Providing a Rich Music Learning Experience

A publication by the Singapore Teachers’ Academy for the aRts (STAR)
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Providing a Rich Music Learning Experience

We would like to express our appreciation to

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Introduction

In this revised edition of *Providing a Rich Music Learning Experience*, we present and discuss a larger collection of music pedagogies that are being practised in our Singapore music classroom contexts.

Beyond raising awareness of the diverse pedagogies, the purpose of including a wide range of these approaches, and putting them side by side with one another, is to encourage dialogue and reflective practice in our music teaching fraternity on how these ways of teaching can complement one another in developing our students in music.

Thus, the various chapters provide broad overviews on the ‘what’, ‘why’, and ‘how’, rather than the procedural know-how of the approaches; the latter could be experienced at workshops instead. Each of these approaches brings forth unique opportunities for teachers to educate and develop each child musically. From these, we can then begin to deliberate on the ‘so what’ and ‘why not’.

Music teachers in Singapore rarely use a singular pedagogical approach, but rather, weave together different approaches that will help their students learn best in their respective music learning contexts. Music teachers also reinterpret these approaches and create their own unique teaching styles, which evolve organically in ways that are shaped by their own teaching contexts and professional identities.

Taking cognisance of the diverse interpretations and applications of the different pedagogical approaches, we are aware that the write-ups for each of these approaches represent only a single perspective. Music educators around the world may hold differing views of what each of these approaches stands for.

In view of all the above, we have incorporated in this edition several critical questions for the purpose of reflecting on each of these approaches in the form of ‘analytical extensions’. In our increasingly diverse classrooms, there is also an increasing need for teachers to be able to reflect on and evaluate different approaches and to combine and adapt them in ways that will promote learning and a sense of inclusion. Such approaches include valuing differing musicking abilities and accommodating diverse learning needs.

Guided by the Singapore Curriculum Philosophy and the learning outcomes of the music syllabus, music teachers may feel empowered to make their own professional choices and apply their unique professional strengths, to creatively co-construct with their students their vision of what an energised and engaged music class looks, feels, and sounds like.
The Orff Approach

"Improvisation is the basis for education in a time of rapid change...It is this emphasis on improvisation which is the heart of the Orff approach"

CARLY, 1977, P.81

Philosophy
The core of Orff Schulwerk is the belief that musical imagination and creativity is inherent in every child and can be developed through singing, saying, moving, and playing. The child’s music learning experiences are usually presented with the opportunities to explore improvisation in speech, in song, in movement, and in instrumental play.

Approach
The Orff Approach of music pedagogy encourages discovery learning as the children experience music lessons, which involve exploration, imitation, improvisation, and creation. These can appear in any order. It provides an environment whereby musical play is choreographed by activities and open-ended questions to elicit and encourage children’s creative thinking. Through these processes, they will experience musical activities that progress from simple to complex. With an imaginative and creative teacher in an Orff classroom, musical understanding and skills can be taught and developed to enable growth in creativity and improvisation.

Exploration
The process of getting students to physically experience the beat, meter, tempo, and rhythm in movement and through instruments stems from the belief that learning music should be carried out by doing. As such, the development of music learning can be encouraged in children by the exploration of (i) space through movement, (ii) sound through voice and instruments, and (iii) form through improvisation. In the exploratory processes, children are encouraged to constantly experiment new ways to music-making.

Imitation
“Imitation is used to insure a role model for creativity” (Choksy et al, 2001, p. 108). The teacher is the major role model for the children to imitate. During this process, children develop basic skills such as aural and observation skills in rhythmic speech, body percussion, singing, and playing pitched and non-pitched instruments through rhythmic and free movements through space. The teacher’s role gradually reduces as the children develop the ability to become more independent in solving their own creative problems.

Improvisation
Through spontaneous music creation using improvisatory tools such as movement, speech, poem, song, pitched and non-pitched instruments, children can develop music understanding.
Warner commented that ‘Musical competency evidences itself in the ability to speak the musical language…achieved in part through improvisation which must be practiced on every developmental step with already familiar material, incorporating the new concepts as they are introduced’ (Warner, 1991, p.69). Improvisation should also come before the introduction of any form of notation.

**Creation**

In the creation stage, children are able to consolidate their learning and apply the skills learnt to complete their music compositions. This helps develop independent learners. The teacher should provide the space and the encouragement for creative expression. Each individual will contribute to the group as a whole, and that community of individuals becomes the ensemble…Music cannot be made where there is no community.’ (Choksy et al, 2001, p. 109)

**Implications for the 21st Century Educator**

As the Orff approach promotes skills of creativity, imagination, innovation, evaluation, critical thinking, and problem solving, it becomes a natural platform to support the development of emerging 21st Century competencies.

The interdependence of children working in groups to create music and movement forms describes a model of learning such as “connectivism”, which ‘acknowledges the tectonic shifts in a society where learning is no longer an internal, individualistic activity’ (Siemens, 2004) and helps the children to flourish in their future environments.

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**Musical Function**

Speech Rhythms, Singing and Playing

Speech rhythms, singing and playing are used as a medium in music learning. The Orff Approach starts with rhythm as it is believed that rhythm is the primal music element. Children’s rhythmic aptitude is apparent in speech patterns and rhymes – a feature in their play activity. This leads naturally to the understanding of rhythmic and melodic concepts such as note values, meter, accent, and form.

Improvisation and Creation

Structured and well-planned scaffolding are essential tools for children to develop...
music skills. Improvisatory skills can be introduced to children through singing, movement, and the playing of instruments. The experiences will contribute to the conceptual and affective development of the child.

**Instrument Playing**
The use of instruments supports the learning of improvisation. The children first experience the playing through imitation, before experimentation and creation. These instruments should be easily played by children so that they can express themselves in music-making. The Instrumentarium, often used in the Orff process, offers a variety of timbres, colours, and textures. It usually includes barred instruments (xylophones, glockenspiels, and metallophones), recorders, and non-pitched percussion instruments (drums, woods, and metals).

**REFERENCES**


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**Art of Music Teaching Video:**
**Orff Approach to Music Lessons at Primary Level**

Scan QR code to view.
The Kodály Approach

“Sequential learning is probably the most natural way of learning about the world surrounding us. This is the most natural way to learn a language and most natural way to learn music.”

LÁSZLÓ NEMES

Philosophy

The Kodály philosophy of music education is that music belongs to everyone. The Kodály Approach, where singing is the foundation, uses songs of cultural heritage within the community as the initial repertoire. The selected repertoire for music education should be of the highest quality for the best learning experiences. The approach is highly structured, sequential, and student-centred. Kodály-inspired music education aims to develop multiple dimensions of musicianship. It includes performance, musical literacy, critical thinking, creativity, listening, and stewardship of musical and culture heritage. It is undergirded by the belief that a well-rounded vocal development builds a good foundation that can lead to instrumental studies.

