

A reflective journey in teaching: Pre-service music teachers' action research

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Abstract

The qualitative study referred to here investigated what a class of undergraduate pre-service music teachers could learn from conducting a piece of action research for primary 5 pupils in Hong Kong. Data were collected from lesson observations, post-lesson conferences with the pre-service teachers, their presentations and individual reflection reports. This action research helped the pre-service teachers to design their research lessons according to the good practices of “teaching students to understand music” and “engaging pupils to learn music through musical activities”. Informed by the research data, a teaching gap was found and the pre-service teachers started to reevaluate how the pupils learn, and to conduct deeper reflections on their own teaching effectiveness. The study concluded with a rethinking of the practice of teaching the musical concepts that are prevalent in music classrooms.

Key words: Action research, Music lesson, Music teacher education, Pre-service Teacher, Teacher education, Teaching gap, Tacit knowledge

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Introduction

Many pre-service music teachers are music lovers who enjoy making music themselves. However, the path of learning how to be a teacher may seem like climbing over a rugged mountainous terrain. They may not be aware the difficulties and challenges involved in guiding school children gently into the world of music. Many pre-service music teachers started to learn their instruments at a young age, so music has become a very natural “language” to them. When facing their future pupils who may not have learned an instrument before, the pre-service teachers may overlook or even take for granted the difficulties that the children may encounter when they learn the subject. Teaching gaps may arise as a result of their misperceptions of their pupils’ ways of learning and the bigger issue

of their understanding of the nature of music learning may also arise. In light of the above, nurturing pre-service teachers’ competency in teaching “has always been regarded as a critical element of initial teacher education programmes” (Cheng, 2014, p. 51). It is crucial that pre-service music teachers learn how to teach, not just from theory but also from practice. A solid theoretical understanding of how learning takes place and a concrete and accurate picture of how their pupils learn are both important.

Over the years, action research carried out by teachers has always been deemed to be an important way to bridge the gap between theory and practice (West, 2011). The application of classroom-based research, such as action research, teacher research and collaborative action research for pre-service and in-service teachers as a part of

teacher education or professional development are still a focus of discussion among teacher education researchers (Cain, 2012; Conway, Edgar, Hansen & Palmer, 2014; Crawford-Garrett, Anderson Grayson & Suter, 2015; Jaipal & Figg, 2011; Lew & Mohsin, 2011; West, 2011; Wong, 2011). These research experiences are valuable to teachers in that they enable them to reflect on their professional practice throughout the research process and empower them to "systematically explore their curiosities and inform their practice" (West, 2011, p. 94). Conway et al. (2014) state clearly that what is needed is "teacher research as professional development that counts" (p. 414). Some of the teachers in their study also said that they would like to conduct research for the purpose of their own professional development in the future (Conway et al., 2014; Jaipal, Figg, 2011; West, 2011). As more music teachers began to engage in action research, Cain (2010) claimed that teachers could generate new knowledge, contributing to the field of music education.

Alongside the growing popularity of action and teacher research, two other emerging varieties of action research models were also adopted as a tool for teachers' education and professional development: the Japanese model of "Lesson Study", and "Learning Study", a Hong Kong version of the Lesson Study model. The Learning Study model, in short, is action research that takes place in classrooms, and which also incorporates a pre-test and post-test in order to obtain data on pupils' previous learning and to evaluate how they learn after the research lesson. This model emphasizes the importance of a thorough understanding of the "object of learning", i.e., the learning contents in the planning stage; and it adopts the "variation theory" as a guiding pedagogical principle for teaching during the teaching process (Lo & Pang, 2005). These two types of classroom-based action research have also become widespread, having a positive influence on both pre-service teachers' education (Cajkler & Wood, 2015; Davies & Dunnill, 2008; Cheng, 2014; Ko, 2012), and in-

service teachers' professional development (Akita & Sakamoto, 2015; Cheung & Wong, 2014; Dudley, 2015; Hendayana, 2015; Gutierrez, Wood, Norton & Pedder, 2014; Pang, 2006; Wood & Sithamparam, 2015).

