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Abstract: This article responds to recent calls for situated examples of student-centered education. Our goal is to illustrate what student-centered pedagogies may look like in the music education classroom, particularly in the context of collaborative composition activities. The sample case presented features a Primary 5 Singaporean music teacher implementing a collaborative composition lesson on Gamelan Beleganjur, a traditional music style from Bali (Indonesia). After describing the structure of the lesson, we analyze data from teacher interviews, classroom interactions (illustrated with pictures), and transcriptions of students' compositions. We argue that the content and design of the lesson itself, as well as the teacher's genuine interest in exploring students' musical ideas and fostering collaboration and creativity, led to the enactment of student-centricity. Our ultimate aim is to provide an additional resource that might inspire music educators (both specialists and generalists) in embracing student-centered education in their classrooms.

Introduction

Towards Student-Centered Education: The Case of Music Education in Singapore

The importance of offering new generations of learners a student-centered education has been one of the most commonly emphasized themes in educational reforms around the world (McKinsey & Company, 2007; OECD, 2014). After decades of rigid content-focused, teacher-directed didactic methods, teachers of all education levels and subject matters have been encouraged to enact student-centered pedagogies in the classroom, placing the learner at the heart of teaching processes and orchestrating instruction around students' ideas, interests, and needs. Underlying this international push towards student-centricity has been increased empirical evidence demonstrating its positive effects on a variety of outcomes. Indeed, compelling studies

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have shown that the adoption of student-centered pedagogies may lead to improved student attitudes (Armbruster, Patel, Johnson, & Weiss, 2009), improved student achievement in standardized tests (Echazarra, Salinas, Mendez, Denis, & Rech, 2016), improved engagement in disadvantaged student populations (Black, 2007), as well as higher graduation rates and reduced student dropout (Friedlaender, Burns, Lewis-Charp, Cook-Harvey, & Darling-Hammond, 2014).

The educational literature presents multiple definitions and conceptualizations for the term student-centered education, also known as student-centered (or learner-centric) pedagogies, teaching, or instruction. According to Pedersen and Liu (2003), the 'student-centered umbrella' encompasses a variety of approaches such as Project-Based Learning (PBL), Case-Based Learning (CBL), Goal-Based Scenarios (GBS), Inquiry-Based Pedagogies (IBP), and Learning by Design (LBD). In these approaches, students are presented a 'central question' (in the form of a problem, project, or case), which creates the need for certain knowledge/activities and provides students with a common goal. This central question is typically open-ended, meaning that multiple responses or solutions might be equally adequate or valid. Learning is the result of students' efforts to answer the central question, a process in which they must make and justify their own decisions. The ultimate aim of student-centered education is to develop the autonomy of the learner, foster creativity and problem-solving competencies, and enable lifelong learning (Thompson, 2013).

This move towards a student-centered education has been also observed in Singapore, the country where this study was conducted. In recent years, the Ministry of Education (MOE) has actively encouraged teachers to be cognizant of students' unique learning styles, needs, motivations, and talents, as well as to leverage all available resources to develop pedagogies that are responsive to the diversity of students in schools (MOE, 2010). Moreover, teachers have been encouraged to turn classrooms into laboratories for thoughtful experimentations and creative exploration. The goal is to help every student to become a "confident person, self-directed learner, active contributor and a concerned citizen" (MOE, 2010, p. 3), thereby nurturing key 21st-century competencies such as critical and inventive thinking, communication skills, and global awareness. These competencies are to underpin the holistic education provided by all Singaporean schools, with the final aim of better preparing students for the future (MOE, 2010).

Music education plays a key role towards MOE's strategic direction of a student-centered education. Music is a compulsory subject in Singapore primary and lower secondary schools. Because music is regarded as one of the key focus areas in pursuing the goal of holistic education (Lum & Dairianathan, 2013), all children study general music for at least the first eight years of their schooling. Students particularly interested in music often participate in co-curricular activities such as band and choir, and/or take music as a subject leading to national examinations at the upper secondary and junior college levels (Chua & Ho, 2017). The latest national music syllabus, called General Music Programme (MOE, 2014), applies across primary and secondary levels and is followed by all the Government (public) schools. Students are expected to achieve five main learning outcomes: 1) Perform music in both instrumental and vocal settings, individually and in groups; 2) Create music in both instrumental and vocal settings, individually and in groups; 3) Listen and respond to music; 4) Appreciate music in local and global cultures; and 5) Understand musical elements and concepts (MOE, 2014).

In the context of 21st-century teaching and learning in Singapore (Tan, 2017), pedagogies in the music classroom are expected to be primarily student-centric. When students are encouraged to create music through student-centered pedagogies, this empowers their voices and

gives them increased agency. Moreover, when students work on musical analyses and performances collaboratively, this provides them with opportunities to grow in confidence as self-directed learners and active contributors, nurturing their critical thinking and fostering social skills (Costes-Onishi & Caleon, 2016). Further, given the diverse cultural perspectives and musical traditions presented across the Singapore national music curriculum, student-centered pedagogies facilitate students' global awareness and the development of their cross-cultural skills (Chua & Ho, 2017). In the next section, we review the literature pertaining to collaborative composition, an area of music that offers a particularly powerful avenue towards student-centricity.

Collaborative Composition as an Avenue toward Student-Centricity

In the past decades, a number of music educators and researchers—for example, Paynter and Aston (1970), Swanwick (1979), Paynter (1982), Loane (1984), Odam (1995), Glover (2000), and Winters (2012), among many others—have argued that collaborative composition activities should be at the heart of music pedagogy, underpinning the development of students' musical knowledge, skills, and dispositions. This body of work assumes an experiential learning approach by focusing on creative classroom music-making, and it builds on the inter-relatedness of three key activities: listening, composing, and performing (Garnett, 2013; Winters, 2012). These ideas, mainly originated in the United Kingdom, have strongly influenced the development of curriculum frameworks in many nations, from West to East, including countries such as Singapore.

