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## **Developing 21<sup>st</sup> Century Competencies through the Arts: A Case Study of a High Performing Secondary School Band in Singapore**

### **Abstract**

The purpose of this study was to examine the development of 21<sup>st</sup> Century Competencies (21CC) through the secondary school band program. The researcher used ethnographic research methods to document the lived musical experiences of students from a high performing secondary school band in Singapore, captured the voices of the participants through extensive focus group discussions and informal interviews, coded and analyzed the data using the Singapore Ministry of Education's (MOE) 21CC framework. Findings provide empirical support for MOE's (2010, 2014) initiatives to developing 21CC through music and the arts. Three interrelated themes—performance, peers and patience—emerged as specific enablers of the school band to nurture 21CC. These enablers, however, may paradoxically be impediments for the development of 21CC; an awareness of how these enablers may sometimes be hindrances is necessary to optimize 21<sup>st</sup> Century learning through the arts.

*Keywords:* 21<sup>st</sup> Century Competencies, arts education, music education, aesthetics, performing arts

Since the turn of the century, educational reforms have placed increasing emphasis on the well-known “21<sup>st</sup> Century Competencies” (21CC) that seek to equip the next generation with skills to meet the challenges of the new millennium (Tan, 2016; Trilling & Fadel, 2009). In line with this global trend, various 21CC frameworks have been established around the world, including the United States, Europe, Australia and Asia (Voogt & Roblin, 2012). Singapore is no exception, with its 21CC framework prominently presented in Ministry of Education (MOE) websites and curricular materials (MOE, 2014). As Director-General of Education Wong Siew

Hoong explained, “It’s not just about teaching a set of ideas, but a set of skills related to those ideas that can bring students forward in the 21st century” (National Institute of Education, 2013).

What seems particularly noteworthy in MOE’s efforts to develop 21CC among students is the amount of time, energy and resources invested into music and the arts—subjects that have traditionally been relegated to the margins. In a press release dated March 9, 2010, MOE noted the importance of PAM subjects (i.e., physical education, art and music) in shaping students’ sense of identities, creativity, expressivity and physical well-being (MOE, 2010). The press release unveiled plans to strengthen PAM programs throughout the city-state, which included infrastructural support such as performing arts studios and band rooms, the recruitment of “single-subject” art and music teachers, and professional development opportunities through the Singapore Teachers’ Academy for the Arts. The *Handbook for the Co-Curriculum* further emphasized the need to develop 21CC through music and the arts, this time via performing arts ensembles such as the school band (MOE, 2014). In particular, the handbook states that there ought to be an “intentional design” of co-curricular activities such that they create “authentic opportunities” for students to practice the 21CC (MOE, 2014, p. 16). The handbook devoted an entire section exclusively devoted to this topic, complete with lesson plans and demonstration videos made available on the MOE intranet. What is so special about music and the arts that render them particularly valuable as platforms to develop 21CC? As far as can be determined, there is no research in Singapore that has empirically verified the assumption that 21CC can be developed through music and the arts.

### **21CC and the Arts: The International Literature**

Singapore’s official commitment to music and the arts as means of developing 21CC provides an interesting point of comparison with the international literature, where the value of

large ensembles (i.e., band, choir, and orchestra) has been hotly debated over the past decade. On the one hand are advocates who are convinced that the arts are suitable platforms to develop 21CC. One prolific framework is the “21st Century Skills Map—the Arts” (Dean et al., 2010), produced by the “Partnership for 21st Century Skills” (Trilling & Fadel, 2009; [www.p21.org](http://www.p21.org)). This skills map holds that the arts are particularly useful for the development of 21CC as they “thrive on the free expression of the imagination and the creative instinct common in all human beings,” further adding that the arts “balance the preservation of ideas with the challenging of old ways and the development of new visions” (p. 16; see also Lim, 2011). Writing more specifically for music education, Shuler (2011) posited that participation in musical activities help students master the “four Cs” (i.e., creativity, critical thinking, communication and collaboration).

