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Inclusive music practices for students with a disability: fore-fronting participatory and agentic teacher practices

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Abstract

Musical experience can reveal dimensions of the self, relationships and flourishing that can challenge assumptions about the lives of people with disabilities. The Adaptive Music Bridging Program engages students aged 8–14 years with a disability in ensemble-based instrumental lessons, cultivating musical skills and literacies through weekly participation. A case study explores participatory pedagogies that promote self-regulation, the meeting of students' musical goals, empowerment from participation and community music engagement. The study challenges music teachers to approach their profession with access and equity at the heart of what they do, who they teach and what they aspire for their students.

Keywords: disability musicking; participatory pedagogies; self-regulation; pedagogy; agency

Introduction

Ensemble learning and collective music making provide powerful social interactions that invite individuals to collaborate and share musicking experiences that extend their thinking beyond their own individual capabilities (Chi & Wylie, 2014; Scardamalia & Bereiter, 2014). The way ensembles organise and operationalise participation is often at the heart of how engagement, skill and will of individuals working together as a collective is optimised (Hadwin & Oshige, 2011). The benefits of musicking on self-regulation have been clearly evidenced (McPherson et al., 2017), and this involves learners mediating their own individual and joint efforts as they become cognitively, emotionally and motivationally involved in the collective music-making process (de Bruin, 2018b, c). Ensemble music programs provide highly interactive settings, offering investigation beyond individual dimensions of connection, rapport and relationality (de Bruin, 2019; Hadwin et al., 2011).

Socially shared regulation of learning (SSRL) occurs as a group-level phenomenon and arises through collective negotiation and interaction between learners. In collaborative music making, SSRL can align group members' perceptions on the role of self in collaborative learning processes and the shared and iterative fine-tuning of cognitive, behavioural, motivational and emotional conditions from group activity (Hadwin et al., 2011).

Socially shared regulation of learning in music ensembles is a metacognitive and adaptive mental process. It is inherently transactive as individuals engage in a musical task and jointly co-construct perceptions of metacognitive, cognitive, behavioural and motivational processes (de Bruin, 2018a; Hadwin et al., 2017). Social regulation thus emerges through ensemble participants and their ongoing communication and engagement with each other (Jarvela et al., 2013). self and socially regulated learning

Music ensembles provide a range of self and socially regulated learning (SSRL) prompts and offer emotional and motivational regulation that can sustain learners and their interactions (de Bruin, 2019). Concomitant metacognition can also involve observable skills including a range of planning, monitoring and evaluation actions engaging musicians' self-generated thoughts, feelings and behaviours that are deliberate, controlled and intrinsically motivated (Zimmerman, 1990).

This study investigates SSRL from the point of view of participation in a beginner music ensemble, aimed at students with disability which affords such reciprocal exchanges to occur, called the Adaptive Music Bridging Program (AMBP). Gaining a sense of accomplishment, whether through developing mastery on an instrument or engaging in musical activities, can provide profound senses of success, achievement and self-worth for any student. The AMBP is open to students aged between 8 and 14 years who have struggled to access instrumental music education as a result of disability (Melbourne Youth Orchestras, 2025). Many students in the AMBP have the experience of exclusion from mainstream ensembles and working with directors and peers, whose questioning of one's presence in an ensemble can obviously be detrimental and crushing. Alternatively, experiences that provide perceptions of belonging, accomplishment and self-improvement, provide an individual feeling of belonging and a social persuasion of inclusion that provides an efficacy-building connection (Seligman, 2012).

This program takes social interaction as central to collective participation and the creation of shared understandings in an ensemble setting (Woolner & Clark, 2014). Whilst the importance of coordinated and cohesive participation has been emphasised in collaborative learning research (e.g., Erkens et al., 2006; Kreijns et al., 2003; de Bruin, 2019), its use in disability research and music ensembles is scarce.

Australian context, band cultures and the AMBP

In Australia, United Nations mandates (UN, 2006) ensure all children with a disability have the right to participate in mainstream schooling and are given opportunity and supports to do so. In Australia, this is referred to as 'inclusive education', with 'special education' denoting a segregated setting (see Skinner & de Bruin, 2025 for worldwide terminologies). Despite a Royal Commission (Aust Govt, 2023) recommending the removal of special education schools by 2052, special education in Australia continues to exist as an exclusionary institutional model.

Mainstream Australian urban secondary school settings provide substantial government supported instrumental music provision (Pascoe et al., 2005). Although disabled students who attend mainstream schooling theoretically have equal opportunity to participate in these instrumental music activities, there are undercurrents of resistance within schools and music departments to deny access to this aspect of schooling (Thompson et al., 2024; Skinner & de Bruin, 2025).

Music ensembles in Australian schools tend to adhere to a traditional teacher-centric approach in nature and recreative aims (Prouty, 2011). These types of musical ensembles are contextualised within a particular type of music-making genre, thus appealing to students wishing to engage in common musical experiences with specific musical learning goals and outcomes (Blocher et al., 1997). School concert band pedagogy and practice are situated within traditional Westernised rehearsal paradigms with conductors acting as the musical expert, choosing and eliciting high-quality performance outcomes and experiences from their ensembles (Powell, 2021), compartmentalised into very specific ways of knowing and doing (Allsup & Benedict, 2008).

The concert band ensemble is comprised of students playing wind and percussion instruments in predetermined ways outlined by textbooks or music method books and scores sold by music publishing companies (Blocher, Miles, & Corporon, 2007). There are arguments regarding the disconnect between the intended curriculum of music as a reified model and approach and the evolving tastes of students Southcott & de Bruin, 2022). Mantie (2019) suggests that "when

students have been required to engage in a musical activity that has been pre-determined to be good for them, personal experiences, expectations and values associated with such experiences become varied” (p.6).

