

Exploring the Professions

Background Literature for the Final Evaluation Report

Associate Professor Debra Panizzon



The Professional Standards Council defines a profession as:

A disciplined group of individuals who adhere to ethical standards. This group positions itself as possessing special knowledge and skills in a widely recognised body of learning derived from research, education and training at a high level, and is recognised by the public as such. A profession is also prepared to apply this knowledge and exercise these skills in the interest of others (Professional Standards Council, http://www.psc.gov.au/what-is-a-profession).

1 Broad Expectations around Professional Learning

In order to maintain, enhance and broaden knowledge, expertise and competence over time, professionals are required to engage in some form of continuing professional development (CPD). Not only is there a specified number of mandatory hours or points of CPD required to maintain certification but the activities comprising CPD must be documented using evidence of completion. In most instances, individuals generally sign off that this CPD is complete as per registration or certification requirements. However, audits are undertaken by most professional organisations as part of an ongoing monitoring process (e.g., Medical Board of Australia, Engineers Australia). A general review of the professions identifies that these expectations are applicable to a broad range of professions, including general practitioners and specialists, nurses and midwives, occupational therapists, certified practising accountants, chartered professional engineers, pharmacists, financial counsellors, and teachers (to name only a few).

Examples of CPD requirements in these professions within Australia include:

General practitioners and specialists: Once a medical degree is completed, all GPs and specialists engage in continuing professional development. The usual amount of CPD is 50 hours per annum, which must include one activity involving peer review, clinical audit or performance appraisal. Full documentary evidence to substantiate the activities claimed must be available for an audit (Retrieved August 2015 from.

 $\frac{\text{http://www.medicalboard.gov.au/documents/default.aspx?record=WD14\%2F13815\&dbid=AP\&chksum}{=a0sKGuDKRzdi0sZjXuzm6Q\%3D\%3D}.$

Nurses and midwives: All individuals must undertake between 20-40 hours of CPD every three years. The amount of time required varies depending on the actual position with enrolled nurses requiring 20 hours while a registered nurse/midwife must complete 20 hours of CPD for nursing and 20 hours for midwifery (i.e., 40 hours) (Retrieved August 2015 from, http://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/FAQ/CPD-FAQ-for-nurses-and-midwives.aspx).

Occupational therapists: As from December 2013, every occupational therapist must complete 30 hours of mandatory CPD per annum. Evidence of the completed CPD activities must be compiled into a portfolio that must be retained for five years (Retrieved August 2015 from, http://www.occupationaltherapyboard.gov.au/Codes-Guidelines/Continuing-professional-development.aspx).

Certified practising accountants: In order to attain and maintain this status of registration, accountants are expected to complete a minimum of 20 hours of CPD per annum with a total 120 hours required over a three-year time period. If the CPD expectation is not met, members may be downgraded or suspended from the profession (Retrieved August 2015 from, http://www.cpaaustralia.com.au/member-services/continuing-professional-development).

Chartered professional engineers: The minimum number of hours of CPD required over a three-year period is 150 hours, which must cover at least: (i) 50 hours in the area(s) of practice; (ii) 10 hours of risk management; (iii) 15 hours of business and management skills; and, (iv) the remainder relevant to individual's interests and career. To maintain Chartered Status, CPD is reviewed every five years through an audit process (Retrieved September 2015 from, https://www.engineersaustralia.org.au/professional-development/continuing-professional-development).

Pharmacists: From September 2013, all pharmacists are required to complete 40 CPD points per annum, which comprises both accredited and non-accredited activities. Within these restrictions, pharmacists choose the types of activity undertaken across three main groups. Group 1 includes information-based activities with no assessment requirement (e.g., attending a seminar) with each CPD credit equivalent to one hour of work. Group 2 activities result in knowledge and skills improvement with some form of assessment included (e.g., preparing for an external review). For this group two CPD credits are collated for every hour of the activity. Finally, Group 3 is where quality or practice-improvement is the central focus (e.g., giving a conference presentation) with three CPD credits accounting for each hour of the activity. A key limitation is that a maximum of 50% of CPD points can be claimed against Group 1 activities. As with other professions, all CPD is recorded by the individual in case of selection for the auditing process (Retrieved September 2015 from, http://www.pharmacyboard.gov.au/Codes-Guidelines/FAQ/CPD-FAQ.aspx).

