Collaborative Synchronous Coaching to support triadic collaboration and bridge the theory-practice divide in initial teacher education

Tim Gander
University of Southern Queensland & academyEX

Advancements in technology have enabled a range of approaches to support preservice teacher development. This research suggests using collaborative synchronous coaching (CSC), through Bug-in-Ear (BIE) technology, as a tool to reduce the theory-practice divide by enhancing collaboration between the visiting lecturer, the mentor teacher and the preservice teacher. Three stages of research were conducted to test CSC's effectiveness in providing feedback. The study examined the concept of CSC, protocol and best practices for using CSC, and the tool's potential to establish a collaborative third space in ITE. The findings from field notes, semi-structured interviews and video observations suggest that CSC is a new coaching technique that can provide an alternative way to support collaborative pedagogical development for preservice teachers while strengthening relationships and opportunities for reciprocal learning. Educators using CSC can navigate their identities within the space more transparently, collaboratively, and constructively. The power of synchronous feedback from more than one person reframes the triadic conversation into a new paradigm.

Aims, objectives and overview of the research

This research addresses the multidimensional and widespread challenge of the theory-practice divide in initial teacher education (ITE). This is explored through two critical elements of ITE, (1) the provision of equitable access to consistently high-quality feedback and timely professional coaching to support preservice teacher development, and (2) the facilitation of the third space (Green et al., 2020) with intentional collaboration and alignment between the ITE provider and the school which the preservice teacher is placed. The ITE-specific challenges of equitable access to high-quality coaching feedback and collaborative partnerships present an opportunity to integrate technology to provide the coaching required via remote video observation tools where an expert practitioner may not be physically available.

This study stems from the researcher’s dual role in co-ordinating practicum partnerships and as a visiting lecturer (VL) on a practice-based ITE programme. Experiencing the value of the differing perspectives within the triadic relationships but unable to find an effective or timely way to share knowledge with the triad of VL, preservice teacher (PST) and in-school mentor (ISM). The need to provide expert curriculum and pedagogical advice to trainee teachers in a geographically challenged country was also amplified by COVID-19 and the government’s requirement to restrict physical access to schools. A remote tool was required to unite all triad members in challenging times.

This research was developed using participatory action research in stages built on the 3-Level Evaluation Framework (Vavoula & Sharples, 2009). Stage one was a pilot study that explored the hypothesis that collaborative synchronous coaching (CSC) will enable intentionally aligned and consistent augmented VL and ISM feedback to support triadic collaboration and bridge the theory-practice divide. Stage two incorporates findings from the literature and a wider scoping review to highlight best practices in the application of CSC and, through social constructivism, explores if user-defined requirements could be met. Stage 3 explores the ability of CSC to enact concepts described in the ITE third space literature in a wider group of triads in a range of schools in New Zealand.

CSC is built on the concept of Bug-in-Ear (BIE) coaching. BIE enables a direct and discreet link to the PST. The VL or ISM can communicate in real-time, giving remote virtual feedback via video observation with a BIE device without disrupting the lesson (Horn et al., 2020; Randolph et al., 2020). Scheeler (2012) explores how BIE technology has been used to provide high-quality synchronous feedback in classrooms to enhance teaching efficacy. Research spanning the last two decades has demonstrated that BIE coaching is an effective evidence-based practice (Sinclair et al., 2020). CSC augments BIE coaching by enabling the ISM and VL to simultaneously interact with the PST remotely (figure 1) while maintaining a private backchannel, hence the
collaborative element.

Figure 1. Collaborative Synchronous Coaching (CSC)

Research questions

Stage 1
1. How might CSC support triadic collaboration to bridge the theory practice divide while providing feedback in initial teacher education?

Stage 2
2. How might CSC assist in delivering user defined goals: Sharing tacit knowledge?
3. How might CSC assist in delivering user defined goals: Providing questioning feedback?
4. What are the best practices when using CSC?

Stage 3
5. How might CSC enable concepts in ITE literature relating to the third space?
   a. Negotiating identities.
   b. Intersection of epistemologies.

Literature review

This literature review encompasses the three central topics for the enquiry. Initially discussing the current challenges and perceptions related to the theory practice divide in ITE, focusing on the structure of the triadic relationship between the PST, ISM and VL, secondly the provision of coaching, and more specifically feedback through Bug-in-Ear coaching is explored. Finally, a review of the literature based on the third space in education and how it could be utilised to mitigate the theory practice divide.

