

REVIEW OF EVIDENCE:
FEATURES OF EFFECTIVE
ASSOCIATE TEACHERS IN
PROGRAMMES OF INITIAL
TEACHER EDUCATION

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Introduction

The authors were commissioned by the Ministry of Education on behalf of the New Zealand Normal School Principals Association to produce a review of the role of the associate teacher in initial teacher education. Both of the authors have had a professional practice and research interest in the practicum (professional experience) component of initial teacher education over many years. Mavis Haigh, Ph.D. (Waikato) is an Associate Professor in the School of Learning, Development and Professional Practice at The University of Auckland, New Zealand. Her research interests include professional/clinical practice in Initial Teacher Education, especially the role of partnership between the university and professional sectors, and assessment within the practicum; the work of teacher educators; and science teacher education. As a monitor for the Education Council of Aotearoa New Zealand she reviews initial teacher education programs across the country. Helen Trevethan, Ed.D. (Otago) is a senior lecturer at the University of Otago College of Education, New Zealand. Her research interests are largely focused on the professional practice of teaching, mentoring beginning teaching and science teacher education. Helen is a monitor for NZQA and the Education Council of Aotearoa New Zealand and is also involved in initial teacher education programme reviews.

The complexity of associate teacher roles

Associate teacher (AT) roles are complex and multi-faceted given that associate teacher – student teacher relationships are situated in complex contexts reflecting the national educational policy of the time, the particular socio-economic, educational and organisational contexts/arrangements of the school and those of the initial teacher education (ITE) provider. They will also reflect the philosophical, pedagogical and procedural expectations of the placement school and ITE provider, programme requirements for the student teachers (STs), and the professional and personal dispositions of the associate teacher and student teacher. This complexity means that associate teacher roles may be expressed differently in different contexts and at different times. In addition, associate teachers combine the role of classroom teacher with mentoring a ST and this may present a challenge for associate teachers which has to be managed, with many seeing their task as ATs as an additional task. It is hardly surprising then that there may be a mismatch between the expectations of the initial teacher education (ITE) providers, ATs (and other school personnel) and STs regarding the enactment of an AT role.

As indicated in the methodology section of this report we carried out an extensive search of recent (2007-2017) academic literature focussing on the practicum and more specifically the role of the school-based associate teachers. Additional earlier, but seminal, literature known to the authors and the results of focussed searches in major teacher education journals and of known academics active in the area were added to the list of those drawn from the general searches. We found a number of reviews of literature linked to the practicum and a few more specifically focussing on the role of associate teachers. To the features identified in these reviews we have added additional roles that were the specific focus of smaller scale studies in order to build a comprehensive list of expectations.

Many of the research reports were small scale explorations of student teachers' wide-ranging expectations of associate teachers and the degree to which these expectations were met. We did not find any study with higher numbers of participants that focussed specifically on the role of the associate teacher, though some studies with higher numbers of participants have canvassed student teacher perceptions of the practicum, including their views of the support their AT had provided. A considerable number of studies focussed on assessment within the practicum and the tensions arising from the duality of support and evaluation.

A confounder of our quest to reach consensus regarding the roles of associate teachers is the variability in the language used by internationally situated reviewers and researchers but we sought understanding of their meaning through careful reading of the articles. We have included a section on terminology in this report.

Summary of expectations of associate teachers

Although there are wide-ranging expectations of associate teachers we have grouped their activities linked with supporting student teachers to become quality teachers into two main categories. These we have labelled as *Assistance* and *Assessment*. Categorisation, by its very nature, tends to separate activities which are, in reality, closely integrated and holistic, and any simple listing gives little indication of the necessary features of high quality AT practice. It is also important to remember that the AT role practised by an associate teacher may be different for student teachers at different stages of their programme and will likely reflect the learning needs and styles of the individual student teacher.

Assistance

This category encompasses those aspects of the AT role frequently labelled as supervision or mentoring as well as those where the associate is providing the student teacher with access to resources and facilitating their entry into the profession.

Being a supervisor includes being a(n): encourager; guide; effective communicator; modeller of practice (teacher of children, planning of teaching episodes, use of student data); counsellor (both professional and emotional, therapist); manager of relations; advocate of the practice of teaching, engaged in coaching, scaffolding and instructing. It may involve team teaching, or carrying out an inquiry with the student teacher.

Providing access includes: welcoming the ST; explaining the context of practice; providing resources (time, materials, students, professional knowledge); inviting the ST into their professional thinking, knowledge (e.g. relationship of educational theory and practice) and experience; creating learning situations; being an advocate/negotiator for the ST; socialising the ST into the school/profession; seeking and providing information; organizing and leading.

Assessment

Assessment for and of ST learning includes: being an observer; providing feedback (verbal and written); helping students to develop their portfolio of practice; encouraging reflective practice; becoming a critical friend; making decisions as to readiness to teach; being a gatekeeper to the profession. ATs are likely to be involved in assessment that is both formative and summative and contribute to credentialing discussions.

A number of researchers have asked the question: Are advocacy, mutuality, and evaluation incompatible mentoring functions? We will address these tensions within the report.

Becoming and being an effective associate teacher

Given the complexity and demand of the AT role it is hardly surprising that *Becoming a Teacher in the 21st Century* (Ministry of Education, 2007)¹ proposed that “the knowledge, skills, and disposition required of associate teachers be specified and formally recognised as the basis for determining a

¹ New Zealand Ministry of Education. (2007). *Becoming a teacher in the 21st century: A review of initial teacher education policy*. Wellington, N.Z. : Ministry of Education.

teacher's qualification for the role of mentoring student teachers" (p.7). This report contributes to this specification.

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Terminology

The language associated with the practicum is important and historically significant (Clarke, Triggs & Nielsen, 2014; Le Cornu & Ewing, 2008). There are multiple terms in use for the various aspects of that context (Whatman & McDonald, 2017). In New Zealand the practicum has been variously described as *practicum*, *teaching practice*, *section*, *placement*, and increasingly, as *professional experience*. The language of the practicum and the practicum participants also varies within and between countries. We have made reference to international practicum literature in this report and some of the terms used differ from those used in New Zealand.

- *practicum: practical experience; professional experience; field-based experience; school-based experience; clinical experience*
- *student teachers: teacher candidates; teacher trainees; interns; pre-service teachers*
- *associate teachers: mentor teachers; supervisors; cooperating teachers, associate lecturers, adjunct lecturers*
- *visiting lecturers: professional supervisors; university liaison lecturers*

Where we are directly referencing international literature we use the terms used in the context of the research. Where we are reporting general findings we use the terms associate teacher and student teacher to meet the term of the contract.

In New Zealand the terminology of the practicum context is changing and *associate teacher* is being replaced with *mentor teacher*, especially in the trial exemplary postgraduate teacher education programmes charged with providing different models of practicum (New Zealand Ministry of Education, 2013). Terminology in the transition period can be confusing and in some cases the same teacher may be called associate or mentor depending on the programme they are supporting. In Australia differences in terminology to distinguish between the traditional model of practicum supervision and a mentoring model were also confusing (Ambrosetti & Dekkers, 2010).

Although, in this report we have used *associate teacher* and *practicum* throughout to meet the terms of the contract, we prefer the terms 'mentor teacher' and 'professional experience'. They are different from the traditional terms, disrupting assumptions and signalling changes in the purpose of the practicum in keeping with changing philosophies of ITE (Le Cornu, 2015).

Methodology

There is a considerable body of international research literature related to the practicum and the roles of the participants. In order to meet the brief for this report – to identify the features of quality mentoring; the key roles and responsibilities of associate teachers; the skills and knowledge that effective associate teachers need; and how to build trust in the practicum – it was necessary to undertake a systematic review of the literature. The major focus of the report is the role of the associate teacher in the practicum. With that in mind we undertook an investigation of the research literature to endeavour to interpret and situate our commentary (Lather, 1999).

The research which informs this report was sourced in a number of ways. Data base searches were conducted using ProQuest, Scopus, Taylor Francis and Google Scholar. The search terms used were combinations of:

cooperating teacher, associate teacher, quality mentoring, effective mentoring, effective cooperating teachers, student teachers, effective associate teachers, primary, elementary (Appendix 3).

Additional searches were conducted using the search terms of “assessment + practicum”, “relational trust” + practicum and “relational trust” + mentoring.

Items from 2007-2017 were sourced and downloaded for further analysis in order to ensure that the report would be informed by the most recent research in the area. Peer reviewed journal articles were prioritised and form the bulk of the references.

Teacher education and mentoring journals that we were aware were publishing a significant amount of practicum-related research were then searched manually online for relevant items published from 2007 through to 2017. The journals searched manually were: *Asia Pacific Journal of Teacher Education*, *International Journal of Mentoring and Coaching in Education*, *Journal of Education for Teaching: International Research and Pedagogy*, *Mentoring and Tutoring: Partnership in Learning*, and *Teaching and Teacher Education*. 0-2 relevant articles were identified per issue. (see Appendix 2)

Although the searches identified many published articles related to mentoring of beginning teachers most of these were discarded in favour of those with a focus on mentoring of STs. Initial searches produced literature about the associate teacher role from ECE, Primary and Secondary contexts.

We have had to be ruthless to make this review manageable. There are many items published prior to 2007 that could have been included but most have not been used by us. However, some seminal and significant items beyond the 2007-2017 scope of the searches were retrieved from reference

lists from more recent articles. The authors' personal familiarity with the literature led us to include other earlier articles we considered seminal.

Additionally we conducted a search of publications listed by academics in New Zealand faculty/school of education websites. We conducted this search for the universities of Otago, Canterbury, Victoria, Massey, Waikato, Auckland and AUT. We searched for research directly linked to the practicum. Where none were obvious we rang the universities asking for additional information. The publications identified in this search are listed in Appendix 1. We recognise that this list is likely to be missing some researchers or practicum-related research outputs given that not all lists on these websites are regularly updated. Our other searches identified additional practicum-related New Zealand research that did not appear on the websites and some from outside of the universities we searched. These have been added to the list of NZ practicum-based research.

Background to practicum

Quality learning experiences for student teachers on practicum are important for their future in the profession and many students rate the practicum as the most important part of their ITE programme (Clarke & Jarvis-Selinger, 2005; Roland & Beckford, 2010; Smith & Lev-Ari, 2005). On the other hand there are concerns about how to provide consistently high quality, educative practicum experiences for student teachers. The relationship between campus and school based student teacher learning is one enduring problem (Vick, 2006; Zeichner, 2010). Changes in priorities and staffing in university ITE programmes have also had an impact on the practicum (Le Cornu, 2010) and it is increasingly apparent that simply being in a school is not sufficient for effective student teacher learning (Grudnoff, 2011). While various aspects of the practicum have been critiqued, many of the concerns have been directed at associate teachers – the focus of this review.

Associate teachers are classroom teachers whose work involves teaching children and also hosting student teachers. In New Zealand, associate teachers who work in primary schools are paid a daily rate for each day that a student teacher is in their classroom, unless they are employed in a 'Normal' School. The term 'Normal School' comes from the French '*écoles normales*' and referred to a group of schools in France in the 16th century which were used to train teachers and were called 'normale' in order to emphasise that they were real schools where children were taught in the normal way. In New Zealand, Normal Schools also have a dual focus: providing education for children and supporting initial teacher education (McGee, 2001). The first of these schools was set up in the 1870s and they were originally schools which included a teacher training department. From 1909 onwards Colleges of Education were established and Normal Schools provided practicum experiences for student teachers, in the expectation that they would be modeling "consistently best practice" (Julian, 1997, p. v). Teachers in those schools have a Normal School allowance built into their annual salary by the Ministry of Education rather than being paid by the initial teacher education provider for each student teacher they host, as is the case for associate teachers in other primary schools. At present, there are 22 Normal Schools in NZ associated with providers that were originally Colleges of Education.

In NZ primary ITE programmes the triadic practicum structure still features strongly. This traditional model has three members; a student teacher, hosted by an associate teacher, visited by a staff member from the initial teacher education provider institution (Grudnoff & Williams, 2010; Rodgers & Keil, 2007; Zeichner, 2002). In triadic practicum settings student teachers are placed in classes for various periods of time and are usually hosted by one associate teacher. A staff member from the initial teacher education provider visits the classroom to observe a student teacher working with children and to lead the assessment of the student teacher's performance.

In New Zealand as long ago as 1979 there were suggestions that that the quality of school based student teacher experiences varied considerably and that success depended greatly on the skill and personality of the associate teacher. Additionally it was perceived that “there is a lack of appreciation by many associate teachers of the aims of in-school training and a lack of coordination between the stage of college courses and what the student does in school” (Department of Education, 1979, p. 32). Associate teachers are often presented as pivotal for successful practicum experiences for student teachers (Bullough & Draper, 2004; Koerner & O’Connell Rust, 2002; Rajuan, Beijaard & Verloop, 2010).

Not all ITE programmes conform to the triadic model and there are some alternative practicum arrangements in NZ. Teach First New Zealand is one of these where learning to teach is field based and students learn to teach while teaching. This pilot programme, run in conjunction with the University of Auckland, is for prospective secondary school teachers. People with undergraduate degrees in priority subject areas are provided with eight weeks training and then placed in schools with support and mentoring for two years before graduating (Whatman, MacDonald, & Stevens, 2015). The New Zealand Graduate School of Education (NZGSE) has developed another practicum model. In their programmes NZGSE staff act as mentors for their interns (student teachers) undertaking observations, providing feedback and engaging in consultations with individual interns (Chick & Knight, 2016). Interns are visited often while they are in schools and the classroom teachers provide the practice setting but are not required to manage student teacher learning.

Partnership practicum models are being developed in some ITE provider institutions. The Collaborative University and School Partnerships Project (CUSP) is a Waikato University initiative. It was developed in response to a view that practicum is most effective where schools and universities work closely together and where campus ITE programmes and school experiences are closely aligned (Harlow, Cooper & Cowie, 2012). The findings showed increased respect, communication and understanding between school and faculty staff. The Eastern Institute of Technology (EIT) also operates a partnership practicum model (Kevern, personal communication, July 19, 2017).

Partnership Schools and EIT work closely together to align and reinforce the learning in both school and campus settings. The University of Auckland uses collaborative practicum models with the final year of the BEdTchg, Grad Dip (Primary and Secondary) and MTchg (Primary and Secondary) programmes. For the third-year BEdTchg programme (Grudnoff & Williams, 2010) STs were placed in schools rather than with individual ATs and Adjunct Lecturer (AL) positions were created in schools. Those teachers who acted as adjunct lecturers managed and coordinated school based ST learning and communicated with the ITE provider. These studies showed that working in this way is

challenging and costly, but that closer relationships between the OTE provider and schools can result with the potential to enhance student teacher learning.

Despite these alternatives, in most cases practicum configuration has changed little over time in New Zealand, (Grudnoff, 2011). The triadic model is still a strong feature of most ITE programmes and the associate teacher is still the person who spends most time in the school with the ST. It is therefore important that the role of associate teacher is fully understood.

“When a teacher commits to supervising a PST, they immediately adopt a second role, that of teacher educator” (Le Cornu, 2015, p.14).

The AT role is demanding, complex and contested. There are many opinions on what the role entails and what the priorities are. Haigh and Ward (2004) explored the attributes of a “good” associate teacher as described by a cohort of secondary teacher trainees in New Zealand. The student teachers in their study illustrated the complexity of the role when they suggested the ATs should be:

Adviser, advocate, appraiser, assessor, collaborator, communicator, critic, encourager, expert, ... helper, giver of knowledge, informer, guide, learner, listener, mentor, modeller, ... negotiator, observer, organizer, provider of resources, ... rescuer, risk-taker, role model, sage, sharer, ... supporter teacher, ... understander and welcomer. (p. 137)

Not all teachers are suited to the AT role (Ambrosetti, 2014; Beck & Kosnik, 2002). Working with STs is different from teaching a class of children, and skill as a classroom teacher is no guarantee of success in facilitating student teacher learning (Sewell, Hansen & Weir, 2017). A significant body of research suggests that ATs are not well-prepared for their role and that AT professional development can address some of the problems of the practicum (Koster, Korthagen & Wubbels, 1998; Sanders, 2009; Timperley, 2001; Wang & O’Dell, 2002). Typical of those is an Australian study which states that associate teachers need to “undertake professional development and training in effective mentoring to enable them to provide fully-rounded practicum experiences for the pre-service teachers with whom they are required to work” (Keogh, Dole & Hudson, 2006, p. 1). Some examples of professional development for ATs in New Zealand include Hoben (2007), who trained secondary school associate teachers in the complexities of giving useful feedback, which she said:

requires understanding of the goals of practicum, the objectives of the lesson observed and some understanding of how to deliver feedback in ways that ensure the recipient ‘hears’ and takes responsibility for making the necessary changes. (p. 181)

Timperley (2001) trained associate teachers to engage in ‘mentoring conversations’ with STs with the intention of moving the AT’s focus from practical concerns to those which promote student teacher professional learning (see section on assessment). She concluded that “mentors are able to

improve the quality of their conversations with their student teachers in ways that are likely to enhance the professional learning of the student teachers if they are given the training in how to do so” (p. 22) . McDonald (2004) also endorsed improvements to AT practices claiming this would lead to “a higher calibre of student teachers and ultimately improved learning and teaching for children in the classroom” (p. 85). The question then is what are the determinants of an effective associate teacher? The broader question at the heart of this report is what is the role of the associate teacher?

