Asia-Pacific Journal for

Arts Education

Special Issue

Unfold the Future of Music Education through Technology

The Flexible-learning Approach in Higher Education Music History Courses

Dr. Pan-hang Tang

The Education University of Hong Kong

bphtang@eduhk.hk

Abstract

This study aims to investigate whether the flexible-learning approach may or may not foster student engagement in learning music history at the tertiary level. This approach provides students with a certain degree of autonomy in terms of deciding what to learn and how that learning should be assessed. Hence, it is highly learner-centred and deemed effective in cultivating students' learning interests. The flexible-learning approach has received global attention in recent years, particularly in Europe, where both policymakers and teachers in higher education have borrowed it for the purposes of curriculum planning and course design. To determine the impact of the flexible-learning approach on music history education, this study employed a retrospective post-pre survey in order to measure students' learning engagement. The results demonstrate that a flexible-learning approach can effectively enhance students' motivation in learning, implying that a single music history course does not need to stick to the traditional linear design, but should provide multiple trajectories for students to learn according to their interests and abilities.

Key words

flexible learning, music history, post-pre survey, retrospective evaluation, higher education

Introduction

Studying music history is essential for music students at the higher education level. However, mere lecturing can be boring. Various pedagogies have been developed as a means of enhancing students' engagement in learning. For example, Scarnati & Garcia (2008) adopted the "reverse chronological sequence" approach for jazz music history and theory education: allowing the students, as a first step, to learn from their favourite musical genres, succeeded in arousing their interests. Niren (2014) used a role-playing game, in which students portrayed various composers, in order to motivate them to learn the style and development of nineteenth-century Romantic programme music. This teaching approach had a great impact on the students, the participants returning to the school several years after graduation to tell the teacher that they had never forgotten the composers they had acted. Strandberg (2017) recommended the active learning approach for music history education, letting her students decide the repertoire of a concert, arranging the musical pieces, and writing the programme notes. She believed that students benefited from understanding the style and historical background of the pieces that they had investigated and analysed. Similarly, Rachlin (2017) found the active learning approach helpful, explaining that when students were looking for the necessary information, they could learn more efficiently by being directly involved. In short, "the more digging you do, the more appreciation you come away with for a particular subject" (p. 46).

Some researchers have suggested utilising computer technology to improve teaching and learning efficacy. Folio & Kreinberg (2009) discussed how they enhanced the quality of music

history education through the computer-mediated collaborative learning approach. In their project, they assigned a reading assignment to their students. After reading, the students worked together in small groups to respond to five open-ended questions through 'Blackboard', the authors stating that "students thought deeply about what they had learned through this type of assignment" (p. 169). Gomes et al. (2016) adopted augmented reality (AR) technology to motivate students to learn twentieth-century music history, allowing the participants to access the AR learning content using a specially designed mobile application. Moreover, Neo et al. (2011) developed a computer programme to create a virtual learning environment to motivate students to learn jazz music history.

Perhaps not surprisingly, fostering students' motivation and enhancing their engagement in history education is an issue in other subject areas. To improve teaching effectiveness, Hicks et al. (2004) suggested training students like professional historians and equipping them with fundamental skills, including chronological thinking, historical analysis of cause and effect, discussion, debate, and persuasive writing. Julien et al. (2018) helped students learn labour history through social media platforms, the students investigating and reporting a self-selected historical event and sharing their findings on social media platforms, where peers could act as key stakeholders and interact with each other. Agus & Nara Setya (2017) advocated a more scientific approach, called hypnoteaching, which combines "quantum learning, accelerated learning, power teaching, neuro-linguistic programming, and hypnosis" (p. 4).

All of these teaching methods and approaches have one thing in common. They address students' study and professional development needs by creating a learner-centred environment,

in which students act as active participants to construct the necessary knowledge and skills effectively (Lee & Branch, 2018).

Rationale of the Research

The flexible-learning approach

In recent years, I have been experimenting with the flexible-learning approach in order to enhance student engagement in learning. The flexible-learning method provides some degree of autonomy for students to determine what to learn (Collins & Moonen, 2001; Taylor & Joughin, 1997) and how to assess that learning (Wanner & Palmer, 2015). Given that it also transforms the teacher into a facilitator who encourages quality communication and interaction among students (Bostock, 2018), it is considered to be an approach that teachers and researchers in many areas can use to cultivate students' learning interests. For example, Lewis (1994) documented how a mathematics teacher adopted the flexible-learning approach in his undergraduate vector calculus course. His students were permitted to finish any learning materials and determine their study route based on their preferences, with class tests at specific times providing the necessary checkpoints for students to adjust their learning pace. Cornelius et al. (2011) detailed the flexible-learning approach in their Teaching Qualification (Further Education) programme. Students needed to finish a set of activities in which they had the choice of working either individually or in small groups. Furthermore, Irvine & Cossham (2011) reported how they improved the teaching efficacy in their Library and Information

Study undergraduate programme, whereby students could access the online learning resources and decide what, where, and when to learn.

At The Education University of Hong Kong (EdUHK), I teach a history course, *MUS2250 Traditions and Practices of Music I*, for the Bachelor of Arts in Creative Arts and Culture as part of a Co-terminal double degree programme. This course is compulsory for Year 1 students in the first semester. Most of them have just completed their senior secondary school education, while others are music graduates or have transferred from an associate degree or a higher diploma programme from other tertiary institutions. The 39-hour course aims to discuss the development of traditional Western music from the Ancient Greek period to the contemporary, 21st century. It is therefore a challenge to cater to the individual study needs of students with diverse musical backgrounds and mixed abilities, while simultaneously aiming to cover a wide range of musical styles. As a result, the course presents an ideal opportunity to let students decide (to some extent) what to learn with respect to their interests and abilities.