Significant problems in the field of research within the domain

Initial teacher education (ITE) is crucial in preparing pre-service teachers to become effective educators. However, the theory-practice divide has long been identified as a challenge in ITE. There is often a significant gap between the theories and methods taught in teacher education programs and teachers’ actual classroom practices (Cochran-Smith & Zeichner, 2009; Korthagen et al., 2006). This can lead to feelings of inadequacy or frustration among trainee teachers who may feel unprepared to deal with the realities of the classroom. Differences in expectations between teacher education programs and placement schools can compound the issue (Bernay et al., 2020). For example, a teacher education program may prioritise certain teaching methods or
theories, while a placement school may have different priorities based on the needs of its students and community (Cochran-Smith et al., 2014; Haigh & Ward, 2004).

**Collaborative partnerships in ITE**

The strength of collaboration between schools and ITE institutions is a critical element supporting trainee teachers to enable change and improvement in their practice and in their schools (Bernay et al., 2020; Cohen et al., 2013; Whatman & Macdonald, 2017). Collaboration is applicable at all levels with strong relationships required between school leaders and faculty staff, as well as individual teachers. The Teaching Council of New Zealand established this partnership as a requirement for all ITE programs “with mutual benefits that are explicit and interdependent, structured, and with a shared responsibility for success” (Teaching Council of New Zealand, 2019, p. 10). In Australia, the Quality Initial Teacher Education Review (Department of Education Skills and Employment, 2022) recommended that collaboration between the school and the ITE provider must be a high priority, and reciprocal relationships should be developed to bridge the gap between theory and practice.

Grudnoff and Williams (2010) assert that with this collective approach it is possible to “devise practicum models that would align with a school’s professional culture, meet university credentialing requirements, and contribute to more effective preparation of beginning teachers” (p. 35). Bernay et al. (2020) found through reviewing the literature that there should be trust, mutuality and reciprocity for the relationship to be successful.

Traditionally the approach has been led by the university (Figure 2) and involved three main parties, the PST, ISM, and the VL working together to integrate theory and practice. However the good intentions to support collaboration are not always met with the lived experience which can be less than ideal for all members in the relationship (Cohen et al., 2013; Haigh & Ward, 2004). There can be an imbalance within the traditional triadic relationship with an overwhelming influence from the school and mentor teacher (Cochran-Smith et al., 2014). If the priorities held by the ITE institution and the mentor do not align, the preservice teacher receives mixed messages. While this binary perspective oversimplifies the complexities within the relationships, Cohen, Hoz and Kaplan (2013) established that ultimately there are “conflicts and gaps between goals and actions, between the practicum triad, and between the two systems involved in the practicum: supervisors and mentors acting in different directions at the same time” (p. 29). Sewell et al. (2018) confirm that the “divide between the *ivory tower* and the *chalkface* of the classroom” (p. 322) is at the center of the debate regarding the school-university partnership. Complexity exists within the interactions; the roles and responsibilities must be understood by each party for the practicum to be of value. Sewell et al. (2018) suggest a *boundary crossing* approach to integrate and understand the differing perspectives. A key element of the challenge is finding productive and collaborative ways to work together (Sewell et al., 2018, p. 324).

![Figure 2. Traditional teacher training triad. Adapted from Bernay et al. (2020).](https://example.com/figure2.png)

A central element of triadic collaboration is when feedback is provided to the PST from the VL and PST. The main opportunity for this is during a triadic conference (Cohen et al., 2013). While the aim of the conference is to enable a collaborative assessment based on the performance of the PST during practicum (Jons, 2019), the summative assessment requirements of the VL, and the formative teaching practice focus of the ISM often contradict each other (Zhang et al., 2015). The triadic conference can exacerbate the theory-practice divide unless there is a more open and inclusive approach to feedback.

Coaching in education

An opportunity to provide aligned feedback to reduce the theory-practice divide is through the coaching process (Henning et al., 2015; Lofthouse & Thomas, 2015; Whatman & Macdonald, 2017). The requirement to consistently receive high quality practice related feedback and coaching shapes and develops the careers of all educators, and at the trainee stage it provides the means to understand what is working well, and what needs to be improved (Marshall, 2009). Joyce and Showers (1980) first proposed coaching in education as an approach to improve in-service training and the implementation of evidence based practices in classrooms, discovering the most effective training had cycles of professional learning, implementation of a specific teaching approach and peer feedback in small coaching groups. Developing from the supervisory conceptions of coaching (Joyce & Showers, 2002) are a range of coaching approaches which support more of a side-by-side approach (Blakely, 2001) which is similar to the distinction made by Ippolito (2010) stating that elements of coaching can focus on either responsive or directive styles, this is complementary of the agentic feedback and collaboration cycles described in the study by Bernay et al. (2020) above.