Literature review

There are so many recommendations for enacting and interpreting the associate teacher role that it is difficult to tease out a coherent vision for this work (Ambrosetti, Knight & Dekkers, 2014; Brondyk & Searby, 2013) We have examined the research literature from 2007 to 2017 to investigate whether there is a contemporary research base which clearly defines effective associate teacher practice. Here we refer to Appendix 3 - a collection of articles which focus on the role of the effective associate teacher in their work with student teachers. The process for sourcing and selecting material for this table is described in the methodology section of this report. Some articles from before 2007 which were seminal to our investigation into associate teacher best practice were also included. In total 34 articles were selected for inclusion and analysis. We have identified some of the themes which emerged from the literature to explore contemporary views of associate teacher best practice.

Immediately apparent from an examination of the material we have found is the diversity in the papers addressing the role of the associate teacher in the practicum. Some of the research papers are qualitative, of short duration and small scale (e.g. Killian & Wilkins, 2009; Orland-Barak & Hasin, 2010). The larger studies are based on surveys or questionnaires and canvas student teachers for their perceptions of effective associate teachers (e.g. Sayeski & Paulsen, 2012; Torrez & Krebs, 2012) or canvas the associate teachers themselves (Black, Olmstead & Mottonen, 2016; Crasborn, Hennissen, Brouwer, Korthagen & Bergen, 2008; Hall, Draper, Smith & Bullough, 2008). A significant proportion of the items are conceptual pieces presenting the authors' views (e.g. Abramo & Campbell, 2016; Ambrosetti & Dekkers, 2010). Others material offers conclusions drawn from literature reviews (e.g. Clarke, Triggs & Nielsen, 2014; Crutcher & Naseem, 2016, Lawley, Moore & Smajic, 2014). Overall there is a plethora of opinion about what makes an AT "effective".

We began our analysis by comparing ST and AT views of AT effectiveness as presented in the contemporary research and found there was considerable agreement between the two groups. Both ATs and STs emphasised the importance of strong, positive, professional relationships (Black, Olmstead & Mottonen, 2016; Margolis, 2007; Ragland, 2017). Support from ATs was consistently seen as pivotal for ST learning (Crasborn, Hennissen, Brouwer, Korthagen & Bergen, 2008; Moody, 2009).

An emotionally supportive practicum environment was particularly important for STs and in some cases was the most important factor in a good practicum (Franklin, Torrez, & Krebs, 2012). Associate teachers need to make student teachers feel part of the classroom and to offer support, respect and

encouragement (Ambrosetti, Knight & Dekkers, 2014; Butler & Cuenca, 2012; Faga, 2016; Izadina, 2015). A survey of ATs in Canada (Black, Olmstead & Mottonen, 2016) showed ATs believed that to be effective they need to have patience, effective communication skills, and the ability to develop positive relationships with STs. Learning to teach is more difficult in an environment where STs feel unsafe or unwelcome. Emotions and learning are interlinked (Timperley, 2013) and emotional wellbeing seems to be crucial for successful practica (Beck & Kosnik, 2002; Faga, 2016; Rajuan, Beijaard, & Verloop)

There were some differences in priorities between STs and ATs in the literature we reviewed. Several studies reported that STs wanted ATs to allow them some 'freedom' in order for them to develop their own teaching style (Faga, 2016; Lawley, Moore & Smajic, 2014; Moody, 2009; Rajuan et al., 2007; Starkey & Rawlins, 2011). It seems that they wanted to be valued and respected for the ideas that they bring to the practicum (Ferrier-Kerr, 2009; Huang & Waxman, 2009), in effect having a voice in their own learning. These STs saw the value of balancing support with the freedom to experiment, in effect experiencing a mixture of support and challenge (Haigh et al., 2006). It follows then that effective ATs must be able to assess ST capabilities and to be willing and able to step back and allow them to take risks (see assessment section). This was not a priority for ATs in the literature we reviewed.

AT classroom practices have a significant impact on ST's later identity as teachers (Rozelle & Wilson, 2012). From their comprehensive literature review Clarke, Triggs and Nielsen (2014) suggested that ATs who have "teaching experience, expertise as classroom teachers and a commitment to professional learning make good mentors" (p. 191). It seems that STs want ATs to model what they understand as sound, current practice (Fayne, 2007; Haigh & Ward, 2004; Koerner & O'Connell Rust, 2002; McDonald, 2004).

Timperley (2013) claimed that "professional knowledge and skills need to be actively constructed within a holistic conceptual framework organised around important ideas." (p. 12). STs raised the importance of seeing that framework being enacted by ATs. One example came from Sayeski & Paulsen's (2012) study where STs said that seeing ATs who believe all children can learn was powerful. In effect these STs were calling for AT practices which reflect the principles of social justice which inform many ITE programmes, highlighting the need for coherency between the campus and school contexts. ATs also recognized that it is important for them to understand the philosophy and expectations of the ITE programme (Ragland, 2017). In the practicum literature alignment is presented as one of the indicators of effective ITE programmes (Darling-Hammond, 2006; Whatman & MacDonald, 2017). It can be challenging for ST learning when they feel that what they are being taught at the provider institution conflicts with what they see happening in their practica (Bradbury

& Koballa, 2008). One response to the issue of alignment was explored in a small study where alumni from an ITE programme were used as ATs (Ragland, 2017). They concluded that this was beneficial for ST learning because ATs were modelling what the STs were being taught and also ATs were likely to be more confident in their work as graduates of the programme.

From our examination of the literature we conclude that there is a plethora of research suggesting how ATs can be better trained and prepared but there is a lack of definitive literature that presents evidence-based arguments about which aspects of AT work make the most difference. Opinions about how to be a good AT abound but what is missing is an evidence base to inform our understandings of what distinguishes effective ATs from the others.

Assistance as part of associate teachers' work

“The optimal situation for learning consists of a supportive interpersonal context that contains situations of challenge to create opportunities for students to develop coping skills in accordance with their evolving identities as individuals” (Rajuan, Beijaard & Verloop, 2010, p. 204)

Student teachers have high expectations of their associate teachers and many student teachers see the value of their practicum in terms of the quality of their associate teacher. The AT role is to support student teacher learning and to support them to building their professional capacity as they move towards creditation/credentialing in their ITE programme. Although this is a complex undertaking, Wang and Odell (2002) claimed that the predominant role of a mentor is to assist STs by providing “emotional and technical support” (p. 510).

STs feel very vulnerable in the practicum as evident in Duffield’s (2006) metaphor for the associate teacher as a safety net for ST tightrope walkers. STs in Beck and Kosnik’s (2002) study provided further evidence when they reported that they wanted

emotional support from the associate teacher ... a peer relationship with the associate teacher... collaboration with the associate teacher... flexibility in teaching content and method ... feedback from the associate teacher ... sound approach to teaching and learning on the part of the associate teacher. (p. 96)

It seems that the most important way an AT can assist ST learning in the practicum is to provide them with a supportive environment. Supportive ATs are empathetic, respectful, trusting and positive (Faga, 2016). When AT and ST are naturally drawn to each other this comes easily, but the forced intimacy of the pairing of STs and ATs in the practicum can be problematic. While some AT/ST relationships become very close, there is considerable potential for interpersonal difficulties due to differences in worldviews, teaching philosophies, understandings of the purpose of practicum and role expectations (Leshem, 2012; Trevethan, 2017). For many STs their ideal practicum is one where they develop close personal friendships with their AT (Bloomfield, 2010) but there is some evidence that this may not be best for their learning. Rajuan, Beijaard, and Verloop (2010) investigated the impact of matches and mismatches between AT and ST perceptions of the AT role and found that while extreme mismatched pairings were not conducive for ST learning, pairings which were mixed

provided optimal learning opportunities. Tang (2003) also supports the idea of learning from differences, rather than from relationships where student teachers and associate teachers hold similar views. It appears that there may be some advantages to a degree of dissonance and that being too similar may not provide the stimulus necessary to question the status quo and inquire into practice however, a safe emotional environment and mutual respect and trust must underpin the relationship.

An effective associate teacher will develop a supportive, learning-focussed relationship with the student

Technical support with planning and behaviour management, and resourcing was once the main focus of practicum (Le Cornu & Ewing, 2008; Timperley, 2013). Teaching was viewed as a craft based occupation with an emphasis on the practical nature of the work. Learning to teach is now more often seen as a research informed profession where teachers examine and transform existing knowledge and practice (Leshem, 2014; Wang & O'Dell, 2007). Nonetheless assisting STs to develop their technical skills and pedagogical content knowledge is still very important (Hudson, 2007) and there are those who believe that there is a need for greater emphasis on the actual practice of teaching in ITE generally (Ball & Forzani, 2009; Beauchamp, Clarke, Hulme, & Murray, 2015; McDonald, Kazemi, & Kavanagh, 2013). In the practicum ATs are able to address technical matters in context by discussing and exploring options, rather than providing STs with answers. By working collaboratively to explore the technical aspects of teaching ATs can assist STs to develop increasing autonomy and professional agency as part of a research based profession.

The role of AT as expert is being challenged in the literature as teachers are increasingly seen as collaborative problem solvers, exploring strategies and resources to facilitate diverse students to reach their learning goals (Timperley, 2013). Although there is evidence that both STs and AT view teaching expertise as an important part of the AT role (Black Olsted, & Mottopnsen, 2016; Hall, Draper-Smith & Bullough, 2008; Rippon & Martin, 2006; Torrez & Krebs, 2012; Saveski & Paulsen, 2012) this is just one of many priorities. It is important that STs have access to competent models of teaching but being able to share the thinking behind their practices and to admit to uncertainty are also valuable in an AT. Graham (2006) describes the difference in terms of 'maestros' and 'mentors' and suggests that while both groups in his study were effective teachers the mentors were willing and able to examine and discuss their practices, while the maestros saw their role as

providing a model to be replicated. While this can be useful, especially early in an ITE programme, long term there is more to be gained from “fostering a disposition of sustained inquiry into teaching practice” and “thinking about teaching as a complex process where there is rarely one ‘right’ answer” (Bradbury, 2010, p. 1053).

An effective associate teacher will collaborate with the student teacher to develop their repertoire of technical skills

Learning to be a teacher requires the development of professional knowledge, professional practice, and knowledge of self (Baum & Korth, 2013; Orland-Barak & Hasin, 2010). ATs can support ST learning by helping them to become critically reflective (Le Cornu, 2005). Reflection is important for ST learning because it captures the complexities and uncertainties of teaching and emphasises that teachers need to be able to consider a range of alternatives with an awareness of their own preconceptions and biases (Harford & MacRuairc, 2008). ATs can assist STs to build their reflective capacity through the type of conversations they have and the way they model and support opportunities for ST critical reflection (Ferrier-Kerr, 2009; Whatman & MacDonald, 2017). In this way STs can learn to question their assumptions and develop the disposition to inquire into their practices. This is consistent with the view that teachers are also learners (Le Cornu & Ewing, 2008). The ‘best’ ITE programmes are cohesive and coherent, allowing STs opportunities to link learning across contexts (Timperley, 2013), making ‘horizontal connections’ (Conner & Sliwka, 2014). ATs can assist STs to make those connections, supporting transferable learning across contexts. In order to do this they must be familiar with the conceptual framework of the programme, the structure and content of courses, the regulatory environment and educational theory and research.

As every child is different so is every ST. ATs can assist STs by being sensitive to their individuality including cultural influences, and recognising and valuing their prior knowledge and experiences (Baum & Korth, 2013; Conner & Sliwka, 2014). According to Rippon & Martin, (2006) the best ATs are those who can “negotiate their way through the shifting sands of support at the right time for each person allowing the power to shift accordingly” (p. 86). ATs support ST learning when they make space for them in the classroom by presenting to the children as a team rather than a hierarchy and by stepping back and allowing the ST to develop their own teacher relationship with the class (Bloomfield, 2010; Duffield, 2006). ATs need to be able to accept and celebrate differences (Glenn, 2006) and to genuinely believe that there are many ways to be a teacher allowing STs to develop their own teaching style over time (Moody, 2009). Otherwise STs can feel restricted and frightened of making mistakes if

they deviate from the AT's practices. It must be acknowledged that this 'letting go' can be challenging for teachers in an environment of teacher accountability and national standards.

An effective associate teacher can accept difference and flex to allow student teacher growth

Effective communication is a vital aspect of the AT role (Black, Olmstead, & Mottonen, 2016; Faga, 2016; Lawley, Moore & Smajic, 2014). Clarifying expectations early in the practicum and good communication skills can avoid some of the misunderstandings and assumptions that can sabotage an effective AT-ST learning relationship (Allen, Butler-Mader & Smith, 2010). Timperley's (2001) mentoring conversations are one example of the power of dialogue to aid ST learning. Margolis (2007) also celebrated the importance of effective communication and reported on the impact of ATs using explicit strategies when sharing their thinking with STs. They concluded that the useful strategies were:

- Sharing struggles and brainstorming solutions
- Modelling specific approaches and explaining rationales
- Team-teaching
- Learning together
- Mining mistakes (p. 89)

These strategies emphasise the power of professional conversation for ST learning. Listening is also important for effective communication. Abramo and Campbell (2008) celebrate the value of STs sharing their personal narratives (biographies and emotions) with ATs as an aid to developing effective learning relationships. ST voice is important in the practicum and respectful relationships are pivotal to allowing for effective communication.

An effective associate teacher is able to facilitate effective communication

Learning to teach requires more than mastery of teaching and classroom management skills and practices. It also requires a clear sense of the professional aspects of teaching (Le Cornu & Ewing, 2008; Shulman, 2005). The AT has a significant influence on how STs see teaching. Supporting STs to enter the profession means looking beyond the classroom to the political, social and economic influences on teaching. ATs can assist STs to become aware of the external influences on classroom practice. ATs can further assist STs in developing professional identities by involving them in facets of their professional lives (Sayeski & Paulsen, 2012).

STs are very much influenced by the way their ATs view teaching and the ITE programme. Butler and Cuenca (2012) express concern that ATs who do not hold the same ideals as the ITE programme cause conflict for STs and there is some evidence that when these differences exist, STs are likely to align their practices and their view of the profession with the AT (Bullough & Draper, 2004). ATs need to be aware of this responsibility and to support transformative thinking and the potential for change rather than endorsing the status quo (Patrick, 2013).

An effective associate teacher demonstrates respect for their profession

The AT role is very personal. STs seem to want their ATs to be good, principled people who are “guided by precepts of equity and justice” (Groundwater-Smith, Ewing, & Le Cornu, 2015, p. xi). A New Zealand study highlighted the importance of associate teacher positivity for STs manifesting as “enthusiasm, flexibility, being supportive and approachable and having a sense of humour” (McDonald, 2009, p.4). Rippon and Martin (2006) also found overwhelming evidence that STs value ATs’ personal qualities such as fairness, honesty, a sense of humour, and respect for other people’s feelings, over ATs’ professional abilities. ATs can assist STs by being proud of their profession, respectful of their pupils and colleagues and enthusiastic about their AT role.

The ways that ATs can assist ST learning are innumerable. Here we have highlighted some that we consider to be important but more important than the activities themselves is the environment in which the assistance is offered. We see the overall context for AT assistance as one of collaboration between ST and AT, where understandings are shared and reciprocal learning is the priority. In Te Ao Māori terms, the relationship between AT and ST must be anchored in the principles of ako and rangatiratanga. This suggests reciprocity and power sharing based on rangatiratanga and

manaakitanga, where STs have a voice and are actively identifying their needs and being part of the decision-making about their own learning (Cram, Kennedy, & Te Huia, & Paipa, 2012).

Conclusion

The AT role is time consuming and demanding. It requires energy, enthusiasm, skill and a commitment to working in partnership. Communication is key in the practicum setting, where much is assumed (Grundy, Robison & Tomazos, 2001) and misunderstanding is the “norm rather than the exception” (Allen, Butler-Mader & Smith 2010, p. 618).

With respect to assisting a student teacher on the practicum an effective associate teacher will

- *develop a supportive, learning-focussed relationship with the student teacher*
- *collaborate with the student teacher to develop their repertoire of technical skills*
- *assist the student teacher to make links between campus and school learning*
- *accept difference and flex to allow student teacher growth*
- *facilitate effective communication*
- *demonstrate respect for their profession*

Assessment as part of associate teachers' work

"The challenge of making judgements about student teaching is akin to those facing a jury. There are rarely ever tight and precise definitions of what composes guilt or innocence in a jury trial ... however the process still calls for informed judgments." (Raths & Lyman, 2003, p. 215)

"Professional Experience is a time of learning but it is also a time of performing in the eyes of the profession. Physically watched by the supervising/mentor teacher, ... pre-service teachers commonly experience a sense of surveillance. And, yet, they also need to be observed to be 'calculated' by the profession, for it is by their performance they are assessed as eligible to enter the profession as beginning teachers." (Rorrison, 2010, 229-230)

In addition to assisting student teachers as they learn to teach, associate teachers working within most New Zealand ITE programmes are also required to assess this learning, both formatively, as 'assessment for learning' and summatively as 'assessment of learning'. To do so in a way understandable by all is important as high quality practica have been characterised as providing "transparent formative and summative assessment opportunities to develop and evaluate student teachers' readiness for teaching" (Whatman & McDonald, 2017, p. 2). Although creditation / certification is the responsibility of the ITE provider (Ministry of Education, 2016), when ATs assess student teacher learning and discuss their judgements with the university supervisor they are also contributing to ITE's gatekeeper role, for which it is accountable to the profession (Rorrison, 2010).

