a high proportion of school personnel reported ATSI education as an integral element in the ethos of schools. It was repeatedly emphasised that responsibility for ATSI education was not assigned to the HAT (or equivalent) role because it was regarded as the responsibility of all personnel. The participants provided information on a range of programs designed to support ATSI students, sometimes in partnership with universities. The need for teacher education graduates to have greater knowledge and understanding of ATSI education was also prominent in the commentary.

Finally, most school personnel commented on factors affecting sustainability of C4E initiatives. A key feature in the commentary was varying levels of confidence about the long-term sustainability of initiatives in the participants’ respective schools. Most principals candidly stated that many initiatives would struggle to continue when funding and the HAT (or equivalent) role ceased. Nevertheless, most Principals, HATs (or equivalent) and other

executive members indicated that schools were trying to sustain the initiatives as much as possible by:

- accommodating C4E initiatives believed to be crucial to the core business of the school within existing budgets or substituting (or at the very least, subsidising) funding from other projects;
- restructuring school executive roles to incorporate aspects of the HAT (or equivalent) role;
- designating a staff member to oversee the major projects stemming from the C4E;
- incorporating the C4E/HAT (or equivalent) plans into the overall school plan; and
- assigning greater responsibility to teachers in the continuation of the initiatives following increases in teacher capacity as an attributable outcome of involvement in C4E initiatives.

11.3 Implications for Practice taking into account the policy context

To assist with the synthesis of the multiple data sources and to help lay a platform for the implications of the research, the Evaluation Questions were further considered in terms of three organising principles: structures, processes and outcomes. These three perspectives are the key elements of the Donabedian Framework (Donabedian 1966, 1988), which offers a unifying perspective. Specifically, the Donabedian Framework provides further insights into the sustainability of initiatives within and across contexts and helps address the notion of quality – the core and underlying construct of ITQ NP initiatives.

In the context of the Evaluation Questions, outcome measures include the quality of the teaching and learning environment, job satisfaction, enhanced teacher capacity, and student learning outcomes. The extent to which a school/network can set up structures to engage effectively in initiatives leading to an improvement agenda focused on improving the quality of its teaching and learning can be monitored by evaluation against a contextually determined sequence of structures, processes and outcomes.

This Section reports implications for practice. The same structure used in the previous Section, 13.2, applies here where implications and associated recommendations are linked to particular Evaluation Themes. In particular, the observations are relevant to, and fit under both the associated long-term foci of the ITQ NP agreement and the themes developing out of the NSW milestone reforms from *Great Teaching, Inspired Learning: A Blueprint for Action* (NSW DEC, 2013).

11.3.1 Centres for Excellence Theme

The following three implications and associated recommendations arose from the data and analyses associated with Evaluation Question 1.

Implication 1.1: concerns the impact of longitudinal needs-based professional learning in schools. Rather than one-off courses, the structure of a continuous and ongoing focus on the priority areas of professional learning in context, was seen as strongly developing teacher capacity. This implication highlights a significant issue concerning the form of Teacher Professional Learning (TPL). It represents a reconceptualisation of what schools can do enhance teacher capacity in their own school or school network by building on their strengths and capacities.

Recommendation 1.1: It is recommended that systems support schools to adopt

longitudinal school-based professional learning in the three priority areas: (i) developing whole-school improvement strategies; (ii) supporting individual and groups of teachers to enhance professional practice; and (iii) working with performance data to improve teaching and learning outcomes.

Implication 1.2: concerns the benefits, other than financial, of having the HAT (or equivalent) work with a number of schools in a network model, such as the hub-and-spoke model to undertake collaborative curricular and pedagogical planning. Consideration of self-organising processes that enable schools to collaboratively form structures and select partners in their own ways is required.

Recommendation 1.2: It is recommended that systems encourage by providing resource support for HATS (or equivalent) in the establishment and ongoing development of professional needs-based connected learning networks of schools or groups of teachers across schools to undertake collaborative curricular and pedagogical planning.

Implication 1.3: relates to the potential of action research as a form of professional learning to enhance university and school partnerships. This was a feature of some professional learning in C4E schools. More preservice teachers with Master's degrees will soon be graduating around Australia under *Australian Qualifications Framework* (Australian Qualifications Framework Council, 2013), Level 9 guidelines. This change will provide teachers with knowledge and experiences of research design. This primes them to work collaboratively in action research partnerships with academics.

