

Playing on Both Sides of the Djembe: Preservice Music Teacher Development Through Facilitating Drumming at a Special Education School

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Abstract

Despite a renewed interest in music teacher education practices with real-world implications, the heterogeneity of learners is often daunting to early-career educators. There is a lack of specific and adequate coursework in undergraduate music education programs to prepare preservice music teachers (PSMTs) for teaching diverse learner populations, including learners with disabilities. Drawing on a project where PSMTs facilitated drumming sessions at a special education school, this case study explored PSMTs' experiences of project-based service learning in a special educational setting. Five themes that emerged from the data describing PSMTs' experiences suggest that such initiatives with learners at a special education school can foster student responsiveness and autonomy. The findings describe how integrating dialectic aspects could nurture the music-teaching skills of a PSMT. These aspects are joy and challenges, expectations and reactions, and learning to teach individually and in a group.

Keywords

drumming, field experiences, music teacher education, preservice music teacher (PSMT), project-based service learning (PBSL), special needs contexts

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Introduction

Music education scholars stress the importance of providing preservice music teachers (PSMTs) with strategic, integrated, and hands-on curricular initiatives that promote critical reflection, discourse, and actions related to diversity and inclusion (Forrester, 2019). Inspiring PSMTs to teach music and giving them the training, skills and experiences, changing their attitudes, and developing their confidence and competence in music teaching are vital for the future of music education.

Authentic context learning experiences, such as situated learning, fieldwork, peer teaching, service learning, practicum, and student teaching, provide PSMTs with an opportunity to develop general pedagogical knowledge and participate in task-related activities (Forrester, 2019). Authentic context learning experiences could provide the “hands-on experience” that early-career teachers desire in preparation programs (Legette, 2013). Ogden et al. (2010) asserted the need for a more authentic pedagogy that regularly integrates theory into practical contexts in real-world environments to equip PSMTs to operate in diverse educational contexts¹. Specific instructional strategies can help meet the needs of learners with varying abilities (Darrow & Adamek, 2018). Education in a special needs context is often challenging to implement, as the heterogeneity of learner abilities and learning-style preferences in classrooms is daunting to early-career educators. Learners with disabilities² have varying motivation levels and differing responses to classroom environments and instructional practices (Felder & Brent, 2005).

The educational framework of this study was project-based service learning (PBSL; Bradford, 2005; Hugg & Wurdinger, 2007). PBSL resulted from combining project-based learning (PBL) with service learning.

Project-Based Service Learning

Many experiential applications, including service learning and PBL, impact significantly on PSMTs’ success at tertiary level (Kuh, 2008). PBSL adds the community as a full partner in the PBL process, and hence, the outcomes are less clear or predictable. In a personal conversation with Bielefeldt et al. (2009), William Oakes noted that

the facilitation of the PBSL experience is more dependent upon capitalizing on teachable moments and learning opportunities than traditional PBL. Therefore, service-learning requires a more flexible curricular scaffolding to support the appropriate learning and presents additional assessment challenges since there is more uncertainty.

The educational framework for PBSL includes (a) PBL, (b) service learning, (c) reflection, (d) collaboration, and (e) assessment (Rockenbaugh et al., 2011).

Project-Based Learning. PBL is an instructional, student-focused method connecting PSMTs’ experiences with school life and provoking serious thinking as they acquire new knowledge (Efstratia, 2014). Instead of using a rigid lesson plan that directs a

learner down a specific path of learning outcomes or objectives, student-designed projects allow for in-depth investigation of a topic worth exploring. PSMTs operationalize concepts and see tangible results by facing and solving real-world problems. Using strategic thinking skills such as critical analysis, PSMTs learn how to structure their thought processes and see the connections between their processes and the results in real time (Helm & Katz, 2011). Kaschub (2014) proposed that teacher educators might consider student-driven PBL to transform PSMTs' understanding and actions. In this model, "music teacher-educators adopt a curatorial role in which PSMTs engage personal and professional autonomy, mastery, and purpose to adapt to ever-evolving musics, musical practices, and music teaching and learning contexts" (p. 125).

Service Learning. Service learning, often called community engagement pedagogies, is "a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities" (Bandy, 2011, p. 1). The common denominator in all service learning is a program where service to a person or agency results in a student learning experience (Ricke, 2021). Service learning offers preservice teachers (PSTs) increased opportunities to develop their teaching practice and teacher identities (LaSalle, 2021) and provides a backdrop to develop personally and become socially integrated into the field of teacher education (Burton & Reynolds, 2009). For PSMTs, service learning represents an alternative fieldwork mode that provides valuable classroom experience to complement existing practicum and student teaching requirements (Bartolome, 2013).