Research shows universal limitations to teacher practice, in being ill-equipped to accommodate diverse learners, to school systems not being able to cope with student diversity and an assumption that learning a musical instrument is inherently inaccessible or only suited to those on a pathway to virtuosity (Bremmer, 2023; Bell et al., 2020). The traditional model of concert band instruction assumes all students are highly engaged and interested in learning to play an instrument. It assumes all participants are able-bodied, look, behave, and conform to the traditionally teacher/conductor centric flow of information (de Bruin, 2022). Thompson et al. (2024) assert that traditional concert band pedagogy and practice have thus seldom been challenged or developed.

Further, music educator understandings of music making, teaching and student engagement typically have been situated within Western European formalised music-making practices, have been praised through a ‘superior’ performance ethic and had been codified within post-secondary music settings (Abramo & Austin, 2014; Allsup & Benedict, 2008). The result has been that differentiation has not been part of regular pedagogical practices in schools, music teacher education or higher education generally (Elpus & Abril, 2011; Thompson et al., 2024). Associated practices and values are thus an assumed truth about collective music making in schools (Mantie & Talbot, 2015) that impacts all music learners self-efficacy in participating, learning and enjoyment. As instrumental music education is considered an extra- or para-curricular activity in Australia schools, learners who do not or cannot conform to purported norms can simply be excluded from ensembles.

Socially shared regulation and the music ensemble

From a teaching and learning perspective, SSRL can involve a suite of adaptive and intra-active pedagogic and strategic preferences that promote individual and group collectivity (Wegerif, 2008). This may be in the planning of collectively discussed initiatives (Bahktin, 1994), self-generated musical thoughts, planning in and on action (Schon, 2017) as well as the joint and self-directed reflection and construction of future actions (Gergen, 1994). This highlights the important link between a learners’ reality and communication with others in the learning process. From a relational perspective, dialogue cannot be separated from context and act cannot be separated from environment. Relational languages and experiences are shared, communal and evolving, and knowing becomes a social process based on a relational premise (Shotter, 1993).

Music ensembles as a vehicle for learning can provide opportunity for an active, emergent and performative engagement between participants. In this context, experience is treated as an action, not as something that simply happens to a person, but rather as a creative, joint action in which shared musical community narratives allow the description and embodiment of an intentional joint action between learners. The social and the cultural are inextricably linked to learning (Miettenen, 2000), and this impacts not only those permitted to participate but also those who are excluded.

Whilst research in SSRL has found explicit instruction to be beneficial in mainstream settings (Schunk & Zimmerman, 2007), studies regarding students with disabilities have been limited to isolated strategies oriented to learner goal setting or self-control (Buric & Soric, 2012; Nelson & Manset-Williamson, 2006). The AMBP sits at a nexus between these distinct and contextually complex arrangements.

Teacher roles in efficacy, accomplishment

To build musical self-efficacy, students need to experience a sense of accomplishment in small, learning goal-oriented tasks within an environment that supports musical successes *as well as* the

ability to develop and foster a sense of autonomy and self-regulatory practices that build upon a sense of musical skill (Küpers et al., 2014). The role of the individual ‘in concert’ with their peers, musical director and parents all play a role in the initial and ongoing feelings of success, attainment and their conception of capability in relation to the physical, emotional and situational circumstances that each musician negotiates in the ensemble.

Feedback operates as a moment-to-moment guiding of students’ immediate actions. This impacts student learning management processes (Korpershoek et al., 2016) and provides information for ‘now’, as well as ‘future’ provisions for the student. Central to the role of teacher feedback is the utilisation of a dialogic pedagogy whereby teachers expand students’ thinking beyond learners’ internalisation of knowledge. de Bruin (2023, 2018e) asserts that dialogue can cultivate intra-active dimensions between teacher and learner that affords or impedes interpersonal positivity. This adds a relational complexity to Hattie and Timperley’s (2007) feedback, feed-up, feed-forward construct, highlighting the interpersonal elements that sustain student positive autonomy in the learning process. What is evident is that feedback entails a complex tapestry of specific attention to modelling, scaffolding, dialogue and content including instructional management, affective-motivational management and presentation techniques and actions that pedagogically ‘lead the child’ to form self-generated thoughts, feelings and actions (de Bruin, 2024).

Research involving children with disability has forefronted a prioritisation to reducing disruptive behaviours whilst focusing on teaching low-level, deficit skills, instead of modelling engagement across a full spectrum of SSRL skills (Hadwin et al., 2011). Studies have highlighted the need to cultivate learning cultures that support volitional strategies such as help-seeking and emotion regulation strategies that reduce stress (Buric & Soric, 2012), noting that it is the quality of feedback interaction involving informed differentiated strategies that enable learners to feel efficacious towards their music making (de Bruin, 2022). Students with a disability may present with a wide range of both physical and cognitive challenges. These may require strategies and approaches that accommodate students to gain and reflect on intuitions regarding reading competencies, staying on task, self-monitoring of progress, as well as perseverance to tasks.

AMBP processes and procedures

A key element and difference in the approach the AMBP takes is the dialogic, relational and democratically oriented mechanisms it initiates. The AMBP brings coordination and ensemble direction informed by deep experience in secondary music education and ensemble direction, lived experience of disability and understanding of teacher provision and policy application in Australian schools. The ensemble accommodates students aged 8–14 years who have been denied access to or have felt ostracised by other school or community ensembles on the basis of aspects of their disability or neurodivergence that have conflicted with teacher-centric approaches to ensemble direction and instrumental music tuition. Some students arrive with a passion for particular instrument and may already have begun learning one. Others engage in a ‘Come and Try Day’ where they get a chance to experience range of conventional, modified and specialist adaptive musical instruments. The student and their parents are guided by AMBP staff to their choice of instrument.