Recommendation 1.3: It is recommended that systems adopt action research methodologies as a priority in system-wide professional learning agendas.

11.3.2 Impact and Attributes of the HAT (or equivalent) Themes

The following four implications and associated recommendations arose from the data and analyses associated with Evaluation Questions 2 and 3.

Implication 2/3.1⁹: affirms an integral component of the HAT (or equivalent) role was the provision of support to teachers across all career stages, but particularly at the preservice, Early Career and New Scheme teacher levels.

Recommendation 2/3.1: It is recommended that systems support schools (possibly in collaboration with universities) to develop case studies of successful induction programs that were facilitated and coordinated by HATs (or equivalent) in ITQ NP and Low SES NP partnership schools to identify best practice in the provision of professional experience and entry, or re-entry, into the teaching profession.

Implication 2/3.2: concerns the capacity of HATs (or equivalent) to act as role models and mentors based on experiences they have gained in the certification process. Their insights constitute a valuable resource for the profession that has the potential to motivate other teachers to consider options for aligning their professional practice with the APST and, possibly, applying for certification.

⁹ Implication 2/3.1 denotes the first implication arising from Themes 2 and 3.

Recommendation 2/3.2: It is recommended that HATs (or equivalent) be encouraged and supported to share their insights and learnings concerning the certification process to help motivate others to consider applying for certification at the voluntary career stages of professional attainment

Implication 2/3.3: addresses the need to consider the HAT (or equivalent) role as a distinct and continuing career option in schools. For some, the role became a stepping-stone in the progression to leadership and senior management positions in schools. For others, who returned to their substantive positions, they did so knowing that their own professional practice had been substantially enriched.

Recommendation 2/3.3: It is recommended that systems need to explore ways to establish the HAT (or equivalent) role as a clearly defined position within a school's leadership team and this position has a primary focus on classroom teaching and learning.

Implication 2/3.4: concerns the finding that the HAT (or equivalent) was widely identified as a critical component of sustaining a school/school-network improvement agenda that has a clear teaching and learning focus.

Recommendation 2/3.4: It is recommended that in the appointment of a person into the role of HAT (or equivalent) that due consideration is given to attributes, such as, the ability to negotiate, develop and maintain effective professional relationships at the school and school-network levels in order to engage staff in sharing the responsibilities for whole-school improvements.

11.3.3 Paraprofessionals Theme

The following implication and recommendation arose from the data and analyses associated with Evaluation Question 4.

Implication 4.1: addresses the educational outcomes suggested in the terms of The Council of Australian Governments (COAG, 2009) as well as linking with policy ideas from *Local Schools, Local Decisions* (NSW DEC, 2011). The paraprofessional role is consistent with these outcomes and policy:

- by providing support for teachers to concentrate more on the core business of teaching;
- through developing good relationships with the local community resulting in enhanced parent and wider community involvement in the school-learning environment (especially in more remote areas); and
- by providing schools with the flexibility to choose the number and roles of staff and the mix of permanent and temporary staff within their budgets to best meet local needs.

Recommendation 4.1: It is recommended that systems and/or schools seek ways to define more clearly the role of paraprofessionals in how they might best support the core work of teachers in areas such as administration, technology use, student learning and community engagement according to individual school contextual needs.

11.3.4 Professional Experience Theme

The following two implications and associated recommendations arose from the data and analyses associated with Evaluation Questions 5 and 6.

Implication 5/6.1: concerns the variability in the level of detail provided by supervising teachers in preservice reports that document professional practice against the Professional Standards.

Recommendation 5/6.1: It is recommended that systems need to ensure that supervising teachers are provided with the necessary professional support on how to better assess and describe teaching practice against the professional standards, with a view to providing a productive professional experience that clearly documents preservice teachers' accomplishments and needs.

Implication 5/6.2: concerns the development of common processes, requirements and expectations that facilitate comparable professional experiences for preservice teachers within and across universities and schools. For example:

- Universities could direct more attention to providing advice on, and monitoring of, the quality of the professional experience to ensure that the professional experience is not affected by course type; and
- school systems and schools need to promote collaborative networking both within and across schools to strengthen the mentoring capacity of supervising teachers in the provision of the professional experience.