Financial counsellors: Within this profession, individuals must complete 20 points of CPD with a minimum of one session from each of three categories: (i) technical - including content knowledge relevant to legal issues; (ii) skills – including cultural awareness, suicide prevention or interviewing; and, (iii) ethics – including conflicts of interest, boundaries and counselling relationships. The CPD points are allocated according to the type of activity with a full day of training accruing six points while preparation of a training session for community education equates to four points (Australian State and Territory Financial Counselling Associations, 2015).

The summary of professions provided here identifies three key points worthy of keeping in mind before considering teaching as a profession.

- 1. There is a consistency across the professions in the use of the term *continuing professional development* CPD.
- 2. In most part, the role of CPD is to allow individuals to self-select what they require to enhance their own learning in the profession. In some cases, there are mandated hours or points required in relation to specific areas of CPD but this still leaves the majority of time or point allocation open to members to choose areas of relevance and interest.
- 3. Most professions have an auditing process with members expected to log their own CPD that should be readily available to the certification authority if requested.

2 Professional Learning for Teachers

Professional learning or professional development in education in its broadest sense encapsulates "those processes and activities designed to enhance the professional knowledge, skills, and attitudes of educators so that they might, in turn, improve the learning of students" (Guskey, 2000, p. 16). Traditionally, it has often referred to discrete activities undertaken or completed by teachers. Over the last decade there has been a major shift towards a more social and interactive notion of 'learning' to include the levels of the community in which teachers work as a professional (i.e., year, school, and district) (Borko, 2004; Desimone, 2009). As such, it is not just about what teachers learn individually but as a community of scholars to enhance their own learning, knowledge and understanding as part of a life-long process of *professional growth and scholarship* (Cochran-Smith & Lytle, 1999). Considered in this light, professional learning is intentional, ongoing and systematic in a teacher's daily life ranging from formal and structured topic-specific workshops to 'hallway' discussions with other teachers around classroom practices.

Substantive research exists in the area with Desimone (2009) extricating from the literature the core components necessary if teachers are to enrich their own practice in ways that enhance student learning and achievement by facilitating teacher professional growth. These are:

- 1. *Content focus:* It is not about the content per se but about linking content to the way in which students learn that content that empowers teachers in working with their students.
- Active learning: Teachers need opportunities to engage in active learning involving interactive
 discussion rather than passive approaches, such as just attending and listening to a lecture. It is
 cognitive engagement and sharing that is more likely to impact teacher learning over the long
 term.
- 3. Coherence: The likelihood for teacher change through learning will depend on the degree to which a professional learning activity is consistent with the teacher's existent knowledge and beliefs. A lack of coherence between these two components is unlikely to result in any substantive change in teacher practices.
- 4. *Duration:* Change in teacher knowledge and understanding (just like students) requires time with ongoing opportunities to engage in professional learning activities necessary to lead to long-term change. While the exact number of hours required as the 'tipping point' is not currently available, there is considerable evidence to suggest that activities sustained over a semester are sufficient.
- 5. Collective participation: Involvement of groups of teachers either from the same year level, school or local district is more likely to have an impact in that it sets up potential ongoing interactions and discourse, which is an extremely "powerful form of teacher learning" (Desimone, 2009, p. 184).

In Desimone's view, careful consideration and inclusion of these components will lead to successful professional learning for teachers, which contrasts significantly from the way in which professional development is often construed (Borko, 2004). Traditionally, professional development is perceived as an *add-on* or *top-up* (filler) for teachers that occurs periodically at designated times of the year (Loughran & Berry, 2011). For many teachers this 'spray-on' approach to professional learning is irrelevant and meaningless because of its lack of connectivity to the teacher's own practice (Mockler, 2005). For example, in high schools this becomes particularly problematic, given the focus on generic

professional development that does not actually address the specific needs of subject-specialist teachers (Wallace, 2009).

Hence, the current move in Australia to allow teachers to seek out their own professional learning opportunities addresses a number of the issues highlighted in the literature above while aligning teaching with the other professions. By giving teachers choice and the opportunity to reflect on their own actions, there is a greater opportunity for learning to be transferred to others, albeit peers or students (Gordon & Doyle, 2015). However, engaging teachers in this kind of change so that they take ownership of their professional growth requires policy as alluded to in the following quote by Lorna Earl (previous Head of the International Centre for Educational Change, Ontario Institute for Studies in Education):

Professional learning is a powerful lever for getting the kinds of change that can enhance student learning. But this may not happen if the process is purely voluntary, left to teachers to take up or not take up. The kind of professional learning that makes a difference for students is hard work and demands strong policy support and professional determination (Lorna Earl cited in Timperley, Wilson, Barar, & Fung, 2007, p. ix).