Preparation

In the preparation phase, the musical material to be taught is experienced holistically through physical, aural, and visual activities. Engaging musical experiences such as music games involving demonstration of rhythms with body percussion, singing in solfa, or using hand gestures to indicate pitch levels, help prepare the child for the music concept to be introduced at the next stage.

Presentation

The presentation phase is the stage where learning is drawn from musical experiences in the preparation stage, in order to make the learning conscious. In this phase, the music concept and their corresponding musical symbols are introduced and presented to children.

Practice

With musical experiences from the preparation phase and knowledge of the music concept, learners reinforce their understanding of the concept through
The Kodály Approach
Providing a Rich Music Learning Experience

The Preparatory Phase
00:00 – 1:58

The Presentation Phase
01:16 – 08:59

The Practice Phase
3:16 – 4:02

Careful planning by the teacher so that the three stages work in harmony
4:03 – 5:36

opportunities to ‘practise’. Musical activities such as the use of solfège hand signs, stick notation, and rhythm syllables are platforms for practice in this phase. This includes reading, writing, composing, and improvising based on concepts learnt.

Musical Function

Singing, Playing, and Moving
Singing takes a central role in the overall musical development of the child. This is often attached to rhymes, chants, musical games, rhythmic movement, body percussion, and free movement to complement the music learning. Singing is the most natural form of music making and the students can enjoy the learning of simple to complex concepts through a song.

Listening
Through the development of singing skills, children hone their listening skills and inner hearing. Teachers provide a structured approach to listening to develop musical understanding and appreciation. The development of listening skills also provides children with the aural perception and sensitivity to various music elements so that they can make sense of the music around them.

Improvising, Creating, and Performing
Children construct their music vocabulary through various accumulated music experiences that develop musicianship skills. Through the repertoire of musical experiences built over time, children develop fluency in music thinking with which they activate during improvisatory and creative activities.

REFERENCES


Implications for the 21st Century Educator
Kodály-inspired music education helps develop a holistic child. When students sing and interact through musical games, movement, and music-making, it helps in the development of psychomotor skills and nurtures social awareness. This social-emotional learning experience of respecting others is relevant to their learning and manages the different dynamics that come along with working within and beyond their peer groups; skills that are necessary for the globalised world today.

Singing about one’s cultural heritage and ways of life can help to build a sense of identity and community. Hence, the singing of folk songs and children’s songs is often used as a foundation for music learning.

INTERVIEW WITH LÁSZLÓ NEMES
The Three P’s – Prepare, Present, Practice
PROVIDING AN EXPERIENCE-BASED MUSIC EDUCATION

The Preparatory Phase
00:00 – 1:58

The Practice Phase
3:16 – 4:02

The Practice Phase
01:16 – 08:59

Careful planning by the teacher so that the three stages work in harmony
4:03 – 5:36

Children also perform these activities in a performance setting.

These ways of music thinking are cultivated over a process of activities that will allow for deep understanding, and which must be developed by a skilful music teacher. They also offer great opportunities for bite-sized performance tasks when teachers want to know summatively if the learning has taken place. More significantly, the student’s voice is heard in the creation of new music experiences - varied and connected, and anchored in the reflective new ways of understanding musicking in class.

Interview with László Nemes: Key Elements in the Kodály Method of Education
Scan QR code to view.

Art of Music Teaching Video: Kodály-based Music Lessons at Primary Level
Scan QR code to view.
The Dalcroze Approach

“Movement became not an end but rather a means of developing a sensitivity to rhythm, phrasing, melody, and form. Dalcroze maintained that the body was connected by a complex network of muscles and nerves to the brain and that training physical responses to music was the most direct approach to rhythmic response and musical understanding.”

SHEHAN, P. K., 1986, P.29

Philosophy

The Dalcroze approach is “to encourage musical expression and creativity, to lead students to trust their own ideas and creations, and to help them discover their body as an expressive musical instrument” (Juntunen, 2016). Each child can develop his/her ability to express what he/she hears through movement and to transfer these physical sensations into the different forms of musical expression (voice and instruments) and musical knowledge.

Approach

This is based on the principle that “rhythm is the primary element in music” (Chosky et al, 2001, p. 40) and the musical elements is reflected in the natural rhythms of the various parts of the human body. Jaques-Dalcroze believed that having this sense of rhythm is “the capacity to feel or ‘sense’ the space/time between movements and is connected to the ability to control variations of the elements of time, space, and energy in movements” (Juntunen, 2016).

Almost every music concept can be taught and experienced through the movement of the body through space, allowing the nurturing of auditory memory, communication, expression, and creativity. Through the various muscular contractions and releases in the human body, music is felt, experienced, and expressed. At the same time, these movements can allow the children to hear, feel, understand, and know. As every child has a personal way of moving, his/her movements can reflect one’s voice and personality. Eurhythmics, solfège, and improvisation are intertwined to develop the inner ear, the inner muscular sense, and creative expression.

Key Notion in Dalcroze Method of Education

“The use of space is probably the most important concept that we can teach about, work with and try to infuse space into every music parameter.”

SHEHAN, P. K., 1986, P.29

INTERVIEW WITH JOHN R. STEVENSON

Scan QR code to view.
The Dalcroze Approach
Providing a Rich Music Learning Experience

Students to better respond to music could movement be associated with repertoire. How diverse cultural elements?

Eurhythmics
Movement, postures, and gestures of the body can teach concepts of rhythm, structure, and musical experience. The different movements in space (e.g. clapping, singing, swaying) and place (e.g. skipping, walking, and galloping) can express tempi, durations, dynamics, accents, and other music elements. With the addition of postures and gestures, melodic contour, harmony, and phrasing can be explored. It expresses internal emotions by externalising affect through movements, postures, and gestures, which can be automatic and spontaneous, or even the result of thought and will.

The skilful teacher here leads the class confidently to respond to music, focusing their listening skills and developing their understanding of music through eurhythmics.

Solfège
Solfège is used in the study of staff notation, harmony, and scales. Its aim is to develop the capacity of hearing, listening, responding to, singing and notating any combination of sounds' (Juntunen, 2016). The ear and the body are instruments used to develop an understanding of pitch, scale, and tonality. Combined with speaking and singing activities, solfège can help with aural skills and vocal improvisation. The Dalcroze solfège applies a fixed do system.

Improvisation
Through the spontaneous musical creation of using improvisatory tools like movement, voice, pitched and non-pitched instruments, improvisation can develop the child’s musical understanding of form, meaning of music, and inner hearing, and also develop his/her creative facility. Instrumental improvisation teaches the child to express his/her musical thoughts and feelings spontaneously through their instrument.