Recommendation 5/6.2: It is recommended that schools presently designated as C4Es and, where applicable, schools presently designated as spoke schools should sustain the current collaborative networking presently facilitated by HATs to strengthen the mentoring capacity of supervising teachers in the provision of the professional experience.

11.3.5 Additional Areas of Interest Theme

The following three implications and associated recommendations arose from the data and analyses associated with Evaluation Question 7.

Implication 7.1: is consistent with Michael Fullan's (2005, 2007, 2009) 'change theory', which suggested that change is more effective when it is 'bottom up' rather than 'top down'. The findings outlined in this report strongly suggest that in future initiatives of this nature, systems need to consider the ways in which school groupings (e.g., C4E and spoke schools) are determined.

Recommendation 7.1: It is recommended that Systems need to consider ways in which school groupings (e.g., C4E and spoke schools) are determined to achieve full, immediate and cohesive involvement from both school administrators and teaching staff.

Implication 7.2: concerns the attraction and retention of teaching staff, particularly in regional/remote schools. During site visits school principals, in particular, were confident of keeping staff once they arrived, but getting them to commit initially seemed to be an issue that requires systems and/or autonomous schools to consider wider incentives to attract quality staff. Significantly, there may need to be different sets of policies for attracting and retaining teachers in regional/remote schools.

Recommendation 7.2: It is recommended that systems work with schools to develop flexible staffing strategies that take into account geographical location and/or teacher shortages in particular subject areas.

Implication 7.3: is related to whether schools will be able to sustain their ITQ NP initiatives now that the funding has ceased. An implication here is how might systems and schools might profit best from the ITQ NP experience.

Recommendation 7.3: It is recommended that systems develop mechanisms and/or processes that continually monitor change agency within schools with a view to supporting long-term sustainability of school improvement initiatives at the local level (tailored to contextual needs). They should consider one or more of the following courses of action:

- ways of retaining or extending HAT (or equivalent) roles in schools;
- appointing personnel who have performed the role of HAT (or equivalent) to assist non-C4E schools in developing local school initiatives of their own; and/or
- encouraging schools to develop local school partnerships and co-operative projects within the confines of their own school budgets in order to benefit from economies of scale.

11.4 Concluding Remarks

What can be generalised succinctly from the data sets across the varied contexts of the ITQ NP evaluation? The similarities and differences that can be drawn across the C4E contexts amount to three considerations. The first concerns the pivotal role of the HAT (or equivalent). The second encompasses the importance of developing effective relationships between personnel within and across school networks, which include the wider school community as well as universities. The third affirms differences, and relates to the importance of identifying relevant contextual needs as the basis for developing strategies that support whole-school improvements. Each is addressed briefly below.

First, the HATs (or equivalent) were at the centre/core of the C4E initiative. They supported a school-wide focus on professional learning for teachers that had a positive impact on teachers, and student engagement and performance, with supporting judgments coming from a range of data sources. Also, through their work they facilitated sophisticated and ongoing teacher reflection on pedagogy and how improvement can validly be measured could be seen as a central outcome of the C4E. .

HATs (or equivalent) were given time to work with colleagues, preservice teachers and other relevant stakeholders. They were also given time to carry out their work, their processes, in a developmentally appropriate way, i.e., over an extended time period, as opposed to more traditional 'one-off' activities.

The impacts of the HAT (or equivalent) role on the teaching and learning practices within schools are well documented in this Report. By taking a leadership role in mentoring their impact improved professional experience for preservice teachers, inductions for beginning teachers and professional development for teachers generally within and across schools.

The second consideration concerns the importance of developing effective relationships. Levels at which relationships operated within the ITQ NP included:

- Principal-HAT (or equivalent);

- school Executive-HAT (or equivalent);
- HAT (or equivalent)-school;
- HAT (or equivalent)-paraprofessional;
- paraprofessional-school community;
- lead-partner (hub-spoke) school;
- network; and
- HAT (or equivalent)-university.

None of these relationships operated in isolation, and lack of reciprocity in one had the potential to impact on overall school and/or network effectiveness. Thus, for example, the relationship between senior management in a school and the HAT (or equivalent) was regarded as a pivotal one in the implementation of ITQ NP initiatives. The instance of a Principal arriving at a school after the establishment of an ITQ NP program, and where there was a lack of alignment between the professional learning focus of the Principal and the HAT (or equivalent), resulted in the subsequent status of whole-school improvement becoming fragile.