An effective associate teacher will engage in transparent formative and summative assessments with the student teacher

These formative and summative assessment and certification roles align with Joughin's (2009) identified functions of assessment in higher education settings, that are: "supporting the process of learning; judging students' achievement in relation to course requirements; and maintaining the standards of the profession" (p. 1). Boud (2009) challenges us to consider how assessment processes function regarding a new teacher's development of "assessment [measurement] thinking" (p. 35), which he considers "an integral part of ongoing learning" (p. 36). Helping student teachers to develop the capacity to be inquiring practitioners who hold strong notions of assessment informing judgements about practice is important in their transition from ITE programme to future professional life. Assessment, therefore, may also become educative by helping student teachers to refine their judgements of their practice. For this to happen student teachers must be intimately involved with the assessment of their practice throughout the practicum. Practicum assessment is

therefore envisaged as “being done with and for the student” (Klenowski, 2009, p. 89); a point also made by Whatman and MacDonald (2017):

... formative and summative assessment of student teachers [should be] a negotiated, transparent and agreed process between the tertiary institution, the school/ECE setting and the student teacher. (p.28)

An effective associate teacher will model the range of purposes for assessment for the student teacher

The assessment process is complex, and responsive to context, autobiography and the expectations of those involved (Haigh & Ell, 2013). The student teacher, the associate teacher and the university supervisor are all involved and each of these participants will make judgements about the student teacher’s learning from different perspectives (Tillema, 2009). Those participating in practicum assessments need to consider together what is to be assessed and how to carry out the assessment (Smith, 2007). Negotiation of process between stakeholders is also supported by research into assessment practice during the practicum that indicates there may be considerable disagreement about assessments between mentors and candidates, both about what should be prioritised during assessment and the standards to be reached (Haigh, Ell & Mackisack, 2013). Smith (2010, p. 36) suggests that instead of seeing such disagreements as “obstacles to valid assessment, they can be exploited to initiate professional learning for the candidates”. Haigh and Ell (2014) have also indicated that dissensus between assessors, such as that which may be experienced between associate teachers and university supervisors, opens rich opportunities for professional engagement and learning.

An effective associate teacher will negotiate the process of assessment with the student teacher.
An effective associate teacher will see disagreements about assessments as an opportunity to initiate professional learning for the student teacher (and the associate teacher).

Supporting the process of learning - formative assessment/assessment for learning

Assessment for learning during the practicum is a means of moving student teachers from a position of identified learning needs to a place of competence by “helping students identify strengths and

weaknesses in a continuous, nonthreatening way” (Tillema, 2009, p.164). This assessment for student teacher learning will be part of everyday practice and information sought for judgment making will be associated with this everyday practice. A longitudinal study carried out by researchers from the University of Auckland and teacher-researchers from four Auckland primary schools probing the question: Who is ready to teach? (Haigh et al., 2013) showed that information about the student teachers’ practice is sought from observations of the student teacher’s practice, from the student teacher’s documentation, from discussion (student teacher with associate teacher) and by listening to the opinions of others, such as colleagues, the principal and school students. Participants then reflect and respond to this information. Reflection and response must be student teacher-centred with the goal of supporting the “reflexive, possibility-thinking and risk-taking creative endeavours of the beginning teacher” (Haigh & Ward, 2004, p. 134).

The use of the terms ‘seeking’, ‘reflecting’ and ‘responding’ positions assessment for learning as an inquiry process where the focus is on enhancing learning rather than programme/procedural compliance (Klenowski, 2009). This view is supported by Loughran (2004) who suggests that moving from ad hoc reflection into systematic enquiry will enhance the student teachers’ development and graduate student teachers equipped to take an inquiry stance (Cochran-Smith & Lytle, 2009) into their practice; to take a lead in reflective discussions about their practice and determine their response.

An effective associate teacher will see everyday practice as an opportunity for assessment for learning; will encourage the student teacher to take an inquiry stance into their practice.

‘Feedback’ and ‘feedforward’ are significant aspects of assessment for learning. In a survey of 164 New Zealand student teachers, Starkey and Rawlins (2011) found that “verbal feedback on individual lessons was used very often and was found to be extremely useful by the students” (p. 11). However, other studies indicate that the “type of feedback and the way it is given can be differentially effective” (Hattie & Timperley, 2007, p. 81). Both the nature of the feedback delivery and the degree of ST participation in making judgments on performance and in target-setting have been shown to influence the student teacher’s construction of professional knowledge and self-regulated learning (Tang & Chow, 2007). However, some recent studies have shown that mentors still tend to dominate learning dialogues (Mena, Hennison & Loughran, 2017) reinforcing Smith’s (2007) argument for school-university cooperation in the preparation of mentors who can use

assessment to enhance ST learning by being knowledgeable about the impact of feedback and feedforward.

An effective associate teacher will be knowledgeable about the impact of feedback and feedforward on student teacher learning.

To better improve the quality of mentoring discussions about practice a number of researchers have proposed following a format designed to promote deeper inquiry into the complex, cognitive practice of teaching rather than focussing entirely on immediate issues of practical performance. There has been a move away from the use of checklists, which are perceived as instrumental in nature and restrictive of nuanced and constructive feedback (Rusznyak, 2011) to the use of instruments that see teaching more holistically, probe for understanding and value theory and encourage the student voice/active engagement in the process. These approaches foreground evidence and recognise the need to seek shared understanding before looking forward.

One approach commonly used in New Zealand is that of mentoring conversations (Timperley, 2001). The strategies include: “basing dialogue on observed data; sharing responsibility for identifying strengths and problems; discussing reasons for particular practices being strengths or problems; establishing the assumptions underlying the student teacher’s practice; giving advice with reasons; and inquiring about the consequences of the advice” (p. 113). Her paper includes a suggested outline of stages for the conversation.

- (i) the agenda setting stage. Here, mentors name the issues they want to raise, invite dialogue from the student teacher, offer support by sharing the responsibility for improvement and check that the agenda was shared by the student teacher.
- (ii) disclosing and evaluating observations. Here, mentors summarise their observations and disclose their evaluations, ask for the student teachers’ reactions, explore any differences and design ways to test them. Agreement regarding concerns should be reached.
- (iii) diagnosing the difficulties
- (iv) working out a strategy for doing something different.
- (v) closure, where the mentor asks the student teacher to summarise what she or he has learned and checks for any outstanding issues.

(adapted from p. 113)

In her paper Timperley also provides criteria for judging the quality of the learning conversation. These reflect the values of mutual respect and valid information that underpin the format of the mentoring conversation. The six criteria are: 1: concerns clearly identified; 2: examples used to illustrate evaluations; 3: implications for improvement identified (in relation to the school students' learning); 4. checks carried out to ascertain if mentor's concerns were shared by the student teacher before giving advice on how to improve; 5: engaging personal theories of teaching (discussing ST's reasons for practising in the way they did); and, 6: development of a shared action plan (based on the shared diagnosis of the problem).²

By using an approach such as that described above that is mutually understood by both participants, some of the more difficult aspects of assessment and feedback on the practicum may be lessened. The clarity of the approach may minimise some of the challenges experienced by mentors associated with achieving a balance between advocacy and the ethical obligation of assessment (Johnson, 2008), and the challenges associated with delivering a difficult message yet retaining strong and collaborative working relationships (Wajnryb, 1996).

An effective associate teacher will know how to run mentoring conversations that reflect the values of mutual respect and valid data. He/she will regularly check on the quality of their practice of mentoring conversations.

Judging students' achievement in relation to course requirements - summative assessment

As the student teacher's time on practicum nears the end teachers associated with the practicum will, for most ITE providers, be involved in the decision-making about the student teacher's achievement of the course requirements. The course expectations / learning outcomes are often set by the tertiary institution or, in situations where strong university school relationships exist, they will have been mutually set by the school and the ITE provider (e.g. Grudnoff, 2011). While a few teacher education programmes require students to be graded on an A-D scale, many practica for teacher candidates are assessed pass/fail, which some argue can, at times, compromise the high standards teacher education programmes expect their pre-service teachers to meet (Doerger & Dallmer,

² An appendix to Timperley's paper provides a scale for rating the quality of learning conversations between mentors and student teachers that could be used by associate teachers to evaluate their practice.

2008). Additionally, “assigning marks for teaching competence is a fraught undertaking if marks are to be standardised across different assessors and reflect teaching as a complex, coherent practice” (Rusznack, 2012). Analysing assessors’ justification of marks given, Rusznack showed that the marks reflected the assessors judgment of both the student teachers pedagogical thinking (rationale for lesson design and reflections) and the student teacher’s ability to deliver lessons. Framing their study with Social Judgment Theory (Cooksey, 1996), Haigh, Ell & Mackisack (2013) explored the cues and policies that evaluators use to judge student teachers’ practice. They found that assessors focused on both aspects of professional practice (dimensions: knowledge and planning; enacting teaching and management; and assessment and use of evidence) and personal attributes (dimensions: learning as a teacher; personal qualities; and relationships) as they determined whether student teachers were ready to graduate into teaching. However, assessors tended to prioritize these dimensions differently (Haigh & Ell, 2014) resulting in a degree of dissensus between assessors.³

Other New Zealand studies highlight the relatively high rate of dissensus in associate teachers’ judgment-making. Spriggs’ small-scale 2016 Masters research used one of Haigh et al.’s (2013) data generating approaches (20 Questions) as she explored how “professional development on the Graduating Teacher Standards [Education Council, 2015a] affected the cues selected by associate teachers as important in judgement making” (p. i). She found that although professional development around making decisions brought about some change of focus/cue for the ATs carrying out assessments of student teachers’ practice, these changes were idiosyncratic rather than uniform. The ATs still relied very heavily on ‘gut feeling’, claiming to use around 50% of gut feeling whenever they made a judgment about readiness to teach. Such reliance on gut feeling is likely to lead to inconsistent judgment across associates and schools. Spriggs suggested that we need to explore ways to increase the robustness and reliability of judgments and that this may require intensive professional development so that all the participants move to a shared understanding of the purpose and objectives of the practicum (Lind & Wansbrough, 2009), a process that would appear to be welcomed by many associate teachers, especially in their early days of being an associate (Mackisack, 2011).

³ A University of Waikato study “Deciding if student teachers are ready to teach: Towards shared understandings” (Cooper, Haigh, et al.) repeating some aspects of Haigh et al.’s 2013 study is also finding consensus and dissensus patterns similar to that of the original TLRI study, both within and between schools.

An effective associate teacher will be aware of his/her priorities associated with making judgments about student teachers' practice, and guard against a tendency to make judgments based on 'gut feeling' rather than evidence

The final judgment of the quality of a student teacher's teaching while on practicum is frequently made triadically, with a discussion between the associate teacher, the student teacher and the university supervisor (or visiting lecturer) (Turnbull, 1997). The university supervisor will have observed the student teacher teach, often immediately before the triadic discussion. During the discussion the student teacher provides evidence of his/her practice against the learning outcomes for the practicum. This evidence is discussed and decisions are made as to whether or not the learning outcomes have been achieved. Traditionally the final decision is made by the representative of the ITE provider though this role has been queried by some. For example, Zhang and colleagues at Waiariki Institute of Technology, exploring the summative assessment of practicum in early childhood centres, call into question "visiting lecturers' final judging role in assessment of practicum" (p. 147). Following her doctoral study examination of assessment practices in ECE institutions, Aspden (2014) also challenged the concept of one (or a small number) of visits by the university supervisor before summative judgments are made and suggested that associate teachers play a more active role in the summative judgments of student teacher practice. Certainly associate teachers are very concerned when their recommendations to fail an under-performing student are not followed by the university (Danyluk, Luhanga, Gwekwerere, MacEwan, & Larocque, 2015). Alternatives to the triadic assessment discussion are provided by others. For example, Mtika, Robson, and Fitzpatrick (2014) explored the value of joint observation of student teacher practice by associate and university supervisor simultaneously before engaging in tripartite dialogue.

The idiosyncratic judgments found by the Haigh et al. (2013) and Spriggs (2016) studies suggest that judgments made by a team of assessors rather than individuals may ensure that judgements are more robust. Thus it can be argued that the more people engaged in an assessment decision the more likely a defensible, professionally based decision will be reached. A number of ITE providers have moved to establish assessment practices where more than three people make the assessment judgments and reach shared decisions. The involvement of an increased number of assessors is often associated with new school-university partnership arrangements. Identified school leaders support ATs in their role resulting in a four-member team building quadraciprocal practicum

relationship (see, for example, Grudnoff (2011), Hetherington (2016) and reports from the CUSP project at the University of Waikato (Harlow, Cooper & Cowie, 2013)). In some instances principals were also involved as assessors (Grudnoff, Haigh & Mackisack, 2016).

Failure of a practicum raises important professional issues. In New Zealand student teachers may only repeat a failed practicum once (ECNZ, 2016). A Canadian study explored the failure to fail in the final practicum (Danyluk, Luhanga, Gwekwerere, MacEwan, & Larocque, 2015). Their results indicated that both university supervisors and associate teachers find the decision to fail a student teacher difficult. They tend to be reluctant to fail a student teacher, to keep them from moving on, so respond by scaffolding more intensively (Goodwin & Oylar, 2008). Failing a student teacher clearly engenders strong emotions for all concerned. For example, the act of failing a student teacher raises personal professional questions for the associate teacher around adequacy of provided support and possibly their own competence. It may also challenge the cultural and social positioning of the participants and brings with it consideration of implications for the profession if unprepared and ill-fitted student teachers are passed and subsequently graduated into the profession. Lee (2007) provides us with a thoughtful reflexive inquiry into her supervision of a student teacher doing a repeat practicum.

An effective associate teacher will be able to defend their judgments about the student teacher to the student teacher, the university supervisor and colleagues who have been associated with the student teacher during the practicum in order that they, together, reach robust defensible positions

Maintaining the standards of the profession – formalised assessment for certification or credentialing

Although certification is the responsibility of the ITE provider (ECANZ, 2016), when ATs assess student teacher learning and discuss their judgements with the university supervisor they are also contributing to ITE's gatekeeper role.

Goodwin and Oylar (2008) asked the question: "What are the "decision-making points and assessments that enable teacher educators to answer the question, who is ready to teach?" (p. 469). They concluded that this question is not easily answered given that "learning to teach is complex, contextually specific, autobiographically grounded and informed by socio-political understandings"

(p. 476) and that decisions about readiness to teach resist simple formulae. Their conclusion is similar to that reached during the longitudinal study carried out by Haigh et al. (2013). They found that uncertainties about the purpose of the assessment, the influence of variable contexts and different understandings of “good practice” (Haigh et al., p.4) all made assessment of student teacher practice on the practicum problematic. Consequently, over time there have been many attempts to develop and test student teacher performance in ways that are both valid and reliable. There has been a shift from the use of multiple choice questions and the ticking of check boxes to assessing more authentically and holistically at the site of practice (Darling-Hammond & Hyler, 2012) albeit using standardised performance assessment scales such as the edTPA in the United States of America. This measure of student teacher performance developed by Stanford University has been operational since 2013 as a summative assessment to be given at the end of a teacher preparation programme for teacher licensure or certification (edTPA Homepage, n.d.). It has attracted both advocates, who value the standardised nature of the assessment and critics who cite the dangers of a high-stakes and outsourced assessment that may not be particularly responsive to contextual variation.

Other smaller scale rubrics for summatively assessing student teacher performance have been tested for inter-rater reliability and internal consistency. One such attempt was that of Chen, Hendricks and Archibald (2011) who designed and validated the Assessing Quality Teacher Rubric. The rubric focussed on task design, presentation, management and responsiveness of the student teacher to those they were teaching. Although only a small scale study evaluating 21 lessons taught by Physical Education student teachers the results indicated that the rubric had ecological and construct validity, with high inter-rater reliability.

An effective associate teacher will understand their contribution, negotiated with the university, to the formalised assessment processes involved in certification / credentialing of student teachers

Challenges involved in assessment of the practicum

There are a number of identified issues associated with the assessment of student teacher performance on the practicum. Issues deriving from the complex nature of teaching, variable contexts, and the role of autobiography have been addressed already.

One issue of particular concern for associate teachers arises from their dual roles of assistance and

assessment. Having to provide support as the same time as carrying out summative assessment can lead to what Ciuffetelli-Parker and Volante (2009) describe as “irreconcilable tensions” (p. 44). Yet it is a tension that needs to be addressed as mentors, in association with university supervisors have an ethical imperative to evaluate a student teacher’s readiness to enter the profession (Johnston, 2008). Others believe that the place of assessment in the practicum should be more intentionally problematised. Rorrison (2010), for example, advocates for the student teacher, placing their needs first and questioning any prioritising of assessment’s gatekeeping role. She suggests a “more humane, trusting and respectful attitude towards assessment” (p. 505).

