INTRODUCTION

“...the future of the human species depends on the capacity of its members to make metaphorical transformations, to ask the question ‘what if’, [.....] Music has its part to play in this discourse, in these conversations, which define what it is to be human”.

(Swanwick, 1999)

What if our music lessons in the classroom became a different kind of classroom, a classroom that would enable us to make transformations and partake in conversations? How would it unfold when the learning “requires invention and self-organisation on the part of the learner” (Fosnot, 1996) and the teacher is neither the sole content expert nor the controlling classroom supervisor? When our musical learning and teaching is student-centric, how will it enable the learner to develop his/her cognitive, metacognitive, affective, developmental, personal and social domains?

In this essay, we define the student-centric lessons as lessons that place the student at the centre of the music learning process, and focus on nurturing the whole child, including the development of skills, knowledge and sound moral values. Through the use of appropriate learning programmes and pedagogical tools, teachers can empower, engage and motivate their students as active learners in their own learning processes. By knowing their students well, the teachers can create a student-centric classroom learning experience for them that fosters thinking and life-long learning. The term “student-centred” is used synonymously with “learner-centred”, and used to contrast with “teacher-centred” teaching.

The purpose of this paper is to discuss some principles of student-centred music lessons and describe music teaching practices that reflect these principles in the context of primary and secondary general music classes in Singapore.
IN SEARCH FOR STUDENT-CENTRIC MUSIC LESSONS

It is with the intent to observe and learn about student-centricity in music learning that a learning journey to Nova Scotia took place in October 2011. The team members are four music middle managers from schools, two members from the Singapore Teachers' Academy for the Arts (STAR) and an Assistant Professor from the National Institute of Education, Singapore. From the lessons observed in Nova Scotia, there was a high value placed in student-directed learning in the processes of creating, making, presenting, perceiving, reflecting and responding. Students were given many opportunities to make music decisions independently (individually or as a group) as they created music, to reflect and think critically about what they had created and performed. Students were also given opportunities to lead the class in music making. Careful scaffolding and facilitation of the creative process had enabled students to explore, develop and express their musical ideas. Opportunities were provided for critical thinking and reflection through peer critiques. The teachers helped their students to make connections to real-life situations through the music lessons. What came out from these observations, reflective and generative conversations among the team were preliminary findings that could be consolidated as guiding principles for student-centred music teaching and learning.

GENERATING THE GUIDING PRINCIPLES FOR STUDENT-CENTRED MUSIC LEARNING

From February to May 2012, STAR began the process of generative conversations on student-centred music learning with the teacher-leaders from the Music STAR Champions programme. The conversations aimed to work towards producing a set of guiding principles for student-centred arts learning that could nurture the 21st century competencies as defined by Ministry of Education, Singapore (see Fig 1). The guiding principles explored in this essay include:

a. Providing choices and empowering students to make decisions 
b. Facilitating creativity in music-making
c. Facilitating critical thinking, reflection-in-action and reflection-on-action
d. Making learning relevant through contextual teaching and learning

A small team comprising STAR and the National Institute of Education staff members worked with the teachers who visited Nova Scotia to trial some music lessons between January and March 2012 to see how these principles could be realised in their music classes. The following sections discuss the student-centric principles by drawing perspectives from different scholars on student-centricity. Some of the observed teachers’ practices will be presented through vignettes to illustrate the different perspectives and how these principles could be realised in the music class. The video excerpts of

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1. Based on discussions with STAR’s visiting fellow, music teachers in Nova Scotia are specialist music teachers and were carrying out a new music curriculum which has a student-centric focus.

2. The STAR Champions are music teacher-leaders nominated by the cluster superintendents and supported by the school principals. One of their roles is to lead and facilitate knowledge sharing of effective student-centred arts lessons that can nurture the 21st century competencies.
these lessons can be viewed at the website “Images of Practice”.

PRINCIPLES IN PRACTICE

Providing choices and empowering students to make decisions

With the belief that “the one who does the work does the learning”, student-centred teaching is about optimising the opportunities for the students “to engage, participate, share and work hard at their learning process” (Doyle, 2011). This happens when teachers create opportunities that will provide choices in how the students can be “engaged with the material, […] demonstrate what they had learned” (ibid.), and also to empower them to make decisions in the learning processes. The opportunity to choose, to make decisions for oneself, and to face the consequences of those decisions, will result in a sense of ownership (McCombs and Whisler, 1997). This ownership, as a result of providing choices to students, will empower and motivate the students.

For Music, student-directed learning is about students engaging in the processes of creating, making, presenting, perceiving, reflecting and responding. It is also about students reflecting and thinking critically about what they had created and performed, and the space to make music decisions independently, whether individually or in groups. Vignette 1.1 describes an example of a music teaching practice that encourages students to think about their music-making and opportunities to create and make musical decisions.

<table>
<thead>
<tr>
<th>Vignette 1.1 A Primary 3 music lesson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students began by singing the song “Funga Alafia” in solfège and as they sang, the teacher pointed to the respective solfège on the “solfège staircase” (doh, re, mi, fa, soh, la, ti, doh – each pitch on a cue card, arranged in ascending order) drawn on the whiteboard. The teacher used questions to guide students to understand the concept of the pentatonic scale. The rest of her facilitation unfolded in the dialogue presented below.</td>
</tr>
</tbody>
</table>

Teacher:  
We are going to create a four-beat pattern using the five notes.  
(She pointed to the pentatonic solfèges on the board. The four-beat pattern was referring to 4 crochet beats in a bar and the task was to create a 1-bar ostinato). Can you give me an example using the pentatonic solfège?

