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Making Pedagogy Tangible: Developing Skills and Knowledge Using a Team Teaching and Blended Learning Approach

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Abstract: In an era of accountability government and industry bodies are mandating that teacher education programs provide evidence of their impact. This paper provides an example of evidence-based practice, exploring how a team teaching and blended learning approach influenced the development of pre-service teachers (PSTs) competency skills and knowledge. This approach was introduced to an initial teacher education (ITE) specialist music secondary methods unit to ensure that the tertiary learning context aligned with contemporary innovations in schools and provided authentic learning and teaching opportunities. Using an embedded advanced mixed methodology, this research had two phases. Phase 1 explored the development of competency skills and knowledge as perceived by PSTs during the ITE music methods unit. Phase 2 investigated the practical application of these skills and knowledge in professional educational contexts post the completion of the unit. Compelling evidence suggests that by making pedagogy tangible, PSTs will be provided with opportunities to develop knowledge constructs and skills relevant to the ever changing demands of the profession.

Introduction

Contemporary policy frameworks are mandating that teacher education programs in Australia and internationally demonstrate evidence of their impact (Edwards & Nuttall, 2016). Teacher educators are therefore grappling with decisions about the type of data that will drive change, while "systematically addressing the influence of neoliberalism and accountability in teacher preparation" (Richmond, Bartell, & Dunn, 2016, p. 103). In Australia, accountability measures include the expectation for graduating teachers to confidently meet the competency standards prescribed by the Australian Institute for Teaching and School Leadership (AITSL) in various educational contexts (2014). These particular challenges are amplified by the uncertainty of rapid social change and technological advancement. As a result, discussions have emerged about the key goals of teacher education (Tatto, Richmond, & Andrews, 2016). Initial teacher education (ITE) should not be limited by specific discipline based knowledge, but rather, should include the skills and knowledge to enable teachers to cope with the changing demands of the profession. Graduating teachers need to think and act in flexible, adaptable and creative ways.

As agents of change (Paufler, 2016), teacher educators have the potential to drive educational renewal (Goodlad, 1994). Graduating teachers must be seen as inquiring educators, continually questioning their pedagogy, existing curriculum and viewing educational practices in critically analytical and creative ways (Sirotnik, 1991). ITE should

support these contemporary skills and knowledge, by developing reflective practitioners capable of problem solving, creativity and flexibility (Richmond, Bartell, & Dunn, 2016). Evidence suggests that ITE programs are aware of the complexities for which they are preparing pre-service teachers, however there may be some disconnect between the skills teachers need and what is actually being provided (Shaklee & Baily, 2012). Teacher educators are grappling with finding the balance between discipline based knowledge and course content and fostering big picture ideas to support graduate teachers in dealing with the realities of current schooling contexts, but preparing them for the uncertainty of the future. There is value in standards for both content and teacher preparation, but this remains only one part of the puzzle (Richmond, et al., 2016). In an age of accountability informed by neoliberal pressures and standardised testing, there is a requirement to demonstrate the connection between the skills and knowledge we teach in ITE and how these can be transferred into practice. This research will provide an evidence-base that articulates the nuances between preparing teachers for current and future educational contexts.

This paper will discuss how two teacher educators within a discipline based or specialist secondary music education method unit responded to the contemporary needs of ITE in two ways. Firstly, a team teaching and blended learning approach that sits within a constructivist paradigm was introduced to the unit. The development of this pedagogical approach was initially decided upon to ensure that the tertiary learning context aligned with contemporary teacher skills and innovations in the profession and provided and provided authentic learning and teaching opportunities. Further, as teacher practitioners it is imperative to make our pedagogical approach, curriculum design choices and assessment development tangible. Team teaching and blended learning provided a platform from which to deconstruct this complex triad and its interrelated dimensions, providing visible understanding that connected contemporary skills to practice. Secondly, this approach provided a basis for which the pre-service teachers would engage in critically reflective practice, to articulate their own pedagogy, curriculum content design and assessment development. Using an embedded advanced mixed methodology, this research had two phases. Phase 1 explored the development of competency skills and knowledge as perceived by pre-service teachers during the ITE music methods unit. Phase 2 investigated the practical application of these skills and knowledge in professional educational contexts post the completion of the unit. This second component of the research was conducted after the pre-service teachers had an opportunity to work in schools independently for at least 6 months and had an opportunity to practically apply their skills and knowledge learnt from the discipline based method to the school context.

It is important to clarify at the outset that the underpinning of this research is not simply about pedagogical reasoning or pedagogical content knowledge. The approach used in this project could be regarded as an extension of the ideas first proposed by Shulman (1986, 1987) and later further developed by Loughran (1994), whereby the teacher educator would think out loud in class about the pedagogical reasoning and decisions which influence their practice in real time. However, because this incorporates articulation of pedagogy, curriculum content and assessment by the teacher educators using a team teaching and blended learning approach, the interrelated dimensions are more complex. A visual representation of this can be seen in Figure 1. This project investigated how the team teaching and blended learning approach influenced the development of pre-service teachers' competency skills, and knowledge. By making this pedagogy tangible and visible, a platform was created for critically reflective practice and the transference of contemporary skills and knowledge to professional practice.