REFERENCES

The Importance of Improvisation in Dalcroze
“One big form of improvisation is to get the students to create something. You give them material and perhaps do something with that material to create something of your own within certain parameters.”

Implications for the 21st Century Educator
The Dalcroze teaching process builds on ‘students’ earlier understanding and knowing and gradually develops based on students’ ongoing responses and progress’ (Juntunen, 2016). This learning takes place in a social constructivist environment. They are encouraged to be aware of the movements of others, to interact and collaborate with each other, and to think critically and solve problems together. In short, the teacher guides the learning process with the understanding that the students are active agents of constructing knowledge. Teaching music in ways that empower learner agency can enable them to achieve musical heights and depths.

INTERVIEW WITH JOHN R. STEVENSON
Learning Music Via Movement and Spatial Experience
“I hear something, I allow my body to respond to what I hear in some way, then I study what it is, how I’ve responded.”
World Music Pedagogy

Underpinnings

The term ‘world music’ denotes music from different genres and cultures from everywhere – rural and urban parts of the world and in different contexts. It is underpinned by:

- A valuing of multiculturalism and hence diverse musical expressions, and appreciating that music of every culture is worthy of study.
- Maintaining the principles of equity and inclusion in the design of a music curriculum and selection of repertoire and musical experiences for students.
- A belief that music is an interdisciplinary experience, and that the study of music is a means of knowing music and understanding music as sound, behaviour, function and social meaning.

Five Dimensions of World Music Pedagogy

The five dimensions of world music pedagogy as laid out by Campbell & Lum (2019) are below. The five dimensions hinge on listening as key to music learning and these dimensions can be used flexibly to enrich music learning experiences.

- **Attentive Listening** (multiple directed listening experiences)
  - Teachers could pose questions before the listening experience to direct students’ attention to specific musical elements and structures when listening to live music or recorded music.
  - Teachers can also facilitate students to wonder about how the work is created, the musicians, the instruments (and their materials), the use of voice, the contexts in which the music is performed, and the function of the music.
  - Students may be directed to listen while following a graph, map, or graphic notation.

- **Engaged Listening** (participatory musicking; active participation while listening)
  - Teachers could ask students to be actively involved in the music-making as they listen to the music, such as singing/playing the melody, patting the beat/rhythm, playing a simplified part, moving/dancing to the music, or playing a musical game along with the music.
Enactive Listening (performance through continued oral-aural listening)
- Students listen to perform a segment of a work, giving attention to every musical nuance, and being as stylistically accurate as possible.
- Students could also use computer programmes and apps to ‘perform’ the music.

Creating World Music (inventions in the style of a studied selection)
- Students create a short passage of music in the style of the musical model through composition, improvisation, or songwriting.
- Students could also be asked to create extensions to a given work, explore new sounds, and to play instruments that differ from the recordings.

Integrating World Music (connections of music to disciplines, fields, and topics)
- Teacher facilitates students to discuss the music, such as how it connects to students’ prior musical experiences and understandings, and how it connects to culture.
- Teacher could make interdisciplinary connections such as: music and social studies; music and science; music and geography; music and cultural identities; music and gender; music and nationalism.

Considerations in Adopting World Music Pedagogy
Curriculum Design
- As the World Music Pedagogy comprises five dimensions and focuses on in-depth music experiences, the curriculum plan will take place across multiple lessons, even lasting for an entire semester or the school year. The choice of musical culture could be guided by the music syllabus.
- The five dimensions of World Music Pedagogy honour the oral-aural process in music learning, although it does not necessarily replicate the same traditional transmission methods of the said traditions, since classroom learning contexts are different.

Selection of musical repertoire
- Selection of musical repertoire can take into consideration the changing nature of music traditions and practices. Therefore, any song or piece could potentially be an entry point into learning about the music and culture. These selections can include contemporary and popular musical practices, as well as hybrid musical forms.
- In order to engage students, these listening selections need to be able to draw students’ attention and spark their curiosity or enthusiasm, such as having interesting sonic properties, or musical contrasts. These listening selections also tend to be short excerpts, just enough to provide information and a gateway into the musical culture. The listening selection could also comprise several musical pieces from a particular culture.

Musical Resources
- Teachers could harness other expertise, such as community musicians and practitioners to add a certain richness and authenticity to their music lessons. Some of these practitioners may also be found within the school community.
- While YouTube videos and the Internet provide a rich array of musical selections, teachers could find out more about their sources, such as the locations where they were recorded, musicians who performed them, dates when the recordings were made, as the differing contexts could play a role in changing the nature of the music being performed.
- Teachers may not have the necessary resources such as music instruments of musical traditions to be taught. Teachers could find ways to replicate the sounds through use of other instruments, or even harnessing technological tools such as mobile devices and apps.

Commitment to Inclusion and Diversity
- Teachers need to embrace an open attitude towards inclusion and diversity. For example, teachers could model how they could respect different music and their respective traditions, such as being cognisant of different musical perspectives and meanings. Comparisons across different musical practices, if dealt with in class, need to be conducted with sensitivity. Teachers can also be open to the perspectives that their students bring when interpreting the music.
- Teachers need to be committed to learning music beyond their own experiences and/or preferences.

Benefits of World Music Pedagogy
As World Music Pedagogy develops and derives from the intersections of ethnomusicology, music, and music education, the approach is designed to bring forth musical, cultural, and cross-cultural understandings. It also sends a clear message that music is a form of human expression and expresses cultural identity, thus helping learners become more self-aware and helping them become more aware of the perspectives of others.

REFERENCES
Non-Formal Approach

Underpinnings of Non-Formal Approach
The non-formal approach is derived from non-formal contexts of learning, such as learning in community music-making contexts. It is underpinned by the following principles:

◆ Learning is not confined to time-bound and place-bound school settings, but can take place in any context and as part of social participation.

◆ Music-making is a direct expression of human community; music catalyses communication between people and brings about social change.

◆ Music learning should mimic authentic musical practices, using methods that are employed by real-world musicians and practitioners outside of formal settings.

◆ Music learning is enriched by the ethos of inclusion and working with diverse and heterogeneous groups.

Key Aspects of Non-Formal Approach

◆ Aural-oral processes of music learning through large group activities, focusing on listening, improvising, and performing, facilitated by a mentor or peer leader, with an emphasis on inclusivity and participation.

◆ Learning is embedded in planned activities that are not necessarily explicitly designated as learning outcomes but may contain elements for learning.

◆ A dynamic creative process which involves participants co-constructing musical material rather than a passive mimicking of prescribed and static musical ideas.

Role of Facilitator

◆ Lead rather than control; music-making is facilitated in a way that encourages active participation with a mindset of working with participants rather than working on students.