Reflection. Despite a renewed interest in relevant educational practices that should be included in music teacher preparation, little is known about the meanings that PSMTs ascribe to these practices in their development as music educators (Burnard, 2014; Georgii-Hemming et al., 2020). PSMTs' professional growth is fostered by balancing teaching experiences and reflection as individuals within a community of learners. While short-term field experiences can benefit PSMT's professional development process, placing them in a school setting for observation and teaching experiences does not ensure that reflection on the music educational process will occur (Barry & Caravan, 2020).

Brownell et al. (2003), Reynolds (2003), Reynolds and Conway (2003), and Reynolds et al. (2005) agree that being involved in fieldwork promotes preservice teachers' reflective practice. However, music teacher educators (MTEs) are sometimes unclear about connecting theory with practice and promoting reflective thinking (Hourigan, 2009). Dewey (1933) identified three attitudes of reflective educators, namely, open-mindedness, wholeheartedness, and responsibility. Reflective learning is integral to motivating and involving PSMTs in this learning process and changing these attitudes toward and confidence in the subject (Roberts, 2018). Aljaberi and Gheith (2018) found that educators' attitudes toward professional self-development were high and positively correlated to reflective practices, and that their attitudes direct their behaviors toward reflecting on classroom practices and improving

performance. Nurturing reflective thinking in a music teacher education program effectively changes PSMTs' attitudes and develops their skills and competence (Russell-Bowie, 2013). Unfortunately, the ability to take notes, study, and pass a test does not mean one can apply the theory, learn, reflect, and perform better in successive applications (Barry, 1996). Practical, meaningful application followed by reflection can unlock the door to a PSMT gaining a better understanding of how skills, actions, and responsibilities interact, counteract, and enhance each other. Student writing encourages reflection and enhances fieldwork with unfamiliar student populations (Hourigan, 2009; Reynolds, 2003). Through reflection, PSMTs can process their experiences, connect their learning to the real world, and identify areas for future growth (Lorenzo Moledo et al., 2021).

Collaboration. In PBSL, PSMTs work in teams to develop their projects, learn from each other's strengths and weaknesses, and share their learning (Hugg & Wurdinger, 2007; Hussein, 2021).

Assessment. Assessment in PBSL involves both formative (providing feedback to PSMTs during the project to guide their learning) and summative (measuring the overall learning outcomes of the project) evaluations of student learning (Bielefeldt et al., 2009).

Field Experiences in Music Teacher Education in Special Needs Contexts

The potential of PBSL to complement coursework for PSMTs in educational contexts through fieldwork is underresearched in South Africa (Leal, 2015). Field experiences are valuable components of undergraduate PSMT programs, offering real-world teaching experiences and providing valuable learning opportunities for PSMTs in authentic music teaching contexts (Kladder, 2018). However, these experiences might be more effective if targeted to specific contexts (Tully, 2023). More research into the implications of field experiences in special needs contexts will strengthen existing teacher education programs and provide a deeper understanding of the impact of special needs preparation for PSMTs (Hourigan, 2007). Learning to teach learners with disabilities starts with preservice experience (Hourigan, 2009). Reynolds and Conway (2003) found that PSMTs favor the service-learning music education field experience over peer teaching, as the former provided an independent experience with learners. Including learners with special needs as part of fieldwork and observations is essential to assist MTEs in preparing PSMTs for mainstreaming and inclusion, as interacting with learners with disabilities could alleviate anxiety about teaching them (VanWeelden & Whipple, 2005). Field experiences in a special needs context can assist MTEs in keeping up to date with changing trends, including mainstreaming and inclusion as a topic in their programs (VanWeelden & Whipple, 2005).

Engaging PSMTs in observation before their field experiences, developing stronger prompts to facilitate deeper reflection, promoting more team teaching and communities of reflective peers, and developing stronger collaboration with cooperating school

music teachers could maximize the effectiveness of these experiences for their professional development (Barry & Caravan, 2020). The need for infrastructure and active support from both the university lecturer and the cooperating teacher may be particularly acute in field experiences where PSMTs work with learner populations they are not familiar with in their own experience, including learners in special needs and culturally diverse contexts (Barry & Caravan, 2020; Hourigan, 2009).