With changing requirements in Australia around professional learning and its alignment to teacher initial and ongoing registration, the following section provides some indication of the current expectations of professional learning in other countries (similar to Australia) in addition to the states and territories of Australia.

3 Current State of Play – Teacher Professional Learning

3.1 New Zealand

Teachers in New Zealand are not required to undertake a mandatory number of hours of professional learning. However, the legislation does expect teachers to complete "satisfactory professional development during the past three years" in order to renew their full practising certificate. The reasoning here is that in order to maintain their full practising certificate, teachers are appraised against the *Practising Teacher Criteria* (see http://educationcouncil.org.nz/content/registered-teacher-criteria-1) that includes the following specific criteria regarding professional learning and development:

- 4. Demonstrate commitment to ongoing professional learning and development of personal professional practice
 - identify professional learning goals in consultation with colleagues
 - participate responsively in professional learning opportunities within the learning community
 - initiate learning opportunities to advance personal professional knowledge and skills
- 5. Show leadership that contributes to effective teaching and learning
 - actively contribute to the professional learning community
- 12. Use critical inquiry and problem-solving effectively in the professional practice
 - systematically and critically engage with evidence and professional literature to reflect on and refine practice.

For teachers who are renewing a provisional practising certificate or practising certificate in the category prior to their confirmation, they are required to be identified as "likely to meet the *Practising Teacher Criteria*" by a professional leader who has employed the teacher within the last three to five years. If assurance from the employer is not available, then a list of professional development activities undertaken by the teacher is requested (Email from the Senior Policy Analyst, Education Council NZ, 24/7/15).

3.2 Ireland

Presently, there are no mandatory requirements for teacher continuing professional development (CPD) in Ireland although the majority of teachers do engage in various forms of professional learning. The Council's policy around CPD is set out in its Policy on the Continuum of Teacher Education. The framework was launch in March/April 2016 with development continuing for implementation in 2020 (see http://www.teachingcouncil.ie/en/Teacher-Education/Continuing-Professional-Development/).

In preparation for this, the Council commenced a consultation process with teachers around their professional learning in 2014. The goal is to enhance the Council's understanding of teachers learning journeys to inform a national framework for teacher learning. The first phase of consultation began with a blank slate when the Council sought feedback and ideas from registered teachers. More than 3,300 teachers joined the conversation. A first draft of the framework, Cosán is available (see http://www.teachingcouncil.ie/en/Publications/Teacher-Education/Cosan-Framework-for-Teachers-Learning.pdf). The framework is embedded in the core values that underpin all of the Council's work including shared professional responsibility, professionally-led regulation, and collective professional confidence (Email from The Teaching Council, Kildare, Ireland, 1/7/15).

3.3 Scotland

Engagement in *Professional Update* (http://www.gtcs.org.uk/professional-update) became a mandatory requirement for all fully registered teachers with the General Teaching Council Scotland (GTCS) from August 2014. Teachers are required to maintain their professional expertise through an agreed program of continuing professional development (CPD) thereby retaining their own autonomy. While administration is held at a local authority or employer level, the GTCS requires that teachers have their professional learning validated on a five-yearly basis. These CPD requirements were set out as part of the McCrone Agreement (Section 2.5, p. 7) produced in 2001. According to this agreement, an additional contractual 35 hours of CPD per annum is to be introduced as a maximum for all teachers, which shall consist of an appropriate balance of personal professional development, attendance at nationally accredited courses, small-scale school-based activities or other CPD activity. This balance is based on an assessment of individual needs that takes account of the school, local and national priorities. It is expected that every teacher will have an annual CPD plan agreed with the immediate manager and that every teacher will maintain an individual CPD record (Email from General Teaching Council Scotland, 23/6/15).