Student 1:  
doh, re, doh, re (Class sang as teacher wrote on the board)

Teacher:  
Can anybody give me another example of four beats [sic] (4-beat melody)?

Student 2:  
soh, me, lah, doh (Class sang as teacher wrote the solfège on the board)

Empowering students to make decisions  
Giving choices

### Giving empowerment in the group collaborations
### Providing Choices

Here, the students had opportunities to interact directly with the subject matter e.g. pentatonic scale. They took an active role in deciding their own learning, for example, they created, as a class, the four-beat pattern, and later, their individual group’s four-beat pattern. This empowered the students in their music learning.
Students can also be empowered to collaboratively make decisions in their creative tasks, which would give rise to a shared understanding that is “socially distributed knowledge or distributed cognition” (Mehan, 1984) - an understanding that learning came about from the combined individuals’ understanding and decision making in the group. This resonates with the social constructivist’s view of learning, believing that learning takes place in a social environment where there is interaction with people. When individuals learn from each other, their “communication and shared problem solving inherently bridge the gap between the old and the new knowledge and different understanding of partners” (Rogoff, 1990). When individuals collaborate together during creative process in music, it enriches the individual’s musical thinking. Vignette 1.2 presents an example of a collaborative music decision-making.

Vignette 1.2 A Primary 3 music lesson

Students had, in their groups, created their 1-bar ostinato (of four crochet beats) using the pentatonic mode to accompany the song Funga Alafia in solfège. They were then required to choose one of the patterns which they had created (patterns - MSRD, DLDM, SMRD, DDMS, MSMS, SLSL, DRMD) to include in their performance of the song. Before the students worked in groups, the teacher demonstrated an example on how this could be done. As the students were seated in rows, she had each row of students performing one of the parts - lyrics of the song; solfège of the song; tapping the beat of the song; singing the ostinato (doh, doh, me, soh – in 4 crochet beats); and, clapping the rhythm of the song. The class performed their different parts and at staggered entries (cued in by their teacher). After performing, the teacher elicited responses from the students, the different parts they were performing.

Teacher:
In a minute, you are going to do your own version of your song. I have shown you that there are different parts. Work in a group of eight, and later present what you had created. You can have all five parts, or two or three parts. It’s up to your group to decide. You are going to perform your version of the song.
Now these are some of the patterns (referring to the ostinati) you had came up with in the last lesson. Today, which pattern did you sing as ostinato?

Student 4:
DDMS.

Teacher:
Yes, I selected this for you. This week, you can come up with something new, or choose one that you created last week. Later, you are going to perform your version of the song for us. How many parts are there in the song we just sang or performed?

Student 5:
Five parts.

Teacher:
Yes, you can choose to have all five parts. If you want to do four parts, it is fine too. You have to work with your group to decide how many parts and who to sing or perform which part. [sic]

(Students went into their groups to work this out. After six minutes, the teacher called them to perform what they had created. After each group’s performance, the teacher asked the students questions with regard to the parts they sang and how the parts related to each other.)
It was observed that the groups experimented with various combinations of parts. One group, instead of tapping the beat on the shoulders, had decided to stamp the beat. Another group had sung the first part of the song, and then changed to perform another part. By giving the students choices on how and what they would like to perform, it stimulated their learning. They had tapped on each other’s understanding to grow in their own musical learning. The collaborative task had emphasised the “role of social interaction as a dimension of learning” (Rallis, 1995), thus making each student “stakeholders in the learning process, regardless of the particular field, [...] and learn in ways that are far more enduring in their application to life situations” (Vega and Tayler, 2005).

In empowering students, students can also be given opportunities to lead others in music making. For example, as the teacher guides the class in music creating or performing, the teacher can call upon students, or ask for volunteers to suggest a direction for the group’s creation or performance. Students could be called upon to lead the class with the rest of the class responding to them. This empowerment is about giving ownership to the students and the teacher now having to share control. The sharing will shape the classroom’s learning environment; it now belongs to everyone and “students are very much turned on when they are involved in making the decision that affects everyone” (Johnson, 2000). Vignettes 1.3.1 and 1.3.2 present examples of this practice.

### Vignette 1.3.1 A Primary 4 music lesson

The lesson began with a call and response between the teacher and the class. The teacher tapped a rhythmic pattern (call) on a two-tone block and the class responded by repeating (response) what the teacher clapped. Each pattern was played twice, after which the class responded. This call and response was played out in three different rhythmic patterns.

Teacher:

Now, I would like one of you to come up and be the call. You will be leading the class in the call. The rest of you will respond by repeating what he had called. He will be your leader.

(There were several volunteers and each time, there was positive response from the students.)
By having sharing power, in a student-centred classroom, the teacher empowers students to make decisions and creates a ‘win-win’ learning environment for all.