Various field experiences positively influence PSTs' transition to full-time music teaching, enhancing their teaching knowledge and skills more than any of their coursework engagements (Barry & Caravan, 2020). This field experience was unique as the learners and teacher at the special education school were full partners in the educational process and the outcomes were less clear and predictable. These experiences offer significant value in creating real-world learning opportunities as PSMTs prepare for careers in music teaching (Kladder, 2018). Classroom environments should emphasize freedom, and PSMTs should be able to contribute to their own learning (Kladder, 2018). Therefore, the purpose of this case study was to explore how PSMTs experience the integration of PBSL into music teacher education through facilitating drumming with learners at a special education school.

Research Methodology

In this qualitative case study, I adopted a constructivist worldview that investigates an individual's desire to comprehend the environment they find themselves in every day (Creswell & Creswell, 2018). Through this empirical inquiry, I investigated PSMTs' experiences facilitating drumming sessions in depth and within their real-life contexts (Yin, 2009). As this project involved PSMTs, descriptive qualitative research was conducted on their reflections and perceptions of their teaching and learning experiences.

The NWU-Research Ethics Regulatory Committee (RERC) assessed and approved this research project (Ethics clearance number NWU 00765 18 A7). Informed consent was obtained from the PSMTs, the school gatekeepers, the learners, and their legal guardians. I explained the research aims, invited questions, and sought permission to proceed to the next stage (Cohen et al., 2011).

Prior to implementing the Anke Djé Anke Bé project at the school, the learners were exposed to various music activities, including participating in choirs, singing during assembly, performing in musical items during school concerts and participating in music education in small groups presented by teachers with musical backgrounds. However, this was the first time the learners participated in a drumming project facilitated by PSMTs.

I facilitated the preparation and discussions after the drumming sessions, while the research focused on the PSMTs' experiences after completing the project. The data collection procedures involved my observations of the interaction between the PSMTs and the learners during the drumming sessions and PSMTs' journals reflecting on their experiences.

Data collection extended over approximately 5 months. The drumming sessions were presented weekly in the staffroom at the school and were about 45 min long. The music specialist at the school was always present during these sessions. My research background played a role in interpreting the findings as meaning was constructed based on my own experiences (Creswell, 2014). Given the dual role of researcher and lecturer, I was careful to maintain “a reflexive stance to limit subjectivity and bias” (Flores et al., 2016, p. 266). I managed the power dynamics of being both their lecturer and researcher by splitting the two roles. I was the PSMTs’ lecturer during the semester when they participated in the PBSL in 2019, while the research on their experiences was conducted the year after they had graduated.

Trustworthiness of the data was ensured through member checking, whereby “the final report or specific description or themes” were returned to the participants (Creswell, 2009, p. 191) to offer them “an opportunity to provide context and an alternative interpretation” (Patton, 2002, p. 561). As they are the ones in the experience studied, they would have detailed information about the context of the experiences, their personal reasons for the occurrence, and their responses to it.

The findings were based on an inductive qualitative data analysis (Creswell & Creswell, 2018) of PSMT reflections on their experiences of facilitating the drumming sessions. The PSMTs were divided into two groups to accommodate the availability of djembe drums for themselves and the learners. Each group visited the school 5 times during the semester, culminating in a concert where both groups were present. Therefore, the data included approximately six 2-page reflections per student, equaling approximately a hundred pages of data that were analyzed using ATLAS.ti 9. This process entailed assigning codes and then deriving subcategories and themes. Computer-assisted qualitative data analysis software (CAQDAS), ATLAS.ti 9, was used for the data analysis (Friese, 2012). First, I identified aspects of the data relevant to the research questions. Data were then coded and analyzed for emerging themes, which enabled focused interpretation of the data. Data saturation was reached when no new information, knowledge, or categories emerged (Merriam, 2009).

The Anke Djé Anke Bé Project

The music specialist at the special education school asked us to facilitate drumming at the school. The music specialist, the PSMTs, and I collaborated to design The Anke Djé Anke Bé³ drumming project. This embodied service learning, “a teaching and learning model in which students leave their classroom to meet the needs articulated by a particular community” (Reynolds, 2004, p. 71).

Group drumming is becoming increasingly established in educational settings to enhance emotional and social well-being (Friedman, 2000; Snow & D’Amico, 2010; Stone, 2005; Winkelman, 2003) while respecting the indigenous, popular knowledge prevailing in specific communities. Group drumming can enhance listening, observing, attending, and collaborating skills and provides a safe and supportive environment in which social processes (such as following, leading, taking turns, sharing, and other forms of reciprocal interaction) are facilitated (Wigram et al., 2002). The positive

experiences of awareness and connection in the safety of drumming in a group potentially support the inherent capacity for self-regulation and encourage positive social interaction (Flores et al., 2016).