Crawford-Garrett et al. (2015) maintain that action research is valuable in helping pre-service teachers to "translate practice into theory or in fostering a deeper sense of teacher efficacy" (p. 481); thus, the aim of the present study was to investigate what a class of pre-service music teachers could learn from conducting a piece of action research in primary school music lessons in Hong Kong. It was thought that by learning through their lived experience, the action research would provide the pre-service teachers a space to develop their teaching ideas and "test nascent theories about teaching and learning" (p.493). Special attention would be paid to whether the research project could be an effective learning tool to help them reflect on their teaching strategies, to the specific insights they might gain from the research and to the practical implications it might have for their future work. In this paper I first briefly discuss the recent music teaching and learning context in Hong Kong; this is followed by an introduction to the research and a discussion of the students' learning process in doing this piece of action research. The paper concludes by answering the question: What can pre-service music teachers learn from conducting a piece of action research in music lessons in Hong Kong?

Paradigm shift in music teaching and learning in Hong Kong

The philosophy of music education in Hong Kong has gone through a series of paradigm shifts over the past few decades. In the past, the principal focus of music learning was on the acquisition of musical skills and knowledge. With the implementation of our new curriculum for primary 1 to secondary 3 in 2003, the emphasis in learning and teaching changed from "teaching students to read music" to "teaching students to

understand music”, and “learning about music” to “learning to make music” (Leung, 2003). These changes are reflected in the four learning targets set out in the music curriculum, which are as follows:

1. Developing creativity and imagination
2. Developing music skills and processes
3. Cultivating critical responses in music
4. Understanding music in context (Curriculum Development Council, 2003).

Therefore, musical skills, knowledge and concepts are now just part of the learning process, while the other aspects of the experience of learning music – creating, critical response in music and understanding music in context – have been brought to the foreground. As there has been a shift from the emphasis on teaching pupils about music to engaging pupils in learning music through musical activities, three designated learning activities are postulated: creating, listening and performing. The Music Curriculum Guide states that these three musical activities “should be conducted in a balanced and interconnected manner so as to develop students’ aesthetic sensitivity and music abilities” (Curriculum Development Council, 2003, p. 40).

This action research also paid attention to fulfilling the requirements of the good practice in music learning of “teaching students to understand music”, rather than solely teaching students to read music and acquire musical skills and knowledge, as well as engaging pupils to learn music through musical activities. However, it would be a challenging task for the pre-service teachers to organize group activities and to facilitate group discussions among pupils, since these activities require much more input than their usual “sit still and listen” teaching mode.

Action research

McAteer (2014) maintained that whilst teachers may be eager to improve their practice by taking

a professional development course, hoping that they will be taught new and better ways of teaching, they do not expect to be told “to reflect on their own situation” (p. 26). Rather than being told how to improve their teaching, the aim of action research is to develop teachers’ critical reflections on their own teaching (McAteer, 2014; Mertler, 2014; Pelton, 2010; Tsafos, 2014). In light of the reflective nature of action research, it became a principal objective of the present research to foster the pre-service teachers’ habit of self-reflective practice.

Second, the “practical inquiry” nature of action research was first stipulated by Lewin (1946), who postulated that social research should prioritize “doing the practical job” (p. 35). As action research is down to earth and closely relevant to teachers’ practice, the data can provide evidence to inform their teaching effectiveness. It thus continues to flourish in the education field as a popular way for both teachers and supervisors to understand their practices in more depth (Glanz, 2014). Since classroom-based action research is designed to address “the most basic question of teaching and learning” (Pelton, 2010, p. 1), it was thus deemed to be an appropriate method for the green and inexperienced pre-service teachers in the present study to polish their teaching skills and reflect on basic questions such as “how do we teach?” and “how do the pupils learn?”

Further, the general characteristics of action research include “a cyclical process of planning, acting, developing, and reflecting” (Mertler, 2014, p. 21). In this cycle of research lessons, collaboration with other teachers can be “a powerful and productive experience for action researchers” (Pelton, 2010, p. 9). The teacher-researchers in the present study collaborated in groups to plan, implement and reflect upon their research lessons so they could share ideas and consult each other.

In summary, although numerous models of action research have evolved over the past 60 years, several characteristics are common to the

practice of all teachers' action research. Action research in educational settings involves teachers as researchers engaging in practical enquiry in their own classroom setting; they plan the research lessons with other teachers in order to improve their own practices after cycles of teaching and reflection on their practices. The action research helps teachers to bridge the gap between theory and practice and provides them with practical data on their own teaching. These characteristics provide a guiding principle for the design of the action research to be carried out by the students, and this is discussed in the following paragraphs.