Theoretical Framework

A combination of team teaching and blended learning brings the past and present together in innovative and flexible ways, challenging pedagogical approaches and thinking. The background and context for both team teaching and blended learning will be provided to inform the understanding of the educational framework and constructivist paradigm in which this sits.

Team teaching is described as cooperative teaching (Bauwens & Hourcade, 1995), collaborative teaching, co-teaching and teacher collaboration (Welch & Sheridan, 1996; Boulay, 2005). It tends to involve two or more teachers collaborating in the planning, teaching and assessment processes. As part of the process they learn from each other (Murphy & Scantlebury, 2010) and thereby operate as both consumers and producers of professional knowledge (Kerin & Murphy, 2015). It has been viewed as an effective teaching approach and evidence suggests that through team teaching, teachers may be empowered to be creative together and to generate new knowledge as they plan, teach and evaluate lessons in a group (Roth & Tobin, 2002).

As an "organizational concept" (Mansell, 2006, p. 19) team teaching requires the educators to have a particular set of skills to create cohesion. For example, respect and trust, listening skills, assertiveness, empathy, the ability to give and receive feedback and the willingness to challenge each other to action (Knights & Sampson, 1995; Mansell, 2006). This approach can lead to an overall enhanced experience for all participants and facilitators. For academics, it can provide opportunities for collaborative reflection (Knights & Sampson, 1995), thereby supporting professional development. For students it can provide swift feedback on work and assessment tasks (Fuller & Bail 2011; Haddon, 2011) both online and in face to face classroom work. In addition, team teaching can improve student engagement (Donnison, Itter, Edwards, Martin, & Yager, 2009) by supporting an increased focus on the learning rather than simply accumulating knowledge (Shibley, 2006). While these aspects may be assumed to support weaker students, reportedly it is the average university students who have the most to gain from team teaching (Beggs, 1996; Mansell, 2006). This is significant as the current emphasis on academic accountability, student results and excellence in the classroom (Benjamin, 2000) is driving many decisions being made across the university sector.

Blended learning is problematic to define as documented understandings and descriptions differ greatly (Mirriahi & Alonzo, 2015). For some it is identified as a mix of traditional on-site instruction with innovative learning technologies (Thorne, 2003) or a course with online and on-campus components (Linder, 2015). Others argue that it is more complicated than just this mix of learning experiences and that it is driven by pedagogical considerations. This pedagogically based view of blended learning requires educators to completely re-think the classroom planning, implementation and management (Sahare & Thampi, 2010).

This more complex perspective of blended learning suggests that the role of the teacher and the student should be reconsidered (Garrison & Kanuka, 2004). This could include moving the emphasis from the teacher to the student and focusing on the experience rather than the content. Further, despite the inclusion of the technological component, the focus should be on pedagogy not technology (Oliver & Trigwell, 2005). Dehaidy and Nouby emphasise that to implement blended learning well, teachers need appropriate pedagogic skills (2008). Therefore, time, effort and appropriate preparation are required to ensure that the pedagogical imperative is being achieved as this underpins the process and the assessment of outcomes and success.

The re-shaping of the curriculum that blended learning encompasses should support students' capacity for independent learning and the students should be at the centre of the curriculum planning (Chigeza & Halbert, 2014). Educators should aim to develop higher order skills such as critical and creative thinking, organisation and motivation to enhance thinking processes, learning opportunities and knowledge application. Educators need to be willing to experiment and change their pedagogy accordingly to ensure a successful and positive implementation of blended learning which is driven by pedagogy rather than technology (Crawford, 2016).

Constructivist theory is based on the idea that people construct their own knowledge through their personal experience (Duffy & Cunningham, 1996). It is about knowledge and learning; it describes both what knowing is and how one constructs knowledge (Fosnot, 1996). The effectiveness of constructivism is that it prepares students for problem solving in a complex environment and caters for the contemporary competency skills and knowledge that graduating teachers require. Constructivism provides opportunities for learners to be active in building and creating knowledge, individually and socially, based on their experiences and interpretations (Anderson, Greeno, Reder, & Simon, 2000). As a result, there will be differences between the taught knowledge and the learned knowledge, since each student interprets taught knowledge based on their own individual socially mediated constructs.

The role of the teacher in this context is to develop an understanding of how pre-service teachers interpret the knowledge and skills being taught. The teacher educators need to guide and facilitate in the refinement of their understanding and interpretation through careful scaffolding and sequencing. This constructivist teaching and learning relies upon the lecturers explicating their pedagogy, curriculum design and assessment development in tangible and visible ways. The team teaching and blended learning approach provides a platform for reflective practice that connections the pre-service teachers' prior knowledge and practical experience in order to construct new knowledge and contemporary competency skills. In doing so we enable a balance between the responsibilities for educators to encourage students to construct their own knowledge while also ensuring that disciplinary knowledge and course content is addressed (Stemhagen, Reich, & Muth, 2013).