One of the most important advocates for the introduction of collaborative composition as a curricular activity was John Paynter, a leading figure in the development of music education in the United Kingdom and one of the most influential music education scholars in the twentieth century (Fautley & Savage, 2011). As a music educator himself, Paynter quickly realized that music plays a vital role in children's general education. He proposed that creative work should be the starting point for all learners, bringing to the fore the idea of children as creative composers. His first book, entitled *Sound and Silence* (Paynter & Aston, 1970), demonstrated that all children—regardless of their age and ability level—could work imaginatively with sounds, improvising and creating their own music collaboratively. This book exerted a powerful influence on the acceptance of collaborative composition as the centerpiece of general music education, thereby changing approaches to music teaching and learning in schools around the world. In his subsequent books, Paynter continued to elaborate on ideas aligned with student-centered educational principles. For example, in *Sound and Silence,* Paynter (1982) claimed that music education was to be centered on the child's perceptions and insights, and that teachers should encourage children to compose music in response to topics about which they felt deeply, as well as about matters that engaged their imagination. Similarly, the basic tenet of *Sound and Structure* (Paynter, 1992) was that we all learn best by doing, and therefore, by extension, students should learn music by using their ears, working with sounds and making decisions about them.

In his many writings, Paynter argued that composition (what he preferred to call 'making up music') was "the most natural thing in the world" (Paynter, 2002, p. 224), as the only stimulus required by children is the opportunity and encouragement to play with sound. The teacher simply needs to create the right atmosphere, by allowing children to make up their own pieces, perform them for the others in the classroom, and discuss them. Paynter emphasized that

pieces should not be necessarily notated, especially in the early stages. To ensure that children focus on what they hear, their compositions should be "invented directly through experimentation and improvisation, confirmed by repetition, and remembered" (Paynter, 2002, p. 224). The teacher should also comment constructively on children's pieces, drawing in all members of the class through appropriate questioning, debate, and establishing connections with compositions by other composers who have explored similar ideas.

The principle "The sound comes first", initially articulated by Paynter and Aston (1970) and later theorized by Odam (1995), was the genesis of an influential model proposed by Swanwick (1979) in *A Basis for Music Education.* Swanwick argued that a comprehensive model of musical experience should involve composition (C), literature studies (L), audition (A), skill acquisition (S), and performance (P) – CLASP. Underlying this model is the idea that music involves multiple layers of meaning, ranging from intuitive layers to others that involve explicit analysis. For this reason, the CLASP proposes that music educators should provide learners with opportunities to experience music in practical ways (i.e., listening to and playing examples of music, exploring its characteristics through composition, and evaluating the results). This practical experience is then complemented by reading and analysis of the literature and technical studies. This ensures that students gain active experience *with* music (i.e., music from different cultures, self-composed pieces), as well as knowledge *about* music (Swanwick, 1999).

Since these seminal works, collaborative composition as a curricular activity has received increasing attention. For example, during the 1980's, music educators and researchers investigated topics such as the nature of teacher-student interactions during the compositional process (Bunting, 1988), how students make meaning through their compositions and develop self-understanding (Loane, 1984), or the spontaneous creativity evidenced in children's song making (Davies, 1986). More recent studies have focused on topics such as the variety of approaches and outcomes from the composing process (Burnard & Younker, 2008), the factors affecting students' motivation for composing (Leung, 2008), how music teachers undertake assessment of composing in the classroom (Fautley & Savage, 2011; Hopkins, in press), as well as music teachers' attitudes to composition (Odam, 2000), including with the use of technological devices (Murillo, Riaño, & Berbel, 2018).

Within the Singapore context, moving in tandem with MOE's strategic direction of a student-centered education, both primary and lower secondary music teachers have been increasingly encouraged to introduce collaborative composition into their classrooms. This topic connects directly with the second learning objective of Singapore's national music curriculum, "Create music in both instrumental and vocal settings, individually and in groups" (MOE, 2014, p. 5). More specifically, the curriculum proposes that:

> *Music creating processes harness and develop students' innate creativity within the context of music. Through musical activities such as improvisation and music composition, students will apply the musical skills and concepts that they have acquired through listening and performing, thus drawing a connection and relevance to all that they are learning.* (MOE, 2014, p. 5).

Chua and Ho (2017) have recently argued that achieving this objective requires music teachers with a student-centered orientation. Student-centered music teachers are able to facilitate, stand back, observe, guide, suggest, model, foster discussion and debate, take on students' perspectives, and ultimately help learners achieve the objectives they set for themselves (Winters, 2012). This way of teaching requires highly nuanced and thoughtful facilitation from teachers, facilitation that empowers the voices of the learners and helps them develop increased

agency and autonomy (Tan, 2017). However, research indicates that some music teachers find it difficult to enact student-centered pedagogies in the classroom (Costes-Onishi & Caleon, 2016). In the area of collaborative composition, even highly skilled teachers often experience difficulties to engage students (Finney, 2011; Paynter, 2002; Winters, 2012). The potential reasons are discussed in the following section.

Music Teachers' Difficulties with Student-Centricity and Challenges of Teaching Composing

The level of specialization in music and music education of school music teachers varies widely around the world, particularly within primary (or elementary) schools (Jeanneret & Degraffenreid, 2012). Although music specialists are becoming more common in schools, there are still many generalists who are deployed to teach music with very little (if any) music background. This has been the case in Singapore for many years, although the situation is changing towards higher specialization (Bautista & Wong, 2017). Indeed, Singapore has a growing fraternity of music specialists. These teachers typically hold major degrees in music education obtained during their initial teacher preparation or in postgraduate programs; in most cases, they also hold external certifications in music theory and/or performance. They are therefore highly qualified to teach the national music syllabus (MOE, 2014). Apart from music specialists, the system has teachers who minored in music education during their university years, as well as generalist music teachers, many of which have little or no formal training in music or music education. The music teaching load for non-music specialists is generally low, as they cover those periods that cannot be absorbed by the music specialist/s of the school (Wong & Bautista, 2018).