The present research

The main aim of this study was to acquire in-depth and rich information on the learning process of a class of year 2 undergraduate pre-service music teachers when they were conducting a piece of action research in teaching primary 5 pupils. Besides descriptions of their action research process as the main data for discussion, other qualitative data would also be collected, such as in-class observations of the research lessons which were videotaped for repeated observations and analysis, post-lesson conferences with the pre-service music teachers, as well as their final report presentations and individual reflections.

The class had a total of 33 pre-service teachers, who were organized into 5 groups of 6-7 members each. The course tutor was also the researcher of the present study. The action research involved two cycles of teaching in two schools. Also, the use of pre-test and post-test questionnaire to be completed by the pupils was adopted as a part of the research process. The pre-test would help the pre-service teachers to obtain a concrete and accurate picture of what the pupils already knew about the topic. A post-test was administered immediately after the lesson in order to evaluate the lesson. The research lessons described here thus followed the essential components of action research as mentioned above, with the addition of

the pre-test and post-test component constituting one cycle of teaching.

The first teaching cycle was done by one group (group D) in one school only, since there were not enough primary 5 classes for both cycle of teaching. After the first teaching cycle, which was done by one group only, all the pre-service teachers on the course watched the video and discussed it together in order to refine their lesson design as well as their teaching strategies, preparing for the second round of teaching. In the second round, all five groups were involved in teaching at a local school, with one group to one class. Therefore, the discussion in this paper focuses on this second cycle.

The research lesson topic, unlike conventional action research and teacher research, in which it is chosen by the teacher or a team in collaboration, was chosen by the researcher. The topic for the primary 5 pupils was about the inter-relationship among musical elements, mood and scene. The learning required the pupils first to identify the various musical elements, mood and scene through listening, and then to apply the knowledge they had acquired by participating in a group music-making activity as a way to show their understanding of the inter-relationship among these three aspects.

The inter-relationship among musical elements, mood and scene:

- Musical elements: dynamics, tempo, articulation, range of pitches and instruments
- Mood: happy, sad, excited, etc
- Scene: in a theme park; an old man reading a book; in a garden.

A pre-test questionnaire was designed by the whole class in collaboration (see Appendix). This questionnaire was sent to two local schools for the two cycles of teaching. When the pre-service teachers received the pre-test, they analysed the results to find out whether the pupils already had some background knowledge of the topic, such as an understanding of musical elements,

and the ability to relate musical elements, mood and scene together, which gave them a better understanding of the pupils' needs and their common mistakes.

The pre-test questionnaire had three main parts:

1. Scene and mood: which picture matches the music?
2. Can you identify the musical elements?
 - Tempo and articulation
 - Range of pitches
 - Instruments (family)
3. Can you describe the mood of this piece of music?

The last question required the application of knowledge. After listening to a short excerpt of music, the pupils were asked whether this music would be suitable for a scene in a library and to give reasons for their answers. A post-test with the same set of questions was carried out immediately after each lesson in order to evaluate the lesson. Therefore, a comparison between the data obtained from the pre- and post-tests would reveal how effective the lesson was in helping the pupils to learn.

Planning stage

Awareness of the gaps in pupils' learning

The results of the pre-test of the primary 5 pupils from this second cycle of teaching generally indicated that they were NOT able to:

1. distinguish between slow, moderato and fast tempos
2. distinguish between the families of instruments
3. use appropriate adjectives to describe the mood of a piece of music
4. explain the relationship between the mood of a piece of music and its musical elements.

The above findings 2, 3, 4 had been expected

by the pre-service teachers. However, the pupils' pre-test results in identifying the tempo were quite unexpected. They expected that nearly all of the pupils would get this question right, because "fast" and "slow" are easy concepts which even a kindergarten pupil can grasp. Further, although the questions asked about both articulation/dynamics and tempo, from a careful analysis of the data, the pre-service teachers concluded that the pupils were more confused about tempo than about articulation and dynamics.