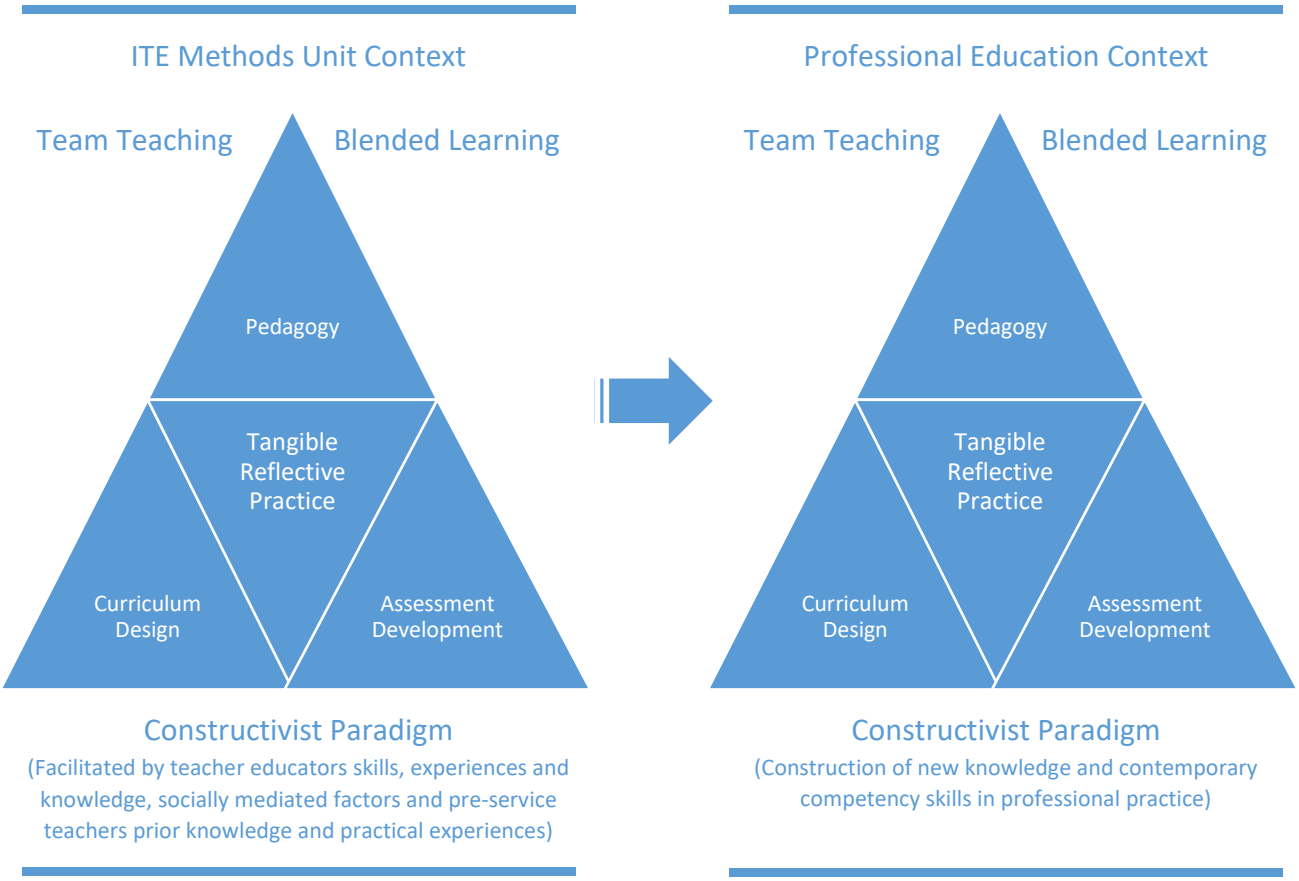

Figure. 1 Theoretical Framework

While it is clear that many educational contexts practice the ideas of constructivism (Fosnot, 1996), in this particular study the principles provide opportunities to make pedagogy and reflective practice tangible. For pre-service teachers this is particularly relevant as practical application of knowledge and skills provides complex meaning to theoretical constructs. In this context knowledge is constructed in three dimensions. Firstly, pre-service teachers construct meaning as a learner from peer interactions, experiences and socially mediated factors. Secondly, pre-service teachers construct meaning as a teacher as the skills and knowledge are enacted by their lecturers in tangible ways, using team teaching and blended learning Thirdly, graduating teachers apply the contemporary skills and knowledge to the professional education context and as a practising teacher they make explicit their own practice in reflective and tangible ways. Through these three dimensions learning is approached as a constructivist, student-centred, situated, collaborative, and individually different process. In a technologically driven world of social media and instant information, "constructivism can become a guiding theoretical foundation and provide a theory of cognitive growth and learning that can be applied to several learning goals" (Karagiorgi & Symeou, 2005, p. 24). The blended learning and team teaching approach allows a platform for pre-service teachers to negotiate their role as both a learner and teacher, linking theory to practice in a highly contemporary and innovative way (Crawford & Jenkins, 2015).