Figure 1 shows the generic structure I have designed for this course. After a main topic, several optional sub-topics are available, followed by a formative assessment to consolidate students' understanding at the end of each topic block. This process repeats until a summative assessment concludes the whole course.
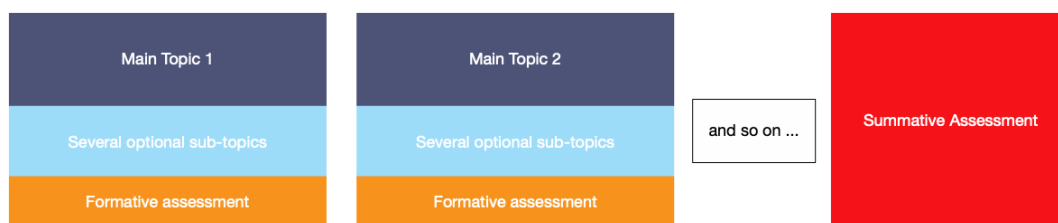
Figure 1 *The generic structure of the* MUS2250 Traditions and Practices of Music I *course*

Figure 2 provides the alternative design of a topic block. For example, the instructor can deliver the optional sub-topics twice in a row or split the main topic into two parts and put the flexible-learning content between them. Moreover, the main topic can function as a self-sustained block without any optional sub-topics.

Figure 2 *Alternative topic block design*

Although this planning means that in theory the flexible-learning content can be delivered in different weeks, in practice he course takes longer to complete, an arrangement that is not

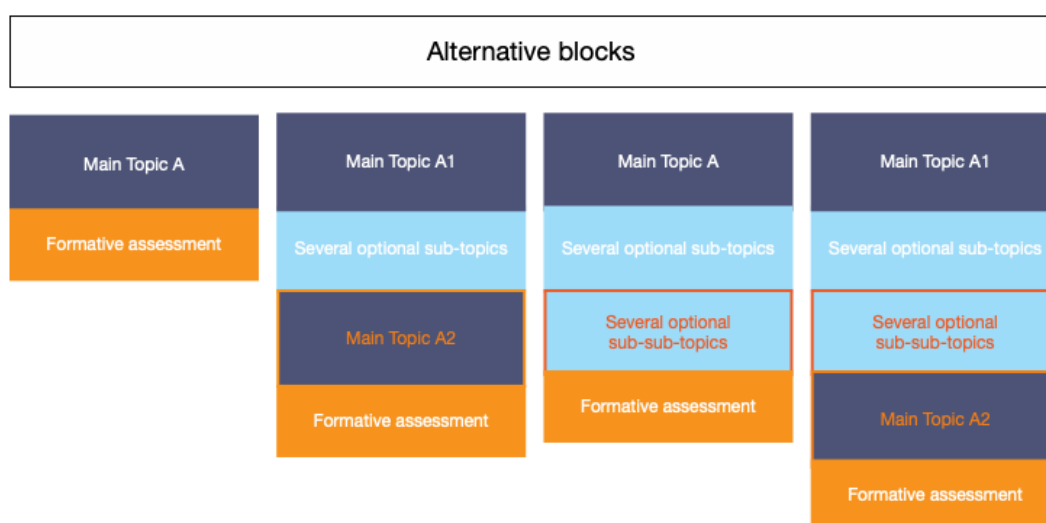ideal. Might it be possible to deliver the various sub-topics simultaneously in a way that is both cost-effective and time-efficient (Wild, 1994)? The magic of Information and Communication Technology reveals that the solution is actually quite simple. For example, Jackson (2020) investigated how the application of 'WhatsApp' might facilitate the process in a flexible learning environment. He concluded that 'WhatsApp' worked well in terms of fostering students' engagement in learning, while simultaneously enhancing interaction and discussion among teachers and students. The major advantage of using this app over a common Learning Management System, such as 'Moodle' and 'Blackboard', is that it is free to use for all parties, including the institute, the teachers, and the students.

Figure 3 is the course design of *MUS2250 Traditions and Practices of Music I*. The main topics occupy the middle line. There are a total of 13 of these, of which six consist of optional sub-topics. For example, after studying "The rise of humanism: the society in the Renaissance period", a student may choose "Renaissance instrumental music", "The Catholic tradition: Palestrina – The Prince of Music", or "The Religious Reformation and early Protestant Church music". The optional sub-topics either follow on top of or fall under the mainstream to indicate the different pathways towards the main "vocal / church music trend" and "instrumental music trend" topics. However, there are no restrictions limiting students to stick to a particular pattern. The only selection criteria are their own study needs and interests.
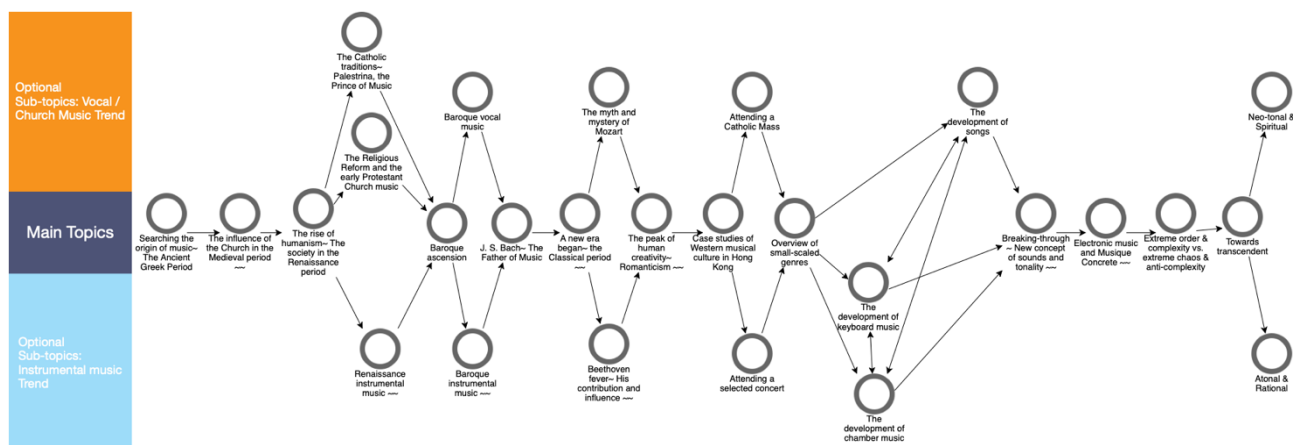
Figure 3 *Course design for* MUS2250 Traditions and Practices of Music I