3.4 Ontario

The Ontario College of Teachers is the self-regulatory licensing body for the teaching profession in Ontario with responsibility for licensing primary and secondary education teachers. The College certifies teachers in compliance with the *Teachers' Qualifications Regulation* that governs the certification of teachers in Ontario. Currently, there is no requirement for the completion of an induction period *prior*

to obtaining full certification in Ontario, nor is there any requirement for completion of a mandatory number of professional learning or development days to maintain full certification in Ontario.

Ontario certified teachers are required to participate in and successfully complete a *New Teacher Induction Program* introduced by the Ministry of Education of Ontario when they enter the workforce after certification (Email from Client Services Ontario College of Teachers, 23/7/15).

3.5 United Kingdom

In England and Wales, the Teachers' Standards require all teachers in schools to "take responsibility for improving teaching through appropriate professional development, responding to advice and feedback from colleagues". Professional development is not, however, required for teachers to maintain provisional or full registration of any kind.

The Government's approach to professional development in England and Wales focuses on increasing the capacity of schools to take the lead in developing their teachers and providing greater opportunities for peer-to-peer engagement. The Government believes that head teachers and teachers should be free to choose professional development activities and programs without prescription from central Government. The funding for this is within a school's budget so it is up to schools to determine with their teachers what forms of professional development will be most effective in their particular circumstances.

A national network of Teaching Schools has been created that play a leading role in supporting other schools and in developing peer-to-peer improvement strategies. These Teaching Schools help other schools to identify and access development opportunities based on clear evidence of value and impact.

In terms of the future, the Government has appointed David Weston, Chair of the Teacher Development Trust, to lead an independent group to develop a non-statutory standard for teachers' professional development. The group, known as the Teachers' Professional Development Expert Group will conclude its work towards the end of the year. However, regardless of the standard, schools will still be responsible for defining their approach to professional development according to their own needs (Email from Department of Education, 11/8/15).

3.6 United States of America

Individual states govern their own teacher registration or accreditation so there is no uniform requirement, similar to what has been the case in Australia. As an example, New Jersey requires that all teachers submit a Professional Development Plan (PDP) that aligns to the *New Jersey Standards for Professional Learning* with the supervisor assessing progress for individual teachers on an annual basis within the school.

3.7 Shanghai - China

Recruitment of teachers in China is not standardised with high competition for positions evident in urban areas while rural areas are often forced to employ 'supply teachers' in the local schools. In large cities, such as Shanghai, teaching is a respected, stable and valued profession. Initial teacher education programs ensures a high calibre of students enter into teaching as a profession. Once in the education system, each new teacher is allocated a mentor for a three-year period who observes and critiques

lessons, participates in lesson planning, resource development and examination marking (Centre on International Education Benchmarking [CIEB], nd). Professional development is also an important requirement for all teachers in Shanghai where it is embedded into the job so that teachers spend less than 50% of their working time teaching. It is a requirement that new teachers complete 120 hours of professional development in their first year of teaching then a total of 360 hours in their first five years of teaching. Senior level teachers are expected to undertake 540 hours on professional development every five years (Centre on International Education Benchmarking [CIEB], nd; Organisation for Economic Cooperation and Development [OECD], 2011).

In summary, given these international examples it appears that ongoing professional learning is considered an integral part of teacher renewal and professional growth. In each country cited, professional learning is conceptualised as the mechanism for allowing teachers to select those activities that will contribute to their own learning, professional practice, and ultimately school community. In this manner, teachers become responsible for their own professional growth at a time and place that suits their individual needs. This ownership addresses many of the key issues identifiable in the research regarding the de-contextualised and irrelevant professional development that embodied the traditional professional development experienced by many teachers.

However, given the important role of professional learning it is interesting that with the exception of Scotland as a western country, mandatory hours are generally not required as part of teacher registration or ongoing certification. According to Hendriks, Luyten, Scheerens, Sleegers & Steen (2010), this pattern is also evident in many European countries where there are few incentives to encourage teacher participation in continuous professional development and the penalties for non-participation are non-existent. In contrast to these western experiences, Shanghai as one of the largest cities in China requires high numbers of hours of mandatory professional development to be completed teachers. The other atypical aspect of the Shanghai example is the immersion of professional development as part of the day-to-day working of the teacher, which highlights the perceived priority of place of this component in this region of China.

The following section provides a summary of the current professional learning requirements in other jurisdictions in Australia as a means of comparison with South Australia. Please note that the information below was extracted from websites or from information in emails sent from the relevant regulatory authorities when details provided on the websites required further clarification.