Research Context and Methodology

In response to a rapidly evolving and innovative tertiary environment and increased industry and government expectations for evidence-based practice outcomes in ITE, this research explores how a combined team teaching and blended learning approach influenced the development of pre-service teachers' competency skills and knowledge. The hypothesis of this study states that by making this approach and pedagogy visible and tangible, that a platform would be created for the transference of contemporary skills and knowledge to professional practice. This relationship between what is learned in a discipline based methods class and the knowledge and skills that are transferred across into educational contexts are measured at three time points. Pre and post the discipline methods unit and then 6 months post the graduating teachers' ITE. This way data could be captured during pre-service teachers' learning, while negotiating how these skills and knowledge might be transferred into practice, and then once students had the opportunity to work independently in schools for a reasonable amount of time after their ITE. The focus of this discipline based unit was not just to enact a curriculum that was crucial to specific content development, but to provide learning opportunities that fostered contemporary competency skills and knowledge such as, creative and critical thinking, flexibility, adaptability and problem solving. Therefore, providing an evidence-base that articulates the equilibrium between preparing teachers for current and uncertain future educational contexts.

The main research questions were to explore:

- To what extent can a team teaching and blended learning approach provide a platform to develop pre-service teachers' competency skills and knowledge?
- To what extent are the competency skills and knowledge valued and applied in professional educational contexts post the completion of the unit?

The research methodology used for this project is an embedded advanced mixed methodology (Creswell, 2013). This methodology was used to illicit key findings from multiple data sources and to allow for triangulation of the data, which is important given the small sample size (n=88) and the localised context. This allowed a focus on the issues presented in a localised context with the intention that this could be applied to a wider context (Bassey, 2007). The research methodology framework is illustrated in the following figure:

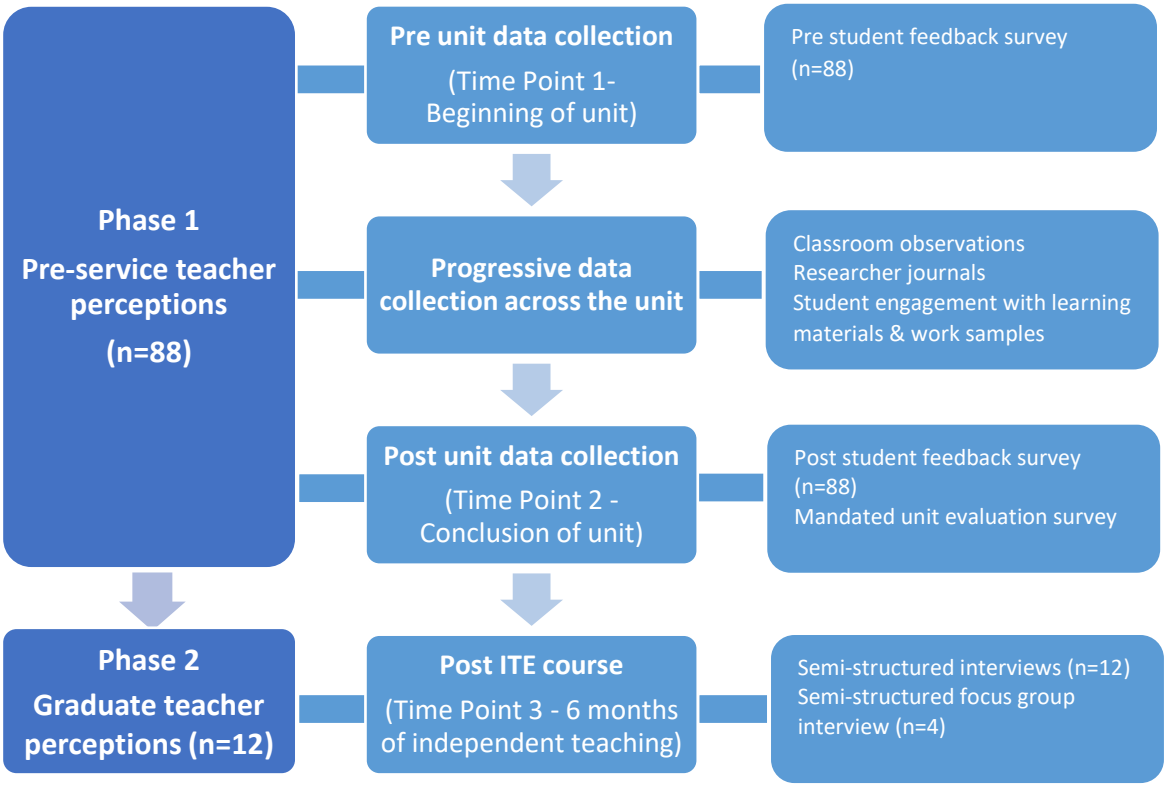

Figure. 2 Embedded Advanced Mixed Methodology Research Framework

The research participants involved in Phase 1 of the project consisted of 88 pre-service teachers from a discipline based music education methods unit who were studying in the secondary or primary-secondary ITE programs in the Faculty of Education at Monash University, Australia. The ITE programs include the Masters of Teaching, the final year of the Bachelor of Education, and the Graduate Diploma of Education. The research participants involved in Phase 2 of the project consisted of 12 graduate teachers, 6 months post their involvement in the discipline methods class and the completion of their ITE course. The teacher educators and researchers involved in this project were Dr Renée Crawford and Dr Louise Jenkins from the Faculty of Education at Monash University. Ethical approval was granted to conduct this research and appropriate measures were in turn put in place to ensure that there was no conflict of interest. This included such practices as a third party administering consent forms, anonymous surveys and replacing student names with codes on certain data sources. This was particularly important for participants in Phase 1 of the project.