Shuler (2011), however, added that while collaboration may appear to be the “automatic result” of participation in band, choir and orchestra (p. 12), he also warned that collaboration would only exist if certain conditions were present—conditions that are not traditionally present in these ensembles. Allsup and Benedict (2008) noted that band programs traditionally tend towards teacher-centered teaching methodologies that foster blind obedience to authority (i.e., the conductor) rather than creative and independent thinking. Drawing on the theoretical lenses of Paulo Freire, they argued that when band directors issue didactic instructions for the trumpets to “stop playing so loud,” they create “an environment of learned helplessness, of oppressor and oppressed” (p. 170). In like vein, Kratus (2007) posited that the “teaching model most emulated in secondary ensembles is that of the autocratic, professional conductor of a large, classical ensemble” (p. 45). For Kratus, since the conductor makes all artistic and creative interpretive decisions, it is “an autocratic model of teaching that has no parallel in any other school subject” (p. 46). If the above criticisms have merit, it follows that performing arts ensembles such as band,

choir and orchestra do not foster 21CCs such as creativity, critical thinking and self-directed learning. Clearly, empirical work is needed to determine how, and to what extent (if any), are 21CCs developed through performing arts ensembles. Such a study would be valuable for Singapore and the international community on the value of the arts as conduits of 21CC.

### **Purpose**

The purpose of this study was to examine the development of 21CC through the arts. In particular, it employed ethnographic research methods to document the lived musical experiences of students from a high performing secondary school band in Singapore. The specific research questions were: (1) How did the students develop 21CC through participating in the school band? (2) What were the specific enabling mechanisms and impediments for the development of 21CC through participating in the school band? (3) What are some practical implications for intentional designs to foster 21CC through the arts?

### **Methodology**

Angsana Secondary School Band (ASSB; all names in this article are pseudonyms) is a high performing all-girls secondary school Band that has consistently achieved the highest adjudication rating at the Singapore Youth Festival (SYF). It has represented Singapore in overseas music festivals, and maintains an active schedule of concerts and performances in notable venues. The band has a healthy recruitment and a fine reputation in the educational and arts scenes. ASSB was purposefully selected for this study because of its tradition of excellence.

The study was conducted over a period of one school semester. A total of 88 students as well as the band director participated in the study. Data collection comprised observations of band activities (e.g., full band rehearsals, sectionals, performances and social functions), video and audio recordings, material artifacts (e.g., concert programs and adjudication sheets), and

interviews. The author and his research assistant collected the data and were on site as participant observers. They were both intimately familiar with the culture of school performing arts ensembles (the author was a former school band director with ten years of experience, and his research assistant was a former member of her school Chinese orchestra), which enhanced the validity of the study (Carspecken, 1996).

The authors obtained ethics clearances and permissions prior to the field visits. In an attempt to account for reflexivity and reduce the subjectivity of the observer (Stake, 1995), the observer who was on site made descriptions from the videos; the other observer who was not on site then triangulated the descriptions through random checking. The writing of field notes was based on recommendations by Emerson, Fretz, and Shaw (1995). When reviewing the field notes, analytical thoughts were recorded as memos. Whenever appropriate, the observers requested for informal interviews with the participants to solicit additional data and audio recorded these chats. All interviews were conducted in English; smatterings of Singlish were preserved in this paper to capture the authenticity of the participants' voices.

The teacher-in-charge nominated ten students to participate in focus group discussions on their band experiences; these group discussions added richness to the one-to-one informal interviews noted above. The researchers prompted these students to share what they had learned from band (e.g., "What have you learned from participating in the school band so far?"). They asked follow up questions (e.g., "So, how do you feel about the hard work? Is it something you dread? Is it something you enjoy?"). Based on the participants' responses, questions specific to 21CC and how 21CC related to their lived band experiences were also asked (e.g., "Have you heard of 21CC? If so, can you share with me what you know about these competencies?"). The researchers purposefully selected students who were playing different instruments in the band,

those who held leadership positions (e.g., drum major and section leader) and those who did not, as well as a mixture of those who had home musical background and those who did not. Table 1 outlines the demographics of these ten participants:

<b>Name</b>	<b>Level</b>	<b>Instrument</b>	<b>Appointment</b>	<b>Home music background</b>
Pamela	Secondary 3	Bass Clarinet	Drum major	Piano, 6 years
Debbie	Secondary 3	Clarinet	Section Leader	None
Sor Han	Secondary 3	Clarinet	None	None
Rachel	Secondary 3	French Horn	None	None
Estelle	Secondary 2	Saxophone	None	None
Flora	Secondary 2	Double Bass	Section Leader	Piano, 9 years
Grace	Secondary 2	Saxophone	None	None
Alexandria	Secondary 1	Bassoon	None	Piano, 9 years
Sheena	Secondary 1	French Horn	None	Piano, 7 years
Chloe	Secondary 1	Clarinet	None	Piano, 2 years

**Table 1: Demographics of Students involved in Focus Group Discussions**

The various sources of data served as resources for thick and rich descriptions (Ryle, 1971) of the participants' lived musical experiences, and also for the triangulation of data (Berg, 2004). Over the course of the study, the researchers captured 23 hours of video footage and 11 hours of audio recording; they also wrote 120 pages of field notes. For purposes of analyses, they transcribed the focus group discussions and also selected audio recordings and video footages relevant to the study. Using procedures recommended by Saldaña (2012), the researchers analyzed and coded the data using MOE's (2014) 21CC framework. This framework included (1) an "inner ring" that captures "core values" (respect, responsibility, integrity, care, resilience and harmony); (2) a "middle ring" that consists of "social and emotional competencies" (self-awareness, self-management, social awareness, relationship management and responsible decision-making); and (3) an "outer ring" that includes civic literacy, global awareness, cross-cultural skills, critical and inventive thinking, communication, collaboration and information skills. The "desired outcomes of education" (i.e., to nurture students who are confident, self-

directed learners, active contributors and concerned citizens of Singapore) were also included in the framework.

### **Themes**

Three interrelated themes emerged from the data as specific enablers of the school band to nurture 21CC: performance, peers and patience. “Performance” refers to the nature of band as a performing arts ensemble. Through the process of rehearsing, practicing, and performing, 21CCs were developed. Students also reported experiencing a wide array of human feeling through band, augmenting their emotional palettes. “Peers” refers to fellow members of the school band. In particular, “senior-junior” relationships emerged as a strong enabler of 21CC. “Patience” refers to a disposition to avoid acting on impulse; it also connotes a willingness to carry on doing something in the face of challenges or boredom. The narrative below presents a thick and rich description of the development of 21CC in ASSB organized using the three themes. Throughout the narrative, specific MOE 21CCs are indicated as “21CC” while desired outcomes of education are identified as “DOE”; they are also italicized. All definitions of 21CCs are based on those that are publicly available on MOE’s official website (<https://www.moe.gov.sg/education/education-system/21st-century-competencies>).

### **Performance**

ASSB was a band with a strong tradition of performance excellence. Its band room was adorned with framed competition certificates, adjudicator’s comments, concert programs, photographs of success in festivals, and medals. There were awards from Australia, China, Malaysia, and Singapore. Posters from concerts feature guest conductors, including one from the United States, and performances at important venues such as the Esplanade Concert Hall and the Istana, complete with photographs with the late President S.R. Nathan. This excellence has



earned the band respect, not just from the school, but also from the arts community. According to the MOE 21CC framework, respect is demonstrated when students believe in their “own self-worth” (<https://www.moe.gov.sg/docs/default-source/document/education/21cc/files/annex-21cc-framework.pdf>). Participants unanimously expressed how “nice” it was to be a part of this “elite clique” (Grace). They clearly enjoyed and cherished being a part of this excellent ensemble. As Estelle noted, “when you play, you feel very proud of the band.”

Being respected, however, came at a price: the need to maintain or even advance the reputation of the band. After all, “if you don’t play nicely, then people also don’t want to join” (Estelle). *Resilience* (21CC) is crucial to uphold standards. As Grace expressed, “People keep thinking it’s so easy to achieve distinction all the time,” and only think “oh my god you look so cool carrying that instrument,” without knowing that “we are actually putting in all these hard work.” Flora similarly observed that “it looks like oh it’s so easy to be in band . . . then when you are in band it is very hard because you must practice.” Many students noted that there were several times they experienced “dread.” For example, Debbie reported, “Umm, ahhh I kind of dread it sometimes.” Nonetheless, she *persevered* (21CC) in order to uphold the band’s reputation.