3.8 Australian context

Australian Capital Territory (Teacher Quality Institute [TQI]): Period of teacher registration renewal is every five years. Registered teachers must undertake 20 hours of professional learning (PL) per annum. Teachers can select their own PL but a proportion of it must be from accredited programs with a full list available as a pdf on the website. Teachers are expected to demonstrate a balance with five hours of TQI Accredited PL, five hours of teacher identified PL, and ten hours made up from either category (accredited or teacher identified activity).

The TQI accredits each PL program ensuring it aligns with the career stages of the *Australian Professional Standards for Teachers (APST)* or the *Australian Professional Standard for Principals (APSP)*. The application must also include how the PL program links to the relevant standard while explaining how it addresses individual foci (Email received on 10/8/15).

New South Wales (Board of Studies, Teaching and Educational Standards): To teach in NSW schools, all teachers must be provisionally or conditionally accredited with payment required annually. Once in

schools, teachers have five years (if full-time) and seven years (if part-time) in which to attain Proficient Teacher Accreditation. To maintain this level of accreditation, teachers must demonstrate competent teaching practice and complete 100 hours of professional development (PD). This PD must include 50 hours of Quality Teaching Council (QTC) registered PD (i.e., courses accredited by the Board of Studies, Teaching and Educational Standards) while the remaining 50 hours can include teacher identified PD and, if approved, university or TAFE study. Highly Accomplished and Lead Teacher levels of accreditation must also complete 100 hours of PD to maintain these levels of accreditation (Retrieved August 2015 from, http://www.nswteachers.nsw.edu.au/current-teachers/maintain-proficient-teacher-accreditation/).

Northern Territory (Teacher Registration Board of the Northern Territory): Period of teacher registration renewal is every five years. Teachers are required to undertake 100 hours over five years of professional learning (PL). The Board differentiates between professional development (PD) and professional learning. PD refers to what teachers do and experience that provides the opportunities to enhance professional knowledge, practice and engagement. In contrast, PL describes the growth in knowledge, skills and attitudes that comes from being engaged in professional development activities, processes and experiences i.e., it is about their individual growth as a teacher. All professional learning for teacher registration renewal must align to the APST. It is the responsibility of teachers to explain how their professional learning contributes to their practice against the seven standards and not the specific foci (Email received on 10/8/15).

Queensland (Queensland College of Teachers): Period of teacher registration renewal is every five years. Registered teachers regardless of full, part-time or contractual positions must complete 20 hours of continuing professional development (CPD) per calendar year. The only exception is for teachers who have taught less than 20 days in the year with no CPD requirement. Professional learning activities are differentiated from tasks and expectations that are part of the normal role of a teacher. Professional learning should include a balance of employer-directed and supported, school-supported, and teacher-identified activities (Retrieved July 2015 from, http://www.qct.edu.au/pdf/CPDFrameworkPolicy AmendedforAustralianStandards.pdf).

Tasmania (Teacher Registration Board of Tasmania): Period of teacher registration renewal is every five years. Registered teachers must have engaged in professional development (PD) in the previous five years but there is no mandatory number of hours specified at this stage. Relevant professional development activities include those activities and practices that contribute to a teacher's professional competence, directly or indirectly to enhance teaching and learning. Currently, teachers are able to select their own PD (Retrieved July 2015, https://www.trb.tas.gov.au/Web%20Pages/About%20Teacher%20Registration.aspx).

Victoria (Victorian Institute of Teaching): Period of teacher registration renewal is annually. Registered teachers must engage in 20 hours of professional development (PD) per annum that must align to the APST. Providers of PD are not accredited and there is no definitive list of PD stipulated for teachers. In addition, teachers are required to complete 20 days of teaching and have a national police history check (Email received 17/9/15).

Western Australia (Teacher Registration Board of Western Australia): Period of teacher registration renewal is five years. Registered teachers must undertake 100 hours of continuous professional learning (PL) over this period. Learning activities can be formal or informal from across three domains representing the APST. These include Professional Knowledge (Standards 1 and 2), Professional Practice (Standards 3, 4 and 5), and Professional Engagement (Standards 6 and 7). Teachers can select a balance across these domains to suit their specific PL requirements. Importantly, PL claimed for renewal must be over and above the normal expectations of a teacher's role and responsibilities (including preparation, 2015 planning, programing, assessment, and reporting) (Retrieved July from,

http://www.trb.wa.gov.au/SiteCollectionDocuments/Policy%20-%20Professional%20Learning%20Activities%20Policy%20-%20POL9%20v1.PDF).