◆ Draw out the strengths in individuals within the mixed groups of varying musical abilities and experiences to collaboratively create, shape, and perform music.

◆ Provide direction, offer suggestions, and allow for possibilities of musical outcomes to emerge in dynamic, creative, and unpredictable ways, giving attention to the flow of the musical experience and creative energies.

◆ Cultivate an open environment of trust and respect, through a desire to include participants’ musical ideas, weaving them together, encouraging, and enabling participants to work together.

◆ Continue to engage in music practice to broaden and deepen facilitator’s own familiarity with different musical styles and genres, since the approach requires the facilitator to possess strong musicianship and musicking skills.

As musical learning is embedded in action and may not necessarily be neatly scaffolded in the way formal approaches do, what opportunities can music teachers draw from the organic nature of the non-formal approach?
Key Characteristics of Non-Formal Strategies

- Facilitator and participants make music as a whole class, with opportunities for improvisation.
- Facilitator and/or participants invent a musical idea, listen to its effect through ‘doing’, make adjustments so that everyone’s ideas interact congruently with one another.
- Facilitator generally starts by offering a limited/short musical material for participants to freely experiment and encourages various rhythmic and sequential permutations, and as participants become more proficient, facilitator opens other parameters for experimentation.
- In order to engage students, these listening selections need to be able to draw students’ attention and spark their curiosity or enthusiasm, such as having interesting sonic properties, or musical contrasts. These listening selections also tend to be short excerpts, just enough to provide information and a gateway into the musical culture. The listening selection could also comprise several musical pieces from a particular culture.

Examples of Non-Formal Strategies

- Ensure a consistent beat
- Play along with participants
- Give feedback using positive language and gestures to inspire a sense of confidence
- Draw on the group’s prior musical experiences
- Avoid talking too much, be succinct with directions and suggestions, and allow more time for playing
- Develop a repertoire of visual cues

Examples of Non-Formal Strategies

- Facilitator could add a third line or an ostinato, and have some participants improvise on one note.
- Facilitator could explore call and response with participants.
- Facilitator could introduce a chord and get participants to explore playing the chord on their instruments with the same rhythmic groove.
- Facilitator could encourage participants to improvise different ideas, or suggest further ideas to add variety to the jamming.

Using Songs as Starting Points for Exploration and Composition

a. Singing the harmony  
- Facilitator keeps a beat and hums or sings a short phrase from a song, participants echo.
- Facilitator divides the group into half and leads the group to sing in 2 parts.
- Facilitator could add a third line or an ostinato, and lead the group to sing in 3 parts.

b. Singing (with improvising)  
- Facilitator improves vocal syllables on one note.
- Facilitator picks participants to improvise vocal syllables on the same note.
- Facilitator brings back the 2-part or 3-part harmony introduced in (a) and chooses soloists to improvise on the note. (Facilitator could introduce body percussion and have some participants perform body percussion together with the harmony and solo parts.)

Using Texts as Stimulus Points for Exploration and Composition

a. Reading a textual material  
- Facilitator reads a poem rhythmically and offers a few rhythmic suggestions.
- Facilitator invites participant(s) to take turns to improvise a rhythm based on the text, or in response to the text.

b. Chord jamming  
- Using a rhythmic groove, drawing from participants’ improvisation earlier, facilitator introduces a chord and gets participants to explore playing the chord on their instruments with the same rhythmic groove.

Benefits of Non-Formal Music

As non-formal music-making draws from non-formal contexts, and emphasises inclusion and a respect for an organic development of musical processes, it has the potential to strengthen communities, build relationships, develop a sense of openness, and also create a collective identity.

References


Singapore Teachers’ Academy for the arts (2017). Opening hearts and minds through collaborative composing. STARPost (Music), 2(1), 2-6.


Oxford Handbooks Online.
Informal Learning

Underpinnings of Informal Learning

Informal Learning is underpinned by the following ideas:

- Understanding that musical learning can occur outside formal contexts, and that learning processes may be organic, less linear, idiosyncratic, and integrate performing, listening, and creating experiences.
- Understanding that music learning takes place when immersed in the music and musical practices of one’s environment, thus drawing on the learners’ lived experiences.
- Understanding that music learning is associated with the development of the learners’ musical identities.

Informal Learning practices usually involve:

- Learning music which is personally chosen, familiar, and which the learners enjoy and strongly identify with.
- Learning by listening to recordings and copying them by ear.
- Learning alongside friends through talking about music, peer-assessment, listening, watching and imitating each other, usually without adult supervision.
- Assimilating skills and knowledge in personal, often haphazard ways according to musical preferences, starting with ‘whole’, ‘real-world’ pieces of music.
- Maintaining a close integration of listening, performing, improvising, and composing throughout the learning process.

Informal Learning is informed by the ways in which popular musicians direct their own learning outside school.

The five key principles of Informal Learning are:

I. Learning music that pupils choose, like, and identify with
II. Learning by listening and copying recordings
III. Learning with friends
IV. Personal, often haphazard learning without structured guidance
V. Integration of listening, performing, improvising and composing

INTERVIEW WITH LUCY GREEN

What is Informal Learning?

Informal Learning is informed by the ways in which popular musicians direct their own learning outside school.

The five key principles of Informal Learning are:

I. Learning music that pupils choose, like, and identify with
II. Learning by listening and copying recordings
III. Learning with friends
IV. Personal, often haphazard learning without structured guidance
V. Integration of listening, performing, improvising and composing
Informal Learning: Providing a Rich Music Learning Experience

Key Aspects of Informal Learning

Autonomy in Choice of Music
The informal learning approach gives learners the autonomy to choose the music themselves. The choice of music reflects what students identify with. These pieces become starting points for student explorations and allow teachers to empower the students’ voices and acknowledge students’ musical identities in the music classroom.

Learning Music Aurally
Students learn aurally by listening to and watching audio-visual recordings. They are given control over their own learning, choosing when and which part of the music to work on by re-playing and listening purposefully to the recordings. Teachers may provide structured and directed learning while giving learners the musical space for expression.

Working in Friendship Groups
By giving students the autonomy to choose their working partners, students feel safe and motivated to learn within their friendship groups. Teachers could also encourage students to consider working with other classmates who may have strengths and musical preferences different from their own, which could then add a certain richness to their group work.

The key idea here is about respecting students’ choices and developing a sense of ownership, responsibility, and commitment to the group.

Working on Real World Music
Students might choose music that teachers deem too complex and difficult, or beyond their current ability. By respecting students’ choices, each learner is given room to approach the music at his own level and pace. This is unlike a traditional classroom setting, where a teacher breaks the exercise into smaller tasks with increasing levels of difficulty.