In order to deliver different sub-topics simultaneously, the study materials and pre-recorded lecture videos were uploaded to 'Moodle' for students to access during the lessons. While the students were engaged with learning with the online materials, I supported them individually from the computer when they needed help. In order to assist with the consolidation of students' understanding after each topic block, they were required to complete an online multiple-choice quiz, which was customised based on their choice of sub-topics. The 'Moodle' grading system helped monitor student learning progress by taking records and analysing the quiz results. Finally, a course essay – also personalised with regard to students' learning interests – concluded the whole course as the summative assessment.

Research Questions

The above information and background led to the following research questions guiding the study:

- Can the flexible learning approach significantly enhance student engagement in learning music history?

- What other implications of the flexible-learning approach can we find in music history education at higher institutions?

Methodology

Definition of student engagement

To answer these two questions, we first need to define the meaning of "student engagement" and know how to measure it. O'Donnell & Reschly (2020) describe student engagement as a meta-construct containing three components in the form of behavioural, cognitive, and emotional engagement (Appleton et al., 2006, 2008; Reschly et al., 2014). Behavioural engagement is students' effort and persistence in learning (Birch & Ladd, 1997; Finn et al., 1995; Skinner & Belmont, 1993). Spending extra time learning and actively pursuing comprehensive knowledge outside class are examples of high behavioural engagement. Cognitive engagement means the value of striving for knowledge (Brophy, 1987; Newmann et al., 1992), e.g., students believing that what they have learned is essential to their professional and career development. Emotional engagement means students' reactions, such as finding pleasure in learning (Connell & Wellborn, 1991; Skinner & Belmont, 1993). For instance, students tend to enjoy listening to music they learn in class when they are emotionally engaged.

Research (Fredricks et al., 2004; O'Donnell & Reschly, 2020) tells us that it is possible to measure all three factors simply by conducting student self-evaluation.

The retrospective post-pre self-evaluation survey

To assess the degree to which the flexible-learning approach could enhance student engagement in my history course, I used a retrospective post-pre self-evaluation survey to measure changes in behavioural, cognitive, and emotional engagement. This post-pre approach stresses the changes in students' attitudes, knowledge, or skills regarding their perspectives (Hiebert et al., 2011), measuring the metamorphosis by comparing the extent of these attributes at the beginning and at the end of a learning process (Kanevsky, 2016). In the conventional pre-post procedure, the pre-test and post-test occur separately at a course's commencement and completion. However, even with noticeable improvement, the student may still rate themselves lower in the post-test because of a different standard of measurement after gaining the learning experience (Hiebert & Magnusson, 2014). The retrospective post-pre approach aims to avoid this inconsistency by putting the pre-test and post-test together at the end of the course so as to describe the actual changes more accurately (Bhanji et al., 2012).

Despite the criticism of subject bias (Nimon, 2014; Nimon et al., 2011), retrospective post-pre evaluation is highly regarded as a potentially effective tool for acquiring usable evidence of student learning (Coulter, 2012). Over the course of the past ten years, an increasing number of studies have adopted this approach in order to investigate student perspectives in learning. For example, Kanevsky et al. (2014) employed this tool to assess students' improvement after a two-year graduate diploma programme. Similarly, Stacey et al.

(2015) measured the impact of training on nurses' satisfaction using this evaluation method. Furthermore, Chen and O'Neill (2020) made use of this approach to measure changes in student engagement in a computer-mediated music composition activity. For this study, I came up with three descriptive statements in terms of students' behavioural, cognitive, and emotional engagement for every topic block listed in Table 1.

Table 1 *Title of the main topics and optional sub-topics*

Topic Block	Title of the main topic	Optional sub-topics
Topic 1	Search the origin of music: The Ancient Greek period	–
Topic 2	The influence of the Church in the Medieval period	–
Topic 3	The rise of humanism: The society in the Renaissance period	a. The Catholic tradition: Palestrina – the Prince of Music b. The Religious Reformation and the early Protestant Church music c. The Renaissance musical instruments and instrumental music
Topic 4	Baroque ascension	a. Baroque vocal music b. Baroque musical instruments and instrumental music
Topic 5	J. S. Bach: The Father of Music	–
Topic 6	A new era began: The Classical period	a. The myth and mystery of W. A. Mozart b. Beethoven fever: His contribution and influence
Topic 7	The peak of human creativity: Romanticism	–

Topic Block	Title of the main topic	Optional sub-topics
Topic 8	Case studies of Western musical culture in Hong Kong	a. Attending a selected concert b. Attending a Catholic Mass
Topic 9	Overview of small-scaled genres	a. The development of songs b. The development of keyboard music c. The development of chamber music
Topic 10	Breaking through: The new concept of sounds and tonality	–
Topic 11	Electronic music and Musique Concrète	–
Topic 12	Extreme order and complexity vs extreme chaos and anti-complexity	–
Topic 13	Towards Transcendent	a. Neo-tonal and spiritual b. Atonal and rational

Survey design

With regard to the design of the survey, the following descriptive statements guided students within each of the three forms of engagement. Participants were required to evaluate themselves for each topic block using a five-point Likert scale (0-4).