Informed by the questionnaire data, the teachers of all five groups realized that they needed to pay special attention to the teaching of tempo during the research lesson. After reflecting deeply, they came to the conclusion that "tempo" was a rather abstract concept. Whilst one pupil might feel that the tempo was fast, to another it may seem moderato. The pre-service teachers then thought that it would be better if the pupils could experience tempo by doing something, rather than just by sitting still and listening to the explanation of the teacher. Therefore, each group designed activities which involved the pupils in experiencing tempo, such as moving and stepping in time to the music.

Structuring their teaching

All five groups designed their lessons to include activities that involved the practical application of what the pupils had learned. To name a few, some groups chose different versions of the same piece of music, that is, with different instruments playing the same melody. Thus the melody itself was invariant. With different versions but keeping the same melody, the pupils could discern the ways in which changes took place in the musical elements, and how various musical elements could produce different moods using the same melody. Hence the pupils could focus on the critical aspects of the musical elements. For example, one group chose different versions of Pachelbel Canon: for example, played by strings, or played on woodwind instruments, in

order to guide the pupils to identify the different instruments, the musical elements and how they created a different mood for the music.

Another learning activity, for example, required the pupils to choose a scene which the music could best describe, and explain why by considering the musical elements of the music. The aim of this task was to help establish the inter-relationship among musical elements, mood and scene. Similarly, a group activity was designed in which each group was provided with a "scene", either in the form of words or pictures printed on a cue card. Then they were asked to choose the kinds of musical elements that were appropriate for creating the mood which matched the scene. This activity allowed the pupils to apply what they had learned in a new situation. For instance, a group used the song "Little Bee", which Hong Kong children know well, for this pupils' group activity. Each pupil's group was given a cue card with a particular mood: e.g., a sad mood, written on it, and the group then discussed together how to change the musical elements of this "Little Bee" in order to create the assigned mood. For example, they would sing more slowly in a lower voice with a very legato articulation to express a sad mood.

The learning process

On the pupils: How they learned

This section discusses how the pupils learned with reference to the research data. First of all, I intentionally removed the data of group D for the comparison as they were the only group which took part in the first cycle of teaching. As this group had two rounds of planning and teaching experience, a direct comparison of their data with those of the other groups would be misleading. Among the remaining four groups, the post-test data indicated that the number of pupils getting correct answers in this part of the questionnaire had increased in three of the groups (the exception was group B, which will be discussed in the following section). The percentages of correct answers had increased by 26.1 %, 12 %, and

11.8% in groups A, C and E respectively.

With regard to the open-ended questions, which the pupils were required to answer in words, below are two examples from the pre- and post-test questionnaires showing how the pupils improved in answering the last question concerning the application of knowledge. The question was: Does this piece of music create the mood of reading in a library? Please describe the musical elements of the piece to explain your answer. One pupil wrote in her pre-test, "No. Because the music is very thick, the rhythm is too quick, not appropriate to describe the mood of a library. I think the use of a light-hearted piece would be better". In the post-test, she wrote, "No. Because this piece of music is fast and staccato. And to describe the mood of the library, it should be quiet, with piano dynamics and legato". Another pupil first answered, "No, the rhythm is fast and strong. Makes people feel happy", while the post-test answer was, "No. This piece of music is fast and staccato, very lively. But in a library it should be very quiet". Both pupils thus showed that they could use appropriate musical terms: staccato, legato and piano dynamics, to describe the music. The data presented above also gave the pre-service teachers a clearer idea of the effectiveness of their teaching.

On the teachers: How they taught

Unexpectedly, the data obtained for group B indicated that the number of pupils getting the correct answer in the post-test had decreased after the teaching. The number of pupils getting correct answers for all three questions related to tempo decreased from 76.5% to 66.7%; 52.9% to 27.8%; and from 64.7% to 50% for musical excerpts 1, 2 and 3 respectively. Therefore, in the post-test only about a quarter of the students (27.8%) gave the correct answer for music 2 and only half of them (50%) gave the correct answer for music 3. It came as a shock to the pre-service teachers that some of the pupils were still unable to identify the tempo correctly, although they

had devised a thorough plan for this part. This became a point of interest for the pre-service teachers to investigate. Actually when they did their teaching, I was in their classroom. It seemed that the pre-service teachers set an inappropriate tempo for their activities. Also, they just let the students go through the activities without doing any consolidation work between the presentation of one tempo and another. They also did not give any feedback to the students while they were walking in time to the music: for example, telling them whether they were following the music at the right pace or not. Therefore, the pupils just “played” three activities by walking to the music. From the video, they could see that the pupils were moving but not learning. After having a group discussion with all the members of that group, they finally realized that this represented a gap between the teaching and the learning. In their presentation, this group reflected on the activity they had given the pupils:

The questions included both tempo and articulation, and although the pupils were able to produce the right answers for articulation it was obvious that they were having problems choosing the right answer for tempo. It could be seen that the pupils were still not clear about the concepts of Allegro, Moderato and Adagio. From the video, we realized that in the activity we had given the pupils for learning about tempo, the tempo of the music was different from the tempo of the musical excerpt they were given to listen to for the pre-test questionnaire [that is, the moderato tempo they set for the activities was different from the moderato tempo of the musical excerpt in the questionnaire]. Therefore, these activities created confusion among the pupils.

In this sense, a more careful selection of learning materials, and a better teaching strategy and skills were still needed in order for the pre-service teachers to carry out their planned lessons successfully. Below are the reflections of two group members:

...we then concluded that there was a discrepancy between what we taught about tempo in the lesson and the music in the test (KYF)

In distinguishing the tempo...We evaluated this afterwards, and we think that students get confused between tempo and rhythm. Even when the tempo remains the same, the students are affected by changes in rhythm patterns etc.: for example, by ornaments and 16th notes... (YWW).

The teachers thought they were teaching a simple concept, and yet it turned out that they had a great deal of misunderstanding of their pupils' difficulties in learning about the topic. In fact, the other groups also found this point of difficulty among their pupils. Additional suggestions made by these teachers for improving the teaching of tempo are presented below:

The most effective way for pupils to master different tempi is to let them have hands-on experience of the fast and slow tempo through direct involvement in making music. (KMY)

Methods to figure out musical instruments and tempo include playing live music in class, following tempo by stepping, and using metaphors related to everyday life. (LYL)

Using movement so that students can feel the tempo is a good choice, because in musical terms tempo is a relative concept. It is difficult to give a definition. (KYK)

After the teaching cycles, the pre-service teachers had started to consider how the pupils learned and to become aware of their thinking processes. They also paid attention to points of difficulty the pupils encountered in understanding a topic, which helped them identify the learning problems of their pupils. Deep reflections were provided then:

The student-centred approach can help to solve the learning difficulties of students...put more focus on learning contents... We always think that

we just need 'to teach' and students will learn and understand. We can then only know whether they understand or not from the assessment at the end! Therefore, as a teacher, I will remind myself to start from the students' points of view. Let's not assume whether students already know something or not. (LYL)

We started analysing the thinking processes of the students...The pre-test helped me to understand the students' mode of thought and the discrepancy between teaching and learning. (PCC)

We can focus on the weak spots of students when designing a lesson plan, and we can avoid repeating teaching knowledge the pupils already have. (KYC)

They were able to understand the teaching subjects more deeply through the teaching process. They also became aware of the importance of using a student-centred approach and of putting themselves in the pupils' position in the future. Lastly they acknowledged the usefulness of the pre-test in giving them an understanding of the pupils' ability before teaching the lesson. Nonetheless, they said that they should pay more attention to the design of this pre-test questionnaire and they started to see the pitfalls of their design.

Discussion and Implications

The aim of this study was to investigate what the pre-service music teachers could learn from conducting a piece of action research. As Odam reminds us, "active involvement always produces a deeper understanding" (p. 24). This good practice in music learning is evident, in that there was a shift from teaching pupils about music to engaging pupils in musical activities, as described above. With the careful and thoughtful planning of their research lesson, the pre-service teachers could learn how to design various musical activities aimed at helping the pupils to understand music, rather than offering a

label orally or giving a detailed explanation of a musical idea, which is what most of the music teachers did in the past.