The students meet for 32 Saturday mornings across the school year. Students are divided into two groups, Foundation Group focusses on students with high support needs and focusses on the rudiments of playing, such as loud and soft, fast and slow and taking turns. For some students in Foundation Group, it can take many months to fully modify and refine musical instruments to allow them maximum musical freedom of expression. While Foundation introduces students to ensemble music making in small groups of up to three students, AMBP’s larger, second ensemble, known as Junior Band operates more like a standard school band and has students with a broad

range of support needs, including participants who have previously graduated from Foundation Group. The remainder of this article will focus on Junior Band.

Rehearsals for AMBP's Junior Band operate as a band approach where learning takes place together through music making together. The ensemble develops music literacies; the control, accuracy and vocabularies concerning melody, pitch, harmony, timbre, tempo and dynamics based on listening, responding and creating with others. The band commenced with a band method book- *Standard of Excellence* (Pearson, 2019). Conventional band repertoire, however, was enhanced by rhythmically oriented call and response activities and improvisationally oriented music making that engages student voice in the creation and design of some student-led pieces. Music works also involved co-designed soundscape creations in response to video prompts, graphic notation and creative music making generated from the students' response to a selected 'movement composer' or dancer.

Rather than sit in rows fanning out in front of a conductor, as most concert bands and orchestras do, the ensemble rehearses sitting in a large circle, with members all facing each other, emphasising the democratic approach to membership and student voice. The participants (students, teachers and volunteers) include wheelchair users and others with physical disability, those with autism/neuro divergent diagnoses, people with low vision, or who are hard of hearing, augmentative and alternative communication (AAC) users, people with intellectual and/or learning disabilities as well as those that present with multiple disabilities. The researchers present as (1) an experienced secondary music educator and director of concert and jazz ensembles for over 20 years and (2) a musician, organologist (creator of musical instruments) and disabled person who brings lived experience perspectives to inclusion/exclusion in music learning across her lifetime.

The programs of music workshops were delivered weekly within the school term, with occasional breaks for public holidays. Informed consent for research participation and audiovisual recording across the life of the student's, parent's and tutor's participation in the ensemble was gathered in advance, with underage students completing child assent forms. Rehearsals were audio-visually recorded, including 10 minutes before and after, capturing interactions and conversations preceding and concluding ensemble activity. Short informal interviews with students and parents were also used to understand students' reflections and also allowed for recollections of specific incidents and events. Pseudonyms are used in the reporting of the data. Adaptive instruments such as a foot keyboard, manipulated violins and cellos and the frog-a-phone (a soft toy frog with 8 pads electronically hacked to create a transposable octave on computer via software) integrated well, although bespoke electronic instruments were often wrought with technical difficulties during their prototype phases. Though not a facet of this study, we feel it worth mentioning that our presumption was of technologically/physically adapting electronically oriented instruments being the greater need; this was confounded by almost all students selecting and engaging on conventional instruments. Our participants played drums, xylophone, piano, trumpet, violin and cello. As an inclusive participatory group, students often provided input towards length of time spent on each song, the development of improvisations and feedback on timings of breaks.

This study addresses the following questions:

- (1) How do the effects of the AMBP music workshops impact participants' sense of musical and personal development and self-efficacy?
- (2) What are benefits beyond music making for students within the AMBP?

Methodology

A phenomenological approach allowed focus on participants' experiences of learning as the phenomenon under investigation (Smith, 2016). Ethical approval was gained from parents and

students to video record rehearsals and additional interviews, and whilst anonymity was waived, we utilise pseudonyms throughout. The researchers, as educators, occupied an insider perspective but maintained objectivity and epoché, or the suspending of assumptions (de Bruin, 2021). | Interviews of students ($n = 12$), parents ($n = 8$) and tutors ($n = 4$) provided a glimpse of deeper meaning-making asking ‘what was it like for you’ (Polkinghorne, 1989, p. 47). A four-step coding process is often used to analyse qualitative data, particularly interview transcripts and video-based data. These steps identified recurring themes and patterns. The four steps included 1) initial reading/rereading to gather initial codes 2) identifying significant codes in the data, 3) creating categories of codes and 4) reviewing and synthesising high-level categories as major themes (Creswell, 2013). The coding and analysis process revealed actions, feelings, opinions, interpretations and reflections of learning incidents in the ensemble expressed in time and over time. Video and interview data were transcribed and analysed using thematic analysis (Braun & Clarke, 2006). Transcripts were read and coded by one researcher and then the other with a constant comparison method for arriving at initial themes. These were discussed with the facilitating team to resolve divergent instances and arrive at a consistent coding of themes which were patterns of interest noted in any or all interview types (i.e., participants, parents and music staff) and considered in relation to the whole dataset. These were reviewed with an independent third researcher to ensure a consistent understanding between research team and the population being researched (Creswell, 2013).

Findings

The findings are presented from the categorising of data into three major themes; self-regulation through participation; empowerment from participation and community and connectivity. These are detailed below.

Self-regulation through participation

Inductive teaching emphasises the creation of active learning environments that permit personal discovery and critical thinking. The ensemble is oriented around democratic forms of knowledge creation and discovery sharing (Freire, 1978), guided by dialogic prompting and interaction (Bahktin, 1994). This allowed students to feel safe in exploring and gaining instrumental skills and processes. Students voiced these thoughts:

John: I play drums, I find the gripping hard but I've gotten better- I can keep time with the band

Sam: Being in the trumpet team gives me ideas to work on, like an even sound and playing together.

The egalitarian nature of experience sharing fore fronted their inclusion and participation that allowed the voicing of discoveries and opinions. The ensemble provided a learning climate in which students could appropriately voice their accomplishments to individual challenges, prompting their own analysis of learning tasks and problem solving

Rebecca: I hear everyone trying their best, listening to instructions. It makes me motivated and I think about how to sound better. Everyone works hard.

Rose: (via AAC)¹. I have confidence conducting the band- its my favorite part of the ensemble. I've planned what I can move to get responses from the band. It's funny.