The third consideration is an affirmation of differences, and relates to the importance of identifying relevant contextual needs as the basis for developing strategies that support whole-school improvements. For example, a recently established regional school with a high proportion of New Scheme Teachers, a high proportion of Early Career Teachers, and a high ATSI population had different professional learning foci compared with a well-established metropolitan school with a clearly defined whole-school professional learning program, strong partner school links, and an experienced staff. The opportunity to collaborate through the ITQ NP program, using professional accreditation as an initial focus, provided mutually advantageous benefits related to staff professional growth and student engagement across both contexts.

Elsewhere, in two separate networks of regional schools, the development of an online learning management system/virtual faculty provided the catalyst for enhanced professional learning and student engagement across the network. And, in a single metropolitan school, the adoption of the Quality Teaching Framework provided the structure that promoted opportunities for whole-school collaborative reflection on practice along with mentoring and peer coaching.

In conclusion, the most significant finding from the ITQ NP Evaluation is that long-term employment of instructional leaders in schools would be a positive influence on the goals of the *National Partnership Agreement on Improving Teacher Quality* (COAG, 2009) and *Great Teaching, Inspired Learning: A Blueprint for Action* (NSW DEC, 2013). Because of its whole-school, teaching and learning focus, the HAT (or equivalent) role emerged as the major quality assurance mechanism in the development of effective relationships and the management of a school's, or network's, core improvement agenda.

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Appendix A

Evaluation of Selected Reforms – Improving Teacher Quality National Partnership

Site Visit Interview Questions – Principal; School Executive

Name of School:

Name of Interviewee:

Initial clarification and confirmation:

- What the evaluation is about
- Members of the evaluation team
- Ultimate reporting process

1. Could you briefly describe the focus of the C4E/National Partnership initiative operating in your school?

2. Who (individuals and/or teams) in the school do you see as most responsible for implementing the initiatives?

3. Questions about the Centre for Excellence/National Partnership initiative:

How would you describe the effectiveness of the Centre for Excellence and/or National Partnership initiative in your school in the following areas?

- Improving teacher capacity
- Improving teacher quality
- Improving student performance
- Effective collaboration with other schools
- Effective relationships with universities

4. Questions about the impact of the Highly Accomplished Teacher initiative (Impact):

How do you see the HAT role, or its equivalent, as being effective in the following areas?

- Providing career progression for HATs as skilled teachers
- As a strategy for attracting and retaining HATs as skilled teachers in hard to staff schools
- Improving the capacity and effectiveness of teachers in hubs/spoke or cluster schools
- Enhancing the capacity of teachers to utilise students attainment data
- Improving student performance
- Achieving sustainable improvements in Teaching & Learning through school planning/management

4a If you had the funds again would you employ a HAT or do something else?

5. Questions about the Paraprofessional initiative (if there is one in the school):

How do you see the paraprofessional initiative as being effective in the following areas?

- Improved support for students
- Improved support for teachers
- Pathways into teaching

6. Questions about the Professional Experience:

Could you outline the professional experience program at your school in terms of?

- Preparation of quality graduates
- Associated 'costs'
- Structure of placement, e.g., Internships, two-week professional experience
- Relationship between stakeholders, e.g., your school, Teacher Education Institutions and employers

- 7. Other questions of interest – optional:**
- Are there any particular contextual factors that have impacted on the success or otherwise of the initiatives in your school?
 - What do you see as the important training needs of new teachers for successful teaching (in your school; in high Aboriginal enrolment or high ESL schools; ...)?
 - What do you consider to be the major issues that impact on the retention of (quality; maths; science) teachers in schools (challenging or otherwise)?
 - What do you consider to be some of the key sustainability issues for the initiatives in place in your school?
 - Is there a particular feature of the way initiatives have been implemented in your school that others might find useful – models, approaches or strategies that can be shared?
- 8. Is there anything else that you would like to add about the Centre for Excellence/National Partnership initiatives in your school?**
- Were you comfortable with the structure of the interview and the questions asked?**

Figure 1: Site visit interview protocol: Principals and school executive