Site Selection

The Anke Djé Anke Bé project took place at a many-sided government school for learners with special educational needs in the North-West province of South Africa. The school caters for learners aged 5 to 18 years who have intellectual and physical disabilities and represents the total spectrum of South African society. The occupational therapist and the educational psychologist assess whether the learner meets the criteria for admission to the school. The assessments test a broad set of skills to get a holistic picture of each learner. The learners who participated in the project presented a challenge in one or more areas: oral expression, listening comprehension, written expression, basic reading skills, reading comprehension, mathematics calculation, and reasoning.

Participants

Convenience sampling (haphazard or accidental sampling) was used in selecting the participants, because of my easy access to this cohort of PSMTs and their willingness to participate in the study (Cooksey & McDonald, 2011). The clear advantages of convenience sampling included the availability of participants and the speed with which the data could be analyzed (Kivunja, 2015). Seventeen PSMTs in their third and final year of studies toward a Diploma in Music (DM) voluntarily agreed to participate in the research conducted after completion of the project. When PSMTs complete their DM, many become music teachers in diverse educational contexts, including environments where children with special needs are involved. The PSMTs represented the diverse population of South Africa and included a variety of cultural identities and ethnic backgrounds. I used pseudonyms for the participants in accordance with the ethical requirements of the study. The djembe skills of the PSMTs varied, ranging from inexperienced (four PSMTs) to limited experience (five PSMTs), a fair amount of drumming experience (six PSMTs), and very proficient (two PSMTs).

Fieldwork

The PSMTs submitted weekly reflections that described the visit and applied the experience to their teaching. These journals were graded as evidence of their learning and represented a record of their growth throughout the project. The PSMTs also submitted a final reflection commenting on their overall experience of the PBSL once it had been completed. As we had a limited number of djembes, the PSMTs conducted auditions⁴ at the school to select 10 learners to participate in the drumming project. The “audition” activities included (a) copying, echoing, or imitating a rhythmic pattern to test the learners’ aural skills, and (b) improvising any rhythmic pattern on top of a basic

rhythmic pattern. Auditioning in a group boosted confidence, connected PSMTs to the music, and nurtured communicative interaction.

Characteristic of PBSL, the PSMTs planned the goals and activities for the sessions according to guidelines based on the outcomes and content of music teacher education at our university. The PSMTs engaged creatively with the contents of the discipline through exploration, consolidation, and application of practical learning experiences and reflection (Wigram et al., 2002). Each drumming session commenced with simple rhythmic activities that progressively evolved into two new songs as the drumming skills of the learners advanced and they gained confidence. The PSMTs were divided into two groups of eight and nine. Each group visited the school for five consecutive weeks to teach drumming, with the first series of drumming lessons culminating in an Eisteddfod performance⁵ and the second series culminating in a concert. The PSMTs consistently ensured a safe, supportive environment where learners were not afraid of being “wrong” and where mistakes were accepted as part of learning, encouraging exploration and self-expression.

Findings

After analyzing the data, five themes emerged from the reflective journals. These themes describe how PSMTs experienced facilitating drumming sessions in a PBSL project with learners at a special education school. The experiences of the PSMTs included (a) joy, (b) challenges, (c) developing responsiveness to expectations and reactions, (d) learning to teach as an individual, and (e) learning to teach in a group.

Joy: “Wanting to Express How They Love What They Do and Teach”

The PSMTs aimed to share their love for the djembe with the learners, creating a strong bond through drumming (Banko). They found working with their peers equally enjoyable. Banko appreciated the learners’ interest in the djembe and their understanding of its sounds. The learners were “amazing, eager to learn, and good listeners, fostering a positive and energetic environment” (Calmo). They found joy in playing musical patterns on the djembe and learned by observing others. Calmo found the djembe enjoyable and sought to inspire the kids to love it as well. They developed rhythms and improvised together. Lile and the learners appreciated the free and interactive environment, while Kgamo enjoyed working with various learners. Tshise and Lepo were pleased with the learners’ enthusiasm for learning a new song and their ability to grasp the material. The field experience was fun and rewarding for Tshise and Boca. The learners were engaged and unafraid to be themselves in the presence of the PSMTs, fostering a comfortable and respectful atmosphere. Calmo recognized the learners’ potential and their improvement in sound and communication skills. Lepo looked forward to future opportunities. Tshise enjoyed working with attentive learners. Some students suggested playing solos. Thamo preferred one-on-one teaching as group lessons were seen as delaying progress.