June: Learning new skills in band encourages me, practice them at home, being motivated to bet getter and surprise everyone next week with what I can do

Many activities were built upon learned music literacies such as pitch and tonal control, dynamics and expression. As well as playing from standard beginner band music, students used movement and dance to 'conduct' an improvised piece, they played music inspired by a soundscape prompt and they responded to visual scores and video concrete activities. Students then used these activities to build on skills and develop their own procedures, visual and verbal vocabularies and shared feelings of engagement with each other (Prince & Felder, 2006). These inductive methods promoted self-regulation through planning for activities encountered in the ensemble, mediation and refinement of in the moment decisions whilst performing together and reflection on actions as a means of ongoing improvement. Participants discussed:

Ahmed: I've made my own signs from my wheelchair that the band follows. We have learned to understand each other.

Barry: We talk about playing louder and softer, faster and slower. Making and sharing suggestions makes the band sound better.

A parent explained their thoughts and observations to the ways the ensemble empowered curiosity and engagement in students: *The ensemble's inclusive ethos means everyone is part of the band and is entitled to an equal sharing of suggestions and ideas. This is a major value the band provides students, allowing them to grow as individuals, musicians and a community.*

Teacher: Our feedback is oriented around questioning how we collectively feel making the music as well as what we feel emotively through also listening to it. This included prompts such as "What did you learn that would be good to share with others? What challenge did you overcome at home this week? How did you do it? How are you changing the elements of music? (Melody, harmony, dynamics, timbre, speed.) This opens up a dialogue of expressing challenges and strengths often in the same breath as how we are moved by the music we make. This draws everyone's awareness to the musical act as a personally expressive one, rather than one fore-fronting technique.

Empowerment from participation

Participants demonstrated a growing agency within the music workshops. The students chose their instrument, were able to choose whether to attend, how to join in (or not) and their ideas became part of songs and creative process which formed the group's repertoire. Co-regulation and SSRL was facilitated through music making as an activity that built personal, cultural and social connection between students, tutors and learning leaders. Through engagement in music activities and emergent interactions, individuals came to internalise the cultural influences they were a part of creating and thus develop as individuals. The participants adopted a deep, meaning-oriented approach to learning and participation. Workshop observations recorded a change over the program in how individuals took part. Eye contact was initially limited during the workshop and students mostly kept to themselves or chatted to their parents in the 15 minute recess. One staff member began bringing games for the students to play in the break time, and fast friendships soon formed, with some children even bringing back souvenirs for their bandmates after returning from holidays. Over the 32 weeks, participants strengthened their abilities to concentrate, coordinate together musically and respond socially. They became confident with the engagement process, allowing everyone a turn to perform and reflect on performances, the ability to be heard and

understood and to take turns effectively. Activities were regular and ordered, yet flexible in timing, engaging the interest of all individuals in music making and each other. Students reflected on elements of growth gained from shared participation.

Peter: Music helps me concentrate. At school, classes are boring but band time goes so fast. I can be myself in band, we all can.

Ralph: We help each other – we show and tell each other how it works, and we improve together

As the weeks progressed, participants made regular eye contact with each other, they spoke and raised questions and opinions, responding musically and vocally to learning, challenges and epiphanies from playing together. Affiliative banter and the occasional joke with music staff and other participants during the break and at the beginning and end of the music sessions enabled a confidence and citizenship of the ensemble and their place in it.

Jane: We've got to know each other – how we all come together and bring our own strengths to the band. John's always loud and happy, Curwen is so clever the way she conducts in soundscapes.

Their musical abilities and decisions became more sophisticated, confident and coordinated, with heightened capacity to attend to what was taking place. Frustrations were met, shared and negotiated together. Occasionally, a student would experience a meltdown in class, when this happened the class stopped and gave the student time to self-regulate (sometimes with assistance from a staff member or parent), before returning to the lesson.

Tutor: We assisted and comforted affected students in breaks. Organizing attention to unified musical direction requires focus and concentration and silence which were not always forthcoming from all ensemble members. Experiencing these mediations together was and continues to be a powerful learning and community building experience for everyone.

The participants spoke enthusiastically about the satisfaction of overcoming challenges to play something they did not think they were capable of and gaining the confidence to perform in a music ensemble they thought was not possible. Staff perceived a constant atmosphere of excitement from the music workshops and the increased sense of pride and ownership of the music and the ensemble. This was enthusiastically articulated by the students:

John: I didn't think I could play drums, but playing, and practicing, I feel an important part of the band.

Rebecca: I have the music blown up (to large print) but I've memorized the parts, it's easy. Making music to the videos is really interesting- it's never the same each week.

Tutor: The students all want to take a turn improvising- far from being afraid they see it as a right to engage in each week. They are very sure of their collective abilities and gain strength from each other.

Parent of 12-year-old: They feel safe and confident, and they take this to other aspects of schooling and life. They are enriched because of this experience.

Community and connectivity

The participants overcame initial social and musical apprehensions, which for some were substantial. Enjoyment emerged as a particularly strong motivation for sustaining participation. Operating as a connected community seemed to be the cathartic agent for this. The ensemble was a vehicle through which the participants could grow and develop as musicians, gaining confidence, respect and a sense of belonging to a musical community.

Rose: (via ACC) The team developed a keyboard I could use with my feet. It was hard to coordinate my left toe at first but through practice I developed the strength, patience and relaxation to be in control of my movements

June: Getting better every week means trying hard, learning our parts, playing with confidence, doing our part.

There were strong psychological developments that were experienced by the participants. Some discussed the overcoming of musical and physical challenges but also the satisfaction and ambition this promoted.

Parent: There is an overriding sense of care and consideration. There are musical values to achieve there are challenges, meltdowns but everyone is there supporting each other through personal episodes. It's an environment that allows them to grow.

The ensemble also provided a means of fostering goal setting and ambition. As a bridging program within the Melbourne Youth Orchestras' suite of ensembles, some students who developed music literacies saw themselves auditioning for a more advanced ensemble.