The need to achieve high performance standards also facilitated a sense of *responsibility* (21CC). As Grace passionately expressed, “I don’t want my junior to screw up, I don’t want to screw up, I want my section to do well and eventually I want, hope the whole band flourishes.” Grace was so committed to fulfilling her responsibility as a senior in the band that her father threatened to force her to quit band if she did not meet his academic expectations. Grace’s peers immediately jumped to the band’s defence: “A lot of people in band do very well for studies”

(Alexandria); “parents should not complain . . . before exams the band already gives us more than one month (to prepare)” (Pamela).

The band director, Mr. Chen, highlighted the band’s colourful performance schedule, which included the SYF Arts Presentation, formal and informal concerts, and a decade-old tradition known as “My First Recital” where new members perform in front of their parents and friends after learning their instruments for three months. Participants agreed that their *confidence* (DOE) increased because of performances. As Chloe recalled, her confidence developed after “My First Recital,” where she had to “play one by one . . . in front of a crowd of people.” The importance of developing confidence through band was made explicit by the teacher-in-charge (Rachel: “Mr Wong says that you know you don’t come to band just for music”; instead, band helps “to build confidence and other working skills”). In addition to confidence, *self-directed learning* (DOE) was also facilitated through the band’s active performance schedule. Field notes documented observations that students often arrived early before band rehearsals and immediately engaged in self-directed individual practice. Even without the presence of adults, the students were entrusted to enter the band room to pace and scope their individual learning and practice.

The development of *global awareness* and *cross-cultural skills* (21CC) was also evident. During the study, the band was preparing American composer John Barnes Chance’s *Variations on a Korean Folk Song* for an important upcoming performance. In order to create a better awareness of Korean culture, the director tasked the students to present various aspects of Korean culture, such as “tourist attractions, traditional games, marriage customs, kings, history and movies” (Rachel). Videos of the band performing overseas in China, Australia, and Malaysia showed the students presenting themselves smartly on the international platform and appearing

proud of representing Singapore. There were also photographs of students touring the Great Wall of China and performing at the Sydney Opera House. As an ensemble that performed beyond local shores, ASSB created opportunities to develop invaluable global awareness and cross-cultural skills.

In band, participants express human feelings through sound. As Debbie expressed, “That’s the part I like most about band . . . when we perform together, you can feel it (feelings) . . . I almost cried on stage.” These sentiments were echoed by Sor Han who said, “the heartache feeling . . . I love it you know . . . you feel it in your heart,” and Estelle who **commented** “It’s like watching a sad movie.” The students’ lively discussion on feeling during performance brought to mind Reimer’s (2003) notion of music education as an “education in feeling.” During performances, the students experienced and created a wide range of emotions and feelings, which potentially contributed to the development of *social and emotional competencies*.

In addition to performing serious band works, ASSB also included popular music in its curriculum. Grace pointed out that when preparing pop songs for school concerts, Mr. Chen inspired them to be creative by asking them to “Hey, do some crazy gimmicks!” Grace further noted, “At first everybody is like, no . . . then later a few people do it . . . eventually everybody gets to do it.” The students brainstormed ideas for gimmicks in their sections, choreographed their movements to popular tunes, and eventually weaved them into a coherent whole. While some students were shy at first, they eventually overcame their shyness (*self-management of emotions*), *collaborated, communicated, created* with their peers (21CC), and eventually became *active contributors* (DOE) at the performance. Video footages of past concerts showed how students appeared to enjoy entertaining the audience with their visual movements. For Grace,

creativity through band became such an integral part of her life that the band room became a venue for her to inspire creative thoughts: “Even in an empty band room, I can just describe it as like, silent sounds trapped in metal.”

## **Peers**

Band offered opportunities for students both within and across levels to meet, learn from one another, and forge deep friendships. As the researchers immersed themselves in the band culture of ASSB, it became increasingly clear that peers constituted an integral part of the students’ lived experience. Whenever students did not rehearse in the full band setting with Mr. Chen, they would be practicing on their own under the guidance of their section leader. These peer-directed sectionals were fertile ground for the development of 21CC, such as communication, collaboration, and resilience.