Challenges: “Playing the Rhythms Until They Got It”

PBSL provided a means through which the PSMTs discovered the value of many key instructional strategies, as they found innovative ways to facilitate learning. These strategies included chunking (Calmo added accents and muscle memory exercises), repetition, appropriate scaffolding (Banko clapped to keep the tempo, while Kgame let two learners play complex rhythms together), modeling (Thamo managed tempo rushes and Lile counted while playing along; while the PSMTs found visual learning, imitation, and watching others effective. The learners learned better through listening and mimicking what the PSMTs did) and multimodal presentation (Learners learned by counting, feeling the beat, and using numbers for note values).

Developing Responsiveness to Expectations and Reactions: “Their Excitement Sometimes Delayed Their Progress”

Despite feeling overwhelmed at first, this field experience provided valuable insights into the learners’ responses compared with their own varying expectations, contributing to the development of the PSMTs’ responsiveness.

The learners were very disciplined and refrained from playing their own rhythms while the PSMTs were teaching to focus on doing what the PSMTs required. They were excited and ready to learn and experience new songs (Lile), although Kgame “wanted more participation and excitement from the learners for them to learn more.” He expected the learners to remember “at least one basic pattern,” while Lile expected them to apply the work, observe, and learn. Thamo expected their hands to be flexible and Lepo expected them to play accordingly, which happened. Learners were receptive to the PSMTs’ guidance, perceiving the activities as clear and appropriate in difficulty. Although initially surprised, they quickly adapted and improved their hand movements.

Regardless of the PSMTs’ age or background, the learners were eager, attentive, and cooperative and responded well to the PSMTs’ explanations, showing understanding in their playing. They enjoyed playing in unison and creating musical patterns but sometimes got overly excited, which could slow their progress.

Learning to Teach as an Individual: “Teaching Children Automatically Contributes to One’s Development as a Music Educator”

The experience allowed the PSMTs to try a new instrument, to learn new playing techniques and teach them to learners, to connect others through the rhythmic patterns and understand individual strengths. The three elements that were most pertinent were (a) the development of a PSMT’s own musicianship, (b) the development of a PSMT’s pedagogy through teaching the learners, and (c) the development of a PSMT’s pedagogy through learning from the learners.

The Development of a PSMT's Own Musicianship. Boca's personal growth and musical proficiency improved through collaborating with Tshise, a vocalist, who guided him in collaborative music-making. Thamo's engagement in composing songs for fellow PSMTs enhanced his understanding of membranophones and refined his djembe-playing techniques and listening acumen. Banko noted increased rhythmic connectivity and improved hand coordination with each practice. In addition, Lile expressed satisfaction in acquiring new drumming skills. The early stages of instruction revealed challenges in proper drum handling, necessitating adequate preparation for both the learners and the PSMTs.

The Development of a PSMT's Pedagogy Through Teaching the Learners. Teaching learners in this context fostered personal growth for the PSMTs. Lepo stressed the importance of skill and knowledge development through effective teaching techniques. Strategies such as tailoring instruction to individual learner experiences, preparing engaging musical content, and focusing on basic rhythms were proposed by the PSMTs. Lepo and Calmo found teaching manageable due to sufficient preparation, with Lepo noting a rewarding experience in imparting musical and rhythmic concepts, while Calmo incorporated body movement to enhance learners' engagement. Boca and Thamo discovered that teaching was less complicated than they thought, with the learners' enthusiasm boosting their teaching experiences. Kgamo found the process personally stretching yet enjoyable in teaching a diverse range of learners, while Tshise was pleased to witness the passion of dedicated learners.

Boca enjoyed collaborative teaching with his fellow PSMTs and the learners exhibited varying learning styles, some adapting readily to rhythmic patterns and others benefiting from the PSMTs counting with them. Lile encountered difficulties in teaching, particularly with the varying pace of the learners' comprehension, indicating challenges in group dynamics as some learners made more progress than others. Individual instruction was a valuable approach to pinpoint learner weaknesses, facilitate understanding, and track the learners' progress. For Banko, the initial challenge of getting to know the learners and identifying their strengths and weaknesses transformed into a more accessible and more enjoyable teaching experience as learner participation and enjoyment increased. Tshise recognized the importance of gauging the appropriate instructional level for learners to ensure comprehension and progress during lessons. He embraced increased patience and understanding, especially in response to cooperative and attentive learners.