Jacinta: My stroke meant swapping strings and creating a grip on one hand and a guide on my violin. My arms were weak- I gradually built up strength, 5, 10, 20, 30 minutes to over an hour. I was determined to play well and make the next ensemble.

The participants saw the ensemble as a gathering of musical friendships. Some participants revelled in the empathic and relational nature of the ensemble, describing close connections with newfound friends. This empathic approach allowed participants with more profound socialisation difficulties to feel secure and welcome, engaging in a shared social environment that provided newfound opportunities for connectivity. The sense of well-being in and beyond music was a palpable benefit that sustained the students beyond the ensemble.

Ralph: I like being part of the band, having friends that can make music together- it's the best.

Peter: I made friends every week. I said hello to the girl next to me and made sure she was set up every week, even though she couldn't talk.

Rose: (via ACC) I felt welcome and happy for the first time in a group. I love making music with my friends, seeing what sounds we can make together and enjoying our company

The participants in the ensemble maintained involvement in activities for 1.5 hours and this feat provided some amazement for staff and families, who reported that this level of sustained focus and commitment to a group activity was unprecedented for their child.

Ralph: I really feel much more confident than a few months ago. I know I can do this, I feel like a musician now

Parent: Students seem to respond strongly; I see growing confidence and perseverance to be the best they can be in their musical endeavors

A vital aspect of the program was for participants to be able to enjoy the experience, and this was evident in their sustained engagement. Music staff were keenly aware of this. Whilst remaining open to responding to participants' questions and assistance when required, their positive banter with students added to the level of fun. With the ensemble activities focusing on group work rather than one-to-one instruction, interactions guided students to engage with each other, cultivating a shared efficacy – the collective belief among a group of individuals in their ability to work together to achieve common goals and overcome challenges (Feltz & Lirgg, 2001).

Sam: The trumpet section is so fun, we do the most talking. We try our best to play in time with the drums.

Parent: They feel safe and confident, and they take this to other aspects of schooling and life. They are enriched because of this experience.

Teacher: All band members learned the rules of engagement within an ensemble, which for most was a new experience. We discovered why it was important to play together, wait for everyone to be ready and discuss how we can experiment with dynamics and blend. Students experienced having to make choices, which helped them to become confident musicians, conductors and musical decision makers.

The interviews with participants, parents and teachers identified a number of key aspects regarding the experience of this inclusive group music activity. This shared music making realised important changes in participants' abilities, engagement, confidence, sociability and well-being, allowing participants to express themselves musically and socially.

Discussion

The ensemble represented an avenue for personal expression, voice, belonging and esteem. The findings provide valuable insights into students' self-, co- and shared-regulation – the individual, tutor to student and ensemble-oriented behavioural and emotional control and adjustment of thoughts and actions to goal orientations occurred through a willingness to engage in, invest effort and take steps towards mastery of skills. Students immersed in applying developing individual skills motivated by engagement, positive feelings and autonomy through their developing musicality. Ongoing dialogic interplay encouraged throughout the learning process in musical engagement appears to be useful in developing agency through agentic participation and direction.

Students viewed musical skill and ensemble participation as a personal development that connected with the social. This has implications for educating students with disability in the use of volitional and emotional management strategies that could help them face challenges in managing negative emotional reactions and lack of confidence to stay in pursuit of tasks. Goal setting, regulatory planning and reflection on challenges and growth are not the solely ableist characteristics but are potential traits prevalent in all learners given opportunity to access and opportunity (Tsilmak et al., 2020).

Feedback as a two-way dialogic discourse can set a learning climate that is socially shared, in that the individual learns from the collective and the collective reap the benefits shared by the individual.

This offers a crucial facet to developing senses of emotional and volitional personal drive and will towards learning. Although emotions and self-reactions might appear automatic, they can actually be controlled and learnt as part of SSRL (Panadero & Alonso-Tapia, 2014). This can empower students to respond to teacher questioning and ensemble dialogue by self-asserting a ‘can do’ attitude, signalling to teachers and other students their positive emotions and motivation (Isohätälä et al., 2017).

The participants describe goals (aims and aspirations), regulatory activities (cognitive evaluations) and cognitive activities (operations) as shared among members of their ensemble. Performing and learning in an ensemble exemplifies socially shared metacognition utilising intentionality, reciprocity and an active engagement in the shared goal of the musical problem-solving process. This perspective correlates with Hadwin et al.’s (2011) concept of SSRL and ongoing influence on individuals’ self-regulative learning. The data reinforce an integrative perspective of self-, co- and shared regulation and supports the basis that these processes can take place simultaneously, may fluctuate during an activity and can be part of an activity that explicitly induces shifts in regulation based on performing, learning and discussing challenges and triumphs with each other. It offers insights into how such dialogically imbued teaching practices encourage learning, thinking about learning and self-efficacy and that these processes are not germane to only able bodied young musicians. This draws attention to how such leaning orientations may be of benefit to all music students in ensembles.

Conclusion

Access to recreational and school instrumental musical participation can enrich all students. There is an imperative to address the opportunities available to disabled individuals in order that they are not foregone, excluded or gatekept out of powerful music experiences (Straus, 2014; Skinner & de Bruin 2025). Music education avails the opportunity to engage in the relational and the communal, reflecting equity, access and social justice (Skinner & de Bruin, 2025). This can be sustained through school and informal community opportunities (de Bruin, 2018d). This study provides insights into the praxis of what music education can provide all children if musical environments facilitate access, encouragement and stimulation.

Many disabled students experience a reality in which they are permitted to making fewer choices in their daily lives and experience fewer relationships than their non-disabled peers (Mehling & Tassé, 2015). Music engagement offers a number of key psychological mechanisms impacting both educational and therapeutic potential (MacDonald & Wilson, 2014). The experiences of children in the AMBP and their musical learning and social relationships observed in the present study suggest strongly that inclusive music practices in ensembles can be tailored to individual tastes, abilities and creative objectives. Inclusion in school music departments and community music organisations offers a powerful, practical and engaging way to address key disadvantages for this population.