On a warm, humid weekday afternoon, the horn section entered a classroom for sectionals. The students appeared somewhat tired after a long day in school, but nonetheless took the initiative (*active contributors*) to shift the tables and chairs to set up for the session. They *communicated* and *collaborated* with one another in attempts to create the most conducive environment possible. The members arranged themselves in a semicircle, with Rachel (the section leader) standing in the middle—as if she assumed the role of the conductor. Smiling (a non-verbal encouragement that possibly reflected *care, communication* and *relationship management*), Rachel instructed the players to start playing. She reminded the students the basics, “Come in together and breathe one count before . . . Think of the note before you play,” and then led the students through a popular piece entitled *Uptown Funk*. Like a conductor, she monitored their playing and corrected errors. In so doing, she demonstrated *responsible decision-making* and musical *integrity* (21CC) in having the courage to stand up for what was right. She then

instructed the section to spend some time practicing tricky rhythms individually, after which the members did so. They appeared serious in their approach, and kept trying despite meeting obstacles, demonstrating *resilience*.

The importance of peers in the observations was triangulated by the fact that the terms “seniors,” “juniors,” “section leaders,” “sectionals,” “team” and “teamwork” regularly surfaced during interviews. Furthermore, many core values from the Inner Ring emerged. Peers inspired hard work and *resilience* (21CC), which in turn built *confidence* (DOE). For Rachel, “They look good . . . when I look at all the seniors and they were playing so well, it gives me the motivation to play better . . . I feel I enjoy the horn and band.” Grace noted, “When my senior left, I was the only tenor (saxophone) senior, so I thought that I should take on more *responsibility*.” She further added that “You should really take *care* (21CC) of your juniors, and not look down on them and just think that ‘Oh they cannot be better than me,’ because what’s going to happen when you leave?” In fact, she claimed that “when I leave, I want my junior to be better than me . . . because if you only have one junior, make it count . . . like if this is your only child, you want your child to grow up to be a good kid,” concluding by calling herself “a bit of a mother hen.”

While Grace “mothers” her junior by showing her overt care and concern, Pamela the drum major desired a stricter approach as she felt that her juniors were “spoilt by their parents” and lacked *resilience*. In consonance, a number of seniors felt that their juniors were somewhat like the “Strawberry Generation” and wanted to revive traditional disciplinary measures such as running around the field for being late—punishments they had experienced as juniors but were later banned when they became seniors. Despite being only one or two years older than their

juniors, the seniors seemed to almost become surrogate parents in wanting the best for their juniors, even if it meant having to unleash the whip.

Notwithstanding the above seemingly “Tiger Mum” approach, the participants interviewed were ultimately caring seniors who displayed *social and emotional competencies* when dealing with their juniors. In particular, *relationship management* emerged as a prominent theme. Sor Han was well aware that “some people cannot take jokes,” and was careful not to “step on the line,” while Debbie and Pamela emphasized that it was important not to be too harsh otherwise the juniors would “purposely don’t practice” so as to “go against” the seniors. They might even quit. Ultimately, as Grace noted, it was important to see things from the perspectives of the juniors and *empathize* (21CC) with them, noting that “the juniors are very new to this environment where it’s more stressful, more high pressure.”

When asked, “Other than music, what did you learn from band?” participants unanimously replied “teamwork.” For Debbie, “Teamwork is super important because once someone cannot do it, it kind of brings everyone down.” Pamela explained that during a rehearsal, “If one person cannot play, the entire section stops,” and “if the entire section stops, the whole band stops.” Sor Han noted that if one person plays wrongly, “the person beside you gets affected, the next person gets affected, then everyone will get affected.” She further added that during a performance, “No matter how you hide, how soft(ly) you play, if you play a wrong note, you can still be heard.” This sense of interdependence appears particularly important in today’s interconnected globalized world; what happens somewhere ultimately affects the rest of the world in one way or another. Band allows students to experience the importance of *collaboration* with their peers and working together in an interdependent environment.

*Critical and inventive thinking* were also important 21CCs enabled through peers in band. When asked, “Do you think more during sectionals or full band?” students replied “Sectionals, definitely.” In particular, students put on their thinking caps in attempts to figure out how to teach their juniors during peer-directed sectionals. As Pamela recalled, “I try different methods . . . maybe I write like ‘1 and 2 and 3 and 4,’ and then to like break it up into quavers . . . Then if it doesn’t work, I make her sizzle the rhythm . . . Or I sing the rhythm for her, or I clap the rhythm for her until she gets it . . . Then I let her listen to the song also.” Flora echoed that if one approach does not work, “you must try a different method.” What if juniors still cannot get it? “Just patiently go through,” Pamela replied, which leads to the final theme.