With this kind of learning environment, it raises the questions of “how much power is enough and how much empowerment can the students handle”. Weimer (2002) suggested that the extent of decision making to be provided to students is determined by how much motivation is required to motivate the one student or to motivate the whole class. The teacher will also have to consider the students’ level of cognitive and meta-cognitive development and their ability to handle more empowerment and decision making. Knowing what the students’ zone of proximal development (Vygotsky, 1978) is, will mean that the teaching will need to take place somewhere between what the students can achieve by themselves and what more they can achieve with a more capable peer. The teacher will then need to decide the amount of choice and empowerment that the students can handle such that they achieve the desired results and they grow in their musical learning and thinking.

**Vignette 1.3.2 A Primary 3 music lesson**

The teacher had the students move to a piece of music which was in quadruple time. For Section A, students were to shake their partner’s hand four times, shake the left hand four times, hi-five right hand two times, followed by low-five left hand two times. For Section B, students created their own movements.

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**Empowerment to create, providing choices**

**Student’s decision making**

**Teacher:**
Now I want you to think of another step (movement) to add it in to make it more enjoyable. You can suggest to make the song more interesting, a variation to our movements *(learnt earlier in the lesson).*

*(A student demonstrate two actions.)*

**Teacher:**
What do you call these actions?

**Student 1:**
Fist, Fist, chest pump, chest pump.

**Teacher:**
Class listen, our friend has a suggestion.

*(Class tried out the actions suggested by their classmate.)*

**Student 1:**
Fist, Fist, knife chop, knife chop

*(Class tried out all the new movements suggested by their classmates: Fist, Fist, Chest, Chest [2 times] Fist, Fist, Chop, Chop [2 times].)*

**Teacher:**
This will be Section B.

*(Class performed Section A, followed by Section B.)*

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Vignette 1.3.2 A Primary 3 music lesson

The teacher had the students move to a piece of music which was in quadruple time. For Section A, students were to shake their partner’s hand four times, shake the left hand four times, hi-five right hand two times, followed by low-five left hand two times. For Section B, students created their own movements.

**Teacher:**
Now I want you to think of another step (movement) to add it in to make it more enjoyable. You can suggest to make the song more interesting, a variation to our movements *(learnt earlier in the lesson).*

*(A student demonstrate two actions.)*

**Teacher:**
What do you call these actions?

**Student 1:**
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**Teacher:**
Class listen, our friend has a suggestion.

*(Class tried out the actions suggested by their classmate.)*

**Student 1:**
Fist, Fist, knife chop, knife chop

*(Class tried out all the new movements suggested by their classmates: Fist, Fist, Chest, Chest [2 times] Fist, Fist, Chop, Chop [2 times].)*

**Teacher:**
This will be Section B.

*(Class performed Section A, followed by Section B.)*
Facilitating creativity in music-making

Howard Gardner (1993) explained that “musical thought is more than thinking about music, it is thinking in music”. One way is for the teacher to engage the students to thinking musically in the creative process. Composing, for example, will engage the students to think musically. It will also involve “thinking in sound” (Wiggins, 1999) which implies hearing musical ideas of pitch, duration, timbre, dynamics, form, texture and so on. A good musical assignment will engage students using their musical thought(s) to act on these musical ideas. As the students create their musical work(s), they apply what they know about music – “what they have learned in the classroom and what they have learned living in the world” (Wiggins, 1999). Their works will exhibit the level and nature of their musical understanding. The teacher, as facilitator will help to determine how much assistance to give, what to teach, so as to help nurture their students’ musical independence.

When students engage in creative tasks, they often work “at the edge”. They will test their abilities and seek new knowledge in the process of creating (Marzano et al., 1988). Their motivation is most persistent as they see “the act of creating is itself of value” (Abeles et al., 1984). It also encourages them to be fluid, flexible, convergent and divergent thinkers, risk-takers and lateral thinkers; resulting in the creation of new schemas that will help deepen their musical understanding.

The creative thinking involved in this process is “not simply a matter of finding novel resolutions to old problems and questions, but also includes actively finding and formulating new problems and new questions” (Gretzels and Csikszentmihalyi, 1976). Students will create, think critically of their product/process, then recreate or reproduce to improved or new standards. It becomes implicit that this process is “integratedly related to critical thinking” (Webster, 1988). Expressing “new musical ideas through composing, to find broad and specific musical ideas when listening, to interpret music when performing” (Blair, 2009) creatively, will shift the focus from the teacher to the students learning more independently and collaboratively. The teacher’s role is then to “design ways for students to be the centre of classroom activity, interacting with the music and with each other” (ibid.).

Vignette 1.4 A Primary 4 music lesson

Students worked in pairs to create two bars of gestures/movements to represent four crochet beats per bar. Students presented their movements and the teacher asked the class whose movements they had liked and why. This is then followed with a creative performing task as the students work in their groups.

<table>
<thead>
<tr>
<th>Teacher:</th>
<th>Would anyone like to come and demonstrate what their movements are?</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Two students came forward.)</td>
<td></td>
</tr>
<tr>
<td>Student 1:</td>
<td>I would like to use the woodblock</td>
</tr>
</tbody>
</table>
Wiggins (1998) noted that in group composition settings, there was evidence of (a) shared understanding in the learning, (b) a vital connection between this shared understanding of the creative task, the process and the success of the group in creating the creative product, (c) the more experienced students (because of their prior experience) in leading the group to a higher level of musical understanding, and (d) each individual having to negotiate, explain, justify, evaluate and ‘campaign’ for their musical ideas. In such collaborative group structures, group understanding and agreement becomes more important than that of the individuals within the group.