Few previous studies on disabled populations mention regulatory or collaborative influences on efficacy or motivation in mainstream settings. This study sheds further light on this area with the finding of these students’ persistence towards musical skills, goals and to each other. This could mean that explicit instruction in SSRL facilitates volition in help sharing and desire to invest effort in supporting each other (Chou et al., 2018). A foundational aspect of ensemble engagement involved the sharing of feedback, of successes and challenges and of expressing their own learning journeys as a means of sustaining each other. This emboldened their efforts, their actions and perseverance and their consideration and contribution to the team, which, in turn, appeared to enhance their willingness to not give up and celebrate each other’s successes.

These findings have important implications for the role of feedback and shared regulatory activity in engaging students with a disability in a musical setting. Musicians organise and coordinate learning on individual, teacher–student and group/ensemble levels. Engagement

between student, teacher *and* fellow musician can provide stimulus for co- and shared regulation, not only encouraging student purpose to learning but also facilitating acute engagement in content and practice. This can involve the sharing of learning, challenges, successes, musical goals and the ways to achieve them together as a team. The findings provoke educators who have disabled and/or neurodivergent students in their ensembles, to reflect on one-to-one teaching practices, the thoughtful feedback they provide to students and the moment-to-moment learning within ensemble settings that build rapport, connection, group empathy and enjoyment, but also where more sophisticated levels of co-regulation and shared regulation can influence skill development and more enriching progress and enjoyment for all.

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Note

¹ AAC or Augmentative and Alternative Communication refers to using modes of communication other than speech. These might include a combination communication boards and devices, sign language, gesture and facial expression (Speech Pathology Australia, 2026). Quotes from students using AAC have been 'translated' into standard English.

References

- ABRAMO, J. M. & AUSTIN, S. C. (2014). The trumpet metaphor: A narrative of a teacher's mid-career pedagogical change from formal to informal learning practices. *Research Studies in Music Education*, 36(1), 57–73. <https://doi.org/10.1177/1321103X14528454>
- ALLSUP, R. E. & BENEDICT, C. (2008). The problems of band: An inquiry into the future of instrumental music education. *Philosophy of Music Education Review*, 51(1), 156–173.
- BAKHTIN, M. M. (1994). *The Bakhtin Reader: Selected Writings of Bakhtin, Medvedev, and Voloshinov*. Edwin Arnold.
- BELL, A. P., BONIN, D., PETHRICK, H., ANTWI-NSIAH, A. & MATTERSON, B. (2020). Hacking, disability, and music education. *International Journal of Music Education*, 38(4), 657–672.
- BLOCHER, L., GREENWOOD, R. & SHELLAHAMER, B. (1997). Teaching behaviors of middle school and high school band directors in the rehearsal setting. *Journal of Research in Music Education*, 45(3), 456–469.
- BLOCHER, L., MILES, R. B., CORPORON, E., LAUTZENHEISER, T., LISK, E. S. & CRAMER, R. (2007). *Teaching Music Through Performance in Band* (Vols.1–10). Chicago, USA: GIA Publications.
- BRAUN, V., & CLARKE, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77–101. <https://doi.org/10.1080/2159676X.2019.1628806>
- BREMMER, M. (2023). Encountering disability in music: Exploring perceptions on inclusive music education in higher music education. *Research Studies in Music Education*, 45(3), 512–524.
- BURIĆ, I. & SORIĆ, I. (2012). The role of test hope and hopelessness in self-regulated learning: Relations between volitional strategies, cognitive appraisals and academic achievement. *Learning and Individual Differences*, 22(4), 523–529. <https://doi.org/10.1016/j.lindif.2012.03.011>
- CHI, M. T. & WYLIE, R. (2014). The ICAP framework: Linking cognitive engagement to active learning outcomes. *Educational Psychologist*, 49(4), 219–243. <https://doi.org/10.1080/00461520.2014.965823>
- CHOU, C. Y., LAI, K. R., CHAO, P. Y., TSENG, S. F., & LIAO, T. Y. (2018). A negotiation-based adaptive learning system for regulating help-seeking behaviors. *Computers & Education*, 126, 115–128.
- CRESWELL, J. W. (2013). *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. Thousand Oaks, California: SAGE Publications.
- DE BRUIN, L. R. (2022). "In the cracks between freedom and fear". Student reflections on identity and confidence in a creative Music Ensemble. *Music Education Research*, 24(2), 223–237. <https://doi.org/10.1080/14613808.2022.2042499>