## **Patience**

Author: Do you learn other things through band?

Pamela: Patience! (group laughter)

Author: But you can learn patience through . . . fishing, right?

Pamela: Patience . . . patience is a virtue (group laughter and nods) . . . ya, you can learn patience from anywhere, but I guess once you play a lower wind instrument for a very long time, you’re just patient with everybody. When the higher winds are playing, you just sit there, patient, praying (group laughter) . . . when you are teaching someone else, if they don’t get something, you have to be patient . . . you have to slowly help them. You can’t just go, “You are so bad at it. Why do you even join band?” You can’t say stuff like that . . . Because not everybody learns at the same pace; some are faster, some are slower, so you learn to be patient . . .

Grace: Finally, you think you get to play, then no, stop!

All: Oh ya!

Grace: Oh man, just let me play! (“Goodness!” and laughter by students)

The moment Pamela mentioned “patience,” all her peers laughed in unanimous agreement—as if they immediately identified with it. The group also expressed consent with Pamela’s statement that “patience is a virtue”; in fact, Grace later suggested displaying these words “on the windows” as a “band motto.” According to Pamela, the quality of patience learned through band was different from that learned through fishing—it was specific to being patient with people. As a bass clarinet player, Pamela often had to wait for others to learn their parts; she had to “just sit there,

patient, praying” in hopes that the others were able to play their parts so that the band director did not have to stop. This was echoed by Grace who dramatically expressed, “Oh man, just let me play!” Clearly, being patient and having to wait was part and parcel of participation in ASSB. From full band rehearsals to sectionals, the researchers frequently observed students exhibiting patience in how they did things repeatedly without losing their temper. They also saw how section leaders guided their junior patiently, and how their juniors patiently followed.

Importantly, the need to be patient in band facilitated the development of several 21CC, in particular, social emotional competencies such as *relationship management* and *social awareness*. As Pamela noted, it would have been inappropriate to “say stuff” such as “You are so bad at it. Why do you even join band?” Through the exercise of patience, Pamela held back what she really might have wanted to say on impulse, favoring instead, to exercise restraint, and to show *care* and *empathy* for others. Grace and all other participants might have wanted to protest each time the conductor stopped to fix problems from the other sections—but they were similarly patient and did not. In many cases, the participants understood the exercise of patience as necessary towards a higher good. In many cases, the participants understood that exercising patience was necessary for a higher good. Sor Han, for example, noted how she just “got to be more patient” with her juniors when they cannot play so as to prevent them quitting. She also did not want to destroy her juniors’ love for music, choosing instead, to help them “bond well together.” Similarly, although Alexandria had to “say it again and again,” she nonetheless maintained her cool so that her juniors could learn music theory from her.

While patience with others was important in ASSB, patience with oneself was also crucial. Sor Han recounted that if there was a challenging bar for the horn, she would have to practice it for “very, very long.” But she was quick to note, “If you have patience for yourself,



you can do it!” Although there were times when “sometimes I just give up” and “start using my phone,” she nonetheless forced herself “to get back to it” although “that’s very difficult.”

Interestingly, her peers related such patience and determination to their academic studies. As Estelle said, “It’s like studying.” All agreed unanimously on the need “to keep pushing” even when things got difficult.

Ultimately, what kept the participants going were the rewards of patience. As Alexandria pithily declared, “No pain, no gain.” Although many participants joined the band based on its excellent reputation and positive impression formed during the orientation program, they soon found practice to be a chore and began to dread band. Grace commented, “I dreaded band in Sec One.” They unanimously agreed that they began their band journey on a high, but this enthusiasm soon waned when reality sank in—Flora even felt that she was “conned” into joining band and dreaded the times when her “finger hurts.” Their patience, however, gradually paid off as they gained mastery of their instruments and began to enjoy band. Debbie observed, “Actually once you get it, it’s quite fun to play.” More importantly, participants’ faces lighted considerably whenever they spoke about their euphoric experiences performing during the “Limelight” concert held at the Esplanade Concert Hall. Pamela recounted that memorable evening: “Everyone is just like, oh my god it was so good yesterday, and you feel like oh ya ok at least it paid off . . . very nice feeling . . . it’s worth it in the end.” She further noted what made the concert experience even more poignant was the fact that “Everybody is going through this, not just you . . . it’s a way of life.”