**Student 1:**
Can I add in the woodblock now?

**Teacher:**
I have two types of woodblock. (Students chose their wood blocks and they beat the pulse while moving to the music. One student ran on the spot while beating the woodblock. The other student started with just beating the pulse, and then he put the woodblock down and started miming some actions to the music. The teacher then asked the students what they thought about what was performed.)

**Student 1:**
I am pretending to be in an invisible box.

**Student 2:**
The group stood up to perform.

**Teacher:**
Besides standing up, is there anything else?

**Student 2:**
They took turns; they stood up one by one. (As the group were discussing and interacting with each other, they were able to build upon each other’s ideas, and collaboratively created a more interesting performance.)
It is in this social constructive setting that Perkins (1999) described having the students to be (a) an active learner - needing to create, to critique, to discuss, to compare and to contrast, (b) a social learner – working in large or small groups to create, listen, perform, and (c) a creative learner – creating their own music. The students built upon each other's ideas, and from them, generate more ideas. They will move towards a shared understanding of their product and “of what they believe the solution should sound like, in terms of what they know [...] and what they believe to be acceptable” (Wiggins, 1999/2000). Here, the students will feel safe to suggest, give feedback, justify, defend and change their ideas. Upon hearing or experiencing the ideas of others within or of other groups, it can motivate individuals to higher levels of musicality and complexity. These will promote and nurture independent musical thinking.

In a student-centric music lesson, the teacher will provide opportunities to empower the students to nurture creativity in music-making, i.e. creativity in listening, creativity in composing, creativity in performing. At the heart of the “creative action”, it will enable teachers to “break new ground, making it possible for us to reconstitute ideas, to see things differently” (Swanwick, 1999). The creative process and its creative thinkers gave “a new twist to an artistic tradition or convention” (Lipman, 1991). Engaging students in creative musical thinking will allow the knowledge and concepts learnt to be applied, challenged, reinforced and even expand from earlier learning. Vignette 2.2 provides an example of facilitating creativity.

**Vignette 1.5 A Primary 4 music lesson**

At first part of the lesson, the class clapped the pulse and chanted the words ‘piano’, ‘drum’ and ukulele’ which was arranged in a four line stanza.

The teacher asked the students for suggestions to change some of these words in the stanza. The class then clapped and chanted these new patterns. The teacher was providing the experience for the students to fit the text in a beat. The teacher then asked the students to create their answer as a response to a question.

(Teacher wrote the lyrics ‘Hey Box, magic box? What is in the magic box?’ on the board.)

**Teacher:**
Can we try to sing this song again? Just now (at the beginning of the lesson), we ask the question. Just now we ask the magic box... what is in the magic box. Let's try again. Ready go.

(Class sang with the teacher.)

**Teacher:**
I would like you to compose an answer to our question. How do you think we can answer the question?
Maybe we can think which instrument we want to talk about?

**Student 1:**
Piano.

**Teacher:**
Do you think we can fit in 'piano' here?
The teacher's role is to encourage, to model and to value their students' creative efforts, so as to motivate their students in the creative and production process. The dilemma is created when the students have thoughts that are different from the teacher’s or when students are more skilled and knowledgeable in some areas than the teacher. Does the teachers’ role then change as they are no longer the ‘expert’, the ‘virtuoso’ or ‘the coach’? A
In this segment of lesson, the teacher was getting the students to explore how the melody and the harmony impacted each other. It was part of the creating process in the song-writing module. The teacher played an extract of the song “Way Back into Love” over the chords C-Am-C-Am, Dm-G-Dm-G, after which she asked ‘Why do the melody and chords sound like they belong to each other?’ The class sat in groups which facilitated group discussions.

Facilitating critical thinking, reflection-in-action and reflection-on-action

Swartz and Perkins (1990) asserted that in critical thinking, its goal is to evaluate and identify a position, analyse competing views or the clarity of ideas. What one will experience is higher-order thinking and greater awareness of one’s thought processes. Hudgins and Edelman (1986) defined good critical thinking as having “the disposition to provide evidence in supporting one’s conclusions and to request evidence from others before accepting their conclusions”. Hence, the critical thinker knows how to make an informed decision based on his/her musical evaluation and understanding of the conceptual musical evidence.

Do we need to set parameters in the creative process? Wiggins (1999) asserted that setting restrictive and “game-like” parameters for the creative assignment can at times “cause students to focus on extra-musical, non-expressive aspects of the project [...] hamper rather than enable or promote the creative processes”. This does not mean that there are no parameters but rather whether there are sufficient choices to allow the students to decide for themselves what they want and to show their potential creativity. Wiggins (1999) suggested that giving just one broad parameter, for example, metric or texture, and allowing the students to make their own decisions regarding the specifics or other remaining structural details, for example, four beats in a bar or two-part canon. The focus is on the process and the celebration of their creativity in music-making. The creative thinking that is being engaged will push the limits of the students’ knowledge and ability, and it will generate new ways of viewing situations that is outside the parameters of standard conventions (Marzano et al., 1992). This will also bring forth greater musical understanding and musical independence in the students.