In the ongoing work on coaching by Knight (Knight, 2017, 2019; Knight et al., 2015) he finds evidence that coaching is an effective method to support the development of teaching practice, and should be included wherever professional learning takes place. This is echoed in a review of the literature by Kretlow and Bartholomew who state “preservice and in-service teacher training should include a coaching component whenever possible, to intentionally train teachers to use evidence-based practices in the classroom” (2010, p. 293).

High quality feedback

Coaching is established as a powerful process and an essential element of coaching is the feedback provided in this process (Jones et al., 2018). While Sadler (2010) suggests that the relationship between the form, timing and effectiveness of feedback is “complex and variable with no magic formulas” (p. 536), he also advises that in any feedback model the shift must be away from “telling the students about the quality of their work (disclosure) and towards having them see and understand the reasons for quality (visibility), and in the process develop personal capability in making complex judgements” (p.546). These key elements are also evident in research which advocates for a noticing approach to teacher improvement (Sherin & Van Es, 2009; Stoetzel & Shedrow, 2020; van Es & Sherin, 2002). Research has demonstrated that the timing of the feedback is often dependent on the task being performed (Hattie & Timperley, 2007). Conventionally a preservice teacher would receive feedback once a lesson had finished due to the constraints of a traditional classroom observation environment (Scheeler et al., 2006), this is known as deferred feedback. However, Kulik and Kulik (1988) found that deferred feedback is not as desirable as immediate feedback for improving process level teaching performance. It is possible, although cumbersome and less common, to provide immediate feedback. With immediate feedback the lesson is interrupted by the mentor teacher, or visiting lecturer to provide the feedback, disrupting the preservice teacher, and the learners (Scheeler et al., 2006). While there are disadvantages with this approach immediate feedback can scaffold the concept of ‘reflection-in-action’ by Donald Schon (1987), and has the further potential to build the efficacy of preservice teachers in developing another of Schön’s concepts ‘knowing-in-action’ which is associated with the tacit knowledge that is often unobtainable to preservice teachers (Cochran-Smith, 2010). The provision of feedback has been a focus of Boud (2015) who insists that “learners must develop their capacity to calibrate their own judgements and appreciate the qualities of their work and how it might otherwise be improved” (2015, p. 4), this builds on concepts related to Schön’s work on ‘reflection in action’ and ‘knowing in action’ (1987). These concepts relate directly to the provision of feedback to teacher trainees who require a range of feedback both immediately and over time to support growth and development. The links between immediate feedback, development of ‘reflection in action’ and instantaneous
access to tacit knowledge holds the potential to augment the feedback process with technology to support and develop preservice teacher efficacy in the classroom.

**Bug in ear technology**

With the affordance of new technologies there are further opportunities regarding the provision of feedback for it to be effective and potentially collaborative. The work of Scheeler (Scheeler & Lee, 2002; Scheeler, McAfee, Ruhl, & Lee, 2006; Scheeler, Congdon, & Stansbery, 2010; Scheeler et al., 2012; Randolph et al., 2020) provides a foundation to explore how Bug-in-Ear (BIE) technology has been used to provide synchronous high quality feedback in classrooms to enhance teaching efficacy. A key characteristic of BIE technology is the ability to modify the way that feedback is provided and acted upon, closely associated with single loop feedback processes (Carless, 2019). By having a direct and discreet link to the preservice teacher the visiting lecturer or mentor teacher can communicate in real time using remote virtual feedback via video observation and a BIE device without disrupting the flow of the teaching episode (Horn et al., 2020; Scheeler et al., 2010). This approach is particularly relevant for preservice teachers who often require scaffolding to perform evidence-based practices with fidelity (Rodgers et al., 2019).