“Performance,” “peers,” and “patience,” however, may have paradoxically been impediments for the development of 21CC. For all the benefits that may be reaped from the peer-directed sectionals, precious curricular time was sometimes wasted. The researchers observed

how tired some of the participants were in sectionals. Their posture sagged and they had noticeably slower response time, possibly indicating fatigue. As patience ran dry, sectionals could sometimes turn into what Alexandria described as “slacktionals.” Additionally, in the pursuit of performance excellence, students may sometimes hurt their peers. Chloe noted, “If you play a wrong note, you get scolded,” further commenting that it feels “horrible” to be reprimanded by her senior. Sor Han was even more vivid:

Last time my seniors ask me to get out of the class to like practice the C . . . you know, like the very easy C. Like when I was in Sec One, I couldn’t play that note. So then they asked me go out and play 100 over times . . . It hurt my heart you know. Cause it was my sister who scolded me . . . in front of like the whole band . . . she was very harsh on me.

Fortunately, both Chloe and Sor Han did not appear bitter; on the contrary, they laughed away as if they were bittersweet experiences. When asked if there was a silver lining to being scolded, Sor Han broke into a huge smile on her face, recounted how she could finally get “the C,” and exclaimed, “so it worked!” Similarly, Rachel replied that through the scolding, she “can learn how to get better.” Still, the possibility that students may quit on being hurt by their peers remained real. As Sor Han conceded, if her juniors were really hurt and wanted to quit, “then quit lor . . . that one really cannot help already lah” (“then quit . . . this cannot be helped”).

### **Discussion**

The purpose of this study was to examine the development of 21CC through the arts using the example of a high performing secondary school band. Findings provide empirical support for MOE’s (2010, 2014) initiatives to developing 21CC through music and the arts; they also buttress Shuler’s (2011) arguments for the cultivation of 21CC through band programs. Three interrelated themes emerged as a result of the analysis: performance, peers and patience. The 21CC that emerged in the data intersected and interconnected; they were not nurtured in silos, but in relation to one another.

Given that the three enablers may impact 21<sup>st</sup> Century learning through the arts both positively and negatively, an awareness of both sides of the same coin is necessary to optimize learning. Performance can be a tremendous motivation, but the pursuit of performance excellence can swing too far to the extreme. Peers can facilitate the development of 21CC, but students can end up hurting their friends. Patience is necessary to function in band, but it can run dry—sectionals can easily degenerate into “slacktionals.” Band directors and teachers-in-charge may find it useful to discuss these issues with their students—to inspire their students towards performance excellence without becoming obsessive, to talk through ways of managing peers and juniors, and to encourage when patience exhausts.

As noted earlier, researchers have criticized band for being an authoritarian activity that does not foster independent thinking (e.g., Allsup & Benedict, 2008; Kratus, 2007). In counterpoint, Rachel argued that students in band are told what to do precisely because they do *not* think:

Let’s say you have a *crescendo* there. If you don’t *crescendo* there, obviously the instructor will ask you to *crescendo* there right. So if you think, you will do it yourself first. Then you obviously won’t be asked to do something. So it starts from you.

For Rachel, therefore, independent thinking begins with the individual player. She further noted, “At the start, you have a choice . . . Unless after that it doesn’t fit the music. Then he (the conductor) will ask you (to change).” When asked whether following the instructions of the conductor infringed on their freedom, the students unanimously agreed, “We just got to follow.” Participants willingly followed and trusted their band director. This trust was not a given; they trusted Mr. Chen because they were *discerning* (21CC) and could tell that he was good. As Grace noted, “He’s unlike a lot of conductors.” Estelle confirmed that she knew Mr. Chen could make the band “sound better.” Therefore, the students were willing to *collaborate* with him to

work towards the larger collective good of the band. The students' willingness to follow Mr. Chen—and to lead their peers when needed—recalled the Deweyan notion that a functional democratic society is one that requires people to follow and to lead (Tan, 2014). ASSB offered the environment to learn both leading and following.