Johnston (2008) believes that the tensions between advocacy and evaluation in mentorship can be addressed by actively preparing [teachers] for the mentor role. He suggests that mentors should be “educate[d] ... in the art of boundary maintenance [and how] to consistently make feedback appropriate and objective (p. 39). A New Zealand secondary context study (Hoben, 2012) has shown how the provision of mentor-related professional learning, led by a school-based practicum liaison teacher, has the potential to improve both the mentors’ level of engagement in mentoring student teachers and their practice of mentoring. This finding reflects the findings from Hoben’s earlier (2006) study of the impact of provision of mentor-related professional learning on mentor practice, though in the earlier study the professional learning was provided by the university. At Massey University, Palmerston North, Sewell, Hansen and Weir (2017) have highlighted the value of designing collaborative and inquiry focussed professional learning programmes that involve both school and university participants to build mentoring capacity. Another example comes from Australia where Sim (2010) ran Project Supervision, a collaborative of teachers and university personnel who joined together to learn how to improve feedback on the practicum.

An effective associate teacher will engage in professional learning around the role.

Although their studies were focussed on the mentoring of beginning teachers in the UK, Hobson and Malderez (2013) alert us to another potential issue concerning the balance of support for, and assessment of, student teacher learning; that is, “the practice of judgemental mentoring or “judgementoring” as an obstacle to school-based mentoring realizing its potential and an impediment to the professional learning and wellbeing of beginner teachers” (p.). They are concerned that judgementoring may become the default understanding of mentoring, thus threatening the mentoring relationship from which support and advocacy flows. Research from

Australia also points to the need for shared understandings of the nature and role of assessment between the university and school. Lack of shared understandings appear to be having a considerable adverse impact on the student teacher's experience of assessment (Allen, 2011).

A number of studies have suggested ways by which those supervising student teacher practice have managed this tension. For instance, in a self-study of his feedback practice, a United States researcher, Basmadjian (2011), identified that he used five approaches. The first he labelled "back door" critique—that is, "a conference that began positively but that indirectly pushed the student teacher to critically examine his or her teaching practice" (p. 106). In the second approach he "depersonalized his critique" (p. 110) by situating his concern within a broader professional context. The third strategy he used to balance assistance with assessment was to remove any doubt that they were meeting programme expectations. He gave them the "Green Light: "You Passed" (p. 111) but still encouraged the student teacher to engage in critical self-inquiry. Fourthly, he used humor – both verbal and non-verbal to break down barriers between himself and the student teacher, perhaps lessening the power differential that a supervisor has over a student (Anderson, 2007) and thus opening the floor to critical engagement around the lesson. The fifth strategy that Basmadjian used in his attempts to balance assistance and assessment was to focus on the school students' learning. He found that the more he "turned the focus away from what they did in a lesson, and toward what their students learned (or did not learn), the more they seemed willing to engage in open, critical dialogue about their teaching practice" (p. 115). Basmadjian concluded that through the judicious use of these five strategies he was removing the threat of a supervisor. He believed that he had achieved a shift in ownership of the evaluation from himself to the student teacher. He also recognised the need for differentiated instruction and support given that student teachers have variable learning and emotional needs that need to be addressed.

An effective associate teacher will understand the tensions inherent in his/her dual roles of assistance and assessment and work towards managing this tension in transparent ways.

Summary

In addition to assisting student teachers as they learn to teach, most associate teachers are also required to assess this learning, both formatively, as 'assessment *for* learning' and summatively as 'assessment *of* learning'. There are a number of issues associated with the assessment of student

teacher performance on the practicum deriving essentially from the complex nature of teaching, variable contexts, and the role of autobiography (of both the associate teacher and the student teacher). Additionally tensions arise from a lack of shared understandings of 'good practice'; some from communication challenges; and some from the AT's dual role of assistance and assessment.

With respect to assessment of a student teacher on the practicum an effective associate teacher will:

- *engage in transparent formative and summative assessments with the student teacher.*
- *model the range of purposes for assessment for the student teacher.*
- *negotiate the process of assessment with the student teacher.*
- *see disagreements about assessments as an opportunity to initiate professional learning for the student teacher (and the associate teacher).*
- *see everyday practice as an opportunity for assessment for learning; will encourage the student teacher to take an inquiry stance into their practice.*
- *be knowledgeable about the impact of feedback and feedforward on student teacher learning.*
- *know how to run mentoring conversations that reflect the values of mutual respect and valid data. He/she will regularly check on the quality of their practice of mentoring conversations.*
- *be aware of his/her priorities associated with making judgments about student teachers' practice, and guard against a tendency to make judgments based on 'gut feeling' rather than evidence.*
- *be able to defend their judgments about the student teacher to the student teacher, the university supervisor and colleagues who have been associated with the student teacher during the practicum in order that they, together, reach robust defensible positions.*
- *understand their contribution, negotiated with the university, to the formalised assessment processes involved in certification / credentialing of student teachers.*
- *engage in professional learning around the role.*
- *understand the tensions inherent in his/her dual roles of assistance and assessment and work towards managing this tension in transparent ways.*

Associate teachers as mentors

In this literature review some studies reinforced the traditional view of the AT- providing support (both through mentoring and providing access) and feedback as well as communicating effectively (Black, Olmstead & Mottonen, 2016; Izadina, 2015). Others suggested that the role is more dynamic and educative and essentially collegial rather than hierarchical (Bradbury, 2010; Glenn, 2006). The purpose of the practicum is to support student teacher learning and ATs can assist STs to feel, act, and think like teachers (Roberts, Benedict & Thomas, 2013).

From a traditional view of learning to teach this might be seen as developing a set of competencies to be learned by a less experienced person from observation of a supportive expert. This view is predicated on perpetuating the status quo, as student teachers follow an existing model of practice where the associate teacher is a model practitioner (Glenn, 2006; Koerner & O'Connell Rust, 2002). But some researchers contend that teaching is more than a learned craft, claiming that learning to teach requires the development of "a set of dispositions ... about teaching, children and the role of the teacher" (Hammerness et al., 2005, p. 387). From this viewpoint student teachers should be developing a range of personal skills and attributes which will allow them to develop their reflective and adaptive abilities (Korthagen, 2004; Murray, Nuttall & Mitchell, 2008; Timperley, 2013). Grudnoff and Tuck (2003) suggest that ATs should encourage student teachers to engage in critical reflection and question the status quo in order to become resilient, reflective practitioners (Ethell & McMeniman, 2000). Zeichner (1996) says that this is necessary because:

unless the practicum helps to teach prospective teachers how to take control of their own professional development and to learn how to continue learning, it is miseducative, no matter how successful the teacher might be in the short run. (p. 217)

This change to the associate teacher role can be described as a change from "supervision" to "mentoring" (Le Cornu & Ewing, 2008) where mentoring requires collaboration and facilitation of on-going reflective conversations (Kane & Broadley, 2005). The reflective model suggests that associate teachers should support student teachers to develop their own personal philosophy of teaching and to set and achieve personal goals rather than following the associate teacher model without question. Viewed in this way, associate teachers need to be skilled reflective practitioners who can articulate their own philosophy of teaching and who are open to challenge and change. The mentoring role is conceptualised in so many ways in the literature that it is challenging to find a universally acceptable definition (Butler & Cuenca, 2012). Ambrosetti and Dekkers (2010) suggested a definition of mentoring that they believe could apply to preservice teacher education:

Mentoring is a non-hierarchical, reciprocal relationship between mentors and mentees who work towards specific professional and personal outcomes for the mentee. The relationship usually follows a developmental pattern within a specified timeframe and roles are defined, expectations are outlined and a purpose is (ideally) clearly delineated (p. 52)

The term “educative mentor” has been used to signal a different way of looking at the AT role. This phrase was first introduced to the literature by Sharon Feiman-Nemser (Schwille, 2008) and is most often applied to mentoring beginning teachers (Langdon, 2007) but it is also a useful frame for the work of the associate teacher (Abramo & Campbell, 2016; Bradbury, 2010; Erbiglin, 2014). Educative mentoring is different from more traditional forms of mentoring in that it is focussed on equipping the mentee for the uncertainties of the future (McDonald & Flint, 2011). Student teachers are preparing to teach in a world with “an unprecedented degree of complexity, fluidity and uncertainty” (Bolstad & Gilbert, 2012, p. 11) and they will need the skills, knowledge and dispositions to be flexible, adaptable and resourceful (Timperley, 2013). Teacher education in general, and the practicum in particular, should provide opportunities for student teachers to engage in collaborative inquiry, testing new ideas, and professional conversations (Schulz, 2005). The associate teacher can help student teachers to access those opportunities by re-envisaging their role as educative mentors.

Learning is at the heart of educative mentoring. Achinstein and Athanases (2004) describe a ‘bi-focal’ approach to mentoring which is focussed on children’s learning as well as that of the student teacher. Langdon (2014) goes further and suggests that the shift from teaching children to becoming a mentor requires a ‘tri-focal’ perspective where mentors, mentees and students are all positioned as learners. Also integral to the educative mentoring model is the notion of reciprocity. When mentoring is collegial and collaborative there are potential learning opportunities for both mentor and mentee (Riveros, Newton, & Burgess, 2012; Simpson, Hastings & Hill, 2007). This is different from the traditional associate teacher role of providing emotional support, giving feedback and helping with resourcing.

Educative mentoring occurs when both associate teacher and student teacher are looking for answers to problems, reflecting and questioning” (Achinstein & Barrett, 2004). Viewing teaching as reflective practice requires a deeper level of thinking and conversation in the practicum setting and brings different expectations to the associate teacher role. Educative mentors help focus student teacher reflection on their own teaching in order to improve (Kane & Broadley, 2005; Timperley, 2001). They model reflective practice when they think aloud and share their beliefs and understandings with their mentees as they plan and teach. As educative mentors, associate teachers

need to examine student teacher actions and the thinking behind those actions as well as their own (Zanting et al., 2001). Facilitating critical reflection is at the heart of educative mentoring (Schwille, 2008) and educative mentors must be flexible, open-minded and curious in order to model teaching as inquiry for mentees in a genuine way.

Educative mentoring includes both support and challenge for mentees (Rajuan et al., 2008). Scaffolded support should be timely and relevant, and individualised for each mentee (Schwille, 2008). Mentors need to be able to establish what mentees can do and know where and how to provide new challenges (see assessment section). In order to do so they need knowledge of effective teaching, of the goals of the ITE programme, and of system requirements such as teacher competence regulations and graduate profiles.

Educative mentoring is a collaborative partnership rather than a master class (Langdon & Ward, 2015). Educative mentors encourage mentees to engage with the puzzles of practice as colleagues rather than apprentices to expert teachers. Working in this way with student teachers requires more than expertise in classroom teaching. Teachers need to be able to establish learning relationships with mentees that are both personal and professional (Ambrosetti, 2014). Educative mentors cultivate “a disposition of inquiry, focussing attention on student thinking and understandings and fostering disciplined talk about problems of practice” (McDonald & Flint, 2011, p. 35).

While teaching skills and knowledge are an important focus for all forms of mentoring, the context in which that learning takes place is also important. Student teachers want to feel supported, respected and trusted by their mentors (Leshem, 2014; Moody, 2009; Torrez & Krebs, 2012). Educative mentors must be sensitive to each individual and develop positive working relationships with their student teachers. “Educative mentoring, then, means providing multiple and varied opportunities for novices to try out the intellectual and interactive tasks of teaching under the thoughtful and caring guidance of a more knowledgeable mentor” (Schwille, 2008, p. 141). Stanulis and Russell (2000) claim that trust and communication are both integral to mentoring student teachers.

Educative mentoring can be distinguished from other forms of mentoring by an emphasis on inquiry into practice and recognition of opportunities for reciprocity in the mentoring relationship (Bradbury, 2010). Effective ATs are increasingly being expected to foster a disposition of inquiry into teaching practice as part of their role (Abramo & Campbell, 2016; Bradbury, 2010; Schwille, 2008) and educative mentoring is a useful way of framing the work of the associate teacher.

Relational trust and the practicum

Trust is critical in contexts where the success of one person's efforts is dependent on the contribution of others. ... Relational trust involves a willingness to be vulnerable because one has confidence that others will play their part. It should not be mistaken for feelings of warmth or affection. (Robinson, Hohepa & Lloyd, 2009, p. 183)

In his book *Visible Learning for Teachers: Maximising impact on learning* Hattie (2012) asserts that positive and deep levels of trust between the teacher and the learner enables the learner to articulate their learning needs and the teacher to respond to the learner's needs. This will also be so when the learner is a student teacher and the teacher is a mentor. As Hudson (2016) indicates "mentoring is founded on the relationship between the mentor, as a more experienced professional, and the mentee as one who is learning about the profession" (p. 30). Moving from friendly and relatively inconsequential teacher conversations to an exchange of ideas aimed at improving learning entails risk taking and trust (Holmlund Nelson, Deuel, Slavitt & Kennedy, 2010). It is trust that creates an "environment in which people are willing to take risks" (Le Fevre, 2010, p. 84). Relational trust is a specific form of trust occurring in learning communities that have demonstrated a significant impact on student learning outcomes (Bryk, 2010). It has variously been labelled as the "connective tissue" of effective education (Bryk & Schneider, 2003) and the "glue" of professional learning communities (Cranston, 2011).

While some mentoring literature addresses the role of trust in the development of competent novice teachers, much of the literature that focusses specifically on the concept of relational trust comes from the school leadership field. One much quoted study into the impact of relational trust comes from this field. Bryk and his fellow researchers (Bryk, 2010) have, over 15 years, investigated student outcome data from more than 400 Chicago elementary schools as well as conducting surveys of stakeholders in those schools. They aimed to identify the internal actions and external community conditions that distinguished schools that had improved student outcomes from those that didn't. From this work they proposed the notion of relational trust, anchored in the social exchanges attached to key role relationships found in schools with the most effective schools having a high degree of relational trust among their stakeholders. Relational trust "describes the extent to which there is consonance with respect to each group's understanding of its and the other group's expectations and obligations." (Cranston, 2011, p. 62). Relational trust appears to foster collaboration and promote "willingness among staff to grow professionally" (Cranston, 2011, p. 59). This assertion is supported by findings from a study conducted by Carroll-Lind, Smorti, Ord and Robinson (2016) in the early childhood sector in New Zealand. They claimed that the "participating leaders built their teams' capacity for using conflicting views as starting points in developing shared

meanings around pedagogical leadership knowledge to improve teaching and learning in ECE” as they developed trust that enabled them to move from “congenial discussions to deeper and more honest, collegial discussions based on valid data” (p. 34).

Relational trust is a social process; it is “grounded in the social respect that comes from the kinds of social discourse that take place across a school community” (Bryk & Schneider, 2003, p.41). Since practicum occurs within the social context of schools, elements of the school’s social context will impact on a student teacher’s learning. Pogodzinski (2012) identified levels of relational trust associated with collective responsibility as one of four elements that impact new teacher socialisation. The other three elements were characteristics of the novices and their colleagues, alignment between novices and their colleagues, and the nature of their interactions (both frequency and content).

Although Bryk’s longitudinal study focussed on school student outcomes it can be argued that student teacher outcomes will also be enhanced if they are working within a social context of high relational trust. Such contexts would share some of the key features associated with advancing students’ learning that were identified by Bryk and his colleagues. There would be strong university-school ties (Grudnoff, 2011; Harlow, Cooper & Cowie, 2013) with a high level of congruence and consistency with respect to expectations of student teacher learning (Haigh, Pinder & McDonald, 2008); a student teacher-centred learning climate that responds to the student teacher’s needs (Ferrier-Kerr, 2009); and a practicum focussed leadership that encourages the community members to share responsibility for the student teachers’ learning (Grudnoff, Haigh & Mackisack, 2016). All members of the community must “become conscious and explicit about how [they] imagine [their] role” (Stanulis & Russell, 2000, p.78) if the partners in the teacher education endeavour are to develop the mutual trust and open communication that enhances student teacher learning. A significant aspect of fostering relational trust as ATs build student teachers' self-efficacy in their work with inquiry will derive from the stance that the ATs take in their approach to their own inquiries (Fowler, 2012).

Ferrier-Kerr (2009) investigated the professional relationship developed between associate teachers and student teachers during the student teachers’ final practicum. She found that establishing a strong professional relationship was critical to the student teacher’s learning. Establishing personal connections; thoughtful communication about roles; matching supervision styles to the needs of the student teacher; collaboration that facilitated learning for AT, ST and school students; and consciously nurtured reflection were all involved in the development of this strong professional relationship. Both associate and student teacher have to be actively engaged in building this relationship if student teachers are to develop the strong sense of belonging in a school (Ussher,

2010) that underpins the development of trust. However, Poskitt (2005) cautions that the building of educative professional relationships requires more than simply a willingness to do so. Both partners must acknowledge their limitations and be open to the views of the other partner in the learning process. This requires:

a disposition of humility and reflexive integrity ... Such beliefs are prerequisites to meaningful self-reflection, knowledge building and collaborations with others. Elements of trust and risk-taking are involved along with values of respect and reciprocity. (Poskitt, 2005, p. 137)

Although she was focussing on the role of visiting lecturers in the support of student teacher learning, Fayne (2007) suggests that once trust and rapport have been established student teachers are more likely to accept guidance, feedback and suggestions. Associate teachers who value the building of relationships with student teachers will also build respect and trust and thus open the way for deeper professional conversations. However, studies suggest that associate teachers' tendency to overtly position themselves as experts can impede optimal learning conditions for the student teacher (Patrick, 2013). A New Zealand case study (Cobb & Harlow, 2017) suggests that rather than thinking of the associate teacher – student teacher partnership in terms of expert plus novice, considering practicum as “legitimate participation in a community of practice” (Lave & Wenger, 1991, p. 88) allows a less hierarchical relationship to form between an AT and ST that enables them to become “co-learning partners” (p.88). Anthony et al.'s (2015) TLRI study also suggests that when teacher educators and student teachers establish sound professional relationships this enables them to together explore new activities and pedagogies with student teachers becoming engaged in authentic problems of practice (Anthony et al., 2015).