Behavioural engagement

I spend time reading about the information and listening to [music of the main topic and the chosen sub-topic(s), if applicable].

	Strongly Disagree				Strongly Agree
	1	2	3	4	5
Before taking the course					
After taking the course					

Cognitive engagement

Understanding [music of the main topic and the chosen sub-topic(s), if applicable] is essential to my music study.

	Strongly Disagree				Strongly Agree
	1	2	3	4	5
Before taking the course					
After taking the course					

Emotional engagement

I love listening to [music of the main topic and the chosen sub-topic if applicable].

	Strongly Disagree				Strongly Agree
	1	2	3	4	5
Before taking the course					
After taking the course					

Results and Analysis

The data gathering process took place in the 2021-22 academic year, and the students took the post-pre survey on December 8, 2021, the date of the last lesson of the course. Due to suspension of the school caused by inclement weather, the lesson for Topic 9, "Overview of small-scaled genres", and the related optional sub-topics, were cancelled. Table 2 shows the results of the survey.

Table 2 *Results of the survey*

n = 35			1	2	3	4	5	Mean	SD	Difference between the means	t	p	Effect size (Cohen's d)
Response rate = 92.11%													
Cronbach's alpha = 0.955													
Topic 1	Behavioural	Pre-	12	18	5	0	0	1.80	0.68	1.23	7.47	<0.001	1.72
		Post-	0	8	19	7	1	3.03	0.75				
	Cognitive	Pre-	5	13	10	6	1	2.57	1.04	1.03	6.59	<0.001	1.14
		Post-	0	1	16	14	4	3.60	0.74				
	Emotional	Pre-	8	11	11	4	1	2.40	1.06	0.94	5.43	<0.001	1.00
		Post-	1	3	15	15	1	3.34	0.80				
Topic 2	Behavioural	Pre-	10	16	6	3	0	2.06	0.91	1.03	6.38	<0.001	1.09
		Post-	2	7	14	10	2	3.09	0.98				
	Cognitive	Pre-	7	9	10	7	2	2.66	1.19	1.09	6.18	<0.001	1.05
		Post-	0	2	12	14	7	3.74	0.85				
	Emotional	Pre-	6	13	11	5	0	2.43	0.95	0.97	5.11	<0.001	1.03
		Post-	1	4	14	12	4	3.40	0.95				
Topic 3	Behavioural	Pre-	9	13	10	3	0	2.20	0.93	1.20	6.00	<0.001	1.30
		Post-	1	4	13	14	3	3.40	0.91				
	Cognitive	Pre-	6	11	9	9	0	2.60	1.06	1.03	4.97	<0.001	1.07
		Post-	0	2	15	12	6	3.63	0.84				
	Emotional	Pre-	5	9	14	6	1	2.69	1.02	0.89	4.99	<0.001	0.98
		Post-	0	3	12	17	3	3.57	0.78				
Topic 4	Behavioural	Pre-	6	7	13	8	1	2.74	1.09	1.09	6.02	<0.001	1.14
		Post-	0	1	11	16	7	3.83	0.79				
	Cognitive	Pre-	2	7	9	12	5	3.31	1.13	0.69	4.35	<0.001	0.71
		Post-	0	1	7	18	9	4.00	0.77				
	Emotional	Pre-	1	7	13	14	0	3.14	0.85	0.63	4.83	<0.001	0.74
		Post-	0	3	8	18	6	3.77	0.84				
Topic 5	Behavioural	Pre-	5	2	10	17	1	3.20	1.11	0.66	5.08	<0.001	0.69
		Post-	0	2	7	20	6	3.86	0.77				
	Cognitive	Pre-	1	2	9	18	5	3.69	0.90	0.51	4.34	<0.001	0.63
		Post-	0	1	3	19	12	4.20	0.72				
	Emotional	Pre-	1	6	9	17	2	3.37	0.94	0.49	4.36	<0.001	0.53
		Post-	0	2	10	14	9	3.86	0.88				
Topic 6	Behavioural	Pre-	0	3	13	13	6	3.63	0.88	0.54	3.93	<0.001	0.64
		Post-	0	1	6	14	14	4.17	0.82				
	Cognitive	Pre-	0	2	11	13	9	3.83	0.89	0.57	4.35	<0.001	0.73
		Post-	0	0	3	15	17	4.40	0.65				
	Emotional	Pre-	0	2	11	13	9	3.83	0.89	0.51	4.34	<0.001	0.62
		Post-	0	0	6	11	18	4.34	0.76				
Topic 7	Behavioural	Pre-	0	5	15	5	10	3.57	1.07	0.57	5.16	<0.001	0.59
		Post-	0	1	7	13	14	4.14	0.85				
	Cognitive	Pre-	0	1	12	14	8	3.83	0.82	0.51	4.34	<0.001	0.68
		Post-	0	0	4	15	16	4.34	0.68				
	Emotional	Pre-	0	2	11	12	10	3.86	0.91	0.34	3.43	0.002	0.41
		Post-	0	0	7	14	14	4.20	0.76				
Topic 8	Behavioural	Pre-	8	7	15	2	3	2.57	1.17	0.49	4.36	<0.001	0.44
		Post-	2	8	15	6	4	3.06	1.06				
	Cognitive	Pre-	0	7	16	11	1	3.17	0.79	0.63	4.61	<0.001	0.78
		Post-	0	1	13	13	8	3.80	0.83				
	Emotional	Pre-	1	6	14	8	6	3.34	1.06	0.49	3.87	<0.001	0.49
		Post-	0	2	12	11	10	3.83	0.92				
Topic 9	The lesson was cancelled due to Typhoon no. 8 bad weather signal.												
Topic 10	Behavioural	Pre-	9	11	9	5	1	2.37	1.11	0.86	5.37	<0.001	0.81
		Post-	0	9	14	7	5	3.23	1.00				
	Cognitive	Pre-	2	15	8	8	2	2.80	1.05	0.80	4.76	<0.001	0.83
		Post-	0	3	14	12	6	3.60	0.88				
	Emotional	Pre-	3	12	11	8	1	2.77	1.00	0.69	4.51	<0.001	0.69
		Post-	1	4	13	12	5	3.46	0.98				
Topic 11	Behavioural	Pre-	8	15	8	4	0	2.23	0.94	0.63	4.41	<0.001	0.65
		Post-	2	13	9	10	1	2.86	1.00				
	Cognitive	Pre-	5	9	13	8	0	2.69	0.99	0.54	3.63	<0.001	0.57
		Post-	1	6	14	12	2	3.23	0.91				
	Emotional	Pre-	8	8	16	2	1	2.43	1.01	0.54	3.09	0.004	0.53
		Post-	4	6	13	11	1	2.97	1.04				
Topic 12	Behavioural	Pre-	12	14	7	1	1	2.00	0.97	0.66	5.36	<0.001	0.67
		Post-	4	11	15	3	2	2.66	1.00				
	Cognitive	Pre-	10	14	7	3	1	2.17	1.04	0.77	4.42	<0.001	0.70
		Post-	4	8	13	6	4	2.94	1.16				
	Emotional	Pre-	7	16	8	2	2	2.31	1.05	0.71	4.42	<0.001	0.66