Several research studies have shown that generalist music teachers have difficulties implementing student-centered pedagogies in the classroom, due to their limited preparation in music and music education. For example, a recent study conducted in Singapore by Costes-Onishi and Caleon (2016) has shown that generalists struggle particularly with connecting music content knowledge with pedagogical content knowledge, with listening to students' voices during lessons, and with encouraging their individual self-expression. Such difficulties persisted even after completing an intensive professional development (PD) program specifically designed to help generalists enhance their music skills and student-centered pedagogical strategies. Similar findings have been obtained in other countries. In the United States, Wiggins and Wiggins (2008) found that generalist music teachers lacked the skills to engage students in musical thinking and did not know how to contextualize music theory lessons. These teachers were found to spend most instructional time in listening and singing activities, but they rarely engaged students in composition or improvisation. In fact, many generalists taught from commercially developed music kits, designed to teach music in a highly scripted fashion, which prevented them from listening to the voices of students. In Australia, de Vries (2011) found that many generalists opt for not teaching music regularly to students due to their lack of knowledge and confidence with this subject matter. Singing and listening are the activities most frequently identified in the classroom of these teachers, while activities involving creation and self-expression are rare.

Research has shown that there are also many music specialists who often struggle with enacting student-centered pedagogies within the context of collaborative composition (Paynter, 2002). In countries such as the United Kingdom, music teachers are highly educated in music and music education. However, the main emphasis of their training is often on instrumental

performance and/or singing, with composing playing a secondary role (if any). For this reason, composition is rarely a strong aspect of the music teachers' musical identity (Finney, 2011). Comments such as "I'm not a composer, how do I teach composition, I'm not sure about this, I don't feel confident…" are common among music specialists, particularly among new beginner music teachers (Winters, 2012, p. 19). Thus, while pedagogies for the teaching of collaborative composition have been extensively documented for more than 40 years, there are still many music specialists who lack confidence, not only in their own ability to think compositionally but also in students' potential to undertake these kinds of activities. Paynter (2002) argued that despite the numerous attempts to develop a more musical curriculum in the United Kingdom, "the 'immediacy' of the experience is given scant attention in the classroom, the emphasis being still, as it has been for so long, on pupils absorbing inert information about music" (p. 217). In Paynter's view, many music educators continue to spend instructional time "talking about music" (p. 217)—that is, focusing on the delivery of factual knowledge as opposed to centering music education on students' creative experiences.

Apart from teachers' level of specialization and confidence, another factor that might contribute to music teachers' difficulties with student-centered pedagogies is the lack of a common understanding of what the notion of *student-centricity* means, not only among music teachers themselves but also among teacher educators, PD providers, and even researchers (Shively, 2015). Like many other umbrella terms with widespread and ubiquitous usage, there is great conceptual diversity regarding its meaning. This causes unfortunate yet important misinterpretations (Pedersen & Liu, 2003). For example, there is evidence that, for teachers in areas such as chemistry, biology, or physics, the notion student-centricity simply refers to instructional methods that recognize individual differences in students' learning styles or cognitive abilities (Lund & Stains, 2015). For others, it merely refers to the idea of keeping students behaviorally 'busy' in the classroom, rather than cognitively active (Pedersen & Liu, 2003). In the music classroom, this conceptual complexity has led some teachers to incorrectly conflate teacher-directed student work, where students are asked to do hands-on actions (e.g., rote practice of rhythmic patterns), with the notion of student-centered pedagogies, where instruction is designed on the basis of students' ideas, interests, and needs. Difficulties with student-centered pedagogies might also be due to teachers' concerns about losing a degree of power if they hand over decisions and direction to the students (Krahenbuhl, 2016).

Finally, we argue that another factor that might be preventing music teachers from adopting student-centered pedagogies, specifically in the area of collaborative composition, is the limited accessibility to concrete examples illustrating how these pedagogies might be enacted. Shively (2015) has recently stated that although the application of student-centered pedagogies and constructivism in the music classroom has been proposed for several decades, practitioners and researchers in the field need to take a step back to analyze how these ideas are being applied across a range of music learning contexts. Analyses such as the one presented in this qualitative study are necessary, as they might provide music teachers with theoretical and practical insights to inform their practice. This paper also responds to more general calls for situated examples of student-centered education, such as the call by Darling-Hammond and McLaughlin (2011), who argued that to enhance teacher quality and ultimately student learning, "teachers must learn about, see, and experience successful learning-centered and learner-centered teaching practices" (p. 83).

Goal

The goal of this study is to illustrate what student-centered pedagogies may look like in the context of collaborative composition activities within the Singapore music classroom (Chua & Ho, 2017; Tan, 2017). The sample case presented features a Primary 5 music specialist implementing a collaborative composition lesson on *Gamelan Beleganjur*, a traditional music style from Bali (Indonesia). After describing the structure of the lesson, we analyze data from teacher interviews, classroom interactions (illustrated with pictures), and transcriptions of students' compositions. The teaching episodes presented are analyzed theoretically in the discussion, in light of recent educational literature.

Context for the Research

The sample case analyzed in this study was identified in the context of a larger research project aimed at mapping the PD needs of Singapore primary school music teachers (for an overview, see Bautista, Toh, & Wong, 2018). One of our purposes was to identify teachers' needs regarding the use of student-centered pedagogies across the General Music Programme (MOE, 2014). Collaborative composition was not the main focus of our project. However, upon viewing the data, it became clear that the information collected from one particular teacher could illuminate our understanding of how student-centered pedagogies may be enacted in the Singapore music classroom, particularly within the context of collaborative composition activities. As such, the current study needs to be interpreted as a secondary data analysis.

Participants

Given the exploratory nature of the project, we recruited a group of participants that roughly reflected the basic demographic characteristics of the population of music teachers in Singapore public primary schools. We selected 12 music teachers from four schools, including two males and ten females. This distribution mirrored the gender breakdown for the national teacher population, with 18% males and 82% females (MTI, 2015). Of the 12 teachers, four were music specialists and eight were generalists, which also reflected the national proportion of specialists/generalists. Participants varied in their length of music teaching experience, which ranged from 1.5 to 13 years ($M = 6.4$, $SD = 4.3$), and in their teaching load for music, which ranged from 1 to 18.5 hours per week ($M = 8.3$, $SD = 6.4$). They also had differing prior experience in music-specific PD initiatives and held different portfolios concerning the grade levels taught (from Primary 1 to Primary 6).