The Australian context demonstrates that there is still inconsistency evident in the use of the terms, professional development, professional learning and continuing professional development across the different states and territories. While 20 hours of mandatory PL per annum is required in most states and territories, this can vary across the registration cycle (i.e., 30 hours in one year, and 10 in the next). The Australian Capital Territory and New South Wales are the only places where programs and courses for professional learning undergo some form of accreditation by the teacher registration authorities, with lists of accredited programs available to teachers on the websites. Finally, in all states and territories the emphasis is around teachers selecting professional learning the suits their own needs and those of the school in which they are located. However, some states and territories do require teachers to undertake a proportion of their professional learning across mandatory areas of professional learning (e.g., Australian Capital Territory).

4 Conclusion

In reviewing the *professions* broadly, continuing professional learning of some kind is mandatory with specific hours or points required for most professions. Importantly though, there is a high degree of autonomy allowing each professional to select courses and programs that address individual career needs. In terms of teacher professional learning, the international examples identified here indicate that while there is an expectation that teachers will undertake professional learning there are in most instances no mandatory hours specified. In contrast, Australia (when compared to its other similar western counterparts) appears to be leading the way with a move to mandatory hours while still allowing teachers to select their own professional learning in areas of interest and need.

5 References

- Australian State & Territory Financial Counselling Associations. (2015). National standards for membership and accreditation. Retrieved 18/8/15 from, http://www.safca.org.au/national-membership-standards/
- Borko, H. (2004). Professional development and teacher learning: Mapping the domain. *Educational Researcher*, 33(8), 3-15.
- Centre on International Education Benchmarking (CIEB). (nd). Shanghai China: Teacher and principal quality. Retrieved 17/8/15 from, http://www.ncee.org/programs-affiliates/center-on-international-education-benchmarking/top-performing-countries/shanghai-china/shanghai-china-teacher-and-principal-quality/
- Cochran-Smith, M. & Lytle, S. L. (1999). Relationships of knowledge and practice: Teacher learning in communities. *Review of Research in Education*, *24*, 249-305.
- Desimone, L. (2009). Improving impact studies of teachers' professional development: Toward better conceptualisations and measures. *Educational Researcher*, 38(3), 181-199.
- Gordon, B. & Doyle, S. (2015). Teaching personal and social responsibility and transfer of learning: Opportunities and challenges for teachers and coaches. *Journal of Teaching in Physical Education*, 34, 152-161.
- Guskey, T. R. (2000). Evaluating professional development. Thousand Oaks, CA: Corwin Press.
- Hendriks, M., Luyten, H., Scheerens, J., Sleegers, P. & Steen, R (Eds.) (2010). Teachers' professional development: Europe in international comparison an analysis of teachers' professional development based on the OECD's Teaching and Learning International Survey (TALIS). Luxembourg: Office for Official Publications of the European Union. Retrieved 17/8/15 from, http://doc.utwente.nl/92610/1/NC8010244ENC_002.pdf
- Loughran, J. & Berry, A. (2011). Making a case for improving practice: What can be learned about high-quality science teaching from teacher-produced cases? In D. Corrigan, J. Dillon & R. Gunstone (Eds.), *The professional knowledge base of science teaching* (pp. 65-81). The Netherlands: Springer.
- Mockler, N. (2005). Trans/forming teachers: New professional learning and transformative teacher professionalism. *Journal of In-Service Education*, *31*, 733–746.
- Organisation for Economic Cooperation and Development [OECD]. (2011). Building a high quality teaching profession: Lessons from around the world. Retrieved 17/8/15 from, http://www.oecd.org/edu/school/programmeforinternationalstudentassessmentpisa/buildingahigh-qualityteachingprofessionlessonsfromaroundtheworld.htm
- Timperley, H., Wilson, A., Barrar, H. & Fung, I. (2007). Teacher professional learning and development: Best evidence synthesis iteration. Wellington, NZ: Ministry of Education.
- Wallace, M.R. (2009). Making sense of the links: Professional development, teacher practices, and student achievement. *Teachers College Record*, *111*(2), 573–596.