Role of the Teacher

Teacher as Facilitator
The role of the teacher is that of a facilitator, who listens to and respects the students’ choices. By allowing students to choose their own music, work with friends with a similar musical taste and identity, choose instruments to work on, set their own objectives and steer their own course of learning, the teacher is giving students ‘voice’ in the classroom, empowering learners to take charge of their learning. The teacher brings the students towards the goal of the learner outcome by facilitating their self-discovery and decision-making, acquiring skills that serve them well beyond our music classroom.

Modelling to Students
When students have chosen their pieces of music and instruments, the music and chosen instrument might not be familiar to the teacher. In Informal Learning, the teacher learns alongside and co-constructs knowledge with students, guiding them by modelling how to work the music out by ear.

Asking Questions
When the student faces a problem, the teacher facilitates self-directed learning by asking questions. These are questions that help students identify the problems they are facing. The teacher also gets students to think of possible solutions. The teacher provides a certain amount of information, knowledge and skill, but leaves room for students to work things out for themselves.

The informal learning approach came about from an understanding of how pop musicians learn outside of school. Hence, the elements of how these musicians were intrinsically motivated to be self-directed in their learning gives insight into how teachers can motivate their own students in a formal environment. For example, the approach emphasises authentic music experiences, incorporates the notion of having music caught and taught in social settings, and allows students the opportunity to self-direct their learning and exhibit leadership skills.

Value of Informal Learning for Learners

The value of Informal Learning comes from its authentic nature. The teacher learner learns alongside and co-constructs knowledge with students, guiding them by modelling how to work the music out by ear.

Asking Questions
When the student faces a problem, the teacher facilitates self-directed learning by asking questions. These are questions that help students identify the problems they are facing. The teacher also gets students to think of possible solutions. The teacher provides a certain amount of information, knowledge and skill, but leaves room for students to work things out for themselves.

Example of adapting Informal Learning for the Upper Primary level
by Loi Wei Ling, Teacher at Edgefield Primary School

Benefits of Informal Learning for Learners

“Very often, children who had previously been disaffected in music, would rise up in this completely different educational setting, and prove themselves to have both musical ability, and group organisational and leadership qualities.”

Interview with Lucy Green

Teacher Facilitator in the Informal Learning Setting

“So it’s about giving a certain amount of information, knowledge and skill, but not giving so much that the student doesn’t have the necessity to work things out for themselves.”

Interpretation

Modelling to Students
When students have chosen their pieces of music and instruments, the music and chosen instrument might not be familiar to the teacher. In Informal Learning, the teacher learns alongside and co-constructs knowledge with students, guiding them by modelling how to work the music out by ear.

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Informal Learning

Providing a Rich Music Learning Experience

Relevance and Application Beyond Popular Music

Informal Learning, as discussed here, is conceptualized by Green (2008) as a teaching and learning approach, which has been adapted and applied into music classrooms. It is about using strategies that encourage self-directed learning, tapping on the real-world learning practices of popular musicians. This mode of teaching through informal learning processes is not restricted to popular music and can be applied to other styles of music.

Example of Informal Learning at Lower Secondary level (Students from Hillgrove Secondary School)

Example of facilitating problem solving in an Informal Learning context at Lower Secondary level by Adeline Tan, Teacher at Bishan Park Secondary School

INTERVIEW WITH LUCY GREEN

Applicability to All Kinds of Music

"It's not restricted to popular music because what we're talking about is a teaching and learning method and it can be applied to any kinds of music."


http://www.musicalfutures.org/resources
Inquiry-Based Learning

In the Music Classroom

An Inquiry-Based Learning (IBL) approach focuses on both music-making and developing musical knowledge and skills through inquiry. It advocates authentic music learning experiences that develop 21st Century skills such as critical thinking, problem solving, collaboration, communication, and creativity.

IBL Being Intrinsic to the Musical Experience

In the making of music, we respond in dynamic fashion to our historical, social, and cultural environment. Drawing upon sounds, ideas, emotions, and personal experiences, we embark upon a journey of inquiry, in imagining, experimenting, interpreting, and expressing. Likewise, we guide our students to inquire about music through listening, performing, and creating, asking what the music might mean, how else it could be expressed, and what new forms might be generated.

As we guide students’ process of inquiry through the iterative (yet non-linear) steps of music-making, they acquire an inquiring mindset towards music, as well as the capacity to direct their own learning through creatively combing and sequencing these steps. This framework of inquiry equips students to be independent in their lifelong learning about music, as well as other aspects of life.

The process of musical inquiry grants ownership of learning to students and empowers them to decide which learning trajectories are most musically interesting and relevant to them. This builds student motivation to learn, leading to greater retention of knowledge, deeper understanding, and more positive attitudes towards continued learning of music.

Underpinnings of IBL

IBL takes a constructivist approach to teaching and learning, in which students are actively and experientially engaged in the processes of creating knowledge and learning. It is based on student-centredness, as well as collaborative and self-directed learning. It is undergirded by these processes of instruction: (i) Gradual Release of Responsibility (Pearson and Gallagher, 1983; Frey and Fisher, 2008), (ii) Staged Self-Directed Learning Model (Crow, 1993), and (iii) Inquiry Continuum (Rezba, Auldridge & Rhea, 1999; Bell, Smetana and Binns, 2005).

i. Gradual Release of Responsibility

- Teacher progressively shifts from assuming “all the responsibility for performing a task...to a situation in which the students assume all the responsibility” (Duke & Pearson, 2004, p.211), thereby calibrating the support given to the learner, to help the student attain independence in learning.
- This transition from teacher modelling to joint responsibility of learning, to independent application of learning is outlined in the Gradual Release of Responsibility model (Frey and Fisher, 2008), which articulates four interactive/interrelated components (Focus Lesson, Guided Instruction, Collaborative Learning and Independent Work). See Figure. 1 (cont’d).
Inquiry-Based Learning: Providing a Rich Music Learning Experience

This instructional model is not linear and can shift back and forth between components depending on which is most relevant at any given point of the students’ growth in mastery of skills and concepts.

ii. Staged Self-Directed Learning Model
- Grow (1991) posits that learners develop increasing self-direction if supported with the appropriate approach at each stage of learning.
- The degree of guidance is dependent on the student’s ability, maturity, motivation, prior knowledge, and readiness to learn independently. See Figure 2.

FIGURE 1 Teacher’s Gradual Release of Responsibility Model

iii. Inquiry Continuum
- Bell, Smetana and Binns (2005), postulate that the level of inquiry will vary according to different instructional contexts. Different styles of teaching and learning work for different learners in different situations.
- The complexity of the inquiry process can be adjusted, corresponding to students’ openness and cognitive needs.