- DE BRUIN, L. R. (2018a). Evolving regulatory processes used by students and experts in the acquiring of improvisational skills: A qualitative study. *Journal of Research in Music Education*, **65**(4), 483–507.
- DE BRUIN, L. R. (2018b). Shaping interpersonal learning in the jazz improvisation lesson: Observing a dynamic systems approach. *International Journal of Music Education*, **36**(2), 160–181. <https://doi.org/10.1177/0255761417712318>
- DE BRUIN, L. R. (2018c). Musical play, creativity and metacognitive processes in developing improvisational expertise: Expert improvising voices. *International Journal of Play*, **7**(3), 248–265. <https://doi.org/10.1080/21594937.2018.1532708>.
- DE BRUIN, L. R. (2018d). Expert improvisers' formal, informal and situated influences on learning, motivation and self-efficacy: A qualitative study. *Music Education Research*, **21**(1), 99–115. <https://doi.org/10.1080/14613808.2018.1516746>
- DE BRUIN, L. R. (2018e). Dialogic communication in the one-to-one improvisation lesson: A qualitative study. *Australian Journal of Teaching Education*, **43**(5), 1–21. <https://doi.org/10.14221/ajte.2018v43n5.1>
- DE BRUIN, L. R. (2019). Improvising musicians' self-regulation and distributed creativities: A phenomenological investigation. *Thinking Skills and Creativity Journal*, **32**, 30–41. <https://doi.org/10.1016/j.tsc.2019.03.004>
- DE BRUIN, L. R. (2021). Epoché and objectivity in phenomenological meaning-making in Educational Research. In E. Creely, J. Southcott, B. Carbott & D. Lyons (Eds.), *Phenomenological enquiry in education: Theories, practices, provocations and directions* (pp. 21–35). Routledge.
- DE BRUIN, L. R. (2023). Instrumental Music Education: intra-action and relationality for creative pedagogies in music studio learning. In C. Randles & P. Burnard, (Eds.) (pp.527–538), *Routledge Companion to Creativities in Music Education*. Routledge.
- DE BRUIN, L. R. (2024). Instrumental music teachers' development of feedback across the lifespan: A qualitative study. *International Journal of Music Education*, **42**(1), 32–46.
- ELPUS, K. & ABRIL, C. R. (2011). High school music ensemble students in the united states a demographic profile. *Journal of Research in Music Education*, **59**(2), 128–145. <https://doi.org/10.1177/0022429411405207>
- ERKENS, G., PRANGSMA, M. & JASPERS, J. (2006). Planning and coordinating activities in collaborative learning. In A. M. O'Donnell, C. E. Hmelo-Silver & G. Erkens (Eds.), *Collaborative Learning, Reasoning, and Technology* (pp. 233–264). Lawrence Erlbaum Associates.
- FELTZ, D. L. & LIRGG, C. D. (2001). Self-efficacy beliefs of athletes, teams, and coaches. In R. N. Singer, H. A. Hausenblas & C. Janelle (Eds.), *Handbook of Sport Psychology*, **2**(2001), (pp. 340–361). New Jersey, USA: Wiley & Sons.
- FREIRE, P. (1972/1978 edition). *Pedagogy of the Oppressed*. Penguin.
- GERGEN, K. J. (1994). Mind, text, and society: Self-memory in social context. In U. Neisser & R. Fivush (Eds.), *The Remembering Self: Construction and Accuracy in the Self-Narrative* (78–104). New York: Cambridge University Press.
- HADWIN, A. & OSHIGE, M. (2011). Self-regulation, coregulation, and socially shared regulation: Exploring perspectives of social in self-regulated learning theory. *Teachers College Record*, **113**(2), 240–264. <https://doi.org/10.1177/016146811111300204>
- HADWIN, A. F., JÄRVELÄ, S., & MILLER, M. (2011). Self-Regulated, co-regulated, and socially shared regulation of learning. *Handbook of self-regulation of learning and performance*, **30**, 65–84.
- HADWIN, A., JÄRVELÄ, S., & MILLER, M. (2017). Self-regulation, co-regulation, and shared regulation in collaborative learning environments. In *Handbook of self-regulation of learning and performance* (pp. 83–106). Routledge
- HATTIE, J. & TIMPERLEY, H. (2007). The power of feedback. *Review of Educational Research*, **77**(1), 81–112. <https://doi.org/10.3102/003465430298487>
- ISOHÄTÄLÄ, J., JÄRVENOJA, H. & JÄRVELÄ, S. (2017). Socially shared regulation of learning and participation in social interaction in collaborative learning. *International Journal of Educational Research*, **81**, 11–24. <https://doi.org/10.1016/j.ijer.2016.10.006>
- JÄRVELÄ, S., JÄRVENOJA, H., MALMBERG, J. & HADWIN, A. F. (2013). Exploring socially shared regulation in the context of collaboration. *Journal of Cognitive Education and Psychology*, **12**(3), 267–286. <https://doi.org/10.1891/1945-8959.12.3.267>
- KORPERSHOEK, H., HARMS, T., DE BOER, H., VAN KUIJK, M. & DOOLAARD, S. (2016). A meta-analysis of the effects of classroom management strategies and classroom management programs on students' academic, behavioral, emotional, and motivational outcomes. *Review of Educational Research*, **86**(3), 643–680. <https://doi.org/10.3102/0034654315626799>
- KREIJNS, K., KIRSCHNER, P. A. & JOCHEMS, W. (2003). Identifying the pitfalls for social interaction in computer-supported collaborative learning environments: A review of the research. *Computers in Human Behavior*, **19**(3), 335–353. [https://doi.org/10.1016/S0747-5632\(02\)00057-2](https://doi.org/10.1016/S0747-5632(02)00057-2)
- KÜPERS, E., VAN DIJK, M., MCPHERSON, G. & VAN GEERT, P. (2014). A dynamic model that links skill acquisition with self-determination in instrumental music lessons. *Musicae Scientiae*, **18**(1), 17–34. <https://doi.org/10.1177/1029864913499181>
- MACDONALD, R. A. & WILSON, G. B. (2014). Musical improvisation and health: a review. *Psychology of Well-being*, **4**, 1–18. <https://doi.org/10.1186/s13612-014-0020-9>
- MANTIE, A. (2019) *The Effects of Goal Setting on Persistence, Resilience, Engagement, and Self-Efficacy of Students Taking a Required Concert Band Class*. Arizona State University ProQuest Dissertations & Theses, 2019. 27548503. ASU Digital Repository. <https://keep.lib.asu.edu/items/157881>.