Within the research from Scheeler (2012) there are further compelling arguments to justify the use of immediate feedback via BIE technology, namely reducing the likelihood of trainee teachers perpetuating negative habits and ineffective practice which can permanently embed in their teaching, this is disrupted through immediate feedback by alerting preservice teachers to modify their teaching techniques to perform them correctly if there is the opportunity in the same lesson. An interesting element in Scheeler’s (2010) research is the method used to develop the protocols associated with the feedback provided during the synchronous sessions, the teaching teams agreed on keywords and instructions that would not distract from the teaching and flow of lesson, but would prompt a change or development in behaviour. This falls within the theme of co-construction and agency within the triad to support a third space as emphasised in much of the reviewed literature in the previous section (Green et al., 2020; Grudnoff & Williams, 2010; Sewell et al., 2017). Scheeler has continued to investigate iCoaching and in her most recent work continues to find benefits in the use of BIE technology and has linked this with an improvement in student academic performance (Randolph et al., 2020). This continued work moves towards addressing a gap in the research regarding learner outcomes with regards to the impacts of BIE feedback on teaching performance (Sinclair et al., 2020).

Although studies by Randolph (2020), Rock (2009; 2014) and Scheeler (2002; 2006; 2010) demonstrate that using BIE technology to receive immediate, corrective feedback improved teaching performance in a convenient and unobtrusive method there were limitations. In all instances the feedback was provided to teachers working in one-on-one scenarios which does not involve the cognitive load and complexity of receiving feedback while in whole class instruction (Benedict et al., 2016), this would be a consideration if the BIE tool was used in a more general classroom setting. Sinclair et al. (2020) reviewed 32 studies where synchronous performance feedback was delivered via technology to impact teaching. Many of the studies were of high methodological quality and qualified synchronous feedback via technology as a valid evidence-based practice. However there were limitations in that many of the studies examined discrete interventionist behaviours and were executed in isolated environments indicating doubts around the benefits on general teacher skills or students outcomes (Sinclair et al., 2020). In addition, the authors claim that the use of technology tools to provide synchronous feedback is intensive and not “feasible or desirable” (2020, p. 97) for use with all teachers. Owens et al. (2020) explain that the BIE device used in their study only worked in certain parts of the classroom, restricting movement of the teacher. It is problematic that in the twenty years of developing BIE for classroom use there continue to be challenges in the effectiveness of the technology. None of the studies in the reviewed literature described experiences regarding the provision of collaborative synchronous coaching from the mentor teacher and the visiting lecturer simultaneously, indicating a gap in current research.

**Collaborative partnerships in the third space in education**

Further to the traditional approach depicted in Figure 2, Bernay et al. (2020) propose two additional approaches to support collaboration. They argue for the triad to evolve to focus on professional learning that better supports classroom practice for the professional learning community as well as the entire school community. Importantly, the preservice teacher is recognised as equal within the relationship. A central theme established in the progressive approach is the concept of a hybrid space (Bernay et al., 2020). Green et al. (2020) also describe a hybrid space and define this as the third space. In discussion of the literature, Green et al. (2020) concluded that
the third space was often challenging to establish and difficult to maintain due to inconsistencies in personnel and a lack of ongoing funding to support the relationships. Opportunities to break down historical hierarchies in the third space should be supported to enable a shared vision which will benefit the preservice teacher, as well as the learners which they are working with. Any space that is created should support engagement with “innovative practice and experimentation to meet the learning needs of individual children or priority learners” (Bernay et al., 2020, p. 137).

The third space concept is based on social-cultural theory, explaining how an individual’s identity comprises a complex range of overlapping characteristics (Bhabha, 1994). It can be used to break down and understand the irregular forces of cultural exchange. In education, Moje et al. (2004) described the third space as a place to (1) build bridges between marginalised discourses, (2) navigate across different discourse communities, and (3) create conversational spaces that bring competing discourses into dialogue with each other. Gutiérrez (2008) also explored the concept extensively within the ecosystem of the literacy classroom. Here the definition evolves into a place where knowledge is constructed between the official and unofficial spaces of the learning environment. “It is a transformative space where the potential for an expanded form of learning and the development of new knowledge are heightened” (Gutiérrez, 2008, p. 152). A common theme in the literature is crossing physical, emotional, social, or cultural boundaries to create a shared vision and understanding. In ITE, this symbolic space nurtures non-hierarchical relationships within the triad. Roles and responsibilities are transformed to enable new opportunities to learn, reflecting the recommendations above of Bernay et al. (2020), Grudnoff and Williams (2010), and Haigh and Ward (2004). Cochran-Smith & Lytle (1999) state that it is impossible to divide between practice and theory; there must be something in between. The third space can be seen as a bridge between the dichotomous physical separation of the campus where PSTs are guided through the theory of the classroom and the classroom itself, where the theory comes to life (Cuenca et al., 2011). On a less visible level, the third space can be regarded as a paradigm shift towards a collaborative and democratic environment for relationships to evolve (Williams et al., 2018). While there have been successful studies that aim to create hybrid ‘third spaces’ to support triadic collaboration (Howell et al., 2017; Wetzel et al., 2018; Youens et al., 2014) they have not been able to provide immediate feedback, which can support more rapid development in practice based environments (O’Brien et al., 2021; Rock et al., 2014; Sinclair et al., 2020).