Qualitative data was analysed using thematic analysis techniques and interpretative phenomenological analysis (IPA). IPA are conducted on varying, but generally small sample sizes due to the meticulous detail and lengthy process required (Smith & Osborne, 2015). It allows for an insider view of the participants world by engaging in an idiographic exploration of their meaning constructs, acknowledging the influence of personal, social and culturally mediated factors. Quantitative data was measured using frequency distribution analysis. The distribution of the statistical data set included the reoccurrence of primary themes, this categorical data not only identified perceptions of contemporary skills and knowledge from the pre-service teachers through the use of team teaching and blended learning, but provided the basis from which semi-structured interview and focus group questions were designed for the Phase 2 data collection. Validity, rigour, trustworthiness and credibility of the data is established through the process of triangulation. In embedded advanced mixed methodology this is achieved through the application of multiple data sources (Creswell, 2013). For the

purpose of reporting key findings relevant to the discussion in this paper the post student feedback survey data and a focus group interview will be presented. This will allow for relationships to be made between what was learned during the ITE discipline methods class and what is enacted by some of those graduate teachers in the professional context 6 months post their course. It is acknowledged that the sample size of the two data sets are different, however this is consistent with the embedded advanced mixed methodology and unavoidable due to the limited availability of participants for the focus group interview component.

Findings and Discussion

Findings indicated that students responded positively to the team teaching and blended learning approach. This was evidenced by the pre-service teachers emulating this approach in their own developing practice. In this section the researchers will present results from the post student survey data and a focus group interview. This will provide exemplars of the project outcomes thus far that demonstrate the impact of the approach on the development of pre-service teachers' competency skills and knowledge.

Results will be presented in a combination of narrative style discourse and graphs. The graphs present a number of themes that indicate the perceptions or understanding that pre-service teachers have developed throughout the discipline based secondary music education methods unit. The focus group interview data will exemplify how this understanding was then implemented in a professional context. The transferable skills and knowledge that participants explicate are evidenced by three dominant themes that appear in both data sets in some way: creative and critical thinking, flexibility and adaptability, and problem solving.

It was clear from the post survey data that pre-service teachers highly valued the team teaching component of this approach, which created an environment that 'fostered creative and critical thinking'. This was indicated by 83% of pre-service teachers as demonstrated in Figure 3. Accompanying this was the level of support for the 'different experiences, expertise and perspectives' provided through team teaching, with 91% of pre-service teachers indicating that this was important.

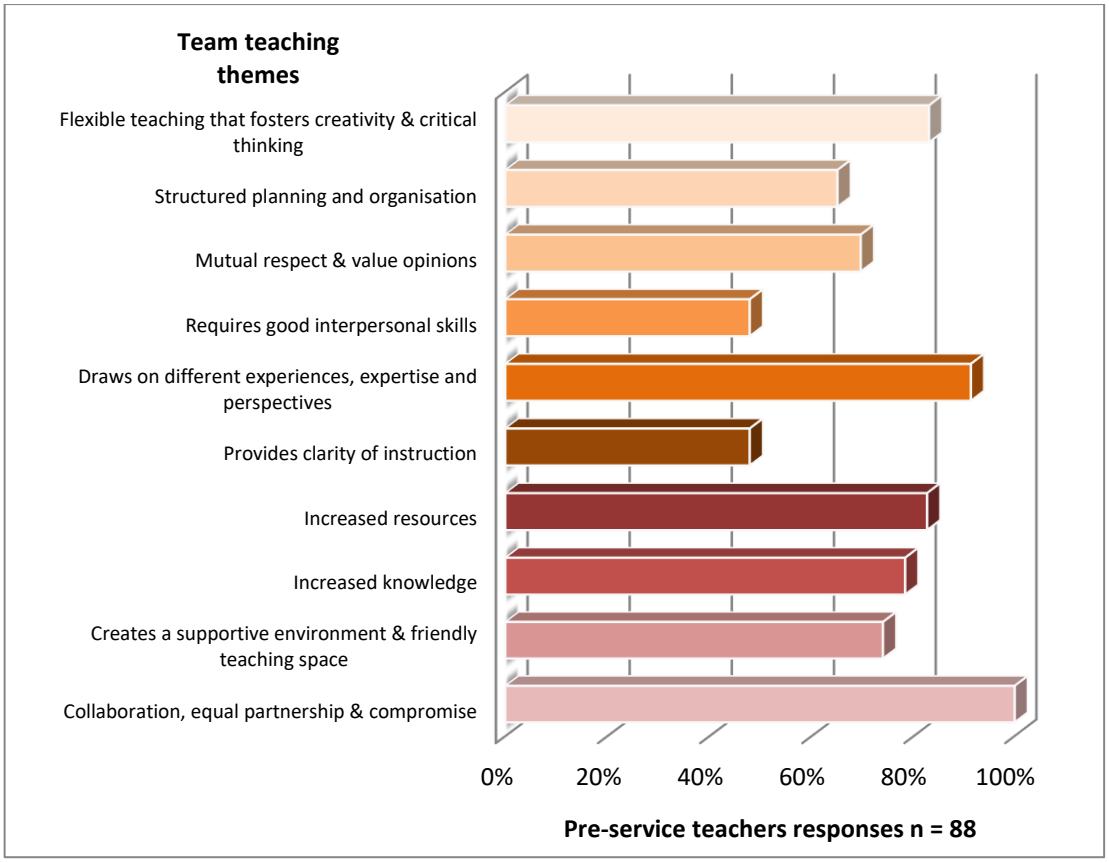

Figure. 3 Themes that resonate with pre-service teachers' perceptions of skills and knowledge applied through team teaching