**Vignette 1.6 A Secondary 2 music lesson**

In this segment of lesson, the teacher was getting the students to explore how the melody and the harmony impacted each other. It was part of the creating process in the song-writing module. The teacher played an extract of the song “Way Back into Love” over the chords C-Am-C-Am, Dm-G-Dm-G, after which she asked ‘Why do the melody and chords sound like they belong to each other?’ The class sat in groups which facilitated group discussions and sharing.

(Teacher played on the piano and sang an extract of the song “Way Back into Love” over the chord progressions C-Am-C-Am, Dm-G-Dm-G.)

Teacher:
I want you, within your tables, to answer this question, ‘What do you think makes the chord (the harmony) and the melody I was singing work? How come they sound like they belong to each other?’ Within your tables, shoulder-partners discuss.

(“Shoulder-partners” was the term the teacher used to refer to students seated side by side.)

(After several minutes, she asked the group to share their answers.)
The vignette illustrates how the teacher provided opportunities for the students to be engaged in cooperative structures of discussion and sharing. The lesson allowed the students to exercise their critical thinking faculties and also to bring about learning through shared understanding within the groups. It also empowered the students to take ownership of their learning. The teacher, through effective questioning, enabled the students to construct their own meaning and new knowledge. Here, we see that the teacher’s role is one of facilitator rather than instructor in the lesson.

| **Teacher:** |
| Can I have you to share? Can we listen to each other’s answers please? |
| **Student 1:** |
| Without the harmony, there is no melody, without the melody, there is no harmony. *(Student was self-conscious and commented that her own comments was nonsense.)* |

| **Teacher:** |
| Mm, that’s interesting… you know what, I don’t think what you had suggested is nonsense, nothing is nonsense. |

| **Teacher:** |
| Can I have another table’s answer? |
| **Student 2:** |
| The chords used are primary chords. The C is a primary chord, the G is a primary chord, and the E is not a primary chord. But sometimes you need a mix of primary and secondary chords for it to sound nice. |

| **Teacher:** |
| You are correct but it does not directly answer my question, even though your answer makes sense. Any inputs from the other tables? |
| **Student 3:** |
| The melody uses the notes of the chord. |

| **Teacher:** |
| Can this table (referring to another table) paraphrase that? |
| **Student 4:** |
| The notes used are part of the same triad. |

| **Teacher:** |
| Wow, what’s a triad? |
| **Student 5:** |
| It is the three notes stacked in a stave, like a chord. |

| **Teacher:** |
| Can I hear from this table? |
| **Student 6:** |
| When the melody and the harmony come together, it sounds nicer. *(Teacher paraphrased and summarised the students’ answers.)* |

| **Teacher:** |
| When the melody and the harmony comes from the same chord, it sounds nicer and the melody uses the notes of the same chord. |
Pogonowski (1987) described critical thinking as “the result of experiential learning that embraces the learner’s effective and cognitive domains. Music is thereby “evaluated in cognitive and affective ways that are informed by experience” (Deturk, 2002) and in this experience, when there are opportunities to discuss and think critically, the learning becomes more meaningful and connected to their understanding of the music. When this type of learning is taking place in a social group learning context, their educational experiences become even more satisfying (Brookfield and Preskill, 2005).

Knowing how to facilitate effective discussions that generates critical thinking to enhance students' learning is a key to student-centric teaching. These discussions will enable them to hear different views of their peers, clarify, organise and refine their thinking, and nurture their skills to handle disagreement, confrontation and affirmation; all these should be practised in the safe environment of the classroom. These are skills that the students will need when they are in the real world.

### Vignette 1.7 A Secondary 2 music lesson

The objective of the lesson was to explore how music could be used to highlight/emphasise the action and drama on screen, tell the story that may not be seen on screen and reflect the emotion of the character(s) in the film. The students viewed a video snippet from the movie ‘Poltergeist: Carol-Ann speaking to mother through TV scene’. The teacher asked the students to give their perspective(s) to the questions: The music of the first part is not in any particular key; what is the term used to describe music that is ‘not in a particular key’? What is the term that describes the opposite of this? How does the ‘Music box’ theme make you feel? What does this ‘Music box’ theme represent?

**Teacher:**
Watch the clip and then in pairs, use the guiding questions (referring to the worksheet) to discuss the clip.
(Student watched the clip.)

**Teacher:**
I will give you two minutes to discuss.
(Student started their discussion and teacher walked around to facilitate.)

**Teacher:**
What is the word that I have used last week
(Teacher was referring to Question 1 ‘what is the term used to describe music that is ‘not in a particular key’?’)

**Student 1:**
Atonal.

**Teacher:**
When music is not in any particular key, it is atonal. And what is the opposite of atonal is?

**Student 2:**
Tonal.
Through effective questioning, the teacher was able to elicit responses from the students, which led to their understanding of how music could characterise and add a dramatic effect to what was happening in the film. By providing opportunities to allow the students to discuss and think critically, and to make their own cognitive and affective judgement(s), their learning becomes more meaningful and connected to their understanding of the music.