The central importance of relationships are also contended as features of effective Maori medium ITE (Hohepa, Hāwera, Tamatea & Heaton, 2014; Murphy, McKinley, & Bright, 2008). Although not specifically writing about the building of trust in the ITE practicum, Murphy, McKinley, and Bright (2008) argue that Treaty anchored relationships of partnership, participation and protection in ITE will improve learning outcomes for the student teacher, in their case Te Reo Māori competence of graduates from Māori medium ITE programmes. They (p. 8) indicate that “professional conversations between ITE programme providers and teachers need to be encouraged.” Building such Treaty anchored relationships into the practicum experience are also likely to contribute to building relational trust and improved student teacher learning outcomes. Cram, Kennedy, Kelly-

Hepi Te Huia, and Paipa (2012) have used the six key principles of Kaupapa Māori⁴ when considering how Maori medium and bilingual practicum experiences become effective learning experiences for student teachers. They provide implications for mentors for some of these principles, as well as for the kura, the ITE provider and the Ministry of Education. For example, two principles with particular pertinence to building professional relationships and trust are:

Principle 1: Tino Rangatiratanga – The principle of self-determination

Implications for the mentor include: The engagement with student teachers ... needs to be a power sharing relationship based on rangatiratanga and manaakitanga. Have them identify their needs and be part of the decision making process about their own training.

and

Principle 5: Whānau – the principle of extended family structure

Implications for Mentors include: Support [ST] to create positive relationships with kura whānau and classroom parents in particular; support the [ST] to identify 'effective practices' for facilitating whānau engagement.

Bryk and Schneider (2003) have identified factors that foster relational trust in schools. These include the centrality of principal leadership and supporting teachers to reach out to parents. Other key factors appeared to be stability of the community and voluntary association. Teacher education equivalents supportive of student teacher learning might be strong collaborative partnerships between schools and initial teacher education providers, engagement of the principal in practicum organisation and practice, strong school-community relationships (see Hedges & Gibbs (2005) for an early childhood example), and an experienced and knowledgeable associate teacher body who have chosen to become involved in student teacher education and therefore pre-conditioned towards building trust. Such features have been built into the practices and processes of school-university partnership models (e.g. see Cooper & Grudnoff, 2017).

⁴ : 1. Tino Rangatiratanga – The principle of self-determination 2. Taonga Tuku Iho – The principle of cultural aspiration 3. Ako Māori – the principle of culturally preferred pedagogy 4. Kia Piki Ake i Ngā Raruraru o te Kāinga – the principle of socio-economic mediation 5. Whānau – the principle of extended family structure 6. Kaupapa – the principle of collective philosophy

Concluding reflection: Challenges of writing about “effective” associate teachers

The purpose of practicum is to support STs learning to teach and develop a teacher identity and yet we found no empirical evidence that unequivocally indicated what features of the AT role have the most impact on ST learning. Crutcher and Naseem (2016) reviewed empirical research about effective AT practices from 2000. Sadly, they determined that there is no evidence in the literature to support any particular view of mentoring. In her review of the literature, Hawkey (1997) suggests that “much [of the] literature on mentoring is either descriptive or declarative with little analysis or theoretical underpinning to the study and practice of mentoring” (p. 325). Brondyk and Searby (2013) agree, claiming that there are no “research-based, universally agreed upon “best practices” in mentoring” (p.190). On the other hand Sewell, Hansen and Weir (2017) claimed that there are many studies which have “shown the impact of the AT’s professional development on student-teachers’ learning” (p. 23). Their example was Grudnoff and Williams (2010) who reconfigured the practicum and worked with school and university staff to create a community approach to the practicum. STs in that study reported more cohesive collaborative learning experiences than they had experienced previously suggesting that the individual AT may not be the most effective for ST learning.

Many researchers have offered their opinions on what makes an effective AT (Abramo & Campbell, 2016; Black, Olmsted & Mottonen, 2016; Bradbury, 2010; Crasborn et al., 2008; Glenn, 2006; Lawley, Moore & Smajic, 2014). In Australia, Rosie le Cornu (2015) said that good supervising teachers (ATs) are defined by:

- the demonstration of highly developed teaching practices and relational capacities;
- supporting PSTs to build constructive learning relationships with themselves, students, colleagues and members of the school community;
- helping PSTs to interpret and respond to events by sharing their expertise and local knowledge, including discussions about their own teaching practices;
- supporting PSTs to plan and implement an appropriate learning program for students;
- building PSTs’ understandings of student data and assisting them to interpret and draw on data and student feedback to effectively plan and modify their teaching;
- the provision of authentic and continuous feedback on PSTs’ effectiveness in the classroom;
- assisting PSTs to collect sources of evidence for their portfolios and to reflect on this evidence to assess their impact on student learning;
- making evidence based professional judgements on PSTs’ performance against the Graduate level of the Professional Standards;
- the provision of a clearly written, evidence-based summative report. (p. 14)

We have created our own list of suggestions for effective ATs (Appendix 4) but we acknowledge that they are just that – suggestions, albeit based on our interpretations of findings we accessed during our extensive review of the practicum literature. We have little empirical evidence linking our list of the qualities of effective ATs with improved student teacher learning and thus we contend that it is difficult to define an “effective” AT. We are inclined to endorse the work of Sanders, Smith, Norsworthy, Barthow, Miles, Ozanne, and Weydeman (2009) who *suggest* effective mentors exemplify five habits. These habits are: “1. building a learning relationship 2. engaging in learning dialogue 3. being intentional 4. making time to mentor 5. valuing the role” (p. 3). This list emphasizes the importance of mentoring as a learning-focussed relationship without directing the specific actions necessary to achieve that.

No matter how comprehensive the list, we know that one size does not fit all. One student teacher may have a positive learning experience with an associate teacher and the next student teacher may not. One alternative to the challenges of placing one student teacher with one associate teacher is a community view of practicum, with student teachers being ‘placed’ with the school rather than with a particular associate teacher, leaving the school to make the appropriate selection of associate teacher following consideration of the student teacher’s learning needs and the ITE provider’s expectations for that practicum.

Supporting student teachers learning to teach is increasingly being seen as a shared endeavour where communication and partnership are useful for improving practicum for student teachers (Allen, Ambrosetti & Turner, 2013; Cooper & Grudnoff, 2017; Harlow, Cooper & Cowie, 2012; Grudnoff, Haigh & Mackisack 2017). In these more collaborative models of practicum the idea of reflective practice is expanded to incorporate “a focus on reciprocal learning relationships and a deepening participatory process” (Le Cornu, 2010, p.196). Labelled the “critical interventionist” model by Beck and Kosnik (2000) it suggests that all members of the practicum community should work together to achieve transformative teaching and learning as part of a professional learning community (Tang & Choi, 2005). The associate teacher is conceptualised as a “trusted professional colleague” (Le Cornu, 2010, p. 200) and the relationship between initial teacher education providers and the schools is collegial, authentic and reciprocal.

Conclusion

We have found only very limited evidence directly linking particular AT practices with improved ST learning. We believe that the role of AT remains complex and difficult to define. ATs are not the

problem or the solution – they are just one part of the practicum community which includes student teachers, ITE programme staff, school staff, school pupils, and the school community.

The AT role is personal (Orland-Barak, 2014) and attempting to describe the ideal person for this role is perhaps unwise. Accordingly we offer this as our conclusion:

An effective associate teacher is:

... a learner who realizes that teaching is about living, theorizing, trying, reflecting, failing, succeeding, conversing, reading, planning, and trying things out all over again as new groups of students and new knowledge in the field challenge her to move to uncharted territory time and time again. There are no perfect cooperating teachers, only perfect conditions that feed the intellect and spirit of teachers willing to accept the challenge of [working with] a student teacher (Baum & Korth, 2013, p. 188).

References used in the report – not yet complete

- Ambrosetti, A., & Dekkers, J. (2010). The interconnectedness of the roles of mentors and mentees in pre-service teacher education mentoring relationships. *Australian Journal of Teacher Education*, 35(6), 42-55.
- Anderson, D. (2007). The role of cooperating teachers' power in student teaching. *Education*, 128(2), 307-324.
- Anthony, G., Hunter, R., Hunter, J., Rawlins, P., Averill, R., Drake, M., ... Harvey, R. (2015). *Learning the work of ambitious mathematics teaching*. Teaching and Learning Research Initiative. Wellington: NZCER.
- Basmadjian, K. G. (2011). Learning to balance assistance with assessment: A scholarship of field instruction. *The Teacher Educator*, 46(2), 98-125.
- Bryk, A. (2010). Organising schools for improvement. *Kappan*, 91(7), 23-30.
- Bryk, A. S., & Schneider, B. L. (2003). Trust in schools: A core resource for school reform. *Educational Leadership*, 60(6), 40-45.
- Chen, W., Hendricks, K., & Archibald, K. (2011). Assessing pre-service teachers' quality teaching practices. *Educational Research and Evaluation*, 17(1), 13-32.
- Ciuffetelli-Parker, D., & Volante, L. (2009). Responding to the challenges posed by summative teacher candidate evaluation: A collaborative self-study of practicum supervision by faculty. *Studying Teacher Education*, 5 (1), 33-44.
- Clarke, A., Triggs, V., & Nielsen, W. (2014). Cooperating teacher participation in teacher education: A review of the literature. *Review of Educational Research*, 84(2), 163-202.
- Cobb, D. & Harlow, A. (2017). Rethinking the associate teacher and pre-service teacher relationships: Powerful possibilities for co-learning partnerships. In B. Cowie & R. McNae (Eds.). *Realizing innovative partnerships in educational research (pp 87-95)*. Rotterdam: Sense Publishers.
- Cochran-Smith, M., & Lytle, S. L. (2009). Inquiry as stance, *Practitioner research for the next generation*. New York, New York: Teachers College Press.
- Cooksey, R. (1996). The methodology of social judgment theory. *Thinking and Reasoning*, 2(2/3), 141-173.
- Cooper, B., & Grudnoff, L. (2017). Redesigning authentic collaborative practicum partnerships: Learnings from case studies from two New Zealand Universities. In M. Peters, B. Cowie, & I.

- Menter (Eds.), *A Companion to Research in Teacher Education* (pp. 223-236). Singapore: Springer. doi:10.1007/978-981-10-4075-7
- Cram, F., Kennedy, V., Kelly-Hepi Te Huia, M., & Paipa, K. (2012). *Background Papers: Māori Medium Initial Teacher Education Outcomes: Graduate Profile & Effective Practicum and Induction Experience*. Wellington: Katoa Ltd.
- Cranston, J. (2011). Relational trust: The glue that binds a professional learning community. *Journal of Educational Research*, 57(1), 59-72.
- Danyluk, P. J., Luhanga, F., Gwekwerere, Y. N., MacEwan, L., & Larocque, S. (2015). Failure to fail in a final pre-service teaching practicum. *The Canadian Journal for the Scholarship of Teaching and Learning*, 6(3), 1-14.
- Darling-Hammond, L., & Hyler, M. (2013). The role of performance assessment in developing teaching as a profession. *Rethinking Schools*, 27, 10–15.
- Doerger, D., & Dallmer, D. (2008). Maintaining High Standards in a Pass/Fail Practicum. *International Journal of Learning*, 15(5) 173-177.
- edTPA (n. d.). *Home page*. Retrieved 13 June 2017 from <http://edtpa.aacte.org/about-edtpa>
- Education Council. (2015). *Graduating teacher standards: Aotearoa New Zealand*. Retrieved from: <http://educationcouncil.org.nz/sites/default/files/gts-afterer.pdf>
- Education Council. (2016). *Approval, review and monitoring processes and requirements for initial teacher education programmes*. Retrieved from http://educationcouncil.org.nz/sites/default/files/Approval%2C%20Review%20and%20Monitoring%20Processes%20for%20ITE%20programmes%20August%202015_1.pdf
- Fayne, H. (2007). Supervision from the student teacher's perspective: An institutional case study. *Studying Teacher Education*, 3(1), 53-66.
- Ferrier-Kerr, J. (2009). Establishing professional relationships in practicum settings. *Teaching and Teacher Education*, 25, 790–797.
- Fowler, M. Leading inquiry at a teacher level: it's all about mentorship. *Set: Research Information for Teachers* [Wellington], 3, 2012, 2-7.
- Goodwin, A. L., & Oyler, C. (2008). Teacher educators as gatekeepers. In Cochran-Smith, M., Feiman-Nemser, S., McIntyre, D., & Demers, K. (2008). *Handbook of Research on Teacher Education*, (pp. 468-490). Routledge/Taylor & Francis Group and the Association of Teacher Educators: New York & London.

- Grudnoff, L. (2011). (2011) Rethinking the practicum: Limitations and possibilities. *Asia-Pacific Journal of Teacher Education*, 39(3), 223-234. DOI: 10.1080/1359866X.2011.588308
- Grudnoff, L., Haigh, M., & Mackisack, V. (2016). Re-envisaging and reinvigorating school-university practicum partnerships. *Asia-Pacific Journal of Teacher Education*, p.1-14 doi: 10.1080/1359866X.2016.1201043
- Haigh, M., & Ell, F. (2014). Consensus and dissensus in mentor teachers' judgements of readiness to teach. *Teaching and Teacher Education*, 40, 10-21.
- Haigh, M., & Ward, G. (2004). Problematising practicum relationships: Questioning the 'taken for granted'. *Australian Journal of Education*, 48(2), 134-148.
- Haigh, M., Aitken, S., Ala'alatoa, B., Chandler, S., Ell, F., Grudnoff, L.,Villers, H. (2013). *Are they ready to teach? Assessing student teachers' final practicum*. Teaching and Learning Research Initiative. Wellington: NZCER.
- Haigh, M., Ell, F., & Mackisack, V. (2013). Judging teacher candidates' readiness to teach. *Teaching and Teacher Education*, 34, 1-11.
- Haigh, M., Pinder, H., & McDonald, L. (2008). Practicum's contribution to students' learning to teach. In C. Rubie-Davies & C. Rawlinson (Eds.). *Challenging thinking about teaching and learning* (pp. 251-268). New York, NY : Nova Science Publishers.
- Harlow, A., Cooper, B., & Cowie, B. (2013). *Collaborative University and School Partnership Project: Implementation in Practice 2012*. Hamilton, New Zealand: Wilf Malcolm Institute of Educational Research.
- Hattie, J. (2012). *Visible learning for teachers: Maximising impact on learning*. New York, NY: Routledge.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77 (1), 81-112.
- Hedges, H., & Gibbs, C. (2005). Preparation for teacher-parent partnerships: A practical experience with a family. *Journal of Early Childhood Education*, 26, 115-126.
- Hetherington, R. (2016). *Exploring relationships during the practicum in pre-service teacher education: Power and positioning within a quadraciprocal model*. Unpublished DEd thesis, University of Melbourne.

- Hoben, N. (2006). *Real teachers, real classrooms and real experiences: The work of associates with preservice teachers on practicum*. (Unpublished doctoral dissertation). The University of Auckland, New Zealand.
- Hoben, N. (April, 2012). *Supervisor or mentor: Does changing the title and providing professional development impact on the practices of those working with Pre-service Teachers on practicum?* Paper presented at the Annual Meeting of the American Educational Research Association, Vancouver, Canada.
- Hobson, A., & Malderez, A. (2013). Judgementoring and other threats to realizing the potential of school-based mentoring in teacher education. *International Journal of Mentoring and Coaching in Education*, 2(2), 89-108. doi: 10.1108/IJMCE-03-2013-0019
- Hōhepa, M; Hāwera, N; Tamatea, K; & Heaton, S. (June, 2014). *Te Puni Rumaki: Strengthening the preparation, capability and retention of Māori medium teacher trainees*. Wellington: Ministry of Education.
- Holmlund Nelson, T., Deuel, A., Slavit, D., & Kennedy, A. (2010). Leading deep conversations in collaborative inquiry groups. *The Clearing House*, 83, 175–179.
- Hudson, P. (2016). Forming the mentor-mentee relationship. *Mentoring & Tutoring: Partnership in Learning*, 24(1), 30-43, DOI: 10.1080/13611267.2016.1163637
- Johnson, W. B. (2008). Are advocacy, mutuality, and evaluation incompatible mentoring functions?, *Mentoring & Tutoring: Partnership in Learning*, 16(1), 31-44, DOI: 10.1080/13611260701800942
- Joughin, G. (2009). Assessment, learning and judgement in higher education: A critical review. In G. Joughin (Ed.), *Assessment, learning and judgement in higher education* (pp. 13- 28). Dordrecht: Springer. <https://doi.org/10.1007/978-1-4020-8905-3>
- Joughin, G. (2009). Introduction: Refocussing assessment. In G. Joughin (Ed.), *Assessment, learning and judgement in higher education* (pp. 1-11). Dordrecht: Springer. <https://doi.org/10.1007/978-1-4020-8905-3>
- Klenowski, V. (2009). Assessment for learning revisited: An Asia-Pacific perspective. *Assessment in Education: Principles, Policy & Practice*, 16 (3), pp. 277-282.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York, NY: University Press.
- Le Cornu, R 2015, *Key components of effective professional experience in Initial teacher education in Australia*. Australian Institute for Teaching and School Leadership, Melbourne.