Further, the study shows that all the groups were able to design activities that fulfilled the learning targets of "Developing music skills and processes", "Cultivating critical responses in music", and "Understanding music in context". However, they were not able to help the pupils to do creative work. It seems that the vision of moving from "learning about music" to "learning to make music" still has some way to go. In addition to the constraint of having only around 30 minutes lesson time for the pre-service teachers to carry out teaching and various other activities, the results suggest that creative activities may not have been within the pupils' or even the pre-service teachers' comfort zone. "Low motivation" of pupils was identified by Hong Kong music teachers as a problem, and this became the reason for the low percentage of teaching time devoted to carrying out creative activities (Leung, 2008). Leung also mentions that, "many music teachers remain unsure about how to motivate their students to compose" (p. 47).

With regard to the special insights the pre-service teachers could gain from this research project and its practical implications, it offered empirical data for those who took part in the study to reflect on their teaching. From the systematic method of designing the pre-test paper and implementing the research lesson, and then assessing the pupils' learning from the post-test results, the pre-service teachers learned about the importance of carrying out evidence-based research lessons that produce both quantitative and qualitative data. Meanwhile, the effectiveness of the pre-service teachers' teaching strategy was reflected in this study. The lack of a suitable teaching strategy and sufficient skill to carry out the activity in one of the groups meant that the lesson became somewhat chaotic. Further, the pre-service teachers clearly understood that they needed to treat the learning content seriously, as

discussed above. This led them to reflect that for a lesson to be successful, it is important to consider more aspects than just the ways in which teachers structure the content of the lesson. The acquisition of this ability to reflect more deeply echoes Lo and Pong's (2005) view that "teaching should be a conscious structuring act" (p. 21). Although there were limitations in carrying out this action research, such as being unable to find enough classes to take part in the first cycle of teaching, it still shows that this type of research project can be an effective learning tool in helping pre-service teachers to reflect on their teaching.

With regard to the teaching gap found by the research, not only were some of the problems related to the pre-service teachers' teaching strategies uncovered, but also some issues concerned with the nature of music learning itself were revealed. We know that some musical properties, such as fast and slow tempos, high and low melodic contours, and dense, thick or sparse musical textures, do not have fixed or absolute dividing lines between them. Although the pupils in this study had previously engaged in musical activities to "learn" how to distinguish between fast and slow tempos, they had not been required to listen to a musical piece in its entirety or to make a comparison between two pieces. Therefore, when the pupils were attempting to answer the listening items in the post-test, problems arose, as each listening item was just an excerpt from a piece of music, and it was difficult for them to discern the speed within a short musical excerpt as they did not have a point of reference.

Learning is a journey which takes time. Wiggins (2001) emphasized the importance of letting pupils "first experience and understand a concept before being expected to identify it with an appropriate label" (p. 27); we may thus have been too hasty in trying to help the pupils to associate the sound with the concept by simplifying the musical experience into fixed responses to be written down on a worksheet, which seems to be a common practice in music teaching. Wiggins also

explains that, "the actual structural characteristics (or elements, such as melody, harmony, rhythm etc.) are properties of the music itself, while it is in our conception of what we hear that our understanding of music resides" (p. 26). Therefore, as teachers we may need to remind ourselves to be patient, and allow our pupils to immerse themselves in the music by engaging in the activities of performing, listening and creating in order to construct the musical concepts on their own. This will enable them to connect the conceptual understanding that they already possessed to the new learning, something which may not happen if we simply ask the pupils to 'classify' the musical elements according to our principles.

Last but not least, the decrease in the pupils' scores in the post-test after the lesson might be owing to the fact that the concept of whether a piece of music is fast or slow was already part of the pupils' tacit knowledge. As Polanyi (1967, cited in Swanwick, 1988) explained, "we know more than we can tell" (p. 131). This may encourage music educators to rethink the practices of teaching musical concepts. As Swanwick (1988) points out, we may be guiding our pupils to pick up on only fragments of the overall experience – we have "lost the sense of the whole in making explicit what was once tacitly apprehended" (p. 147). In short, we might be working so hard that our pupils are being over-taught. We might even be confusing our pupils! It is time for us to recall, first and foremost, the importance of enjoying the "musical whole" when learning music.