Music Inquiry Framework
- The Music Inquiry Framework features four modes of inquiry: Express, Experiment, Collaborate, and Reflect. These modes are undergirded by the four music pedagogical leverages (Musical Creativity, Musical Communications & Culture, Musical Collaboration, and Critical Thinking in Music) for developing emerging 21CC (Chua, S.L., Ho H.P., Lum C.H., Tan, C.J., 2016).
- The modes represent the interconnected ways by which students may be guided to learn about music with increasing self-directedness, as teachers apply various teaching strategies according to the students’ level of readiness.
- They can be used in any combination or sequence that most effectively and naturally supports the music teaching and learning process.
- The modes (see Figure 4) are reflected in connection with the instructional process of the Gradual Release of Responsibility model, Staged Self-Directed Learning model, and the Inquiry Continuum; (cont’d).

Students confirm a fact through an approach which is prescribed by the teacher. The results are already known in advance.

Students investigate a teacher-presented question and generate explanations for the results through a prescribed approach.

Students investigate a teacher-presented question with the students designing and/or selecting the approach to test the question and generate explanations for the results.

Students investigate their own question with them designing and/or selecting the approach to test the question, generate their explanations and conclusions from the results.

CONFIRMATION STRUCTURED INQUIRY GUIDED INQUIRY OPEN INQUIRY

FIGURE 3 Inquiry Continuum (Rezba, Auldridge & Rhea, 1999; Bell, Smetana and Binns, 2005)

STAGE

<table>
<thead>
<tr>
<th>Student</th>
<th>Dependent</th>
<th>Interested</th>
<th>Involved</th>
<th>Self-directed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>Authority</td>
<td>Coach</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Motivator</td>
<td>Guide</td>
<td>Facilitator</td>
<td>Consultant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Delegator</td>
</tr>
</tbody>
</table>

FIGURE 2 Staged Self-Directed Learning Model (Grow, 1991)
FIGURE 4 Music Inquiry Framework

**TEACHER-DIRECTED**  **STUDENT-DIRECTED**

<table>
<thead>
<tr>
<th>Inquiry type</th>
<th>Confirmation</th>
<th>Structured</th>
<th>Guided</th>
<th>Open</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher as</td>
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Below are examples of how the Music Inquiry Framework can be applied in part or in entirety in a series of lessons over time or across levels:

**Scenario 1**
Sing with appropriate tempo and dynamics

**ANALYTICAL EXTENSION**
Considering that musical learning can be embedded in body experiences, and musical thinking is evidenced in musical action, how can the Music Inquiry Framework be used in ways that teachers have students think in music, and not just think about music?* *

*Think in music* refers to thinking in terms of sounds or the organisation of sounds. This often takes place when one is immersed in the sound world and participating in music-making. *Think about music* refers to thinking about the organised sounds and making sense of these. This often takes place when one is reflecting upon the music that is played.

**Scenario 2**
In small ensemble groups, students are to create a soundscape using classroom instruments and/or voice, based on a given stimulus

**TEACHER-DIRECTED**  **STUDENT-DIRECTED**

Teacher specifies the parameters (instruments and musical elements) to be included in the soundscape composition. A template is provided for students to structure their composition. The iterative process is limited.

Students are given the opportunity to re-interpret the tempo and dynamics to a different song, in consultation with the teacher.

Teacher involves students in deciding where to possibly vary the tempo and dynamics at some of the phrases in the song.

Students are given the opportunity to re-interpret the tempo and dynamics of the same song. Students are to explain their musical choices.

**EXPRESS AND EXPERIMENT**

**COLLABORATE**

**REFLECT**

Students work on their song using the Lyrics and Music templates provided.

Students work through ideas for their song, with suggestions from the teacher.

Students work through their song, with facilitation by the teacher.

Teacher decides on the specific assessment criteria and gives students feedback on their song.

Teacher co-constructs assessment criteria with students, and gives feedback on their song.

Teacher facilitates the process of students giving feedback on the other groups’ songs, in relation to the co-constructed criteria.

Students are given choices from a range of stimuli from which they will musically interpret and compose a soundscape within their groups. They have autonomy to choose a set of Musicking Cards for their composition process, in consultation with the teacher.

Students have autonomy to choose a set of Musicking Cards for their composition process, in consultation with the teacher.
### Inquiry-Based Learning

Providing a Rich Music Learning Experience

#### Modes

**TEACHER-DIRECTED**

**STUDENT-DIRECTED**

---

### Express and Experiment

**LYRICS**

- **TEACHER-DIRECTED**
  - Teacher provides a set of lyrics as a template to which students can choose to change selected words.
- **STUDENT-DIRECTED**
  - Students craft the lyrics for one section of the song (e.g. Verse or Chorus).

**MUSIC**

- **TEACHER-DIRECTED**
  - Teacher specifies the parameters (e.g. chord progression, choice of instruments, style, balance) to be included in the song.
  - A project template for music arrangement is provided for students. The iterative process is limited.
- **STUDENT-DIRECTED**
  - Students have the autonomy to decide the parameters in their group’s song (e.g. chords, choice of instruments, style, balance, mix and pan).

---

### Collaborate

- **TEACHER-DIRECTED**
  - Students work on their song using the Lyrics and Music templates provided.
- **STUDENT-DIRECTED**
  - Students self-reflect on the specific assessment criteria and groups on the musical coherence of the song, in relation to the co-constructed criteria.

---

### Reflect

- **TEACHER-DIRECTED**
  - Teacher decides on the specific assessment criteria and gives students feedback on their song.
- **STUDENT-DIRECTED**
  - Students self-reflect in groups on the musical coherence of the song, in relation to the co-constructed criteria.

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### REFERENCES

Technology-Based Music Lessons

Philosophical Underpinnings
Technology-based music lessons involve the use of various types of digital technologies that support and facilitate musical experiences and learning. The philosophical underpinnings include the following:

- Music teaching should still focus on developing the musical child rather than the technological aspects. As such, technology is used as a tool to:
  - Facilitate access and enrich music experiences, music expression, and music learning.
  - Provide students with authentic experiences in music, helping them to connect with their lived experiences where technology has become ubiquitous.
  - Create an inclusive music classroom and provide a more egalitarian approach to music education.
  - Facilitate a virtual platform for music performance and creation.

- In the digital environment, music literacy is much broader than reading and writing music. It includes the ability to understand, interpret, create, and communicate by performing, composing, analysing, collaborating, listening, responding, and making connections, to participate fully in the community.

- New technologies continue to redefine what music is, when music is, and what makes a musician. Music-making can take more varied forms than composing and performing, such as producing and remixing, since technology can open possibilities for sounds to be manipulated and reimagined.