- Le Cornu, R. (2015). *Key components of effective professional experience in Initial teacher education in Australia*, Melbourne: Australian Institute for Teaching and School Leadership.
- Le Cornu, R., & Ewing, R. (2008). Reconceptualising professional experiences in preservice teacher education: Reconstructing the past to embrace the future. *Teaching and Teacher Education*, 24(7), 1799–1812.
- Le Fevre, D. (2010). Talking about change knowledge for professional learning. In H. Timperley & J. Parr (Eds.). *Weaving evidence, inquiry and standards to build better schools* (pp. 71-92). Wellington, New Zealand: NZCER Press.
- Lee, K. V. (2007). Caesar’s closure: Terminating a practicum field experience. *Reflective practice*, 8(4), 545-550.
- Lind, P., & Wansbrough, D. (2009). *Literature synthesis addressing requirements for teacher education programmes*. Wellington: New Zealand Teachers Council.
- Loughran, J. J. (2004). Student teacher as researcher: accepting greater responsibility for learning about teaching. *Australian Journal of Education*, 48(2), 212 - 220.
- Mackisack, V. (2011). *In my shoes: The benefits and challenges of being an associate teacher*. Unpublished Master of Education dissertation, The University of Auckland.
- Mena, J., Hennison, P., & Loughran, J. J. (2017). Developing pre-service teachers’ professional knowledge of teaching: The influence of mentoring. *Teaching and Teacher Education*, 66, 47-59.
- Mtika, P., Robson, D., & Fitzpatrick, R. (2014). Joint observation of student teaching and related tripartite dialogue during field experience: Partner perspectives. *Teaching and teacher education*, 39, 66-76.
- New Zealand Ministry of Education. (2013). *Request for Application for Provision of Exemplary Post Graduate Initial Teacher Education Programmes*.
www.minedu.govt.nz/.../EducationInitiatives/QualityOfITEProvision.asp...
- New Zealand Ministry of Education. (n.d.) *Lifting the quality of initial teacher education provision (ITE)*. Retrieved from <https://education.govt.nz/ministry-of-education/specific-initiatives/lifting-the-quality-of-initial-teacher-education-provision/>
- Patrick, R. (2013). “Don’t rock the boat”: conflicting mentor and pre-service teacher narratives of professional experience. *Australian Educational Researcher*, 40(2), 207-226.

- Pogodzinski, B. (2012). Considering the social context of schools: A framework for investigating new teacher induction. *Mentoring & Tutoring: Partnership in Learning*, 20(3), 325-342.
- Poskitt, J. (2005). Towards a model of New Zealand school-based teacher professional development. *New Zealand Journal of Teachers' Work*, 2(2), 136-151.
- Raths, J., & Lyman, F. (2003). Summative evaluation of student teachers: An enduring problem. *Journal of Teacher Education*, 54(3), 206-216.
- Robinson, V., Hohepa, M., & Lloyd, C. (2009). *School leadership and student outcomes: Identifying what works and why: Best Evidence Synthesis Iteration*. Wellington: Ministry of Education.
- Rorrison, D. (2010). Assessment of the practicum in teacher education: Advocating for the student teacher and questioning the gatekeepers. *Educational Studies*, 36(5), 505-519.
<https://doi.org/10.1080/03055691003729013>
- Rusznyak, L. (2011). Student teaching assessment instruments: possibilities and pitfalls for promoting professional development. *Journal of Education*, 51, 1-22.
- Rusznyak, L. (2012). Summative assessment of student teaching: A proposed approach for quantifying practice. *Journal of Education*, 56, 91-115.
- Sewell, A., Hansen, S., & Weir, K. (2017). Enhancing the capabilities of associate teachers in the practicum: A New Zealand case study. *New Zealand Journal of Educational Studies*. DOI 10.1007/s40841-017-0078-z
- Sim, C. (2010). Sustaining productive collaboration between faculties and schools. *Australian Journal of Teacher Education*, 35(5), 18–28.
- Smith, K. (2007). Empowering school- and university-based teacher educators as assessors: A school – university cooperation. *Educational Research and Evaluation*, 13(3), 279-293. DOI: 10.1080/13803610701632109
- Smith, K. (2010). Assessing the practicum in teacher education: Do we want candidates and mentors to agree? *Studies in Educational Evaluation*, 36, 36-41.
- Stanulis, R., & Russell, D. (2000). "Jumping in": Trust and communication in mentoring student teachers. *Teaching and Teacher Education*, 16, 65-80.
- Starkey, K., & Rawlins, P. (2011). *Teaching practicum in 21st century New Zealand*. Wellington: Ako Aotearoa Publications.

- Tang, S. Y. F., & Chow, A. W. K. (2007). Communicating feedback in teaching practice supervision in a learning-oriented field experience assessment framework. *Teaching and Teacher Education*, 23(7), 1066-1085.
- Tillema, H. (2009). Assessment for learning to teach: Appraisal of practice teaching lessons by mentors, supervisors, and student teachers. *Journal of Teacher Education*, 60(2), 155-167.
- Timperley, H. (2001). Mentoring conversations designed to promote student teacher learning. *Asia-Pacific Journal of Teacher Education*, 29 (2), 111–123.
- Turnbull, M. (1997). Assessment in the early childhood practicum: A triadic process. *ACE papers*. Auckland College of Education: Auckland, New Zealand.
- Ussher, B. (2010). Involving a village: Student teachers' sense of belonging in their school-based placement. *Asia-Pacific Journal of Teacher Education*, 38(2), 103–116, doi: 10.1080/13598661003677614
- Wajnryb, R. (1996). The pragmatics of feedback: Supervision as a clash-of-goals between message and face. In A. Yarrow, J. Millwater, S. De Vries, & D. Creedy (Eds.), *PEPE Research monograph: No. 1*. Queensland University of Technology.
- Whatman, J., & McDonald, J. (2017). *High quality practica and the integration of theory and practice in initial teacher education. A literature review prepared for the Education Council*. Wellington: NZCER.
- Zhang, Q., Cown, P., Hayes, P., Werry, S., Barnes, R., France, L., & Te Hau-Grant, R. (2015). Scrutinising the final judging role in assessment of practicum in Early Childhood Initial Teacher Education in New Zealand. *Australian Journal of Teacher Education*, 40(10), 147-166.

Appendix 1

Publications of New Zealand researchers with links to the roles of associate teachers in ITE practicum and the concept of relational trust.

Note:

- *This list includes articles published in peer reviewed journals, books, book chapters, reports, and unpublished masters and doctoral theses. It does not include papers presented at conferences. The list was derived in the first instance from publication lists on the websites of NZ universities and other tertiary institutions providing ITE. It was added to as we carried out other searches. We also contacted ITE academics seeking additional information. Our apologies for any missed publications.*
- *Items in this list have been included because they have a strong focus on the role of associate teachers working with student teachers rather than practicum generally or mentor teachers working with beginning/newly qualified teachers. See Whatman & McDonald (2017) for a practicum-related review and bibliography with a wider focus.*

Anthony, G., Hunter, R., Hunter, J., Rawlins, P., Averill, R., Drake, M., ... Harvey, R. (2015). *Learning the work of ambitious mathematics teaching*. Teaching and Learning Research Initiative. Wellington: NZCER.

Aspden, KM. (2015). Dual roles: Mentoring and assessment in the early childhood practicum. In C. Murphy, & K. Thornton (Eds.) *Mentoring in early childhood education*. (pp. 105 - 118). Wellington, New Zealand: NZCER Press.

Aspden, KM. (2014). *Illuminating the assessment of practicum in New Zealand early childhood initial teacher education*. Unpublished PhD thesis, Massey University.

Brennan, M., Everiss, L., & Mara, D. (2010). *An exploration of field-based early childhood teacher education in Aotearoa New Zealand*. Teaching and Learning Research Initiative. Wellington: NZCER.

Chandler S. (2014). *Student teacher perceptions of ways visiting lecturers support or constrain their practicum learning experiences*. Unpublished Master of Education dissertation, The University of Auckland.

Cobb, D. & Harlow, A. (2017). Rethinking the associate teacher and pre-service teacher relationships: Powerful possibilities for co-learning partnerships. In B. Cowie & R. McNae (Eds.). *Realizing innovative partnerships in educational research* (pp 87-95). Rotterdam: Sense Publishers.

Coombes, C., & Downie, N. (2014). Early childhood field based Initial Teacher Education in New Zealand. A valid choice? *New Zealand Journal of Teachers' Work*, 11(1), 17–29.

Cooper, B., & Grudnoff, L. (2017). Redesigning authentic collaborative practicum partnerships: Learnings from case studies from two New Zealand Universities. In M. Peters, B. Cowie, & I. Menter (Eds.), *A Companion to Research in Teacher Education* (pp. 223-236). Singapore: Springer. doi:[10.1007/978-981-10-4075-7](https://doi.org/10.1007/978-981-10-4075-7)

Cooper, B. (2017). Introduction: Supporting innovation through collaborative research with teachers in school and tertiary settings. In R. McNae, & B. Cowie (Eds.), *Realising Innovative Partnership in Educational Research. Theories and Methodologies for Collaboration* (pp. 61-66). Rotterdam: Sense Publishers.

- Cram, F., Kennedy, V., Kelly-Hepi Te Huia, M., & Paipa, K. (2012). *Background Papers: Māori Medium Initial Teacher Education Outcomes: Graduate Profile & Effective Practicum and Induction Experience*. Wellington: Katoa Ltd.
- Ell, F., & Haigh, M. (2015). Getting beyond “gut feeling”: understanding how mentors judge readiness to teach. *Asia-Pacific Journal of Teacher Education*, 43 (2), 143-155. 10.1080/1359866X.2014.934200
- Ferrier-Kerr, J. (2009). Establishing professional relationships in practicum settings. *Teaching and Teacher Education*, 25, 790-797. doi:10.1016/j.tate.2009.01.001
- Grudnoff, L. (2011). Rethinking the practicum: Limitations and possibilities. *Asia-Pacific Journal of Teacher Education*, 39 (3), 223-234. 10.1080/1359866X.2011.588308
- Grudnoff, L., Haigh, M., & Mackisack, V. (2017). Re-envisaging and reinvigorating school–university practicum partnerships. *Asia-Pacific Journal of Teacher Education*, 45 (2), 180-193. 10.1080/1359866X.2016.1201043
- Grudnoff, A. B., & Williams, R. (2010). Pushing Boundaries: Reworking University-School Practicum Relationships. *New Zealand Journal of Educational Studies*, 45 (2), 33-45. URL: <http://hdl.handle.net/2292/15794>
- Haigh, M., Aitken, S., Ala'alatoa, B., Chandler, S., Ell, F., Grudnoff, L., ...Villers, H. (2013). Are they ready to teach? Judging student teachers' practice. *set: Research Information for Teachers*, 3, 3-10.
- Haigh, M., & Ell, F. (2014). Consensus and dissensus in mentor teachers' judgments of readiness to teach. *Teaching and Teacher Education*, 40, 10-21. 10.1016/j.tate.2014.01.001
- Haigh, M., Ell, F., & Mackisack, V. (2013). Judging teacher candidates' readiness to teach. *Teaching and Teacher Education*, 34, 1-11. 10.1016/j.tate.2013.03.002
- Haigh, M., Pinder, H., & McDonald, L. (2008). Practicum's contribution to students' learning to teach. In C. Rubie-Davies & C. Rawlinson (Eds.). *Challenging thinking about teaching and learning* (pp. 251-268). New York, NY : Nova Science Publishers.
- Haigh, M., & Ward, G. (2004). Problematising practicum relationships: Questioning the 'taken for granted'. *Australian Journal of Education*, 48 (2), 134-148.
- Hansen, S., & Sewell, AM. (2016). Starting out as a teacher. *Education Review*. Vol 7(1), 1-18.
- Harlow, A. with Short, C., Waititi, C., Maubach, C., Price, G., Cheesman, S., & Aitken, V. (2014). Collaborative University School Partnerships Research Brief: ARTS in CUSP - 2013. The University of Waikato.
- Harlow, M. A., & Cobb, D. (2014). Planting the seed of teacher identity: Nurturing early growth through a collaborative learning community. *Australian Journal of Teacher Education*, 39(7), 70-88.
- Harlow, A., Cooper, B., & Cowie, B. (2014). Collaborative University School Partnerships Research Brief: The second-year practicum, 2013. The University of Waikato.
- Harlow, A., Cooper, B., & Cowie, B. (2013). Collaborative University School Partnerships Research Brief: Implementation in Practice, 2012. (pp. 1-9). The University of Waikato.
- Hedges, H., & Gibbs, C. (2005). Preparation for teacher-parent partnerships: A practical experience with a family. *Journal of Early Childhood Education*, 26, 115–126.

- Hoben, N. E. (2011). Greater recognition, greater responsibility: An enhanced role for school-based Practicum Coordinators. *New Zealand Journal of Educational Studies*, 46 (2), 7-19.
URL: <http://hdl.handle.net/2292/11269>
- Hogg, L. & Yates, A. (2013). Walking the talk in initial teacher education: Making teacher educator modeling effective. *Studying Teacher Education* 9(3), 311-328.
- Hōhepa, M; Hāwera, N; Tamatea, K; & Heaton, S. (June, 2014). *Te Puni Rumaki: Strengthening the preparation, capability and retention of Māori medium teacher trainees*. Wellington: Ministry of Education.
- Lind, P. (2004). *The perceptions of teacher education in relation to the teaching practicum*. Unpublished PhD thesis. Massey University, Palmerston North, New Zealand.
- Lind, P., & Wansbrough, D. (2009). *Literature synthesis addressing requirements for teacher education programmes*. Wellington: New Zealand Teachers Council.
- Mackisack, V. (2011). *In my shoes: The benefits and challenges of being an associate teacher*. Unpublished Master of Education dissertation, The University of Auckland.
- McDonald, L. (2009). *Supervision of student teachers during practicum: Beliefs, attitudes and practices of Associate Teachers*. Germany: VDM. Pages: 52.
- McDonald, L. (2008). Effective mentoring of Student Teachers: Attitudes, characteristics and practices of successful Associate Teachers within a New Zealand context. In C. M. Rubie-Davies, C. Rawlinson (Eds.). *Challenging thinking about teaching and learning* (pp. 239-251). New York: Nova Science Publishers.
- McDonald, L. (2004). Effective mentoring of student teachers: Attitudes, characteristics and practices of successful associate teachers within a New Zealand context. *New Zealand Journal of Teachers' Work*, 1(2), 85-94.
- McDonald, L. (2001). *Successful associate teachers: Beliefs, attitudes and practices within a New Zealand context*. Unpublished project, Master of Educational Administration, Massey University, New Zealand.
- McDonald, L., & Flint, A. (2015). Learning within a supportive environment: Mentoring skills. *Journal of Education and Training*, 3 (1), 23-23. 10.5296/jet.v3i1.8095
- Murphy, C. & Thornton, K. (Eds.) (2015). *Mentoring in early childhood education: a compilation of thinking, pedagogy and practice*. Wellington: NZCER.
- Murphy, H., McKinley, S. & Bright N. (2008) *Whakamanahia Te Reo Māori: He Tirohanga Hotaka – An exploration of issues and influences that effect te reo Māori competence of graduates from Māori medium ITE programmes*. Wellington: New Zealand Teachers Council.
- Ovens, A. (2003). Learning to teach through the practicum: A situated-learning perspective. In B. Ross & L. Burrows (Eds.). *It takes two feet: Teaching physical education and health in Aotearoa New Zealand* (pp. 76-89). Palmerston North, New Zealand: Dunmore Press.
- Sanders, M. (2014). Mentoring matters. *The Christian Teachers Journal*, 21(4), 12-15.
- Sanders, M. (2011). 12 of the best: Practical strategies to build strong adult mentoring relationships. *The Christian Teachers Journal*, 19(4), 18-19.
- Sanders, M. (2008). *Agent of change: In situ professional development for associate teachers*. Unpublished PhD thesis, Macquarie University, Australia.