Procedure

Ethics approval was obtained from the authors' university Institutional Review Board (IRB). The first author (Principal Investigator) and fourth author (Research Assistant) met up with the Heads of the Music/Aesthetics Departments of the four schools to inform them about the aims of our project. During these meetings, we requested permission to invite specific music teachers to participate in classroom observations followed by individual interviews. First, we

wanted to observe the teachers delivering a full unit of instruction of their choice to identify areas in which they might need further support. Units of instruction, which ranged from one to three classroom periods, were video-recorded. Subsequently, we had individual interviews to investigate in depth these teachers' ideas, suggestions, and challenges related to music-specific PD. Interviews were conducted by the first author, while the fourth author took field notes and asked follow-up questions, when necessary. Interviews were audiotaped and their duration ranged from 45 to 60 minutes. Signed consents were collected from teachers, students, and parents. They were informed that participation in this study was voluntary and would not result in any monetary or graded incentive.

Data Analysis

The observational component of our research project was based on the ecological approach to design ethnography (Barab & Roth, 2006). Analyses of the classroom observations drew on curriculum materials, lesson plans, transcriptions of student-teacher interactions (illustrated with pictures), and transcriptions of students' musical productions. The design of the semi-structured interview protocol was informed by the theories of responsive professional development (Wlodkowski & Ginsberg, 1995). The protocol had four sections. Section 1 gathered details on teachers' demographic information (e.g., age, teaching experience, prior training in music and music education). Section 2 explored how teachers came up with the unit of instruction, the desired lesson objectives, and future potential improvements. Section 3 looked into teachers' PD needs in relation to the unit of instruction observed. Finally, Section 4 asked teachers to identify their PD needs to improve as music educators more broadly. The interview transcripts were analyzed by the second and fourth authors using *conventional* content analysis (Hsieh & Shannon, 2005).

Case Study
The School, the Teacher, and the Students

The sample case presented in this paper was selected because of its inherent interest, using an information oriented sampling strategy (Sandelowski, 1995). The school featured offered music as a niche content area, in particular *Chinese Orchestra*. The teacher, referred to as Mr Smith (pseudonym), was a music specialist with ten years of experience teaching music at the primary school level. He had academic qualifications in both classical guitar and music theory. Mr Smith's class consisted of 38 Primary 5 students (18 boys and 20 girls). Primary 5 students in Singapore are typically 10 to 11 years old.

Topic of the Lesson: Gamelan Beleganjur

Mr Smith designed and implemented a lesson on *Gamelan Beleganjur*, one of the most popular styles of traditional music in Bali (Indonesia). Also known as 'gamelan of walking warriors' (Bakan, 1999), its original function was to accompany armies into battle and frighten the enemy. Today, *Gamelan Beleganjur* is essential to Balinese Hindu religious ceremonies, for example in festivals dedicated to celebrating the anniversary of a temple's dedication, during

cremation ceremonies, and during rites to honor good spirits or appease evil ones. The most primitive instrumentation of *Gamelan Beleganjur* consisted of one primary gong (called 'great gong'), one secondary gong, four pairs of cymbals, two differently tuned drums (which are considered male and female), and finally one small hand-held gong that acts as a metronome. The standard formal structure of *Gamelan Beleganjur* (known as *gilak*) is based on a repeating eight-beat gong cycle. A steady beat, called *kajar*, serves as reference for the other instruments which would either play an interlocking rhythm or a syncopated unison rhythm. The drums and the cymbals play over the ostinato of the gongs (Bakan, 1999).

Lesson Structure

The lesson involved the collaborative discussion, composition, and performance of *Gamelan Beleganjur* pieces, using percussion instruments. Prior to the lesson described in this paper, Mr Smith had already covered the basics of *Gamelan Beleganjur* (e.g., history, instrumentation, formal aspects, auditions) and the students had also formed small working groups. The following is an excerpt from the interview held with Mr Smith after the class, in which he detailed the overall goal of the lesson:

> Teacher: *I have actually taught the students about the concept of interlocking rhythm and how the Balinese use it in their various forms of music. So, right now, what they are doing is creating their own interlocking rhythm and then applying it in the context of Gamelan Beleganjur […]*

This lesson served as the final rehearsal of students' *Gamelan Beleganjur* compositions, prior to their upcoming semester assessment. The lesson was structured in three sections:

1) General discussion [15 minutes]. To start off the class, Mr Smith and the students spent some time discussing the essential aspects of a good *Gamelan Beleganjur* performance. Among other topics, they addressed the importance of having a good *kajar*, how to compose interlocking rhythms, the instrumentation needed for *Gamelan Beleganjur*, and musicianship-related aspects.

2) Collaborative composition and rehearsals [15 minutes]. The students dispersed to their group to work on the collaborative composition and rehearsals. There were four groups in total (here referred to as Groups A, B, C, and D), each comprised of nine or ten students. As the students rehearsed, Mr Smith walked around the classroom to check on each groups' progress and to provide the students with constructive feedback.

3) Group performances peer evaluation [20 minutes]. Finally, Mr Smith proposed that the first two groups who practiced with instruments (Groups A and B) would perform first. He explained that today they would do an 'informal peer review', and that after each performance, students from the other groups would be invited to offer feedback to the performing group, describing strengths and weaknesses, areas for improvement, and suggestions. Each performance was allocated two-three minutes.

Illustrative Episodes

One of the pedagogical strategies most prominently used by Mr Smith throughout the lesson was that of asking open-ended questions. For example, he began the general discussion by asking the class what made a good *Gamelan Beleganjur*. Several students quickly raised up their hands (Fig. 1). The teacher invited David and Jane to share their thinking with the rest.

Figure 1. Students raising their hands to participate in the class discussion

Teacher:	*Let's get David?*
David:	*Kajar?*
Teacher:	*What do you mean by kajar?*
David:	*Constant beat!*
Teacher:	*How do I decide whether your constant beat is good? Your kajar, or your gong cycle, how do I decide? Let's say, for example, I've got four stars, three stars, two stars, and one star. How can I give you a four-star assessment for your kajar? Let me get somebody to add on to your [David's] point. Jane?*
Jane:	*The rhythm must not be going too fast. It cannot go faster and faster, it should be steady.*
Teacher:	*So the steady beat, or rather the gong must be constant.*

Notice that although David's answer was adequate, Mr Smith requested him to elaborate further by asking what he meant by the term *kajar*. This question lead to a short definition, in the student's own words. Subsequently, by asking "How?" questions, the teacher effectively engaged other students in the class (for example Jane, as shown) to build on the idea of constant beat previously shared by David. Another interesting aspect to notice is how Mr Smith often adopted the same words used by the students, implicitly validating their responses, and then reformulating certain ideas using similar—or, if necessary, more precise—terms (e.g., steady, constant).