n = 35 Response rate = 92.11% Cronbach's alpha = 0.955			1	2	3	4	5	Mean	SD	Difference between the means	t	p	Effect size (Cohen's d)
		Post-	3	8	13	7	4	3.03	1.12				
Topic 13	Behavioural	Pre-	10	15	9	1	0	2.03	0.82	0.74	4.35	<0.001	0.83
		Post-	2	14	10	8	1	2.77	0.97				
	Cognitive	Pre-	7	13	9	6	0	2.40	1.01	0.86	4.66	<0.001	0.83
		Post-	2	6	12	11	4	3.26	1.07				
	Emotional	Pre-	8	17	6	4	0	2.17	0.92	0.69	4.88	<0.001	0.75
		Post-	2	10	15	7	1	2.86	0.91				

There were 38 students in the class, 35 of whom returned the questionnaire (N = 35; response rate = 92.11%). The alpha coefficient was 0.955, revealing a high level of internal consistency. The mean scores of the pre- and pro-test of all three factors of every topic were calculated, along with the standard deviations, in order to determine the data dispersion. The differences between the mean scores of the pre- and pro-test measured the extent to which student attitudes had changed. The results were larger than 0.0, indicating that positive growth occurred in all items after the course. With the exception of emotional engagement in Topic 7, all items changed significantly, with an increasing rate higher than, or near, 0.5. Some items, including all attributes in Topic 1, Topic 2, and Topic 3, as well as the behavioural engagement of Topic 4, even resulted in an intensively increasing rate larger than, or near, 1.0.

I also performed paired sample t-tests to compare the means of the pre- and post-test values of all the items. The *t-value* of every item in Topic 5 was consistently large (ranging from 3.09 to 7.47). At the same time, the two-tailed *p-value* remained extremely small (<0.001 in most cases), proving that the results were statistically significant. In addition, the effect size (Cohen's *d*) provides further evidence demonstrating the extent of the growth. Nineteen items recorded a medium value of >0.5, including the cognitive and emotional engagement of Topic 4, the behavioural and cognitive engagement of Topic 7, the cognitive engagement of Topic 8,

and the emotional engagements of Topic 10 and Topic 13, as well as all the attributes of Topics 5, 6, 11 and 12. Fourteen items, including all the attributes of Topics 1, 2 and 3, the behavioural engagement of Topic 4, and the behavioural and cognitive engagement of Topic 10, as well as the behavioural and cognitive engagements of Topic 13, recorded a high value of >0.8. Only the emotional engagement of Topic 7, as well as the behavioural and emotional engagements of Topic 8, demonstrated relatively lower, but still substantial, values.

Accordingly, significant improvement occurred after the course across all items, apart from emotional engagement in Topic 7. This exceptional case resulted in the least extent of positive growth (0.34), the second weakest but still vital *t-value* (3.43), a relatively higher *p-value* (0.002), and the lowest Cohen's *d* (0.41). While implying that this attribute revealed the most trivial growth among the students, it should also be noted that a very high pre-test mean value of 2.86 was recorded for this attribute. As the highest in the course, it may have proved too difficult to garner any further improvement.

Table 3 lists the course average means and their differences in order to discuss the overall impact of the flexible-learning approach. Statistical significance analysis is unnecessary here because the course ratings cannot be insignificant when all the individual topic ratings are already statistically significant.