A coda

This research project has indeed made a lasting impact on the pre-service teachers in their journey of music teacher education. The process of carrying out the research resulted in a great deal of reflection and self-awareness on the part of both the researcher and the pre-service teachers. Not surprisingly, the pre-service teachers gave positive feedback, saying that these

research lessons had helped them to focus more on the ways in which their pupils learned. More importantly, having had this hands-on and lived experience of conducting research lessons, the “spirit” of using action research in the classroom with the aim of improving teaching and learning flourished. Ultimately “action research” became a popular research methodology during their final-year research projects in various topics related to teaching and learning. It is not surprising that West (2011) suggested that we need to “instill in our undergraduate students a researcher’s habits of mind” (p. 94). With this fruitful and thoughtful experience of using action research to enhance their music teaching, this learning experience will ring and vibrate like a piece of music in their minds. As Cain (2012) concludes, “action research by music teachers is challenging but not impossible” (p. 423). Being a teacher requires a lifelong reflective practice, as well as a drive to pursue professional excellence and advancement in one’s career.

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Appendix

Pre and Post-test questionnaire

Appendix

Name : _____ () Class : _____ Date : _____

- 1) Listen carefully to the following three excerpts of music, then choose or write down your answers in the spaces provided:

Figure 1 Stormy Night	Figure 2 Burglary	Figure 3 An old man sitting alone
Music excerpt 1		
Which scene matches the music? <input type="checkbox"/> Figure 1 Stormy Night <input type="checkbox"/> Figure 2 Burglary <input type="checkbox"/> Figure 3 An old man sitting alone	Tempo & articulation <input type="checkbox"/> Allegro & legato <input type="checkbox"/> Moderato & staccato <input type="checkbox"/> Adagio & legato Range of pitches <input type="checkbox"/> High <input type="checkbox"/> Low Instruments <input type="checkbox"/> String <input type="checkbox"/> Woodwind <input type="checkbox"/> Keyboard <input type="checkbox"/> Vocal <input type="checkbox"/> Percussion	Please describe the mood of the music (You can refer to table 1): _____ _____ _____

Music excerpt 2		
Which scene matches the music? <input type="checkbox"/> Figure 1 Stormy Night <input type="checkbox"/> Figure 2 Burglary <input type="checkbox"/> Figure 3 An old man sitting alone	Which group of instruments/voice below can be clearly heard in the music excerpt? <input type="checkbox"/> Vocal & keyboard <input type="checkbox"/> Vocal & percussion <input type="checkbox"/> Woodwind & percussion Tempo & dynamic <input type="checkbox"/> Fast & forte <input type="checkbox"/> Fast & piano <input type="checkbox"/> Slow & forte <input type="checkbox"/> Slow & piano	Please describe the mood of the music (You can refer to table 1): _____ _____ _____

Music excerpt 3		
<p>Which scene matches the music?</p> <p><input type="checkbox"/> Figure 1 Stormy Night</p> <p><input type="checkbox"/> Figure 2 Burglary</p> <p><input type="checkbox"/> Figure 3 An old man sitting alone</p>	<p>Which instrument plays the <u>theme</u>?</p> <p><input type="checkbox"/> String</p> <p><input type="checkbox"/> Woodwind</p> <p><input type="checkbox"/> Keyboard</p> <p><input type="checkbox"/> Vocal</p> <p><input type="checkbox"/> Percussion</p> <p>Tempo & articulation</p> <p><input type="checkbox"/> Fast & legato</p> <p><input type="checkbox"/> Fast & staccato</p> <p><input type="checkbox"/> Slow & legato</p> <p><input type="checkbox"/> Slow & staccato</p>	<p>Please describe the mood of the music (You can refer to table 1):</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

1. Listen to the music excerpt, then answer the following questions: Please describe the mood of the music briefly (you can refer to table 1)

2. What scene do you associate with this music excerpt? (e.g., running in the playground, picnicking in the suburbs)

3. Does this piece of music create the mood of reading in a library? Please use **musical elements** to explain your answer.

【Table 1: Glossary for describing musical mood】

The words and expressions are provided for reference only. You can **decide** whether you use them or use them repeatedly. (You can use the alphabet indicated).

- | | | | |
|---------------------|--------------------------|--------------------------|----------------------|
| (A) Sad | (B) Quiet/Calm/ Peaceful | (C) Horrible | (D) Lonely |
| (E) Sneaky | (F) Lively/Exciting | (G)Happy/Cheerful/Joyous | (H) Solitude |
| (I) Nervous/Anxious | (J) Angry | (K) Relaxed/Leisurely | (L) Dreary/ Desolate |