Another aspect brought up by the students during the class discussion was the importance of instrumentation. The following excerpt is an interaction between Mr Smith and three students (Kerry, Jerome, and Beth), who highlighted the importance of instrumentation and musicianship for a good *Gamelan Beleganjur* composition and performance.

Teacher:	*Any other thing do you think we need to look at?*
Kerry:	*The music must be clear.*
Teacher:	*The music must be clear, what do you mean?*
Kerry:	*If you cannot hear the music too well, you won't get high marks.*
Teacher:	*How would you be able to hear the music clearly?*
Kerry:	*Must try not to use things like tambourine. If not, you can't hear...*
Teacher:	*Okay, you must try not to use things like tambourine. Then, what will happen if you use tambourine?*
Kerry:	*Other instruments will be affected.*
Teacher:	*Okay, other instruments will be affected. But is it necessary that we do not use tambourines? Or are there any other possibilities? Let me get, ah… yes?* [Another student raised his hand]
Jerome:	*Just adjust the volume of each instrument.*
Teacher:	*Okay, adjust the volume. Actually, you two are bringing in two different points but let me just focus on them. Ah, yes let's get Beth?*
Beth:	*Let's say interlocking rhythm one is really loud and interlocking rhythm two they… They can't play very loud, then you can't hear the number two (instrument), you can only hear number one.*
Teacher:	*Okay, maybe I'll focus on Jerome and Beth's point, later I'll come back to your point* [Points at Kerry]

Note that to prompt Kerry, Mr Smith rephrased the statements previously made by him using follow-up open-ended questions. In addition to "What do you mean?" and "How?" questions, notice the use of questions involving prediction ("What will happen if…?"). This conversational exchange, similar to many others that were observed during the lesson, can be described using the metaphor of the *ping-pong* game: the teacher and the students went back and forth on each other's utterances quickly, in a very dynamic and fluid fashion. Mr Smith showed true interest and curiosity about students' ideas. In fact, after several exchanges involving open-ended questions, the teacher observed that some students in the class were uncertain about the instruments required for *Gamelan Beleganjur*. This allowed Mr Smith to realize the need to boost the students' understanding by providing them with additional explanations and practical demonstrations with actual instruments.

Later in the discussion, Mr Smith engaged students in the composition and rehearsals of *Gamelan Beleganjur* pieces. As he explained during the individual interview:

Teacher:	*The goal was to get students to rehearse their own interlocking rhythms, using any instruments of their choice, or even body percussion if they like, and then to actually put up a performance.*

There were four groups in total (Groups A, B, C, and D), each comprising of nine to ten students. Only one group had boys and girls. Each group was seated in one corner of the

classroom, forming a circle. Due to the limited number of instruments, Mr Smith suggested that two groups could practice with instruments first (e.g., triangles, castanets, drums), while the other two groups practiced using body percussion. As the students worked together, Mr Smith walked around to listen to their compositions, asking reflective questions and providing them with constructive feedback.

After 15 minutes of collaborative composition and rehearsal, Mr Smith called the class back to silent attention and proposed the start of group performances. Each performance was allocated two to three minutes. The non-performing groups were advised to observe and listen carefully. This was so they were able to provide feedback and suggestions to the performing group. The first group to perform was composed of ten boys (Group A). The group's de-facto leader was Kerry, who played the role of conductor during the rehearsals and performance. Kerry positioned himself in the center of the circle (Fig. 2), where all the member of his group could see him clearly.

Figure 2. Group A during their performance.

The piece composed by Group A involved the use of three castanets, two body percussion (handclaps), one hand drum, and three triangles[2]. As can be observed in Figure 3, the rhythm of the castanets and the handclaps served as Group A's interlocking rhythms 1 and 2 (note that these elements are indicated in the transcription provided). The hand drum played the role of the *kajar* and the three triangles as the gong cycle. Throughout the performance, Kerry controlled the pace by counting the beats and cueing his teammates into their entry and exit points. Their performance involved 10 cycles and the group finished strongly on their final *kajar* and gong beat. Group A's performance was met with an applause by the other students in class. The group members did a half bow as acknowledgement.

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[2] Although *Gamelan* is traditionally noted using cipher notation, students' compositions in this paper are transcribed using Western rhythmic notation, which we consider to be easier to understand by a non-specialized audience. The fact that Western notation allows for a more "visual" representation of rhythms will enable all readers to identify the various components of the *Gamelan* compositions presented.
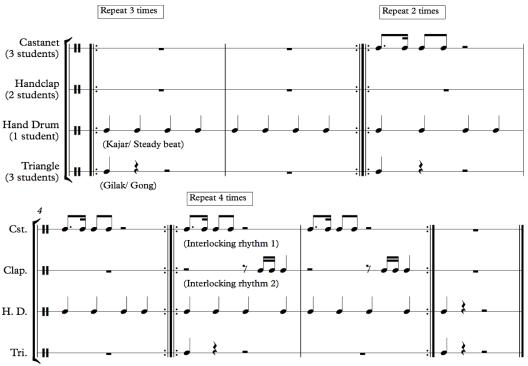
Figure 3. Group A's 10 cycle composition.

The next group to perform (Group B) was composed of nine girls. This group was led by Rebecca, who played the *kajar*. She was also in charge of orchestrating and cueing members during their performance. Group members were seated in a circle, with Rebecca seated slightly in front (as seen in Fig. 4), so that others could see her and hear the *kajar* better.