Table 3 *Course average ratings*

		Mean	Difference between means
Behavioural	Pre-	2.53	0.81
	Post-	3.34	
Cognitive	Pre-	2.98	0.75
	Post-	3.73	
Emotional	Pre-	2.90	0.66

Post-	3.55

Behavioural engagement started with the lowest pre-test mean value of 2.53, but jumped the most significantly (by 0.81) to reach 3.34 in the post-test, indicating that students' behavioural engagement changed from slightly disagreeing to slightly agreeing. On the other hand, cognitive engagement scored the highest mean value in both the pre- and post-test scores among all three aspects, with ratings of 2.98 and 3.73, respectively. The growth was 0.75, which is medium-high, meaning that the students, who were initially at a "Neutral" level in terms of their cognitive engagement, had strengthened by the end of the course to the level of "Agree". Lastly, emotional engagement achieved the second-highest pre-test mean value of 2.90. With the smallest, but still strong, increase of 0.66, this attribute rose to the second-highest post-test mean value with 3.55., demonstrating an observable improvement.

Conclusions and Implications

To summarise, students posted notable improvement gains in their behavioural, cognitive, and emotional engagement factors in the course *MUS2250 Traditions and Practices of Music I*, demonstrating in the process that the flexible-learning approach can enhance student engagement in music history education at the tertiary level.

Two decades ago, the flexible-learning approach received serious critiques (D. T. Chen, 2003), some researchers finding the quality of its learning outcomes to be unsatisfactory (Bell et al., 2001), while others questioned its cost-effectiveness (Ling et al., 2001). Positing

different views, some researchers, such as Wild (1994) and Ratheswari (2018), had already foreseen the power of technology and its potential to overcome the previously-identified shortfalls. The flexible-learning approach now flourishes in higher education, especially in Europe, in countries such as Austria (Unger & Zaussinger, 2018), Finland (Moitus et al., 2020) and the United Kingdom (Brennan, 2021). In these locations, policymakers have brought the idea of the flexible-learning approach into curriculum planning in order to foster students' engagement and self-regulation. The flexibility of what, where, when, and how to learn transcends into a flexible-learning path. On the one hand, this offers students maximum control of their learning environment and routes. On the other, it promotes equity in education (Duarte et al., 2016).

Some teachers in tertiary institutes provide multiple study routes for completion of a single course, students being allowed to choose the best pathway to optimise their learning. For example, Duarte et al. (2016) put the flexible contents between two fixed-content lessons. After the first lesson, and before the next class, students were allowed to decide which learning tasks they wanted to take and in what order they wished to complete them. Meanwhile, Ibañez et al. (2022) suggested a six-sequence design. Each sequence consisted of its own set of worksheets, learning resources, and working tasks, students being given the freedom to select and deselect a learning sequence at any time during the duration of the course. Similarly, Rouhani et al. (2019) provided students with the flexibility to control their working progress based on the six modules making up their course, allowing them to choose those topics which were of most relevance to them.

In the same way, my history course provides students with the flexibility to decide the best study path to fit their learning needs. As such, a single music history course does not need to stick to the traditional linear structure, but can instead provide students with multiple trajectories based around their interests and abilities.

References

Agus, B., & Nara Setya, W. (2017). Hypnoteaching in History Lesson. *Journal Pendidikan Edutama*, *4*(2), 1-10. doi:10.30734/jpe.v4i2.50

Appleton, J. J., Christenson, S. L., & Furlong, M. J. (2008). Student Engagement with School: Critica Conceptual and Methodological Issues of the Construct. *Psychology in the Schools*, *45*(5), 369-386. doi:https://doi.org/10.1002/pits.20303

Appleton, J. J., Christenson, S. L., Kim, D., & Reschly, A. L. (2006). Measuring Cognitive and Psychological Engagement: Validation of the Student Engagement Instrument. *Journal of School Psychology*, *44*(5), 427-445. doi:https://doi.org/10.1016/j.jsp.2006.04.002

Bell, T., Cockburn, A., McKenzie, B., & Vargo, J. (2001). Digital Lectures: If You Make Them, Will Students Use Them? Constraints on Effective Delivery of Flexible Learning Systems. *Interactive Multimedia Electronic Journal of Computer-enhanced Learning*, *3*(2). Retrieved from http://imej.wfu.edu/articles/2001/2/06/index.asp

Bhanji, F., Gottesman, R., de Grave, W., Steinert, Y., & Winer, L. R. (2012). The Retrospective Pre-Post: A Practical Method to Evaluate Learning from an Educational

Program. *Official Journal of the Society for Academic Emergency Medicine*, *19*(2), 189-194. doi:10.1111/j.1553-2712.2011.01270.x

Birch, S. H., & Ladd, G. W. (1997). The Teacher-child Relationship and Children's Early School Adjustment. *Journal of School Psychology*, *35*(1), 61-79. doi:10.1016/S0022-4405(96)00029-5

Bostock, J. R. (2018). A Model of Flexible Learning: Exploring Interdependent Relationships Between Students, Lecturers, Resources and Contexts in Virtual Spaces. *Journal of Perspectives in Applied Academic Practice*, *6*(1), 12-18. doi:10.14297/jpaap.v6i1.298

Brennan, J. (2021). *Flexible Learning Pathways in British Higher Education: A Decentralized and Market-based System*. Gloucester, United Kingdom: Quality Assurance Agency for Higher Education.