- Sanders, M., Smith, A., Nourseworthy, B., Barthow, S., Miles, L., Oanne, P., & Weydeman, C. (2012). *Five habits for effective mentors*. Wellington, Ako Aotearoa.
- Sewell, A., Hansen, S., & Weir, K. (2017). Enhancing the capabilities of associate teachers in the practicum: A New Zealand case study. *New Zealand Journal of Educational Studies*, DOI 10.1007/s40841-017-0078-z
- Sewell, AM., Weir, K., & Cody, T. (2015). *Strategies for co-constructing an initial teacher education curriculum: A school-university partnership*. [Commissioned Report] Massey University, Palmerston North.
- Smith, A., Sanders, M., Nourseworthy, B. et al. (2012). *Maximising learning dialogue in professional field-based experiences*. Wellington, New Zealand: Ako Aotearoa.
- Spriggs, P. (2016). *The influence of professional development on associate teacher judgements about student teacher readiness to teach*. Unpublished Master of Professional Studies in Education dissertation. The University of Auckland.
- Starkey, L. and Rawlins, P. (2012). Student teacher learning during practicum experience, *Teacher Education Advance Network*. 5 (1), (no pages).
- Starkey, L., & Rawlins, PL. (2012). Student teacher learning during practicum experience. *Teacher Education Advancement Network Journal*. 4(1) (no pages)
- Starkey, L., & Rawlins, P. (2011). *Teaching practicum in 21st century New Zealand*. Wellington: Ako Aotearoa.
- Thornton, K. (2014). Mentors as educational leaders and change agents. *International Journal of Mentoring and Coaching in Education*, 3(1),18-31.
- Trevethan, H. (2017). Educative mentors? The role of classroom teachers in initial teacher education: A New Zealand study. *Journal of Education for Teaching*, 43(2), 219-231. doi: 10.1080/02607476.2017.1286784
- Trevethan, H. W. (2014). *Associate teachers in New Zealand: Great expectations*. Unpublished EdD thesis. University of Otago, Dunedin, New Zealand.
- Turnbull, M. (1997). Assessment in the early childhood practicum: A triadic process. *ACE papers*. Auckland College of Education: Auckland. New Zealand.
- Ussher, B. (2010). Involving a village: Student teachers' sense of belonging in their school-based placement. *Asia-Pacific Journal of Teacher Education*, 38(2), 103–116, doi: 10.1080/13598661003677614
- Villers, H., & Mackisack, V. (2011). Optimizing opportunities to learn during practicum: Developing collaborative partnerships between the university and school. *Asia-Pacific Journal of Cooperative Education*, 12 (3), 183-194.
- Whatman, J., & McDonald, J. (2017). *High quality practica and the integration of theory and practice in initial teacher education: A literature review prepared for the Education Council*. Wellington: NZCER.
- Wilson, C. (2016). Creating effective invited spaces: Putting the lens on early childhood teacher education practica. Unpublished Master's thesis, Massey University.
- Zhang, Q., Cown, P., Hayes, P., Werry, S., Barnes, R., France, L., & TeHau-Grant, R. (2015). Scrutinising the final judging role in assessment of practicum in Early Childhood Initial Teacher Education in New Zealand. *Australian Journal of Teacher Education*, 40(10). 147-166.

Appendix 2

Alphabetically-listed associate teacher-linked citations located in the following journals:

- *Asia-Pacific Journal of Teacher Education (2007-2017)*
- *International Journal of Mentoring and Coaching in Education (2012-2017)*
- *Journal of Education for Teaching (2007-2017)*
- *Mentoring and Tutoring: Partnership in Learning (2007-2017)*
- *Teaching and Teacher Education (2007-2017)*

Achinstein, B., & Fogo, B. (2015). Mentoring novices' teaching of historical reasoning: Opportunities for pedagogical content knowledge development through mentor-facilitated practice. *Teaching and Teacher Education, 45, 2015, 45-58.*

Aderibigbe, S., Colucci-Gray, L., & Gray, D. (2016). Conceptions and expectations of mentoring relationships in a teacher education reform context. *Mentoring & Tutoring: Partnership in Learning, 24(1), 8-29, DOI: 10.1080/13611267.2016.1163636*

Alcorn, N. (2014) Teacher education in New Zealand 1974–2014. *Journal of Education for Teaching, 40(5), 447-460.*

Ambrosetti, A., Dekkers, J., & Knight, B. (2017). Mentoring triad: an alternative mentoring model for preservice teacher education?. *Mentoring & Tutoring: Partnership in Learning, 25(1), 42-60, DOI: 10.1080/13611267.2017.1308093*

Ambrosetti, A., Knight, B., & Dekkers, J. (2014). Maximizing the potential of mentoring: A framework for pre-service teacher education. *Mentoring and Tutoring: Partnership in Learning, 22, 224–239.*

Ambrosetti, A., Knight, B., & Dekkers, J. (2014). Maximizing the potential of mentoring: A framework for pre-service teacher education. *Mentoring & Tutoring: Partnership in Learning, 22(3), 224-239, DOI: 10.1080/13611267.2014.926662*

Arshavskaya, E. (2016). Complexity in mentoring in a pre-service teacher practicum: a case study approach. *International Journal of Mentoring and Coaching in Education, 5(1), 2-19, doi: 10.1108/IJMCE-07-2015-0021*

Bloomfield, D. (2010). Emotions and 'getting by': a pre-service teacher navigating professional experience. *Asia-Pacific Journal of Teacher Education 38(3), 221–234.*

- Bradbury, L. (2010). Educative mentoring: Promoting reform-based science teaching through mentoring relationships. *Science Education, 94*, 1049–1071.
- Brondyk, S., & Searby, L. (2013). Best practices in mentoring: complexities and possibilities. *International Journal of Mentoring and Coaching in Education, 2*(3), 189-203, doi: 10.1108/International Journal of Mentoring and Coaching in Education, 2(3), 189-203, doi: 10.1108/
- Buitink, J. (2009). What and how do student teachers learn during school-based teacher education. *Teaching and Teacher Education, 25*(1), 118-127.
- Cain, T. (2009). Mentoring trainee teachers: How can mentors use research?. *Mentoring & Tutoring: Partnership in Learning, 17*(1), 53-66, DOI: 10.1080/13611260802233498
- Clarke, A., & Collin, S. (2007). Complexity science and student teacher supervision. *Teaching and Teacher Education, 23*(2), 160-172.
- Copland, F. (2010). Causes of tension in post-observation feedback in pre-service teacher training: An alternative view. *Teaching and Teacher Education, 26*(3), 466-472.
- Crasborn, F., Hennissen, P., Brouwer, N., Korthagen, F., & Bergen, T. (2011). Exploring a two-dimensional model of mentor teacher roles in mentoring dialogues. *Teaching and Teacher Education, 27*(2), 320-331.
- Crasborn, F., Hennissen, P., Brouwer, N., Korthagen, F., & Bergen, T. (2008). Promoting versatility in mentor teachers' use of supervisory skills. *Teaching and Teacher Education, 24*(3), 499-514.
- Davids, M. (2015). Teaching practicum assessment in post-apartheid teacher education: Is it self-serving or serving students?, *Journal of Education for Teaching, 41*(4), 338-350, DOI: 10.1080/02607476.2015.1080349
- Dengerink, J., Lunenburg, M., & Kools, Q. (2015.) What and how teacher educators prefer to learn. *Journal of Education for Teaching, 41*(1), 78-96, DOI: 10.1080/02607476.2014.992635
- Dominguez, N., & Hager, M. (2013). Mentoring frameworks: synthesis and critique. *International Journal of Mentoring and Coaching in Education, 2*(3), 171-188, doi: 10.1108/IJMCE-03-2013-0014
- Douglas, A. (2011). The different learning opportunities afforded student teachers in four secondary school subject departments in an initial teacher education school–university partnership in England. *Journal of Education for Teaching, 37*(1), 93-106.
- Duckworth, V., & Maxwell, B. (2015). Extending the mentor role in initial teacher education: embracing social justice. *International Journal of Mentoring and Coaching in Education, 4*(1), 4-20, doi: 10.1108/IJMCE-08-2014-0032

- Ell, F., & Haigh, M. (2015). Getting beyond “gut feeling”: Understanding how mentors judge readiness to teach. *Asia-Pacific Journal of Teacher Education*, 43(2), 143–155.
- Ferrier-Kerr, J. (2009). Establishing professional relationships in practicum settings. *Teaching and Teacher Education*, 25(6), 790-797.
- Fives, H., Hamman, D., & Olivarez, A. (2007). Does burnout begin with student-teaching? Analyzing efficacy, burnout, and support during the student-teaching semester. *Teaching and Teacher Education*, 23(6), 916-934.
- Gallo-Fox, J., & Scantlebury, K. (2016). Coteaching as professional development for cooperating teachers. *Teaching and Teacher Education*, 60, 191-202.
- Gelfuso, A., & Dennis, D. (2014). Getting reflection off the page: The challenges of developing support structures for pre-service teacher reflection. *Teaching and Teacher Education*, 38, 1-11.
- Goodnough, K., Osmond, P., Dibbon, D., Glassman, M., & Steven, M. (2009). Exploring a triad model of student teaching: Pre-service teacher and cooperating teacher perceptions. *Teaching and Teacher Education*, 25(2), 285-296.
- Grudnoff, L. (2011). Rethinking the practicum: limitations and possibilities. *Asia-Pacific Journal of Teacher Education*, 39(3), 223–23.
- Hall, K., Draper, R., Smith, K., & Bullough, R. (Jr) (2008). More than a place to teach: Exploring the perceptions of the roles and responsibilities of mentor teachers. *Mentoring & Tutoring: Partnership in Learning*, 16(3), 328-345, DOI: 10.1080/13611260802231708
- Hamel, F., & Jaasko-Fisher, H. (2011). Hidden labor in the mentoring of pre-service teachers: Notes from a mentor teacher advisory council. *Teaching and Teacher Education*, 27(2), 434-442.
- Harford, J., & MacRuairc, G. (2008). Engaging student teachers in meaningful reflective practice. *Teaching and Teacher Education*, 24(7), 1884-1892.
- Hastings, W. (2010). Expectations of a pre-service teacher: implications of encountering the unexpected. *Asia-Pacific Journal of Teacher Education*, 38(3), 207–219.
- Helgevold, N., Næsheim-Bjørkvik, G., & Østrem, S. (2015). Key focus areas and use of tools in mentoring conversations during internship in initial teacher education. *Teaching and Teacher Education*, 49, 128-137

- Hennissen, P., Crasborn, F., Brouwer, N., Korthagen, F., & Bergen, T. (2011). Clarifying pre-service teacher perceptions of mentor teachers' developing use of mentoring skills. *Teaching and Teacher Education, 27*(6), 1049-1058.
- Hennissen, P., Crasborn, F., Brouwer, N., Korthagen, F., & Bergen, T. (2010). Uncovering contents of mentor teachers' interactive cognitions during mentoring dialogues. *Teaching and Teacher Education, 26*(2), 207-214.
- Hobson, A., & Malderez, A. (2013). Judgementoring and other threats to realizing the potential of school-based mentoring in teacher education. *International Journal of Mentoring and Coaching in Education, 2*(2), 89-108, doi: 10.1108/IJMCE-03-2013-0019
- Hobson, A., Ashby, P., Malderez, A., & Tomlinson, P. (2009). Mentoring beginning teachers: What we know and what we don't. *Teaching and Teacher Education, 25*(1), 207-216.
- Hoffman, J., Mosley Wetzel, M., Maloch, B., Greeter, E., Taylor, L., DeJulio, S., & Vlach, S. (2015). What can we learn from studying the coaching interactions between cooperating teachers and preservice teachers? A literature review. *Teaching and Teacher Education, 52*, 99-112.
- Hunter, L., Rossi, T., Tinning, R., Flanagan, E., & Macdonald, D. (2011). Professional learning places and spaces: the staffroom as a site of beginning teacher induction and transition. *Asia Pacific Journal of Teacher Education, 39*(1), 33-46.
- Ibrahim, A. (2013). Approaches to supervision of student teachers in one UAE teacher education program. *Teaching and Teacher Education, 34*, 38-45.
- Irby, B. (2015). Editor's overview: Mentoring as social responsibility, *Mentoring & Tutoring: Partnership in Learning, 23*(2), 95-99, DOI: 10.1080/13611267.2015.1062218
- Izadinia, M. (2015). A closer look at the role of mentor teachers in shaping preservice teachers' professional identity. *Teaching and Teacher Education, 52*, 1-10.
- Izadinia, M. (2015). Talking the talk and walking the walk: Pre-service teachers' evaluation of their mentors. *Mentoring & Tutoring: Partnership in Learning, 23*(4), 341-353, DOI: 10.1080/13611267.2015.1096550
- Izadinia, M. (2016). Preservice teachers' professional identity development and the role of mentor teachers. *International Journal of Mentoring and Coaching in Education, 5*(2), 127-143, doi: 10.1108/IJMCE-01-2016-0004

- Janine S. Davis & Victoria B. Fantozzi (2016) What Do Student Teachers Want in Mentor Teachers?: Desired, Expected, Possible, and Emerging Roles. *Mentoring & Tutoring: Partnership in Learning*, 24(3), 250-266, DOI: 10.1080/13611267.2016.1222814
- Jaspers, W. M., Meijer, P., Prins, F., & Wubbels, T. (2014). Mentor teachers: Their perceived possibilities and challenges as mentor and teacher. *Teaching and Teacher Education*, 44, 106-116.
- Kemmis, S., Heikkinen, H., Fransson, G., Aspfors, J., & Edwards-Groves, C. (2014). Mentoring of new teachers as a contested practice: Supervision, support and collaborative self-development. *Teaching and Teacher Education*, 43, 154-164.
- Klieger, A., & Oster-Levinz, A. (2015). The influence of teacher education on mentor teachers' role perception in professional development schools. *Journal of Education for Teaching*, 41(2), 115-127, DOI: 10.1080/02607476.2015.1010873
- Le Cornu, R. (2016). Professional experience: learning from the past to build the future, *Asia-Pacific Journal of Teacher Education*, 44(1), 80-101, DOI: 10.1080/1359866X.2015.1102200
- Le Cornu, R. (2010). Changing roles, relationships and responsibilities in changing times. *Asia-Pacific Journal of Teacher Education*, 38(3), 195–206.
- Le Cornu, R., & Ewing, R. (2008). Reconceptualising professional experiences in pre-service teacher education...reconstructing the past to embrace the future. *Teaching and Teacher Education*, 24(7), 1799-1812.
- Lejonberg, E., Elstad, E., & Christophersen, K. (2015). Mentor education: challenging mentors' beliefs about mentoring. *International Journal of Mentoring and Coaching in Education*, 4(2), 142-158, doi: 10.1108/IJMCE-10-2014-0034
- Leshem, S. (2014). How do teacher mentors perceive their role, does it matter? *Asia-Pacific Journal of Teacher Education*, 42(3), 261–274.
- Lock, R., Soares, A., & Foster, J. (2009). Mentors' written lesson appraisals: the impact of different mentoring regimes on the content of written lesson appraisals and the match with pre-service teachers' perceptions of content. *Journal of Education for Teaching*, 35(2), 133-143.
- Lofthouse, R., & Thomas, U. (2014). Mentoring student teachers; a vulnerable workplace learning practice. *International Journal of Mentoring and Coaching in Education*, 3(3), 201-218, doi: 10.1108/IJMCE-03-2014-0010

- Lofthouse, R., & Wright, D. (2012). Teacher education lesson observation as boundary crossing. *International Journal of Mentoring and Coaching in Education*, 1(2), 89-103. doi: 10.1108/20466851211262842
- McGraw, A., & Davis, R. (2017). Mentoring for pre-service teachers and the use of inquiry-oriented feedback. *International Journal of Mentoring and Coaching in Education*, 6(1), 50-63.
- Medwell, J., & Wray, D. (2014). Pre-service teachers undertaking classroom research: developing reflection and enquiry skills. *Journal of Education for Teaching*, 40(1), 65-77, DOI: 10.1080/02607476.2013.864018
- Melek Koç, E. (2012). Idiographic roles of cooperating teachers as mentors in pre-service distance teacher education. *Teaching and Teacher Education*, 28(6), 818-826.
- Mena, J., Hennissen, P., & Loughran, J. (2017). Developing pre-service teachers' professional knowledge of teaching: The influence of mentoring. *Teaching and Teacher Education*, 66, 47-59.
- Mitchell, J., Clarke, A., & Nuttall, J. (2007). Cooperating Teachers' Perspectives Under Scrutiny: A comparative analysis of Australia and Canada. *Asia-Pacific Journal of Teacher Education*, 35(1), 5-25.
- Murphy, H., McKinley, S. & Bright N. (2008) *Whakamanahia Te Reo Māori: He Tirohanga Hotaka – An exploration of issues and influences that effect te reo Māori competence of graduates from Māori medium ITE programmes*. Wellington: New Zealand Teachers Council.
- Nahmad-Williams, L., & Taylor, C. (2015). Experimenting with dialogic mentoring: a new model. *International Journal of Mentoring and Coaching in Education*, 4(3), 184-199, doi: 10.1108/IJMCE-04-2015-0013
- Nilsson, P., & van Driel, J. (2010). Teaching together and learning together – Primary science student teachers' and their mentors' joint teaching and learning in the primary classroom. *Teaching and Teacher Education*, 26(6), 1309-1318.
- Orland-Barak, L. (2014). Mediation in mentoring: A synthesis of studies in Teaching and Teacher Education. *Teaching and Teacher Education*, 44, 180-188.
- Orland-Barak, L., & Hasin, R. (2010). Exemplary mentors' perspectives towards mentoring across mentoring contexts: Lessons from collective case studies. *Teaching and Teacher Education*, 26(3), 427-437.
- Parker-Katz, M., & Bay, M. (2008). Conceptualizing mentor knowledge: Learning from the insiders. *Teaching and Teacher Education*, 24(5), 1259-1269.