Figure 4. Group B during their performance

The instruments selected by these girls for their composition were three castanets, two hand drums, two tambourines, and two triangles (Fig. 5). The rhythm of the castanets and the tambourines served as Group B's interlocking rhythm 1 and interlocking rhythm 2. The hand drum was used for the *kajar* beat and the two triangles as the gong cycle. At the beginning of the performance, Group B was able to coordinate relatively smoothly with the instruments sounding in sync. This performance lasted for 11 cycles.
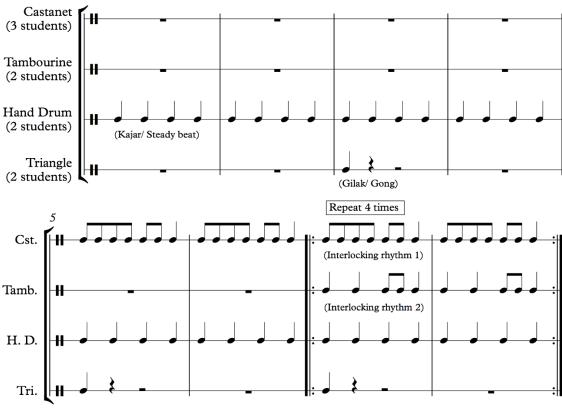
Figure 5. Group B's 11 cycle composition

Immediately after each of the *Gamelan Beleganjur* performances, the students were invited to provide the members of the performing group with constructive comments, suggestions, or even criticism for improvement. During our individual interview with Mr Smith, he articulated the following regarding peer assessment:

Teacher: *My aim was actually to get the students to share their feedback on their peers. So, that is what I would call an informal feedback. It's also an assessment for learning because the feedback will be the one… how they learn to improve!*

The teacher set up some guidelines, such as raising hands before speaking to avoid having several students talking at the same time, offering feedback in a constructive manner, and being respectful of everyone's opinions (Fig. 6). The following is a transcript of the informal peer review of Group A's performance.

Figure 6. An illustration of the group performance peer assessment

Teacher:	*Your friends have some comments and feedback. Shall we listen? Okay, Sabrina has something to tell you all.*
Sabrina (B[3]):	*It's like it's not interlocking with the rhythm.*
Teacher:	*Okay, Sabrina thinks the rhythm was not interlocking. I have a question, how did you all plan your interlocking rhythm?* [Posed to Group A]
David (A):	*Because we spent some much time choosing the instruments…*
Kerry (A):	*Number one, we chose instruments which took a bit of time. Number two, sometimes, some of them don't listen so much, then… It takes some period of time to quiet them down.*
Teacher:	*So, the difficulty that you have is actually getting your group members to listen. Okay, how can you overcome this problem?*
Kerry:	*Er… just keep quiet.*
Teacher:	*Okay, just keep quiet. Or…*
Kerry:	*Let all of them know…*
Teacher:	*Okay, maybe you need to work out something on how you can communicate better.*

Sabrina, from Group B, pointed out that Group A's composition was "not interlocking with the rhythm". Note that Mr Smith did not comment on whether Sabrina was right or wrong. Instead, he paraphrased her statement and then asked the Group A members an open-ended question to foster reflection on the composition process. In response, David and Kerry explained that their problem was due to the time it took the group to choose right instruments and to get everyone on task. Implicitly, they acknowledged that Sabrina's statement was correct and that they were aware of the need to improve on this matter. Mr Smith added on to Kerry's point by asking him how Group A could overcome these issues, therefore letting the students to identify

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[3] In the remaining transcripts, a capital letter in parenthesis is used to indicate the group in which the student belongs (A, B, C, or D). Note that the group is indicated only the first time that a new name appears.

their own solutions. The following transcript shows the feedback given to Group A by a student from Group D.

Teacher:	*Okay, any other feedback? Yes? [Points to Group D]*
Serene (D):	*Some of them are using the instruments wrongly.*
Teacher:	*Okay, I've got a very interesting feedback here. Can you explain to them what do you mean?*
Serene:	*For example, one of them keep on hitting the… [Demonstrates a hitting gesture onto the floor]*
Kerry:	*Oh, the castanet, right?*
Serene:	*You're not supposed to hit it on the floor.*
Teacher:	*I see, good point. At the same time, what kind of sound did it create?*

Serene pointed out that some members of Group A were not using the castanets in the way they were supposed to be used. Just like in the previous transcript, notice how Mr Smith did not specify whether Serene was right or wrong. Instead, he requested her to explain her thinking further. Not only Kerry, but also the other members of Group A, immediately understood what she meant and agreed that they should have used the castanets differently during their performance. These interactions demonstrate the power of peer-to-peer feedback, as the students themselves were able to identify and point out relevant comments and areas for improvement with limited intervention from the teacher. Mr Smith essentially played the roles of facilitator and mediator, not disregarding any answers from the students, even if these deviated from his own expectations or opinions.

Despite having a structure to the discussion, the students at times got very excited, which inevitably led to noisy moments. The teacher was very patient and tolerant of students' high level of excitement. For example, Group B members did not seem very satisfied with their performance, even though Rebecca did her best to signal when to stop, after the tenth cycle. After Group B's performance, Kerry and then Emmanuel provided feedback that agitated not only members from Group B, but also a large portion of the class.

Teacher:	*Can I have one more student? Kerry?*
Kerry (A):	*The… the gong bang and the castanet, they don't match.*
Several (B):	*Huh? Huh?* [Started to defend themselves and the class became noisy]
Teacher:	*Okay, guys, guys! Can we just listen to Kerry? Shhhh…* [Signaling students to quiet down]
Kerry:	*The castanet is faster.*
Teacher:	*Okay, the castanet…*
	[The class was audibly noisy now with a lot of chattering. It seemed that everyone had an opinion. One student even gestured wildly with both hands up]
Kerry:	*At first, at one point, at one point not the whole song!*
Teacher:	*Okay, one point. There was a certain point you're out of tempo…* [The students were overwhelming Mr Smith now]
Peter (A):	*The tambourine was faster…*
Sam (A):	*At first, the gong cycle was different from the…*

> Teacher: *Okay! Wait, wait, wait! Shhhh…* [Signaling students to quiet down]. *I don't think we can hear your feedback unless we have one voice only, please. Let me wait for the group to finish your discussion* [Mr Smith gave Group B a few seconds to consolidate their response].

Kerry pointed out that the gong bang and the castanets did not match. His feedback was met with audible confusion by Group B members. All students in class started to talk among themselves, creating a noisy environment. As there were too many conversations going on in the classroom, the teacher stepped in to quieten the students down and maintain order before proceeding. He patiently explained to the students that he could not hear their feedback unless there was only one student talking at a time. Mr Smith was tolerant of the noise but signaled the class to quieten down. This let Kerry have a chance to explain his thinking further.