Brophy, J. E. (1987). Socializing Students' Motivation to Learn. In M. L. Maehr & D. A. Kleiber (Eds.), *Advances in Motivation and Achievement: Enhancing Motivation* (pp. 181-210). Greenwich, CT: JAI Press.

Chen, D. T. (2003). Uncovering the Provisos behind Flexible Learning. *Educational Technology & Society*, *6*(2), 25-30. Retrieved from http://ifets.ieee.org/periodical/6-2/3.html

Chen, J. C. W., & O'Neill, S. A. (2020). Computer-mediated composition pedagogy: Students' engagement and learning in popular music and classical music. *Music Education Research*, *22*(2), 185-200. doi:10.1080/14613808.2020.1737924

Collins, B., & Moonen, J. (2001). *Flexible Learning in a Digital World: Experiences and Expectations*. London: Kogan Page.

Connell, J. P., & Wellborn, J. G. (1991). Competence, Autonomy, and Relatedness: A

Motivational Analysis of Self-system Processes. In *Self Processes and Development*

(pp. 43-77). Hillsdale, NJ, US: Lawrence Erlbaum Associates, Inc.

Cornelius, S., Gordon, C., & Ackland, A. (2011). Towards Flexible Learning for Adult

Learners in Professional Contexts: An Activity-focused Course Design. *Interactive

Learning Environments*, *19*(4), 381-393. doi:10.1080/10494820903298258

Coulter, S. E. (2012). Using the Retrospective Pretest to Get Usable, Indirect Evidence of

Student Learning. *Assessment & Evaluation in Higher Education*, *37*(3), 321-334.

doi:doi.org/10.1080/02602938.2010.534761

Duarte, R., de Oliveira Pires, A. L., & Nobre, Á. L. (2016). *Increasing Adult Students'

Learning Opportunities with Flexible Learning Pathways: Evidence from a

Technology and Industrial Management Graduate Course.* Paper presented at the 2nd

International Conference of the Portuguese Society for Engineering Education, Vila

Real, Portugal.

Finn, J. D., Pannozzo, G. M., & Voelkl, K. E. (1995). Disruptive and Inattentive-Withdrawn

Behavior and Achievement among Fourth Graders. *The Elementary school journal,

95*(5), 421-434. doi:10.1086/461853

Folio, C., & Kreinberg, S. (2009). Blackboard and Wikis and Blogs, Oh My: Collaborative

Learning Tools for Enriching Music History and Music Theory Courses. *College Music

Symposium*, *49/50*, 164-175.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School Engagement: Potential of the

    Concept, State of the Evidence. *Review of Educational Research*, *74*(1), 59-109.

    doi:10.3102/00346543074001059

Gomes, J., Figueiredo, M., Amante, L., & Gomes, C. (2016). Augmented Reality in Informal

    Learning Environments: A Music History Exhibition. *International Journal of Creative*

    Interfaces and Computer Graphics, *7*(2), 39-55. doi:10.4018/IJCICG.2016070104

Hicks, D., Carroll, J., Doolittle, P., Lee, J., & Oliver, B. (2004). Teaching the Mystery of

    History. *Social Studies and the Young Learner*, *16*(3), 14.

Hiebert, B., Bezanson, L., O'Reilly, E., Hopkins, S., Magnusson, K., & McCaffrey, A. (2011).

    Assessing the Impact of Labour Market Information: Preliminary Results of Phase Two

    (Field Tests). (Final report to Human Resources and Skills Development Canada).

    Canadian Career Development Foundation, Toronto. Retrieved from

    http://www.crwg-gdrc.ca/crwg/index.php/research-projects/lmi

Hiebert, B., & Magnusson, K. (2014). The Power of Evidence: Demonstrating the Value of

    Career Development Services. In B. C. Shepard & P. S. Mani (Eds.), *Career*

    Development Practice in Canada: Perspectives, Principles and Professionalism (pp.

    489-530). Toronto: Canadian Education and Research Institute for Counselling.

Ibañez, J. S., de Benito Crosetti, B., García, J. M., & Carrió, A. L. (2022). New Flexible

    Designs and Modes of Organization in Higher Education: The Construction of Personal

    Learning Paths. *Pixel-bit: Revista de Medios y Educación*(63), 65-91.

    doi:10.12795/PIXELBIT.91739

Irvine, J., & Cossham, A. (2011). Flexible Learning: Reflecting on a Decade of Library and

      Information Studies Programmes at the Open Polytechnic of New Zealand. *Library*

      Review, *60*(8), 712-722. doi:10.1108/00242531111166728

Jackson, E. A. (2020). The Use of WhatsApp for Flexible Learning: Its Effectiveness in

      Supporting Teaching and Learning in Sierra Leone's Higher Education Institutions.

      International Journal of Advanced Corporate Learning, *13*(1), 35-47.

Julien, M., Stratton, M., & Clayton, R. (2018). History Is Not Boring: Using Social Media to

      Bring Labor History Alive. *Management Teaching Review*, *3*(3), 208-220.

      doi:10.1177/2379298117717257

Kanevsky, L. (2016). Assessing Students' Perceptions of the Effectiveness of Instructional

      Interventions with Post-Pre Surveys. Retrieved from

      https://www.sfu.ca/content/dam/sfu/istld/documents/Post-Pre_Kanevsky_handout.pdf

Kanevsky, L., Rosati, M., Schwarz, C., & Miller, B. (2014). *Post-pre Assessment of*

      Effectiveness of a Two-year Graduate Diploma Program Offered in a Blended Format.

      (Unpublished report). Simon Fraser University, Burnaby, BC.