Approaches
Diversity of Approaches
There are diverse approaches in which teachers could harness technology for their music teaching. The SAMR model, created by Dr Ruben Puentedura, is used here to frame and illustrate the diverse ways in which ICT-based approaches could be used. (Diagram cont'd)
In a hybrid approach in music (Tobias, 2016), example: weaving of pedagogical/subject content. For of the learning environment/resources, or in the a blended or hybrid approach, whether in terms Technology-based music lessons can also involve Blended/Hybrid Approaches

- Technology-based Music Lessons
  - Providing a Rich Music Learning Experience

**Student Learning Space Pedagogical Scaffold (SLS PS)**

The Student Learning Space Pedagogical Scaffold draws reference from the STP and seeks to guide teachers in the design of ICT-enriched learning experiences for students. It is about the application of the STP to design quality learning experiences that leverage technology. The SLS PS provides guidance for the planning of lesson modules based on different types of learning experiences.

### Pedagogical Principles

- Harness technology so that students have opportunities to participate on equal terms, explore and experiment, and express themselves in different ways, thus promoting an inclusive music learning environment.
- Provide students time for exploration and play with the use of digital technology, as these form the basis of music experiences for students to make informed musical decisions in their work.
- Integrate musical and technical concepts as one informs the other, so that students can make musical decisions, as their understanding of musical and technological concepts is being developed.

### Creative Possibilities with Technology

Digital technology has expanded the possibilities of listening, creating and performing to include processes such as:

- Recording
- Sequencing
- Mixing
- Producing
- Sampling

Creative music-making tasks that harness technology could include:

- Deconstructing
- Song-writing
- Remiking/Mashups
- Composing music for visual media
- Sound designing/Constructing of own sounds/instruments with technology
- Collaborative online music-making or virtual music-making (e.g. one-man bands, virtual a cappella)

### Role of Technological Tools

There are two roles in which digital technological tools can serve in music education: one for musical expression; the other as an educative tool.

### Musical Expression

Different technological tools provide different ways for students to engage in music. Various technological tools have also been harnessed to stretch musical possibilities. Here are some examples of different types of musical possibilities, which could be supported by different technological tools to encourage diverse forms of music expression. (Diagram cont'd)

For example, students can be guided to choose music with appropriate lyrics to be communicated and performed responsibly. Students can also be guided to communicate appropriate social messages through their music.

**Technology-Based Music Lessons**

- **Modular Approach**
  - Technology-substituted
  - Technology-augmented
  - Technology-modified
  - Technology-redefined

**Table**

<table>
<thead>
<tr>
<th>Substitution</th>
<th>Augmentation</th>
<th>Modification</th>
<th>Redefinition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using technology as a direct replacement for more traditional forms.</td>
<td>Using technology as a direct substitution with significant functional improvement.</td>
<td>Using technology to redesign tasks.</td>
<td>Using technology to perform tasks that are impossible without technology.</td>
</tr>
</tbody>
</table>

**For example, digital metronoms, digital tuners, notation programmes, digital instruments, video viewers, music players, communication devices are used to substitute traditional music tools.**

**For example, music services such as Spotify are used to facilitate search and access to millions of recordings.**

**For example, audio/video recording and editing are used to allow students to record and edit sounds, or to change tempo and key for students to play along, all of which would not have been possible musical tasks without these.**

**For example, Digital Audio Workstations (DAWs) allow students to create music arrangements with a broad palette/variety of timbres and tools, hence redefining the music creating process.**

**Blended/Hybrid Approaches**

Technology-based music lessons can also involve a blended or hybrid approach, whether in terms of the learning environment/resources, or in the weaving of pedagogical/subject content. For example:

- In a flipped learning approach, where activities that conventionally take place inside the classroom are now taking place outside the classroom and vice-versa, learning technologies such as podcasting and screencasting provide students with opportunities to learn at their own pace, and give space for more active learning in face-to-face sessions.
- In a hybrid approach in music (Tobias, 2016), the teacher and students embrace diverse, interrelated, and overlapping ways of knowing and doing music, and explore new ways of being musical. For example, digital devices and acoustic instruments could be used simultaneously, and roles of composers and performers could be blurred. The hybrid approach tends to situate learning of skills and knowledge in musical contexts, rather than in musical concepts, as a means towards musical development.

**Scaffold**

The Student Learning Space Pedagogical Scaffold (SLS PS) is the student learning space pedagogical scaffold that seeks to guide teachers in the design of ICT-enriched learning experiences for students. It is about the application of the STP to design and seek quality learning experiences that leverage technology. The SLS PS provides guidance for the planning of lesson modules based on different types of learning experiences.
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<th><strong>EXAMPLES</strong></th>
<th><strong>SPECIAL NOTE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Notating music</td>
<td>Notation software</td>
<td>Sibelius, Finale, MuseScore, Noteflight, Dorica, Notion</td>
<td>Generally, for projects where notation is required (e.g. follow-up performance/recording by live musicians especially in Western classical music, contemporary concert music, jazz and film music scored for orchestras and ensembles)</td>
</tr>
<tr>
<td>Performing music</td>
<td>Mobile computing</td>
<td>iPad Bands/iPad orchestras/laptop orchestras</td>
<td>iPads/laptops are treated as instruments for performance purpose</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SmartMusic, Smart instruments in GarageBand, Band-in-a-box, accompaniment functions on electronic keyboards</td>
<td>Generally, to play or sing-along using popular music repertoire</td>
</tr>
<tr>
<td></td>
<td>Pre-recorded accompaniment</td>
<td>Karaoke and music play-along video and audio files</td>
<td></td>
</tr>
<tr>
<td>Arranging/Creating music</td>
<td>Digital Audio Workstation</td>
<td>GarageBand, Logic Pro, Mixcraft, Ableton Live, Cakewalk, Cubase, ACID, ProTools, Studio One, Bitwig Studio</td>
<td>Generally for pop and contemporary genres e.g. EDM, R&amp;B, and for creating music for visual media (film, TV, video games, etc.)</td>
</tr>
<tr>
<td>Audio Recording and Editing</td>
<td></td>
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</tr>
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<tbody>
<tr>
<td>Creating/Performing through programming (e.g. live-coding performance)</td>
<td>Code-based music creation and performance tool</td>
<td>Sonic Pi</td>
<td>Sonic Pi is designed as a coding programme to enable school children to learn programming by creating music and learn to create digital music by programming</td>
</tr>
<tr>
<td>'Sound-based music' composition</td>
<td>Software/Hardware synthesizer</td>
<td>littleBits Synth Kit</td>
<td>Creates a wide array of sounds</td>
</tr>
<tr>
<td></td>
<td>DAWs and dedicated software programmes with advanced sampling, and/or audio editing and processing features, standalone samplers</td>
<td>DAW and dedicated software (e.g. Ableton Live, Max for Live or MAX/MSP) Dedicated standalone samplers or workstations with built-in samplers (Akai MPC, NI Maschine)</td>
<td>Possibilities for creating musique concrète, electronic music, electroacoustic music, electronica, sonic art, sound art, and genres such as soundscape composition and acousmatic music</td>
</tr>
<tr>
<td>Collaborative online music-making to facilitate shared decision-making processes and a participatory culture</td>
<td>Online Digital Audio Workstation</td>
<td>BandLab, SoundTrap</td>
<td>Generally, for pop and contemporary genres e.g. EDM, R&amp;B</td>
</tr>
<tr>
<td></td>
<td>Online Apps</td>
<td>A capella apps</td>
<td>For online collaborative music-arranging (voice/instrumental)</td>
</tr>
</tbody>
</table>
Musical Expression
Different technological tools could also be used to develop musical understandings and support music teaching and learning. Here are some examples of educative tools. Some of these tools also have potential to support a constructivist approach to music learning.