Throughout the session, Mr Smith was respectful of views and ideas that contrasted with his own. He at times disagreed with certain responses given by the students, but never imposed his own opinions. One instance of this took place after the controversial statements made by Kerry, which led to murmurs, looks of disagreement, and confusion among Group B members. Kerry seemed to understand the impact of his feedback, and immediately clarified that the castanet was only faster at one point, not during the entire performance. Mr Smith then gave Group B a few seconds to consolidate a response to Kerry's feedback.

> Teacher: *Rebecca, would you like to share your response to this feedback?*
>
> Rebecca (B): *The interlocking rhythm 1 is, like, very fast... Then, Priscilla told me to slow down, so I slowed down. And after that…* [Rebecca points to another student. Other Group B members laughing and acknowledging their error].
>
> Kerry (A): *Orh…* [Showing understanding]
>
> Teacher: *Ah... so, there is a reason why suddenly there was a change of beat* [tempo]. *Ann, would you like to add on?*
>
> Ann (B): *I found that the interlocking rhythm 1 didn't match up. It was very messy.*
>
> Teacher: *Ah, okay. It's interesting because I actually felt that interlocking rhythm 1 was fine… Do others agree with Rebecca and Ann?*

Rebecca, Group B's leader, explained that there was a miscommunication in the group that caused certain problems with the coordination of their interlocking rhythm 1. Ann agreed with this explanation and described the interlocking rhythm as being "very messy". Note that Mr Smith disagreed with Rebecca's and Anna's views, as he "felt that interlocking rhythm 1 was fine". Instead of making his view prevail or proving the students wrong, he gave them *reason* by asking the class if others shared the same opinion, hence acknowledging and validating their thinking. The conversation continued as follows.

> Teacher: *Okay, one more feedback please? I want to get the other two groups to play. Okay, I think to be fair, I let this group share their feedback* [Points to group A]. *Okay, Emmanuel?*
>
> Emmanuel (A): *Serene, when she hit the, I mean just the gong cycle, they were, er… they were not, er… matching with Ann and Rebecca.*

Teacher:	*Okay, okay...* [Group B immediately became quite agitated]
Several (B):	*How to match? What do you mean?* [Loudly]
Emmanuel:	*It's like not in the middle…*
Teacher:	*You mean they are not playing on the same beat, right?*
Unidentified (C):	*You mean not matched up with the Kajar?*
Emmanuel:	*Yeah.*
Teacher:	*Okay, he's talking about the tempo of the different instruments. What do you all think? I personally also thought this was fine too, but perhaps I didn't notice that aspect…*

Another student from Group A, Emmanuel, pointed out that the member playing the gong cycle in Group B did not match with some of the other instruments in group. Because Emmanuel's explanation was rather unclear, both Mr Smith and another student in the classroom rephrased his idea with different words, making sure they were understanding his point correctly. Again, note how even though the teacher had a different opinion about Group B's performance, he validated Emmanuel's contribution by asking if others in the classroom shared his view and by saying that "perhaps I didn't notice that aspect". This way, the teacher actively contributed to the co-construction of knowledge. Mr Smith showed his students that he was one more participant in the learning process, that he was not in charge of producing the answers, and that everyone's opinions were equally important. He did not confine the student's feedback to what he thought it was *correct*.

Discussion

The goal of this paper was to illustrate what student-centered pedagogies can look like in the context of collaborative composition activities within the Singapore music classroom (Chua & Ho, 2017; Tan, 2017). Our ultimate aim was to provide an additional resource that might inspire more music educators—both specialists and generalists—in embracing student-centered education in their classrooms.

The Primary 5 lesson on *Gamelan Beleganjur* designed by Mr Smith was, in our viewpoint, solid from a curriculum standpoint. The lesson involved discussing, composing, rehearsing and performing traditional Asian music, which allowed to tackle four of the five learning objectives of Singapore's national music syllabus, namely: 1) Perform music in both instrumental and vocal settings, individually and in groups; 2) Create music in both instrumental and vocal settings, individually and in groups; 4) Appreciate music in local and global cultures; and 5) Understand musical elements and concepts (MOE, 2014, p. 4-7).

The comprehensive nature of this lesson resonates to a great extent with Swanwick's (1979) CLASP model. The lesson was structured into three sections. The first involved a general whole class discussions, during which students reflected upon previous (A)uditions of *Gamelan Beleganjur* compositions and their prior knowledge of the (L)iterature. The second section involved group rehearsals of students' own (C)ompositions and the third one public (P)erformances, during which students had opportunities to practice their instrumental (S)kills. At the macro level, therefore, we argue that the design of the lesson conducted by Mr Smith was appropriate to allow students gain active experience *with* music as well as knowledge *about* music (Swanwick, 1999).

Mr Smith used the strategy of posing a central question (Pedersen & Liu, 2003; Thompson, 2013), which involved the creation of original musical pieces, specifically interlocking rhythms, using any combination of instruments. This strategy resonates with the work of many music educators and researchers who, in the past decades, have pushed for collaborative composition to become the heart of music pedagogy (Garnett, 2013; Loane, 1984; Odam, 1995; Paynter, 2002; Paynter & Aston, 1970; Swanwick, 1979; Winters, 2012). The activity was student-centered as it allowed the learners to collaborate and actively solve a concrete musical *problem* (Stavrou, 2006). This does not mean that learners constructed knowledge that was new to the field of music. As argued by Shively (2015), learners in student-centered music classrooms construct knowledge by simply engaging in rich and stimulating conversations and musical experiences. Mr Smith created the right atmosphere for knowledge construction to occur, by allowing students to make up their own pieces collaboratively, perform them for the others in the classroom, and finally discuss them constructively (Paynter, 2002). He acted as a facilitator as learners determined the type of compositions they wanted to create. He helped them work through the difficulties encountered (although not solving the difficulties for them) and suggested alternative ideas or paths.