Thamo appreciated a more homogeneous learner proficiency level, and Tshise observed improvement as learners' dedication and practice increased. The learners demonstrated comprehension of the material presented, and Lile and Calmo advocated using the learners' mother tongue and hands-on demonstrations for effective concept and skill communication. Banko acknowledged the need for patience and care in working with children, while Tshise benefited from the experience of adapting to a new audience, aiding his comfort in front of learners. Boca gained confidence and alleviated nerves, foreseeing a more relaxed approach in future teaching sessions. Kgamo's multifaceted teaching experiences offered insights into personal growth,

including developing patience and adaptive teaching techniques to accommodate varying levels of understanding. His realization that an enthusiastic and engaging teaching approach contributes to learners' enjoyment and learning also contributed to his growth as a future music teacher.

The Development of a PSMT's Pedagogy Through Learning From the Learners. Working with individuals challenged Lepo, because "children have different personalities and energy." A music educator should always have a range of different methods "to see how children learn without making them fear." "One has to deal with different learners with different levels of understanding and skills and be patient with them" (Calmo). They taught Calmo patience: "If one situation is not working, come with another one." Thamo's interaction with the learners cultivated patience and improved communication skills.

Lile understood that the children had special needs and worked slowly to see how quickly they could grasp something. Once she could ascertain the learning tempo, she could channel her mind "to be patient if the children took longer to grasp specific concepts."

The learners' passion, excitement, energy, "strong presence," and enthusiasm about learning made interaction easier for the PSMTs. Working with the learners calmed Boca and diminished his nerves about teaching. They made it easier for him to be himself and to teach.

The teaching experience allowed Lepo "to work with the learners and know to manage them and work with different personalities and characters." This prepared her "for the real life of becoming an educator." The experience was "a great opportunity to work with learners, especially with special needs."

Learning to Teach in a Group: "The Learners Showed Great Teamwork Spirit"

Learning to teach in a group depended on good communication, an understanding of diverse ways of learning and teaching, regular reflection, teamwork, developing one's own musical expertise, and nurturing group dynamics. By embracing these aspects, the PSMTs established a community of teaching and learning they all could benefit from., linking to collaboration as a component of PBSL (Hugg & Wurdinger, 2007; Hussein, 2021).

Facilitating the drumming sessions involved "intense and extended conversations" between the PSMTs to teach different learners how to understand the same method.

Kgamo's peers "understand or approach things differently," but she learnt to appreciate the different kinds of understanding. Tshise found collaborating with his peers at first "a bit tricky" because they often disagreed on teaching content and methods, but afterward "it was all easy and smoothly flowing." Working in different ways made it more interesting, as there was diversity in how he and his peers approached music (Calmo). Through collaboration, they ensured the learners understood "when drumming was a success," as they all had different tastes in the rhythms "but worked

amazing together.” For Thamo, it was a fantastic experience to work with the learners as they became aware of the levels of their understanding to prepare themselves for teaching because the learners could play through the pieces of music the PSMTs taught them.

Regular reflective practices and collaboration (characteristic of PBSL) assisted PSMTs in constructing meaning by discovering connections.

Teamwork allowed them to create the best songs for the learners. Some PSMTs initially found it challenging to work with their peers due to misconceptions about playing together. Helping one another was a way for them to connect as a group. Lile preferred group work, as “everyone had correct skills and an idea of how to play.” Lepo admired how the PSMTs created everything together, explored, and learned from each other: “Creative minds are always eager to do anything.” The learners showed excellent teamwork spirit and everyone seemed to enjoy what they were doing. They knew what to do in a group, and everyone worked as a team and managed to do things they could not do one-on-one. By playing together, the learners could also help one another get “a clearer sense of drumming.”

Kgamo enjoyed seeing her classmates teach. Working alongside his peers encouraged Boca to continue working and building his musical expertise. Lepo stated, “It is always great working with my fellow music students because we all get along and always come up with ideas that challenge us and make us grow more.”

Some PSMTs preferred teaching learners in smaller groups, while others preferred teaching in large groups. A small group size accelerated the progress of the learners’ learning without many distractions as the learners were more attentive. Smaller groups made teaching the learners new rhythmic patterns more manageable and enhanced their confidence to ensure they performed well. PSMTs could focus more on individuality and mastering specific skills. Working in a large group required much work (Banco). For Boca, the group was “a bit too much” as learners were initially confused (because it was new to them) but eventually understood which parts they were supposed to play and eventually managed to play together very well. The drumming was “coming together, and the sound played connected” (Banco).