In summarising the literature there is a need to nurture collaborative relationships within the triadic relationship to reduce the theory practice divide. It is well established that teachers require feedback to improve their practice in both short- and long-term cycles. For feedback to be effective in short single loop feedback processes it must be systematic, corrective, positive and immediate. Coaching is a useful technique to support the double loop feedback process and the development of teacher efficacy in longer cycles of feedback (Carless, 2019). For preservice teachers to be effective the third space must be utilised to support successful partnerships. However there does not seem to be a wide range of evidence based on the combination of remote and synchronous coaching to support these concepts for classroom teaching. There is also minimal evidence describing a collaborative synchronous approach which could provide strengthening of the third space as well as opportunities to use short- and long-term feedback cycles for coaching. It is clear within the studies discussed that technology is simply the tool to provide feedback. Many studies have attempted to emulate the existing experience by substituting the coach with the tool, rather than augmenting the whole experience with a new approach.

**Outline of the applied research methodology**

Grounded in the Vygotskian paradigm that knowledge is social and constructed with others (DeVries, 2000) this project employed a mixed methods approach applied through participatory action research (Kemmis et al., 2014). Participatory action research can be summarised as “enquiry with people, rather than research on people” (Altrichter et al., 2002, p. 130). This is also echoed by Hodges (2014) emphasising the focus on participating in the change, rather than analysing the change. Participants in the research supported the construction of research questions and user defined requirements with regards to effective feedback. Participants were also involved with analysis of data and discussion of findings.

The participatory action research methodology was applied across the 3-Level Evaluation Framework by Vavoula & Sharples, (2009) which has been successfully used to assess mobile tools in an educational context (Koole et al., 2018).
Participants and place

The participants are at the center of this project. The primary participants in this study were preservice teachers on a practice based Master of Teaching and Leadership program in New Zealand. All preservice teachers in the study had been using IRIS Connect (a dedicated video reflection tool) for over a year and their schools and students have already provided informed consent to permit the use of the tool to improve teaching practice. An invitation was sent to all 64 second year preservice teachers on the program to gauge the level of interest regarding participation in the study. Four triads took part in the research. Ethics were approved by the IRB.

Data collection and analysis

The data collection process followed the Micro, Meso and Macro stages, based on the 3-Level Evaluation Framework (3M) developed by Vavoula and Sharples in 2009. The M3 framework has been effectively used to evaluate mobile tools in different educational contexts (Fabian & Topping, 2019; Kabassi, 2017; Koole et al., 2018). The framework was created to address the challenges faced in assessing mobile learning, including capturing learning in different contexts, measuring mobile learning processes and outcomes, and considering the wider organizational and socio-cultural context of learning.

The 3M framework is designed to operate at three different levels: micro, medium, and macro, to aid understanding of the learning taking place in a range of contexts. The micro level examines the interaction, activity, and behavior of individual learners or actors in a learning context. The data was analysed through a participatory lens with the focus on a self-reflective collective study of practice and transformational action to improve practicum pedagogy (Kemmis et al., 2014).

Stage 1 – Micro Scale (RQ1)

The micro scale focusses on the technology, does it work the way intended, meeting the requirements of the task. This stage consisted of a pilot study to test the concept of CSC and the most effective set up for the technology. The aim was to establish if it was possible to simultaneously communicate within the triad while providing practice feedback to live teaching. In line with social constructivism and participatory action research qualitative and quantitative data was collected through a co-constructed survey which assessed the effectiveness of the tool for each member of the triad.