<table>
<thead>
<tr>
<th>EDUCATIVE POSSIBILITIES</th>
<th>TECHNOLOGICAL TOOLS</th>
<th>EXAMPLES</th>
<th>SPECIAL NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Musical explorations, learning of music concepts</td>
<td>Musical games, interactive systems</td>
<td>Desktop and mobile apps</td>
<td>Possibilities for generation of ideas, seeing patterns in music, and knowledge building in the form of play</td>
</tr>
<tr>
<td>Development of musical repertoire and understanding of genres/styles</td>
<td>Music services</td>
<td>Spotify, Tidal, Apple Music</td>
<td>Access to millions of songs which are categorised into genres/styles</td>
</tr>
<tr>
<td>Sharing of work and peer critique</td>
<td>Audio/Video distribution platform</td>
<td>Singapore Student Learning Space, YouTube, SoundCloud, Blogs</td>
<td>Opportunities for dialogue about music, interactions and exchanges, and developing a community of practice in music-making</td>
</tr>
<tr>
<td>Music Theory/Basic instrumental skills</td>
<td>Massive Open Online Courses (MOOCs), webinars, video tutorials</td>
<td>Singapore Student Learning Space, Coursera</td>
<td>Opportunities for flipped learning or blended-learning</td>
</tr>
</tbody>
</table>

Role of Teacher
Given the wide and diverse range of approaches, creative possibilities with technology, and different ways of engaging with musical expression and learning, teachers can:

- Be open to learning from each other, allow for more experimentation and openness to risk-taking, and re-examine attitudes towards diversity and creative expression that may not be similar to their own.
- Be mindful that hybrid music practices in contemporary society result in less clearly defined roles, such as the roles of composers and performers.
- Embrace differences in contextual understandings (e.g. cultural norms, practice norms) and a broader understanding of music literacy and interdisciplinary possibilities (e.g. media literacy).
- Facilitate and guide students in evaluating the music they listen to as active and responsible consumers of music.
- Be mindful of not perpetuating biases (e.g. that technology is an advantage for male students).

REFERENCES


Transforming Music Teaching

“The role of the teacher, then, is to design ways for students to be the centre of classroom activity, interacting with the music and with each other.”
Blair, 2009

The chapters in this compendium have provided different perspectives regarding teaching approaches and philosophies, and its applications in the 21st Century music classrooms. Different approaches have different strengths, goals, and are used in different contexts. Music pedagogies are varied, just as our students are varied. With the many teaching approaches available, music teachers need to examine their own contexts and be able to adapt and adopt the most relevant way to engage their students, in order to make music education meaningful and accessible for all.

Student-centricity

The focus on student-centricity draws teachers to consider which pedagogy or blend of pedagogies would best facilitate their students’ learning for that particular music concept. Using different approaches in combination could offer new ways of teaching to cater to diverse learning needs.

Weaving Different Approaches

Teaching with different approaches is more than just a hotchpotch of different methods. Weaving different approaches involves a deliberate choice of a particular teaching approach for a teaching-learning rationale linked to a particular musical content for a specific group of students at a particular stage of their learning. Hence, a teacher would need to consider the content, the profile of the students, and the timing that he/she is introducing the content, to decide on the blend of approaches to use.

The challenge to weaving different approaches is to know why one is borrowing a technique, activity, or idea, and how the approaches complement each other. Otherwise, it can result in a series of aimless activities without a clear sense of where those experiences are going (Abril & Gault, 2016), or what they are adding up to. Therefore, it is crucial that the teacher has an understanding of the values, beliefs, and theories of each music teaching approach, to purposefully adapt the lesson according to their students’ level and ability.

The following may be used as a frame or guide in weaving the different approaches:

a. Experience, Concept, Application

Experience-Concept-Application (ECA) can be used as a broad framework to guide the application of eclectic music pedagogical approaches in a way that develops understandings of musical concepts. The approach advocates that each music concept, in general, has to be:

- Prepared through experiencing the concept through music (rather than explaining or describing).
- Practised through applying and expressing the ideas, creating, and experimenting.
- It is based on deeper underpinning principles that include:
  - The principle of ‘sound before sight’, in which students are guided to think and respond in sound, and then draw on their music experience to understand the music concept and learn the notation.
  - Students’ musical development is facilitated by musical play. The improvisational nature of games and spontaneous activities encourages creativity and provides greater meaning and motivation to students’ learning. See Figure 5 (cont’d)
b. Questions to consider in designing a lesson:

- What do the students already know?
- Which pedagogical approach(es) best help my students to draw on their prior understanding to acquire this new learning? See Figure 6 (next page)
- What learning characteristics are evident in this class of students?
- Which pedagogical approach(es) best meet their learning style(s)?
- How can I bring out the musical voice of my students effectively?

- What kind of musical experience will engage and energise my students, and ignite their musical imagination?

b. Considerations of deeper teaching beliefs for music education

The analytical extensions in each chapter of this compendium are intended to probe for deeper reflections on how each approach could be made more relevant for their students. For example:

- Some approaches may be associated with certain repertoires and musical traditions, because they were developed in different socio-cultural contexts. How could these approaches be adapted to use repertoires that could help students connect with their lived experiences in contemporary Singapore contexts?
- Given our increasingly heterogeneous classrooms, how can some of these approaches cater for differentiation and for diverse learning needs?
- What opportunities can teachers draw from less formalised approaches?
- How can teachers imbue in students a sense of inclusion and respect for diversity, as well as a sense of social responsibility, given the greater access to music in this digital age?
- How can we achieve a balance while inculcating in our students a sense of their cultural identity, as well as an openness to learning about other cultures?

Music teachers should continue to question and reflect upon existing pedagogical practices in the context of the changing education landscape and student profile. Hence, there will be a continual need to be open to new ideas, and to develop practice in a manner that will re-inform pedagogical decisions. Whichever approaches music teachers consider, there is one common goal, which is to provide a meaningful musical experience that would positively impact the lives of their students in schools and beyond.

REFERENCES