Discussion and Implications for MTEs

The findings suggested that the field experiences of PSMTs nurtured their educational practices through PBSL in various ways and were a rewarding and fulfilling component of their training. Constructing skills, knowledge, and value from direct experience is characteristic of PBSL, facing and solving real-world problems (Kladder, 2018) with the community as a full partner. Learning extends beyond just content (Bartolome, 2013) while providing a rich learning experience for the PSMTs, enhancing their personal growth. By integrating PBSL in their curriculum content, MTEs foster the teaching skills of PSMTs in an authentic context.

Three pairs of dialectic components contributed to nurturing the music-teaching skills of PSMTs when relevant aspects of PBSL were integrated into music teacher education and developed autonomy and responsiveness. These aspects are joy and

challenges, learning to teach individually and in a group and PSMT expectations and learner reactions.

Constructing Knowledge From Joys and Challenges

The affective learning benefits for the PSMTs were notable in the data. PSMTs reported feelings of joy and a sense of being engaged in something meaningful. Teaching learners in a special needs context broadened the PSMTs' knowledge about teaching. Through creating opportunities to teach diverse contexts, MTEs could collaborate with PSMTs to address their challenges through trial and error and talking to each other. Addressing their challenges enabled them to construct knowledge, skills, and value—characteristic of PBSL. The PSMTs enjoyed collaborating with their peers and the learners (characteristic of PBSL); therefore, MTEs could alternate groups doing fieldwork with groups doing reflection and planning. Unpredictable outcomes, spontaneous learning, and unplanned moments of insight characterize PBSL.

Learning to Teach Individually and in a Group

MTEs should include practical engagement with concepts and skills through field experiences in a PBSL context, where PSMTs can explore, consolidate, reflect upon, and apply teaching and learning aspects while actively teaching and learning. Creating safe environments, where PSMTs can interact with learners in larger and smaller groups, can assist the PSMTs to focus on different aspects of learners' cognitive, personal, and cultural experiences. Establishing PBSL experiences with learners with varying skill levels will benefit PSMTs as MTEs make them aware of how to capitalize on teachable moments and learning opportunities, both aspects of PBSL. The more the PSMTs practiced with the learners, the better their performance and ability to notice their mistakes and correct one another became. Through PBSL, MTEs allow for acute responsiveness to learners and affective self-driven learning by PSMTs. In a study by Parker et al. (2017), their participants initially doubted that planning would enhance their teaching experiences while allowing them to be natural, flexible, and responsive to learners in the moment. On the contrary, they realized that planning prepared them for teaching in many ways. MTEs should emphasize and train PSMTs to adequately plan for teaching, enabling them to process teaching strategies ahead of time so they can respond in the moment while maintaining flexibility (Teachout, 1997).

Reflecting on how to embrace the learners' strengths and weaknesses is a vital component of class discussions led by an MTE prior to facilitating drumming at the special education school, as it promotes understanding and tracks the learners' progress. Assisting PSMTs to identify the learners' strengths and weaknesses results in a more accessible and more enjoyable teaching experience for the PSMTs as learner participation and enjoyment increase. This correlates with Powell and Parker (2017), stating that "a successful teacher seeks to know students' strengths and weaknesses" (p. 31).

Reflecting on Learners' Reactions and PSMT Expectations

Reflection, critical analysis, and synthesis as aspects of PBSL contributed to valuable teaching and learning experiences. As the required outcomes for teaching and learning are less clear in PBSL, PSMTs determined the outcomes for each visit according to their reflections on the practical field experiences. Although MTEs struggle to find time for debriefing and reflecting, they might allow space during their contact time to consider these components of a fieldwork teaching experience (Reynolds, 2004). Learning to reflect is a gradual process. MTEs can nurture reflective skills by providing PSMTs with specific prompts for reflection.

Service-learning partnerships might encourage the transformation of music teacher understanding and responsiveness by preparing others to teach for musical understanding and music responsiveness (Burton & Reynolds, 2009). MTEs setting realistic expectations in collaboration with PSMTs will contribute to developing music teaching skills based on their reflections after each session. By enhancing their reflective skills, MTEs assist PSMTs in constructing meaning, promoting their development and growth as future music teachers. MTEs should build upon PSMTs reflective skills on PBSL to assist them in implementing effective music teaching strategies (Russell-Bowie, 2007). These reflective skills include their experiences, their understanding of the learners, and their diverse backgrounds. This strengthens their reflective and higher-order thinking skills, self-awareness, and confidence in teaching and learning.