- Hudson, P. (2016). Forming the mentor-mentee relationship. *Mentoring & Tutoring: Partnership in Learning*, 24(1), 30-43, DOI: 10.1080/13611267.2016.1163637
- Pinho Castanheira, P. (2016). Mentoring for educators' professional learning and development: A meta-synthesis of IJMCE volumes 1-4. *International Journal of Mentoring and Coaching in Education*, 5(4), 334-346, doi: 10.1108/IJMCE-10-2015-0030
- Ponte, E., & Twomey, S. (2014). Veteran teachers mentoring in training: negotiating issues of power, vulnerability and professional development. *Journal of Education for Teaching*, 40(1), 20-33.
- Rajuan, M., Beijaard, D., & Verloop, N. (2007). The role of the cooperating teacher: Bridging the gap between the expectations of cooperating teachers and student teachers. *Mentoring & Tutoring: Partnership in Learning*, 15(3), 223-242, DOI: 10.1080/13611260701201703
- Rodgers, A., & Keil, V. (2007). Restructuring a traditional student teacher supervision model: Fostering enhanced professional development and mentoring within a professional development school context. *Teaching and Teacher Education*, Volume 23(1), 63-80.
- Rozelle, J., & Wilson, S. (2012). Opening the black box of field experiences: How cooperating teachers' beliefs and practices shape student teachers' beliefs and practices. *Teaching and Teacher Education*, 28 (8), 1196-1205.
- Salter, T. (2015). Equality of mentoring and coaching opportunity: Making both available to preservice teachers. *International Journal of Mentoring and Coaching in Education*, 4(1), 69-82, doi: 10.1108/IJMCE-08-2014-0031
- Scherff, L., & Robb Singer, N. (2012). The preservice teachers are watching: Framing and reframing the field experience. *Teaching and Teacher Education*, 28(2), 263-272.
- Sharplin, E., Peden, S., & Marais, I. (2016). Making the grade: describing inherent requirements for the initial teacher education practicum. *Asia-Pacific Journal of Teacher Education*, 44(3), 224-241, DOI: 10.1080/1359866X.2015.1105933
- Sim, C. (2011). 'You've either got [it] or you haven't' – conflicted supervision of preservice teachers. *Asia-Pacific Journal of Teacher Education*, 39(2), 139–14.
- Smith, J. & Nadelson, L. (2016). Learning for you and learning for me: Mentoring as professional development for mentor teachers. *Mentoring & Tutoring: Partnership in Learning*, 24(1), 59-72, DOI: 10.1080/13611267.2016.1165489
- Soslau, E. (2015). Development of a post-lesson observation conferencing protocol: Situated in theory, research, and practice. *Teaching and Teacher Education*, 49, 22-35.

- Soslau, E. (2012). Opportunities to develop adaptive teaching expertise during supervisory conferences. *Teaching and Teacher Education*, 28(5), 768-779.
- Spooner-Lane, R., Tangen, D., & Campbell, M. (2009). The complexities of supporting Asian international pre-service teachers as they undertake practicum. *Asia-Pacific Journal of Teacher Education*. 37(1), 79–94.
- Stenberg, K., Rajala, A., & Hilppo, J. (2016.) Fostering theory–practice reflection in teaching practicums. *Asia-Pacific Journal of Teacher Education*, 44(5,) 470-485, DOI: 10.1080/1359866X.2015.1136406
- Sundli, L. (2007). Mentoring—A new mantra for education? *Teaching and Teacher Education*, 23(2), 201-214.
- Tang, S., & Chow, A. (2007). Communicating feedback in teaching practice supervision in a learning-oriented field experience assessment framework. *Teaching and Teacher Education*, 23(7), 1066-1085.
- Tran Nguyen, H. (2009). An inquiry-based practicum model: What knowledge, practices, and relationships typify empowering teaching and learning experiences for student teachers, cooperating teachers and college supervisors? *Teaching and Teacher Education*, 25(5), 655-662.
- Trevethan, H. (2017). Educative mentors? The role of classroom teachers in initial teacher education. A New Zealand study. *Journal of Education for Teaching*, 43(2), 219-231.
- Tsui, A., & Law, D. (2007). Learning as boundary-crossing in school–university partnership. *Teaching and Teacher Education*, 23(8), 1289-1301.
- Turner, E., & Blackburn, C. (2016). Prospective and mentor teacher perspectives on co-learning events. *Mentoring & Tutoring: Partnership in Learning*, 24(4), 271-289, DOI: 10.1080/13611267.2016.1235010
- Ussher, B. (2010). Involving a village: student teachers’ sense of belonging in their school-based placement. *Asia-Pacific Journal of Teacher Education*, 38(2), 103–116.
- van Velzen, C., Volman, M., Brekelmans, M., & White, S. (2012). Guided work-based learning: Sharing practical teaching knowledge with student teachers. *Teaching and Teacher Education*, 28(2), 229-239.
- Yee Fan Tang, S. (2008). Issues in field experience assessment in teacher education in a standards-based context. *Journal of Education for Teaching*, 34(1), 17-32.

Appendix 3

Citations of the references located during the “Effective Associate teacher” literature search

Author	Year	Context	Country	What is the AT role?
Abramo & Campbell	2016	Music teachers	USA	possess knowledge of educational theory and practice; understand the importance of context in education; understand narrative’s role in the process of learning to teach critically reflect on teaching practice. practices such as joint inquiry; conversations regarding contemporary learning theories; reflective questioning; self and collaborative critique of existing practices; eliciting cooperating student teachers’ narratives as a pedagogical strategy; CTs’ awareness of self as learner and viewing learning and teaching as problem-posing and problem-solving work
Ambrosetti, Knight & Dekkers	2014	Developed a mentoring framework	Australia	Relational Developmental Contextual
Baum & Korth	2013	Survey of 62 early childhood teacher education faculty	USA	a) skills for critical mentoring, - ref Feiman Nemser (2001) b) the ability to encourage deep reflection on teaching practices c) the sensitivity to work with prospective teachers with varying levels of skills and dispositions.
Beck & Kosnik	2000*	Investigated AT views of their role	Canada	inquiry, innovation, reflection, mutual respect, personal connection, collaboration and community.
Black, Olmsted, & Mottonen,	2016	Survey of 282 ATs and 13 interviews	Canada	Patience Effective communication skills Teaching expertise Relationship with ST - build rapport Establish expectations Guidance Feedback
Bradbury	2010	Discussion paper	USA	Fostering a disposition of sustained inquiry into teaching practice Meeting immediate needs while developing a long- term orientation toward reform-based science teaching Thinking about teaching as a complex process where there is rarely one “right” answer Using background knowledge of students and their work samples to plan lessons that learning about a particular topic Valuing the contributions and ideas of both the mentor and novice Versed in current research
Brondyk & Searby	2013	Aimed to investigate “best practices” in mentoring	USA	Best practices are those which achieve that stated purpose ie to increase ST effectiveness
Butler & Cuenca	2012	Attempt to provide a shared conception of mentor role	USA	Instructional coach Emotional support system Socializing agent Coherency with campus programme

Clarke, Triggs & Nielson,	2014	Review of literature Cooperating teachers	Australia	<p style="text-align: center;">The Nature of Cooperating Teachers' Participation</p> <p style="text-align: center;">Closed Invited Claimed</p> <p>The Substance of Cooperating Teachers' Participation</p> <ul style="list-style-type: none"> Providers of Feedback Gatekeepers of the Profession Modelers of Practice Supporters of Reflection Purveyors of Context Convenors of Relation Agents of Socialization Advocates of the Practical Gleaners of Knowledge Abiders of Change Teachers of Children
Crasborn, Hennissen, Brouwer, Korthagen & Bergen	2008	30 Mentor teachers The aim was to see if training made the identified behaviours more frequent	Netherlands	Mentor teachers need a versatile repertoire of supervisory skills – identified by the w showing attentive behaviour (1), asking an open starting question (2), asking for concreteness (3), summarizing feeling (showing empathy)4), summarizing content (5), showing genuineness (6), completing sentence/clarifying question(7), confronting (giving feedback, summarizing inconsistencies, utilizing the here and no generalizing(asking for similar situations) (9), helping in making things explicit (10), helping in finding and choosing alternatives (11), asking for something new (12), giving information (13), giving opinion/assessing (14), giving advice/instruction (15)
Crutcher & Naseem,	2016	Review of empirical research about effective practices in mentoring	USA	Described emergent “effective” mentoring practices as: Critical reflection/feedback Modelling Collaboration Knowledge about the needs of novice teachers
Davis & Fantozzi	2016	Interview with 7 STs	USA	Emotional support Supportive conversations Instructional coach Leave them to ‘be’ the teacher
Duffield	2006*	14 STs interviews over time	USA	The cooperating teachers who were welcoming, trusting and could share ownership i classroom provided the teacher candidates the most successful experience.
Erbiglin	2014	Evaluation of Mathematics CT PD	Turkey	Authors endorsed Reduced CT Talk Increased depth of talk on Maths pedagogy Asking open ended questions rather than telling
Faga	2016	32 ST Survey, observations and informants interviews	USA	CTs were the most important thing. The need to Provide an environment where STs feel safe to explore Opportunities for STs to develop or maintain self- efficacy Communicate effectively Be able release control of the classroom Encourage through constructive conversation Positive relationships with CTs
Feiman-Nemser	2001*	Description of ‘exemplary’ support teacher	USA	Finding openings Pinpointing problems Probing thinking Noticing signs of growth Focusing on the kids Reinforcing an understanding of theory Showing one way of teaching Modelling wondering about teaching
Glenn	2006*	2 Mentor ST pairs	USA	Effective mentors: collaborate rather than dictate

				relinquish an appropriate level of control allow for personal relationships share constructive feedback accept differences
Graham,	2006*	Cooperating teacher views Survey and semi-structured interviews	USA	Distinction between mentors and maestros Mentors: Strong teachers Able to articulate a vision of good teaching Willing to discuss their decisions Focused on children's learning as well as ST learning
Hall, Draper, Smith & Bullough	2008	AT views Open ended questions 264 MTs Follow up interviews with 34 MTs	USA	CT and mentor distinction - teachers do not see themselves as mentors as defined: Mentors: model effective practice provide opportunities for STs to observe and critique practice coach the ST including engaging in dialogue focused on practice. create a context that will facilitate the beginning teacher's learning engage in discussion, reflection, and criticism of teaching p. 342
Hobbs & Stoval	2015	ECE mentoring Lit review	USA	Mentors have the profound responsibility to be both supervisor and instructor all the while fostering a cooperative, trusting, and supportive relationship.
Hudson	2007	446 preservice teachers' perceptions of their mentoring	Australia	The model has five factors for mentoring: personal attributes, system requirements, pedagogical knowledge, modelling, and feedback
Izadina	2015	Interviews with 16 MTs and their pre-service teachers		Mentors views- of their role providing support, providing feedback and communicating effectively.
Killian & Wilkins	2009	Interviews with 13 CT/ST pairs	USA	Supervisory effectiveness continuum (Appendix 1) The "highly effective" group: Mid-range in number of years of teaching Had more than 5 STs previously Closely collaborated with University supervisor Graduate level preparation for supervision Deep preparation allowed them to be able to articulate beliefs behind practices and to practices congruent with those beliefs
Kiraz & Yildirim	2007	690 trainee teachers completed questionnaires about their supervising teachers' competency	Turkey	Experience not the most important factor The younger and less experienced teacher demonstrated better supervisory skills
Lawley, Moore & Smajic	2014	Conceptual review of research	USA	Cooperating teachers should <ul style="list-style-type: none"> • give information in an internship experience. • encourage preservice teachers to incorporate their own ideas into lessons and class practices. <ul style="list-style-type: none"> • Cooperating teachers should not take offense when preservice teachers question teaching methods or strategies. <ul style="list-style-type: none"> • Preservice teachers should enter the internship experience as the receiver of information they are learning from previous experiences of the cooperating teacher. • Preservice teachers should be willing to question a cooperating teacher's beliefs and implement one's own ideas in one's plans and teaching experiences. • Collaborative planning and conferencing are essential for the cooperating teacher and preservice teacher to mutually benefit during the internship experience. • The method of communication must be appropriate to the developmental level of the preservice teacher. • Communication training should be offered by educational institutions for both the cooperating teacher and the preservice teacher.
Margolis	2007	7 Mentor teachers Undertaking professional development for mentoring	USA	MTs had training in using "explicitness" as desirable mentoring pedagogy Talk about teaching is important Relationship building first
McDonald	2004*	From interviews with ATs STs and visiting staff	NZ	Explain personal pedagogy Role model Encourage ST reflection

				Give feedback Positive personal qualities Professionalism
Moody	2009	13 Preservice post graduate and undergraduate student teachers surveyed by email	Australia	Support from supervising teacher Freedom to develop own teaching style Constructive feedback Approach to assessment- pass/fail Advisor, encourager, giver of feedback, observer, instruction and supporter (p. 159).
Orland Barak & Hasin	2010	Views of 5 “exemplary” mentors of their role	Israel	Organisational skills Integration of theory and practice Professionalism and expertise Interpersonal relationships Challenge and support Modeling Reflexivity
Ragland	2017	Surveys and interviews with 10 Cooperating teachers	USA	Study was to determine what characteristics of cooperating teacher contribute to suc ST learning experiences- these are St growth and development in planning, delivery, management and assessment Relationship building Being alumni from the programme – knows the philosophy and expectations of the programme Have been taught to be reflective practitioners
Rippon & Martin	2006*	271 final year student teachers – primary and secondary Questionnaire about preferences	Scotland	STs emphasised the importance of the personal qualities over professional abilities Approachability Inclination to work with probationers Time for probationers Empathy for hopes and fears Open to working in partnership Teaching Credibility A competent teaching role model Respected by others in school Professional Knowledge and Authority Up-to-date educational knowledge Knowledge of whole school issues and procedures Motivational Skills Knows what to look for in classroom observations Can give sound advice and direction in feedback Shares their enthusiasm for teaching Other Fair, honest, sense of humour, respectful of other people’s feelings, hold a personal as well as a professional identity.
Russell & Russell	2011	Survey and questionnaire about Mts experiences	USA	Resource person, guide, role model, friend and experienced professional
Sayeski & Paulsen	2012	389 STs Primary secondary, special ed. Online evaluations of their CTs	USA	Can a consistent set of practices be identified that contribute to quality ST learning experiences Constructed an on-line CT evaluation tool based on lit review (2002 and earlier refer) which found that high quality CTs should: support planning, provide feedback, model effective practices, engage in discussion effective teaching and nurture ST professional development and thinking about teach Also use research –based strategies, the latest technology, keep up to date Believe that all children can learn – social justice Set aside time for discussions Provide regular concrete feedback in a variety of formats, allow students to experim explore Include students in all aspects of their professional life

Torrez & Krefbs,	2012	80 CTs 174 STs Surveys and focus group interviews Only STs asked characteristics of a successful master teacher	USA	ST views of a successful MT 1. Is a good teacher and purposefully models good teaching (36%) 2. Works to create a positive relationship with the teacher candidate (30%) 3. Provides opportunities and support (25%) 4. Possesses qualities of a person of good character (8%).

*Denotes outside of original literature search timeframe but considered significant

Appendix 4

Summary of suggestions for effective associate teacher practice

- *develop a supportive, learning-focussed relationship with the student teacher*
- *collaborate with the student teacher to develop their repertoire of technical skills*
- *assist the student teacher to make links between campus and school learning*
- *accept difference and flex to allow student teacher growth*
- *facilitate effective communication*
- *demonstrate respect for their profession*
- *engage in transparent formative and summative assessments with the student teacher.*
- *model the range of purposes for assessment for the student teacher.*
- *negotiate the process of assessment with the student teacher.*
- *see disagreements about assessments as an opportunity to initiate professional learning for the student teacher (and the associate teacher).*
- *see everyday practice as an opportunity for assessment for learning; will encourage the student teacher to take an inquiry stance into their practice.*
- *be knowledgeable about the impact of feedback and feedforward on student teacher learning.*
- *know how to run mentoring conversations that reflect the values of mutual respect and valid data. He/she will regularly check on the quality of their practice of mentoring conversations.*
- *be aware of his/her priorities associated with making judgments about student teachers' practice, and guard against a tendency to make judgments based on 'gut feeling' rather than evidence.*
- *be able to defend their judgments about the student teacher to the student teacher, the university supervisor and colleagues who have been associated with the student teacher during the practicum in order that they, together, reach robust defensible positions.*
- *understand their contribution, negotiated with the university, to the formalised assessment processes involved in certification / credentialing of student teachers.*
- *engage in professional learning around the role.*
- *understand the tensions inherent in his/her dual roles of assistance and assessment and work*

towards managing this tension in transparent ways.