Lee, S. J., & Branch, R. M. (2018). Students' Beliefs about Teaching and Learning and Their

      Perceptions of Student-centred Learning Environments. *Innovations in Education and*

      Teaching International, *55*(5), 602-610. doi:10.1080/14703297.2017.1285716

Lewis, P. (1994). A Flexibility Scheme for a First-year Mathematics Module. In W. Wade, K.

      Hodgkinson, A. Smith, & J. Arfield (Eds.), *Flexible Learning in Higher Education* (pp.

      99-105). London: Kagan Page.

Ling, P., Arger, G., Smallwood, H., Toomey, R., Kirkpatrick, D., & Barnard, I. (2001). *The Effectiveness of Models of Flexible Provision of Higher Education*. Australia: Evaluations and Investigations Programme of the Department of Education, Training and Youth Affairs.

Moitus, S., Weimer, L., & Välimaa, J. (2020). *Flexible Learning Pathways in Higher Education: Finland's Country Case Study for the IIEP-UNESCO SDG4 Project in 2018–2021*. Finland: Finnish Education Evaluation Centre.

Neo, T. K., Neo, M., & Lim, M. (2011). The Use of Multimedia as an Innovative Method of Learning the History of Music: A Malaysia Experience. *International Journal of Instructional Media*, *38*(2), 187-196.

Newmann, F. M., Wehlage, G. G., & Lamborn, S. D. (1992). The Significance and Sources of Student Engagement. In F. M. Newmann (Ed.), *Student Engagement and Achievement in American Secondary Schools* (pp. 11-39). New York: Teacher College Press.

Nimon, K. (2014). Explaining Differences between Retrospective and Traditional Pretest Self-assessments: Competing Theories and Empirical Evidence. *International Journal of Research & Method in Education*, *37*(3), 256-269. doi:doi.org/10.1080/1743727X.2013.820644

Nimon, K., Zigarmi, D., & Allen, J. (2011). Measures of Program Effectiveness Based on Retrospective Pretest Data: Are All Created Equal? *American Journal of Evaluation*, *32*(1), 8-28. doi:doi.org/10.1177/1098214010378354

Niren, A. (2014). So You Think You Can Be a Composer: Pedagogical Strategies for Active

    Learning in Music History Courses. *College Music Symposium, 54*. Retrieved from

    www.jstor.org/stable/26574390

O'Donnell, K., & Reschly, A. L. (2020). Assessment of Student Engagement. In A. L. Reschly,

    A. J. Pohl, & S. L. Christenson (Eds.), *Student Engagement: Effective Academic,*

    Behavioral, Cognitive, and Affective Interventions at School (pp. 55-76). Cham:

    Springer International Publishing AG.

Rachlin, H. (2017). Use Band and Orchestra Compositions to Inspire Interest in Music History.

    School Band & Orchestra, *20*(9), 44.

Ratheeswari, K. (2018). Information Communication Technology in Education. *Journal of*

    Applied and Advanced Research, 3(1), 45-47.

    doi:dx.doi.org/10.21839/jaar.2018.v3S1.169

Reschly, A. L., Appleton, J. J., & Pohl, A. (2014). Best Practices in Fostering Student

    Engagement. In P. Harrison & A. Thomas (Eds.), *Best Practices in School Psychology:*

    Student Level Services (6th ed., pp. 37-50). Bethesda, MD:: National Association of

    School Psychologists.

Rouhani, M., Divitini, M., Vujosevic, V., Stai, S., & Olstad, H. A. (2019). *Design of a*

    Programming Course for Teachers Supporting Flexible Learning Trajectories. Paper

    presented at the Proceedings of the 8th Computer Science Education Research

    Conference, Larnaca, Cyprus. https://doi.org/10.1145/3375258.3375263

Scarnati, B., & Garcia, P. (2008). The Fusion of Learning Theory and Technology in an Online

    Music History Course Redesign. *Innovate: Journal of Online Education*, *4*(2), 1-6.

Retrieved from

https://search-proquest-com.ezproxy.eduhk.hk/docview/61867160?accountid=11441

Skinner, E. A., & Belmont, M. J. (1993). Motivation in the Classroom: Reciprocal Effects of

Teacher Behavior and Student Engagement Across the School Year. *Journal of*

Educational Psychology, *85*(4), 571-581. doi:10.1037/0022-0663.85.4.571

Stacey, D., Skrutkowski, M., Carley, M., Kolari, E., Shaw, T., & Ballantyne, B. (2015).

Training Oncology Nurses to Use Remote Symptom Support Protocols: A

Retrospective Pre-post Study. *Oncology Nurse Forum*, *42*(2), 174-182.

doi:10.1188/15.ONF.174-182

Strandberg, K. (2017). Music History Beyond the Classroom: Active Learning through Local

History. *Journal of Music History Pedagogy*, *7*(2), 32.

Taylor, P., & Joughin, G. (1997). *What is Flexible Learning?* Queensland: Griffith University.

Unger, M., & Zaussinger, S. (2018). *The New Student: Flexible Learning Paths and Future*

Learning Environments. Vienna, Austria: Institute for Advanced Studies, Vienna.

Wanner, T., & Palmer, E. (2015). Personalising Learning: Exploring Student and Teacher

Perceptions about Flexible Learning and Assessment in a Flipped University Course.

Computers & Education, *88*, 354-369. doi:10.1016/j.compedu.2015.07.008

Wild, P. (1994). Flexible Learning and Information Technology in Higher Education. In W.

Wade, K. Hodgkinson, A. Smith, & J. Arfield (Eds.), *Flexible Learning in Higher*

Education (pp. 35-45). London: Kagan Page.