**Reflective thinking** involves a higher order of thinking. It is about “thinking about their thinking” and engaging one's meta-cognition process. Dewy (1933/1991) discussed it as a process that occurs before an action or belief is adopted and as conclusions are reached. He articulated that it “involves responding to an experienced dissonance by examining and re-examining held assumptions, identifying relevant facts, [...] and generating solutions to bring closure to situations that are uncertain or controversial”. As there is “ongoing verification and evaluation, judgements based on reflective thinking are more likely to be valid and insightful than beliefs derived from authority” (Dewy, 1933). Having the learners question and challenge their own and others’ practices is therefore important in the development of reflective practices. This reflection in the form of conversation can also turn experience into meaningful learning when a person “actively construct and find personal meaning within a situation” (Falk et al., 2000).

<table>
<thead>
<tr>
<th><strong>Teacher:</strong></th>
<th>How does it make you feel when the scene changes and also when the music changes too?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student 3:</strong></td>
<td>Soothing.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Teacher:</strong></th>
<th>Can I have more words from this table behind?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student 4:</strong></td>
<td>Peaceful.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Teacher:</strong></th>
<th>Table at the corner?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student 4:</strong></td>
<td>Something good has happened.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Teacher:</strong></th>
<th>What does the ‘Music Box’ theme represent to you?</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Students’ responses included ‘Child innocence, adult’s joy, no full relief but at least there is hope, hopefulness, concern.’)</td>
<td></td>
</tr>
</tbody>
</table>

| **Teacher:** | It’s interesting that the music allowed so many varied interpretations. So far, everybody who have said something are all possible answers. This is the subjectivity of music. When you think the answer is either right or wrong, that is pretty bad; that means it’s limited. But the wonderful thing about film music is that it’s subjective and up to you to interpret. That’s wonderful. |

Through effective questioning, the teacher was able to elicit responses from the students, which led to their understanding of how music could characterise and add a dramatic effect to what was happening in the film. By providing opportunities to allow the students to discuss and think critically, and to make their own cognitive and affective judgement(s), their learning becomes more meaningful and connected to their understanding of the music.

**Reflective thinking** involves a higher order of thinking. It is about “thinking about their thinking” and engaging one's meta-cognition process. Dewy (1933/1991) discussed it as a process that occurs before an action or belief is adopted and as conclusions are reached. He articulated that it “involves responding to an experienced dissonance by examining and re-examining held assumptions, identifying relevant facts, [...] and generating solutions to bring closure to situations that are uncertain or controversial”. As there is “ongoing verification and evaluation, judgements based on reflective thinking are more likely to be valid and insightful than beliefs derived from authority” (Dewy, 1933). Having the learners question and challenge their own and others’ practices is therefore important in the development of reflective practices. This reflection in the form of conversation can also turn experience into meaningful learning when a person “actively construct and find personal meaning within a situation” (Falk et al., 2000).
According to Levy (1999), learning does not only take place from experience, but also from the reflection of the experience. The teacher’s role is to help the students become more meta-cognitive, taking them from the cognitive level and making them aware of how they go about their learning and thinking such as what and how they know, quality of their knowing, the feelings associated with the experience. Bruner (1996) noted that “the learner can be helped to achieve full mastery by reflecting as well upon how she is going about her job and how her approach can be improved”.

Schön (1983, 1987) cited that there are kinds of knowledge or skills that one holds inside one’s bodies, which enables one to perform the activities naturally, easily and skillfully. In this type of action, it is derived from tacit knowledge. It is often left unexplained, unmentioned or not reflected. Thus, Schön described it as knowing-in-action. What is crucial to one’s learning is the ability to “think what one is doing while one is doing it”, known as reflection-in-action. Schön described this as a kind of reflection that occurs while one is able to consciously evaluate and make changes while one is working. This is like an on-going experimentation that enables one to find solutions. The changes made are purposeful rather than by ‘trial-and-error’. The teacher’s role is crucial in guiding and facilitating these reflective conversations as it is a process that he/she can help to reshape what the students are working and thinking on it.

### Vignette 1.8 A Secondary 1 music lesson

Students had created a one-bar rhythmic ostinato (based on four crochet beats in a bar). In groups, they explored how their patterns (using body percussion) would work with the melody line and they would decide how to perform both parts together. The following dialogue showed the facilitation on the part of the teacher to bring about some reflective thinking in the groups.

**Facilitating reflection-in-action**  
Teacher went to each group to hear what each group was doing and facilitated their discussions. These were some of the teacher’s questions:

- It looks very good like this but what it would be like if half of you play harmonica, how are you going to do this action which require more partners? Maybe you could modify your rhythmic ostinato clapping actions? You could think about tapping on the floor or lap?
- Do you think your action of tapping your face would produce an effective and audible sound?

(A group of three students asked the teacher for advice.)

- **Student:** Can we do it like this? She plays one beat, I do another beat, then alternate the actions.

- **Teacher:** Does that mean that one student will be playing the harmonica alone?

- **Student 1:** Yes, she wanted to.

- **Teacher:** Ok, if that is what you want.

(Another group demonstrated to the teacher their rhythmic ostinato.)

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**Facilitating discussions that involved reflection**
Through the students’ own reflective responses which were facilitated by the teacher’s questions, they were able to construct their understanding, improve on their creative approach, and achieve insightful learning. The opportunity provided for the students to make their own creative decision(s) also led to greater student-directed learning and ownership.