Being engaged in PBSL, reflecting on their experiences, and deepening knowledge puts PSMTs in a situation where they can develop their self-awareness and self-confidence, as well as their skills in personal reflection and interpersonal skills (McCarthy, 2003). The more the PSMTs interacted with the learners, the more comfortable they felt teaching (cf. Hourigan, 2007). Awareness of the learners' reactions allowed the PSMTs to construct and enhance their own knowledge, skills, and values. MTEs should give opportunities for diverse PBSL experiences for PSMTs to learn and respond with high levels of autonomy. I had to do little explicit instruction beyond the initial planning and discussions with the PSMTs about teaching and learning. Teaching and learning became easier as PSMTs "understood the learners better and devised better ways to ensure they understand."

Conclusion

This research focused on exploring PSMTs' experiences of PBSL in a special educational setting through facilitating drumming. The findings describe how integrating dialectic aspects in PBSL could nurture the music-teaching skills of a PSMT. As an MTE, I found the teaching and learning between PSMTs and learners encouraging. There were multiple examples of skills development related to learning to play the djembe, developing new playing techniques, teaching rhythms and musical concepts, developing musical capabilities, teaching learners of varying skill levels, creating songs, cultivating listening skills, patience, teamwork, and communication.

During the PBSL field experiences, the PSMTs nurtured their music teaching skills by playing on one side of the drum, busy teaching, while the learners played on the opposite side, busy learning. However, the learners also contributed to the PSMTs' learning by teaching them how to teach through manifesting the various ways they (the learners) learned. This field experience, therefore, prepared PSMTs for their careers as music teachers, consistent with findings in the literature showing that real-world field experiences can promote PSMTs' professional development (Barry & Caravan, 2020).

Learning to connect with different learners and teaching them at the level of their experience and the PSMTs' level of experience was the highlight of the PBSL for the PSMTs. They enjoyed opportunities to build confidence and develop patience through their practical teaching and learning experiences, in their reflections, and in our group discussions. The PSMTs found meaning in facilitating drumming in a special education school, as this broadened their knowledge, skills, and values relevant to developing their autonomy and responsiveness as music teachers. One of the most distinctive experiences that contributed to the PSMTs' growth as future music teachers was being "lively and excited" about what they were teaching the learners to learn while also having fun. I gained a deeper understanding of how to prepare PSMTs to apply music pedagogy to changing learner populations. Music teacher education in a special needs setting values diversity and acknowledges the uniqueness of every learner, as evident from the data and the literature.

While this qualitative study did not aim to make generalizations about all music teacher education programs and settings, the research findings have practical implications for MTEs who are nurturing music teaching skills through PBSL. Continued research on the impact of PBSL on PSMTs will assist MTEs in making informed decisions about best practices related to PBSL in music teacher education.

Author's Note

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Notes

1. In South Africa, Music is one of the four art forms in Creative Arts. In the Foundation Phase (Grade R–3) and Intermediate Phase (Grade 4–6), Creative Arts is a component of the Life Skills subject and in the Senior Phase (Grade 7–9), Creative Arts is a subject on its own. In the Further Education and Training (FET) Phase (Grade 10–2), Music is an elective subject that consists of Performance, Music literacy, Creative work/Technology and General music knowledge (South Africa, 2011). Music education at the tertiary level in South Africa is undergoing a transformation to address historical disparities and promote inclusivity (De Villiers, 2022). This transformation includes diversifying the curriculum to encompass a broader range of music genres and traditions, integrating technology, and fostering collaboration between institutions and communities. Access to resources remains a challenge, and there is a growing focus on preparing music students for diverse career paths. Teacher training is a priority to ensure educators can address the unique challenges of South African music education (Odendaal, 2020).
2. Learners with disabilities refers to learners who face a physical, emotional, intellectual, or social challenge (American Psychological Association, 2020).
3. According to the Bambara people in Mali, the name of the djembe comes from the saying “anke djé, anke bé,” which translates as “everyone gathers together in peace” and defines the drum’s purpose. I chose this name for the project to emphasize the togetherness of the preservice music teachers (PSMTs) and the learners who participated.
4. Due to time and resource restrictions, auditions were necessary to select 10 learners who could keep the beat on a drum for the project’s initial phase. Only 10 drums were available for both groups of PSMTs and learners combined. As the project progressed, funds became available to acquire more drums, and more learners could participate in the project simultaneously.
5. In South Africa, an eisteddfod is a competitive platform for participation in classical and contemporary music, dance, speech, drama, and the visual arts. The learners participated in a local eisteddfod competition where they performed the drumming songs the PSMTs taught them for an audience and adjudicators.

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