All pre-service teachers found that developing a sense of collegiality and flexibility when working together was paramount with 100% experiencing the team teaching classroom as a place of collaboration, equal partnership & compromise'. This valuing of appropriate attitudes and behaviours was furthered as 70% responded that there was a general sense of 'mutual respect and valuing of opinions'. Pre-service teachers explained that the teacher educators created a 'supportive environment & friendly teaching space' (74%) and used team teaching to 'draw on different experiences, expertise and perspectives' (91%). Competency skills such as structured planning and organisation (65%) and the ability to draw from an increased pool of resources (83%) and knowledge (78%) was also recognised by the pre-service teachers as important.

Themes that resonated with the blended learning component of this approach are illustrated in Figure 4. Similarly, to the team teaching aspects highlighted, pre-service teachers indicated that a number competency skills and knowledge were being practiced and valued in this music education methods unit. Pre-service teachers indicated that blended learning opportunities provided an engaging environment that encouraged flexible learning (74%), stimulated creative and critical thinking (48%) and catered to diverse learning styles (65%).

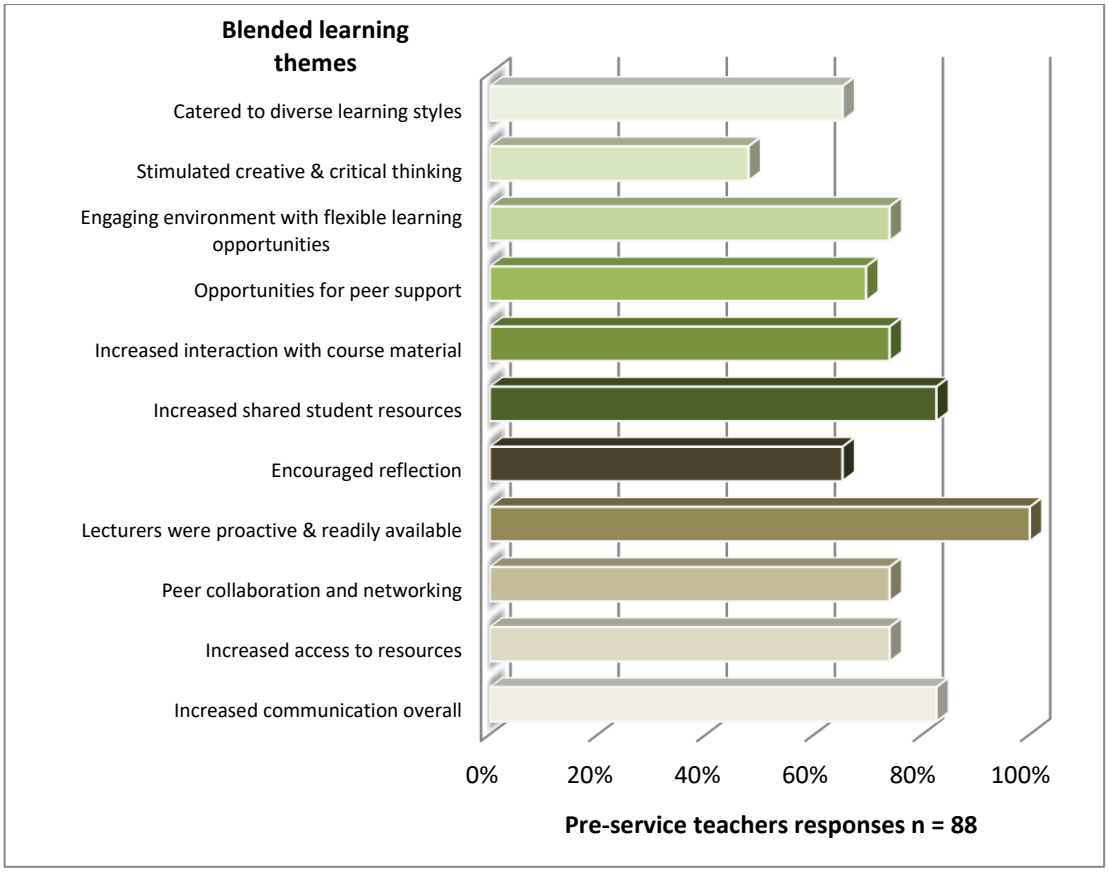

Figure. 4 Themes that resonate with pre-service teachers' perceptions of skills and knowledge applied through blended learning