A common characteristic of the three sections of this lesson was the centrality of students' *voices* (ideas, opinions, perspectives, etc.). One of the pedagogical strategies most prominently used by Mr Smith was that of asking open-ended questions. According to Wasik and Hindman (2013), open-ended questions or statements are those that require multiple-word responses and that typically accept many possible responses as equally valid. Questions such as "What do you mean by…?", "Why do you think that way?", "How would you do that?", or "What do you think that will happen?" provide students with opportunities to express their own ideas, to elaborate their thinking further, and to think more deeply and creatively. The information gathered from open-ended questions allows the teachers to better understand student thinking, to better help the students build new knowledge based on their prior understandings, and ultimately to use the learners' own ideas as the starting point of the learning process (Blair, 2009). The pedagogical role of open-ended questions significantly differs from that of closed-ended questions (i.e., those with one single correct answer, as well as 'yes/no' questions), which are commonly used by teachers to check for understanding and/or with management purposes (Hughes, 2005). The strategy of asking open-ended questions allowed Mr Smith to build upon students' understandings and to tailor the flow of the lesson to their specific needs. Mr Smith's interactional style suggests that he regards the students as "thinking individuals", treating their ideas as the cornerstone of the teaching and learning process (Pianta, 2016). He actively involved his students in collectively thinking about the topic at hand, which allowed the learners to connect their own prior knowledge to the knowledge of the teacher, as well as to knowledge about the field of music (Krahenbuhl, 2016).

Mr Smith was respectful of views and ideas that contrasted with his own, always accepting alternative interpretations. He at times disagreed with certain responses given by the students, but never imposed his own opinions. This contributed to create a safe and non-judgmental learning environment (Blair, 2009). These strategies are consistent not only with the principles student-centered education, but also with *constructivism* (Krahenbuhl, 2016). Adopting a constructivist stance in the classroom, according to Stavrou (2006), produces a necessary level of uncertainty or unpredictability, given that teachers constantly seek and value alternative views of reality among students. This is why constructivist teaching has been described as a *way of being*, as teachers need to genuinely see themselves "working side-by-side

with thinking individuals whose ideas matter—in fact, whose ideas are central to the learning/teaching process" (Wiggins, 2015, p. 23). For this reason, music teachers have been encouraged to carry out activities that foster the emergence and discussion of multiple viewpoints (Blair, 2009). The aim is to involve students in collectively thinking about their musical experiences, as opposed to approaches to music education where the voice of the teacher silences or invalidates the voices of students (Muhonen, 2014).

After each group performance, Mr Smith asked the students from the other groups to offer constructive feedback to their peers: strengths and weaknesses, areas for improvement, and suggestions. Feedback in the student-centered music classroom, according to Wiggins (2015), needs to be embedded *in* and emerge *from* students' learning experiences. The main focus is to help learners examine and reflect on their own learning, focusing attention on how their understandings change (Shepard, 2000). This is precisely what we observed in Mr Smith's lesson. The peer-to-peer feedback clearly demonstrated a student-led learning environment, which we believe the students found stimulating and exciting. To create this positive climate, conducive for discussion and exchange of ideas, Mr Smith was strategic regarding when to move in and when to move out of the learning process. He did not abdicate his role as a teacher, though, as he was still the one who calmed the class down when discussions were getting out of control. Working side-by-side with students and building improved relationships with and among them requires flexibility on the teacher's side (Chua & Ho, 2017). This comes with the understanding of how students are and behave in situations that are meaningful and engaging to them, such as the peer-to-peer discussions featured in this lesson (Dole, Bloom, & Kowalske, 2015; Lund & Stains, 2015).

Summary and Closing Remarks

This case study illustrates how pedagogies in the music classroom can be student-centric, particularly within the context of 21st-century teaching and learning in Singapore (Tan, 2017). Mr Smith empowered students' voices and gave them autonomy, providing them with opportunities to grow in confidence as self-directed learners and active contributors, nurturing their critical thinking and fostering collaboration (Chua & Ho, 2017). To support students in the co-construction of meaningful musical knowledge, he facilitated open-ended discussions and fostered peer-to-peer feedback, pedagogical strategies in which it was sometimes necessary to tolerate the noise resulting from students' enthusiasm and excitement. His class was "one in which the teacher welcomes learners to enter with the teacher into the learning process, as full participants in exploring our, their, and others' musical worlds" (Shively, 2015, p. 133). Mr Smith treated his students as active and productive agents, instead of as passive recipients of information. He encouraged the emergence of multiple viewpoints rather than imposing his own opinions or radical right-or-wrong dichotomies (Cleaver & Ballantyne, 2014). This allowed him to not just teach but also learn from his Primary 5 students. As stated by Dewey (1961), when a teacher and his/her students engage in some form of collaborative activity, "the teacher is a learner, and the learner is, without knowing it, a teacher—and upon the whole, the less consciousness there is, on either side, of either giving or receiving instruction, the better" (p. 160).

The various pedagogical strategies identified in this case are not meant to be exhaustive in the characterization of student-centricity in music education (Wiggins, 2015). Note that we do

not claim that these are new or innovative strategies for the teaching of collaborative composition. As seen in the *Introduction*, we are aware that many music educators and researchers have been advocating for this way of teaching for decades (Bunting, 1988; Finney, 2011; Odam, 2000; Paynter, 1982, 1992; Paynter & Aston, 1970; Swanwick, 1979, 1999; Winters, 2012). Similarly, we do not claim that the lesson described here is "excellent", "perfect", or "best" teaching that should be replicated by others. We agree with Coffield and Edward (2009) in that these are ambiguous terms and that the idea of spreading "excellent", "perfect", or "best" practices is problematic and unrealistic in educational settings. Thus, we simply claim that the content and design of Mr Smith's lesson, as well as his genuine interest in exploring students' musical ideas and in fostering collaboration and debate, led to the enactment student-centricity in the context of a Singapore primary music classroom.

Finally, it is important to clarify that embracing student-centered pedagogies does not necessarily require a complete abandonment of more directive teaching methods, which may be the most practical and efficient under certain circumstances (Dewey, 1961). As noted by Shively (2015), the contemporary music classroom may include a combination of both student-centered and teacher-centered teaching approaches. Music teachers need to wisely make decisions about the type of instructional approach that might best suit a given learning purpose, considering the range of pedagogical possibilities that are available (Thompson, 2013).

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