Stage 2 – Meso Scale (RQ2)

Once the technology has been tested and is robust enough to be used in classroom teaching the meso scale assesses how CSC could impact traditional practicum feedback methods in ITE. Social constructivism enabled user defined requirements with regards to pedagogical outcomes which were then tested requirements as defined by the PSTs, VLS and ISMs. Again, semi-structured interview was also held with each triad following the trial. The findings were aligned with an in-depth scoping review to refine best practice in using the tool. These results influenced the specific protocols involved in the timing of the feedback during the teaching episode, how the feedback is delivered, and application of key phrases or language applied by the visiting lecturer and mentor teacher to support the preservice teacher in modifying practice.

Stage 3 – Macro Scale (RQ3)

The macro scale examines the organisational impact and wider implications of the tool. Findings from stages 1 and 2 informed the implementation of this stage. The overarching goal of reducing the theory practice gap through engaging the third space was the focus and the success of implementation was measured against the findings from a scoping review of how the third space had been applied in ITE.

The third space is critical at this stage to disrupt the institutionalised hegemonic underpinnings of the relationship. The strengths and weaknesses of all parties must be acknowledged for the tool to be successful, for example the school mentor could know more about the individual attributes of the class that is being taught, and the visiting lecturer may have more of an understanding of the pedagogical methods to support teaching of a particular topic.

Qualitative data was be collected through small group interviews with the triad, as well as quantitative data through co-constructed surveys. Data was also be collected through analysing data on IRIS Connect, which has the functionality of tagging and timestamping teacher actions.
Presentation of any preliminary ideas, the proposed approach and the results achieved so far

The PhD is in the final stages of publication and to date a scoping review on effective BIE coaching practice has been published in the International Journal of Mentoring and Coaching in Education. The pilot study on how CSC might bridge the theory-practice divide in ITE is currently in review. The final publication of ‘Flattening the power structure: Collaborative Synchronous Coaching as the third space in the practicum’ is also in review.

The results of the pilot study in stage 1 demonstrate that CSC is a valid method of delivering real-time practice feedback that can support triadic collaboration. The user defined goals of ‘sharing tacit knowledge’ and ‘providing questioning feedback’ were met in stage 2. There were some tensions and challenges with CSC when used with the triads. Technical difficulties were discovered with Bluetooth connections failing and sound issues that had to be solved. There were also challenges for the ISM and VL in deciding who was providing the feedback, and when it should be provided as to not break the flow of the teaching session. Cognitive load was also a challenge for some PSTs when receiving ‘questioning feedback’. This led to the development of several suggestions for best practice when using CSC. 1) Establishing roles, responsibilities and outcomes, 2) developing a seamless technology solution and 3) transparency (particularly for student participants in the classroom). When digging deeper into concepts associated with the third space in ITE results demonstrated that CSC could aid in supporting authentic collaboration and de-hierarchising relationships to enable more effective preparation for beginning teachers. CSC promotes dialogic discourse and disrupts traditional binaries in education. Creating authentic learning communities can bridge expertise gaps and increase PST development. Observers can develop new perspectives and apply contextualised feedback in real-time. Overall, this emphasises the concept of reciprocal learning and within the Aotearoa context, ‘ako’.

Proposed contribution to the field of research/description of the PhD project’s contribution to the problem solution in the domain

The aim of this research is to inform and contribute to ITE reform and policy through leveraging a deeper understanding of best practice using current technology, advocating for alternative approaches in employment-based courses. A positive relationship in the third space can be facilitated through the co-construction, timing and type of feedback that is delivered through CSC. In doing this the research also aims to enhance the provision of equitable access to consistent high-quality feedback in ITE. CSC acts as a support for the preservice teacher who may be placed in locations where there is not adequate support in place, enabling greater equity in the support and provision of high-quality teachers. This approach also aims to instigate the most impact on teacher efficacy through research informed feedback processes. The opportunity to deliver feedback remotely is also an exercise in reducing the financial impact of the observation process, namely through time and travel to remote locations. CSC could also be transferred to any practice based preservice field for example medicine or paraprofessionals who require support to develop their skills.

References


Marshall, K. (2009). Rethinking teacher supervision and evaluation how to work smart, build collaboration, and close the achievement gap. In Rethinking teacher supervision and evaluation how to work smart, build collaboration, and close the achievement gap (2nd ed.). Jossey-Bass.


Note: All published papers are refereed, having undergone a double-blind peer-review process. The author(s) assign a Creative Commons by attribution licence enabling others to distribute, remix, tweak, and build upon their work, even commercially, as long as credit is given to the author(s) for the original creation.

© Gander, T. 2023