The findings of this study hold several implications for 21CC and arts education. To begin with, performance, or some form of an artistic aim, is a powerful tool to facilitate the development of 21CC. Educators should continually provide performance opportunities for students in arts education—no matter how small-scale, no matter how informal, something is always better than nothing. As noted, even the simple, informal “My First Recital” bore 21<sup>st</sup> Century fruits. Additionally, when speaking to the students on their band experiences, it became clear to the author that focus group discussions were particularly effective and powerful means of consolidating and reviewing the 21CCs learned naturalistically. They rendered explicit what was implicitly learned. At the same time, the author also gleaned from the students, fascinating insights on the nature of 21CC development through arts education. To reap the full rewards of developing 21CC through the arts, educators may hold such sessions with their students where they make time and space for them to think and talk through what they had learned. These discussions are “bottom up” in nature: they mine what might already be present and magnify the learning. At the same time, they generate awareness of the 21CCs that may be lacking so that intentional curricular plans may be developed to foster those. These discussions need not take up extensive curricular time; they may be done say while players are tired from practicing, or during brief downtimes. Ultimately, the goal is to create explicit awareness of 21CC through gradual incorporation into the culture of the arts group. **Finally, there were several potential best practices in ASSB, such as the inclusion of smaller group practice sessions, that may be useful as**

**models.** Practitioners may draw on the thick and rich descriptions in this study as sources of inspiration to craft their own curricular practices.

The emergence of patience as a prominent theme was unexpected. Compared to 21CCs like creativity and resilience, patience may appear, *prima facie*, a passive poor cousin in its emphasis on what *not* to do (i.e., to *not* act on impulse). Yet, as Trilling and Fadel (2009) noted, a learning environment that fosters patience is crucial for the nurturing of creativity (see also, Tan, 2016). For example, before the band students were successfully creative in choreographing movements to go along with their pop songs, they certainly needed patience. Though related to resilience, patience has a different nuance: before one is resilient, one has to be patient and decide *not* to give up first, no matter how challenging or boring a task. Patience may therefore be seen as an antecedent to resilience; the two work together. In the fast-changing world in which we live, patience may indeed, as Willingham (2013) noted, be the “21<sup>st</sup> Century Skill students really lack.” Given the relative lack of attention paid to patience in 21CC frameworks, it is perhaps timely to reinstate its rightful prominence and place.

Several limitations of this study must be acknowledged. Given the exploratory nature of this study, a high performing band was chosen over an average or low performing one because it potentially offered richer and thicker data. Given the things that were “going on right” in ASSB, there were possibly more varied ideas and activities that may be documented. While studying this high performing band has generated insights that may potentially be transferable to some aspects of arts education, no claim of generalizability to all forms of arts education can be made. Future research may examine the development of 21CC in bands of other performing abilities, choirs, orchestras, non-Western ensembles, and other artistic forms such as dance and theater. In addition, while efforts were made to interview as wide a sample as possible, those who spoke

may not be representative of the entire population. Future studies may employ large-scale surveys to capture a wider sample of student responses. **Furthermore, as the participants were drawn from an all-girls school, future research could include mixed gender or all-male participants.** Finally, given the qualitative nature of this study, it was not practical to control for potentially confounding variables and to claim that band or arts education alone accounted for the development of 21CC. Future studies may compare, for instance, those in arts education versus those who were not, or develop pre- and post-tests to determine the nature of 21CC development through the arts more precisely.

Nonetheless, this study on 21CC and the arts has hopefully shed some light on the nature of arts education. When asked, “If you are to recall your band experiences, what would you remember the most?” all participants replied “Limelight” without hesitation. Video footages of “Limelight” showed the students being immersed and losing themselves in performing, soaking in the appreciative glory of the applause, and enjoying the fruits of their patient labor with their peers. All three enablers—performance (the concert), peers (doing it together with others) and patience (not giving up and working hard for the end product)—work hand in glove to enable students to enter into aesthetic peak experiences (Maslow, 1968; Reimer, 2003; Tan, 2017). These peak experiences are what makes arts education powerful, unique and special as platforms to develop 21CC—they are not just cognitive but affective, not just tangible but ineffable, and not just memorable but euphoric.

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