- MANTIE, R., & TALBOT, B. C. (2015). How can we change our habits if we don't talk about them?. *Action, Criticism, and Theory for Music Education*, 14(1).
- MCPHERSON, G. E., MIKSZA, P. & EVANS, P. (2017). Self-regulated learning in music practice and performance. In *Handbook of Self-Regulation of Learning and Performance* (pp. 181–193). Abingdon-on-Thames, England: Routledge.
- MEHLING, M. H. & TASSE, M. J. (2015). Impact of choice on social outcomes of adults with ASD. *Journal of Autism and Developmental Disorders*, 45, 1588–1602. <https://doi.org/10.1007/s10803-014-2312-6>
- MELBOURNE YOUTH ORCHESTRAS. (2025). Adaptive Music Bridging Program. <https://myo.org.au/programs/ensemble-program/adaptive-music-bridging-program/> accessed November 30 2025
- MIETTINEN, R. (2000). The concept of experiential learning and John Dewey's theory of reflective thought and action. *International Journal of Lifelong Education*, 19(1), 54–72. <https://doi.org/10.1080/026013700293458>
- NELSON, J. M. & MANSET-WILLIAMSON, G. (2006). The impact of explicit, self-regulatory reading comprehension strategy instruction on the reading-specific self-efficacy, attributions, and affect of students with reading disabilities. *Learning Disability Quarterly*, 29(3), 213–230. <https://doi.org/10.2307/30035507>
- PANADERO, E. & ALONSO-TAPIA, J. (2014). How do students self-regulate? Review of Zimmerman's cyclical model of self-regulated learning. *Anales De psicología*, 30(2), 450–462. <https://doi.org/10.6018/analesps.30.2.167221>
- PASCOE, R., LEONG, S., MACCALLUM, J., MACKINLAY, E., MARSH, K., SMITH, B., CHURCH, T, ... WINTERTON, A. (2005). *National Review of School Music Education: Augmenting the Diminished*. Canberra, Australia: Department of Education, Science and Training.
- PEARSON, B., ELLEDGE, C. & YARBROUGH, J. (2019). *Standard of Excellence*. Neil A. Kjos Music Company.
- POLKINGHORNE, D. E. (1989). Phenomenological research methods. In R. S. Valle & S. Halling (Eds.), *Existential-Phenomenological Perspectives in Psychology: Exploring the Breadth of Human Experience* (pp. 41–60). Boston, MA: Springer US.
- POWELL, B. (2021). Modern band: A review of literature. *Update: Applications of Research in Music Education*, 39(3), 39–46. <https://doi.org/10.1177/8755123320988528>
- PRINCE, M. J. & FELDER, R. M. (2006). Inductive teaching and learning methods: Definitions, comparisons, and research bases. *Journal of Engineering Education*, 95(2), 123–138. <https://doi.org/10.1002/j.2168-9830.2006.tb00884.x>
- PROUTY, K. (2011). *Knowing Jazz: Community, Pedagogy, and Canon in the Information Age*. Jackson, Mississippi: University Press of Mississippi.
- SCARDAMALIA, M. & BEREITER, C. (2014). Smart technology for self-organizing processes. *Smart Learning Environments*, 1, 1–13.
- SCHÖN, D. A. (2017). *The Reflective Practitioner: How Professionals Think in Action*. Abingdon-on-Thames, Oxfordshire, England: Routledge.
- SCHUNK, D. H. & ZIMMERMAN, B. J. (2007). Influencing children's self-efficacy and self-regulation of reading and writing through modeling. *Reading & Writing Quarterly*, 23(1), 7–25. <https://doi.org/10.1080/10573560600837578>
- SELIGMAN, M. E. (2012). *Positive Psychology in Practice*. Hoboken, New Jersey, USA: John Wiley & Sons.
- SHOTTER, J. (1993). Becoming someone: Identity and belonging. In N. Coupland & J. Nussbaum (Eds.), *Discourse and Lifespan Identity* (pp. 5–27). London, UK: Sage.
- SKINNER, A., & DE BRUIN, L. R. (2025). Inclusive music practices for students with a disability: Feedback for agency and resilience in the Adaptive Music Bridging Program ensemble. In De Bruin, L. R., Skinner, A. & Southcott, (Eds.), *Musicking, Disability, Defiance and Innovation*. (pp.27-54). New York, USA: Bloomsbury. ISBN: 9798216258599
- SMITH, J. A. (2016). Interpretative phenomenological analysis in sport and exercise: Getting at experience. In *Routledge Handbook of Qualitative Research in Sport and Exercise* (pp. 241–251). London, UK: Routledge.
- SOUTHCOTT, J. & DE BRUIN, L. R. (2022) Being and Becoming Instrumental Musicians and Teachers: A Post-Qualitative Exploration Frontiers in Education. Open Access.
- Speech Pathology Australia (2026) <https://www.speechpathologyaustralia.org.au/Public/Public/Comm-swallow/Aug-alt-strategies/Augmentative-Alternative-Communication.aspx?hkey=b6dd3db5-465d-46a2-94e0-c6b3a4c69de8>.
- STRAUS, J. N. (2014). Music Therapy and Autism: A View from Disability Studies. https://academicworks.cuny.edu/gc_pubs/415/
- THOMPSON, G., DE BRUIN, L., SUBIANTORO, M. & SKINNER, A. (2024). Hidden diversity in the conservatoire: A qualitative enquiry into the experiences of higher education music students with disability. *International Journal of Music Education*, 43(4), 677–690. <https://doi.org/10.1177/02557614241237235>.
- TSILMAK, O., OKHRIMENKO, I., OKHRIMENKO, S., YUSUPOV, V. & HRYSHCHENKO, M. (2020). Characteristics of volitional qualities of successful students. *International Journal of Applied Exercise Physiology*, 9(12), 119–128.
- UNITED NATIONS (2006). Convention on the Rights of Persons with Disabilities (CRPD). <https://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>.
- WEGERIF, R. (2008). Reason and dialogue in education. In B. van Oers, E. Elbers, R. van der Veer & W. Wardekker, (Eds.), *The Transformation of Learning. Advances in Cultural-Historical Activity Theory*, 273–286. Cambridge: Cambridge University Press.

WOOLNER, P. & CLARK, A. (2014). Developing shared understandings of learning environments: Interactions with students, teachers and other professionals. In *School Design Together* (pp. 167–183). London, UK: Routledge.

ZIMMERMAN, B. J. (1990). Self-regulated learning and academic achievement: An overview. *Educational Psychologist*, **25**(1), 3–17.

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