All students expressed that the teacher educators were proactive and readily available in this teaching and learning context (100%) and 74% of pre-service teachers believed that this platform increased their interaction with course material and access to resources. This highlights the critical aspect of the role of the educator in this context to be continually present (Bender, 2012; Crawford, 2016; Johnson, 2001) and in turn the increased time and commitment this requires (Benson, Anderson, & Ooms, 2011; Garrison & Kanuka, 2004). Pre-service teachers realised the value that blended learning can provide in encouraging reflective practice (65%), peer collaboration and networking (74%), peer support (70%), and the increased sharing of student designed or sourced teaching resources (83%). Finally, it was explained that using blended learning increased overall communication (83%) not only in the form of important news and assessment reminders to do with the unit itself, but in the sharing of information about curriculum and policy developments, teaching resources, strategies, professional development experiences and pedagogical development. Creating a safe and supportive environment so that pre-service teachers felt comfortable to contribute to learning activities and discussions both in class and online was critical. Likewise, building rapport is paramount and the teacher educators committed the extra time and commitment required to engage proactively, making clear the expectations at the outset. This was particularly important as some research suggests that despite the social media platforms that young people interact with on a regular basis, that there is a reluctance to engage with online materials and at times discussions in class and in forums for fear of not having the right answer or being judged negatively (Bender, 2012). Mutual respect and valuing differing opinions was established early to help counteract this, including the purposeful use of forums and learning activities to encourage personal interaction,

collaboration and team building both in class and online. The teacher educators were included and contributed to these aspects of the unit as much as the content and curriculum.

Online forums and learning activities can provide opportunities for students to reflect and shape responses. Research also suggests that introverted or self-conscious students who would typically avoid contributing to class discussions, may benefit from online forums as this allows them the appropriate time and space to be included (Johnson, 2001). There are clearly mixed research outcomes, which are reported across different contexts, and as such it is necessary to acknowledge that each specific case will have differing variables. With that stated, pre-service teachers involved in this research indicated that blended learning does cater for a diverse range of learning styles and many of the introverted participants expressed that this provided them with more opportunities to be included in the learning activities and contribute to the group in an overall positive way.

Focus group participants discussed the interplay between their experiences as a learner and a teacher in relation to the three dimensions described in the theoretical framework. This included understandings of the types of knowledge constructs and contemporary competency skills now practiced by these participants in a professional education context. Three dominant themes have been determined as key transferrable skills (creative and critical thinking, flexibility and adaptability, and problem solving) and are discussed in relation to the ITE discipline methods class retrospectively and as currently applied to each teacher's individual situation. Each participant critically reflected on their pedagogy and how the practical learning opportunities provided tangible ways to make visible their approach to teaching and learning. The following are exemplars that have been judiciously chosen to represent the data.

Creative and critical thinking was a theme identified throughout the post survey data (Figure. 3 and 4), and also regarded as an important skill to the focus group participants. Teacher 3 refers to a performing arts project conducted in class: "It was really rewarding for me because it was the creative process, where I was in charge and I could decide…" Providing opportunities for creative expressions and sharing intellectual control were highly valued. This teacher also explained that the blended learning platform allowed peer to peer and peer to lecturer, "immediate feedback" which they could then "critically apply...knowing what's possible and what's not" (Teacher 3). The scaffolding and sequencing of knowledge that occurred within this team teaching and blended learning approach is exemplified when considering the basic principles underlying constructivism, particularly, active, collaborative and authentic learning (Crawford, 2016). The application of the process of these principles in this instructional design required tangibility or visibility of knowledge in practice. This ensured that pre-service teachers were provided with scaffolds in order to critically and creatively navigate through content, make authentic evaluations and allow for shared intellectual or learner control (Crawford, 2016; Karagiorgi & Symeou, 2005). Teachers 1 and 2 explained that they used creative writing as part of the brainstorming process for this performing arts project which they collaborated on using the online platform. The blended approach supported this process and was a way of working already familiar by their peers as it was set up in class. Teachers 3 and 4 worked on a unit of work that was used in a school context where they were responding to youth issues such as peer pressure, drinking and reckless driving. The teachers wrote a short play script with accompanying music. Their students had to creatively and critically shape the story at various points in the script and explore the consequences of the decisions. The task itself "relies heavily on students critical thinking and creating" (Teacher 3), and "how to combat these issues in creative and engaging ways - it really related to them as well" (Teacher 4). The premise for this unit came from work completed in the music education methods class where they were required to think in these ways and reflect on how they would engage their students in this big picture thinking. It

is also important to note that this creative and collaborative unit of work designed by these two graduated teachers were working in different schools. They used online collaboration and team teaching, emulating the practices of their lecturers.

Flexibility and adaptability were identified as critical to 100% of pre-service teachers (Figure. 3) and particularly important when engaged in decision-making about creative processes. Teacher 1 explained some of the difficulties and challenges presented with the performing arts project completed in the music methods unit. This included making the lead scriptwriter aware that "some of the things that were in [the script] weren't appropriate". Careful communication and emotional intelligence were required as the pre-service teachers' negotiated content modification and creative ownership. Requesting deletions was confronting for teacher 2 and she was "very nervous about doing that". The technique and process of scriptwriting highlighted several layers of complexity in relation to flexibility and adaptability: emotional intelligence, an ability to compromise, and high level interpersonal and intrapersonal communication. Many of the underlying skills required for flexibility and adaptability are fostered in the team teaching component of the approach used in the music methods unit (Mansell, 2006). The experience provided a skill set that allowed these pre-service teachers to respond to such situations in flexible and adaptable ways as exemplified by teacher 1 who said "if you go into a school and you are a performance arts teacher...you're expected to teach anything".