Schön also described another level of reflective practice - ‘reflection-on-action’, whereby it involved thinking back on what had been done in order to discover how an action might have contributed to an unexpected outcome. The facilitation of this evaluation and reflection process would enable the students to make sense of their journey of knowledge construction and also understand the processes through which their conclusions are arrived at. Vignette 3.4 describes an example of reflection-on-action taking place in a music lesson.
Vignette 1.9 A Secondary 2 music lesson

The students were given about 3 weeks to create (individually) a score for a 1:30 minute film excerpt (Pirates of the Caribbean) using existing loops on Ipad GarageBand. In this lesson, the students were to share what they have created to their peers.

Facilitating discussions that involved reflection

Teacher:
It’s a good time to have some sharing. We would like to hear your work and also comment on it. Let’s start with that table (the students are seated in groups at tables). Can you pick one and let’s hear your music. After you pick one, the owner of the work does not present it or come up. Someone else in the group will present it. (Student 1’s work is being played.)

Teacher:
Can we ask her friend what she thinks about this composed clip?

Student 2:
I think it’s very well done because there was use of a lot of different elements like different strings, drums, shakers. When a different scene comes up, she changes the melody part. The overall mood is fast paced and anxious.

Teacher:
Can I invite the other students to comment?

Student 3:
There are many varied changes compare to the other clip (she was making a comparison to another friend’s sound clip).

Teacher:
Can we hear from you?

Student 4:
There were some parts of ‘mickey-mousing’. Like the front part; there was a brief part of comical music. She can have more tension in some parts of the music. When the camera changes angle, she can change the type of music.

Student 5:
She can vary the loudness of the different instruments. Now, all instruments are blasting at the same volume.

Student 6:
We hear all the instruments throughout the extract, maybe she can pause some of the instruments, that is to take a rest.

Teacher:
You mean vary the entrances of the instrument? (Student 6 nodded her head. Teacher moved on to another student’s work. After listening, the teacher invited students to do peer reflection.)

Student 7:
The second part when she change to a faster pace music was appropriate, as it was the ‘ocean part’ of the movie clip.

Teacher:
Why was it appropriate?

Student 7:
That part was building up the tension as there was going to be a fight.
The reflection-on-action facilitated by the teacher allowed the students to be actively engaged in the learning process. The students became aware of why one does what one did. As learning is both an active and reflective process in a student-centric lesson, this meeting of action (experience of doing) and thinking (reflection) combine to create new knowledge, meaning and understanding.

Freire (1973) believed that reflection is a result of “critical consciousness”, in which learners become actors and authors of their own decisions. Having opportunities for students to have some formal or informal time to discuss ‘what, why and how’ will help them to “internalise and link thought to action, allowing us to problem-solve, create coherence and form patterns of understanding” (Vygotsky, 1978). The sharing of their reflections in dialogical spaces and hypermedia will assist them to make sense of theirs and others’ learning. This approach will ‘capture’ a greater amount of learning, and true learning is fully actualised.

**MAKING LEARNING RELEVANT THROUGH CONTEXTUAL TEACHING AND LEARNING**

Pogonowski (1989) described a context as “a determined place and time, either real, or simulated”. When contexts are included in the teaching of music in the classroom, it will engage students in music-making that describes, as close as possible, real-life situations. Furthermore, when musical concepts are presented in context, students will understand the relevancy of learning. It can connect music to their daily living and identity, make personal meaning of their music learning experiences, and nurture their social, cultural and historical awareness by relating to socio-cultural-historical contexts.
Graue and Walsh (1998) asserted that “children cannot possibly remain untouched by their contexts”. Both children and context have a symbiotic relationship; their learning and sense making can be shaped by the context. Providing opportunities for them to engage in the meta-cognition of the context through music will heighten their awareness of their learning experiences. The process, by which they acquire this awareness, will also become a motivating factor for learning (Hook, 1994). Vignette 4.1 provides an example of contextual teaching and learning, in which a context of a film is used to engage the student(s) learning.

**Vignette 1.10 A Secondary 2 music lesson**

The objective of the lesson was for the students to explore how music gives a film a distinct overall identity. The music highlights the action and drama on screen, tells the story that may not be seen on screen and also reflects the emotion of the character(s). The teacher uses an excerpt from the film ‘Jaws’, opening scene, from which a discussion will focus on these questions: What effect does the music have on this scene? Did you see the shark? What do you think the music represents? What can you say about the music: is the music in major key/minor key/not in any particular key? Is the music/sound(s) low/high? Is there music throughout the excerpt? Is it effective to have music throughout this excerpt?

After watching the film clip, the teacher had the students discuss with their ‘shoulder partner’ (in pairs) the questions on the workshop. This lesson is to lead to the creative project of the students (individually) scoring for a 1:30 minute film excerpt (Pirates of the Caribbean) using existing loops on iPad GarageBand.