Problem solving was an ongoing challenge throughout this performing arts project as the pre-service teachers responded to an authentic teaching scenario which included the ability to cope with a lack of resources, the difficulties of planning rehearsals around study and work commitments and logistical issues. This was encapsulated by Teacher 4:

> *[This project] was a massive learning experience...that will benefit my own teaching. I learnt how to work together…to compromise with one another for the benefit of the end result...extreme time management skills and how to juggle...other assignments with general work life...I learnt how to trust my peers and support their creative ideas – I learnt what it was like to [do this]...from a teacher's perspective but also from a student's perspective – such as dealing with performance anxiety, the pressures of script writing, time planning, collaboration and much more.*

As the leaders of this performing arts project, teachers 1 and 2 had to plan and manage the rehearsals and direct their peers through decision-making processes. A group decision was made to extend a crucial rehearsal late into the night whereby it "felt like we were actually out in the industry doing it ourselves" (Teacher 1). This emulated a real-life context where the learners became the teachers taking responsibility for the decision-making processes and managing their own learning (Anderson, et al., 2000; Knights & Sampson, 1995). This approach was supported by 91% of pre-service teachers who intimated that this provided opportunities to draw on different experiences, expertise and perspectives to solve both surface level and complex problems (Figure. 3). Teacher 2 explained how the sense of teamwork became apparent due to the pressure they were under at this time as "everyone just let their guards down... [had] fun and really tried their hardest – And that was when we really gelled as a group." This example of group problem solving was governed by socially mediating factors that enabled the group to build stronger collegiality. This is supported by a constructivist view of learning where the pedagogy provides learners with opportunities for practical and contextually meaningful experiences through which they can construct knowledge, raise questions, and defend their ideas and strategies via modelling and interpretation (Fosnot, 2005).

Teachers 1 and 2 were clear about continuing to emulate the blended learning and team teaching approach as, "the class was used to that model so we were continuing it" and

they saw the value in this pedagogy describing that, "it just worked really, really well… [and] felt like we were really team teaching". At this point the teachers made the connection to blended learning and online platform and the provision of "immediate access" to information and news sharing as well as the flexibility of content which was "accessible to everyone, anywhere, anytime" (Teacher 1). As observers of this process, the teacher educators could see a reciprocal relationship between the tangible or visible pedagogy demonstrated in the discipline methods unit and the teachers' ability to now reflect upon and discuss their own pedagogy. The data confirmed that this content knowledge was constructed in three dimensions from learner to pre-service teacher to applying their knowledge and contemporary skills to the professional education context.

Implications for Practice

The themes from the data indicated that a number of contemporary competency skills and knowledge were valued by the pre-service teachers in the discipline music education methods unit. In particular, three dominant skills (creative and critical thinking, flexibility and adaptability, and problem solving) were being developed by engaging in practical activities such as the performing arts project described by the focus group participants. This was exemplified by the ability of the teachers to deconstruct pedagogy and then apply this to the development and implementation of curriculum. Both the pre-service student survey data and the graduate teachers involved with the focus group interview implied that these were important contemporary teacher skills and knowledge transferrable to professional education contexts.

Evidence-based practice is imperative in the current educational climate of accountability measures and standards. This practitioner research is an example of how a study in a localised context can be used to provide a platform for decision making about content design and pedagogical approach that has potential application in other initial teacher education contexts. Making pedagogy tangible has had an impact on the development of pre-service teachers' competency skills and knowledge. In the music education methods unit the lecturers' pedagogical approach, curriculum content choices and assessment development was explicitly discussed with the pre-service teachers making meaning and knowledge constructs visible. This enhanced the pre-service teachers understanding of what it means to be a critically reflective practitioner which they were then able to implement in learning activities and in turn in their own classes as graduate teachers.

In this context the lecturers applied a constructivist paradigm to situate the team teaching and blended learning approach used. This provided the platform for which to make pedagogy tangible, including the approach, curriculum content choices and assessment development. In a technologically driven world, constructivist principles can be used to harness innovative instructional design and provide cognitive growth and learning that can be applied to complex real-life situations (Crawford, 2016). Therefore, the blended learning and team teaching approach provided a way for pre-service teachers to negotiate their role as both a learner and teacher, linking theory to practice in a highly contemporary and innovative way. The most significant outcome of this research was the correlation that can be drawn between the positive learning outcomes demonstrated when pedagogy is no longer an abstract concept. Practical applications of knowledge constructs and skills are critical to the development of pedagogical understanding. Pre-service teachers should be provided with contemporary skills and knowledge relevant to prepare them for the ever changing demands of the profession. Regardless of the overall approach adopted, there is no denying the impact that the teacher

educators had on the pre-service teachers' development when making their pedagogy accessible in visible and tangible ways.

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