<table>
<thead>
<tr>
<th>Using the context of film excerpts to engage the students in their learning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher:</strong></td>
</tr>
<tr>
<td>Can I hear the number 3’s from each table (the teacher name each student in each group table a number 1, 2, 3, 4) with their responses?</td>
</tr>
<tr>
<td>Can I hear from you the answer to the first question?</td>
</tr>
<tr>
<td><em>(What effect does the music have on this scene?)</em></td>
</tr>
<tr>
<td><strong>Student 1:</strong></td>
</tr>
<tr>
<td>Anxiety.</td>
</tr>
<tr>
<td><strong>Teacher:</strong></td>
</tr>
<tr>
<td>Good, how about this table?</td>
</tr>
<tr>
<td><strong>Student 2:</strong></td>
</tr>
<tr>
<td>The music is very scary.</td>
</tr>
<tr>
<td><strong>Teacher:</strong></td>
</tr>
<tr>
<td>This table, can I have a response to this question - <em>Did you see the shark? What do you think of this?</em></td>
</tr>
<tr>
<td><strong>Student 3:</strong></td>
</tr>
<tr>
<td>No.</td>
</tr>
<tr>
<td><strong>Teacher:</strong></td>
</tr>
<tr>
<td>The answer is no. We never saw the shark. How do you know? Why did you cover your ears?</td>
</tr>
</tbody>
</table>
Student 4:
It's the sound, the music.

Student 5:
It is like that there is something beneath in the water because the scene is shown from underneath the water.

Teacher:
Somebody said it is the music. What do you think the music represents?

Student 6:
The shark, the fear.

Teacher:
Yes, the shark or the fear that the shark brings to the people. So, can I summarise what you said 'so to you, the music is the shark because you heard the music that represents the shark but you never saw the shark.' Now, that's an interesting point. What about the next question?

(What can you say about the music: is the music in major key/minor key/not in any particular key?)

Student 7:
Minor, yet not in any particular key.

Teacher:
What about your response? How about here (referring to the group at another table)?
(The students gave similar responses to the student 7 as the teacher asked for responses from the different groups.)

Teacher:
I tend to agree with those who say 'not in any particular key'. Yes, you can't really say that there is no tonality. But how about this question? (Is the music/sound(s) low/high?)

Student 8:
It's both low and high.

Teacher:
So when is the low part?

Student 9:
When the shark is closing in.

Teacher:
Good, I like that. Any other ways to interpret when the lower sounds were used?

Student 10:
In the water scene; used to build up the tension.

Teacher:
That something is lurking underneath and it is coming. How about the high sounds?

Student 11:
It shows the Climax; the part when she is struggling in the water.
(The teacher encouraged other responses from the students: when she grabbed the marker, when it's scary.)

Teacher:
Is there music throughout the excerpt?
By facilitating the discussion through questions, the students critically reflected and thought about what they had seen and heard in the excerpt of the film. As the context of film music was meaningful and relevant, it had motivated the students and allowed them to take ownership of their learning and learn from each other and together.

There is value in allowing the students' responses to steer lessons and create instructional strategies (Brown, 2008). Brown (2008) commented that educators “recommend asking questions and leading students to solutions rather than simply giving answers, with the goal of nurturing students' natural curiosity”. Hence, the students through active participating in the discussion decide how learning should take place and what new knowledge is gained. Pogonowski (1989) asserted that, “integrating real-life issues with music so that teaching and learning become contextual and relevant to our students’ lives... provide tools for ongoing lifelong learning”.

**EPILOGUE**

The move towards student-centricity is more than just a change in the teaching methods or instructional strategies. It is a shift in one’s philosophical paradigm; moving to thinking of not only “what we teach but also how and why we teach something” (Napoli, 2004), and “thinking about our performance
as teachers to thinking about the learning processes the student should go through in order to learn effectively” (ibid.). Hence, student-centric teaching is not just about moving away from direct instruction. In fact, Hmelo-Silver et al. (2007) pointed out that “student-centred learning actively utilizes direct instruction on a just-in-time basis”. The choice to exercise which approach will depend on the context and situation.

*Does this mean that the role of the teacher changes in a student-centric lesson?*

The role of the teacher as an expert does not change when moving from a teller of knowledge to a facilitator of learning. “What changes is how this expertise is used” (Doyle, 2011). It is about how the teacher encourages full participation, promotes mutual understanding, and cultivates shared responsibility among the students. It is about stepping aside at times and letting the students take the lead; it is about sharing power in the classroom and being aware that the teacher do less telling and the students do more discovering and experiencing (Weimar, 2002). Teachers will need to scaffold the lessons in more detail and also “sequence a set of related learning experiences, so that they build on each other” (Weimar, 2002). Moving the teaching from “always telling” to more of facilitation will no doubt take time, planning and effort to develop this skill. The big picture being that this can help optimise the students’ learning.

With a student-centred approach, lessons will enable our students to make metaphorical transformations, partake in ‘what if’ conversations and define what it is to be human (Swanwick, 1999). By putting students at the centre of learning, teachers “can encourage and inspire students to seek out knowledge and to strive for understanding at a deeper level” and students can “achieve independent minds and the capacity to make educational decision and value judgements” (Brown, 2008).

The inclusion of these four student-centred principles (providing choices and empowering students to make decisions, facilitating creativity in music-making, facilitating critical thinking, reflection-in-action and reflection-on-action, and making learning relevant through contextual teaching and learning) in the delivery of music teaching, can potentially develop the 21st century competencies in the students, and nurture them to becoming a confident person, self-directed learner, active contributor and concerned citizen.

“The aim of education should be to teach us rather how to think, than what to think — rather to improve our minds, so as to enable us to think for ourselves, than to load the memory with the thoughts of other men.”

(Dewey, 1910/1991)
REFERENCES


Boardman, E. & MENC, the National Association for Music Education (U.S.) (2002). Dimensions of musical learning and teaching: A different kind of classroom. MENC, the National Association for Music Education, Reston: VA


