

## **Double Bass Workbook for Children Focusing on Critical Thinking**

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### **Abstract**

This study aimed to create the double bass workbook that focuses on critical thinking and the efficiency of learning. The research tools were: 1) The double bass workbook for children (7-9 years old), and 2) an assessment and interview form, to analyze the data was percentage. The research used that to teach those six students and gathering data by observation during the academic year 2018-2019. The findings were: The organizing music activities will make children's music lessons interesting in communication, cooperation, and critical thinking through listening, singing, game playing, recording, filling notes (adding a melody), accompanying practice to practice double bass. The teacher's assessment with the workbook was at 93% that means the teacher was highly effective in using the double bass workbook. The children passed the exam, the average score was 33 from 35. In the future, this workbook both practicability and operability.

**Keywords:** Double Bass, Workbook, Critical Thinking

### **INTRODUCTION**

The double bass has been introduced to China for nearly a hundred years. In the early days, due to the very small number of players, teachers, music books, and musical instruments, the progression of double bass performance and teaching was going slow and even stagnant for a long time. After the founding of the People's Republic of China, with the development of China's cultural and educational undertaking, people have a more certain understanding of performing and teaching the double bass. Knowledge of double bass music gradually established and have an appropriate position; the playing and teaching have been better developed as well. (Chen zipping, 2010) Due to the development of quality education, China has successively issued several policies and guidance on the teaching of instrumental music in primary and secondary schools, therefore enabled rapid development of instrumental education in primary and secondary schools.

Yu Yao (2017) students could learn all kinds of musical instruments other than piano and violins popular musical instruments, such as oboe, bassoon, horn, and double bass have been gradually recognized by the public. Childhood was the golden period to start music learning, which the full promotion of quality education nowadays, as a highly creative art, music, especially instrumental performance, plays an important role in developing students' interest in learning music as well as their expressiveness and creativity. The multiple senses and feelings of children shall be stimulated to participate in the creation and appreciation through the

performance and playing of music with musical instruments so that they can be truly exposed to music. Not only enriching children's extracurricular activities, raising their attention, learning instruments can also inspire their imagination and creativity, thereby crucial to the development of the children (Liu Xi, 2015).

In the 21st century classroom, the development of student's critical thinking skills becomes an essential educational goal. Scriven (1985) stated that "training in critical thinking skills should be the primary task of education". Developing students' critical thinking skills can help them in reasoning, formulating questions, and effectively solving problems. In the music context, the processes of comparing, evaluating, judging, and classifying for listening, composition, and creative music projects provide students opportunities to apply critical thinking skills. The research in music education shows that, in general, teachers can enrich students' musical experiences by the implementation of critical thinking (Wiggins, 2015). Kokkidou (2013) and Elliott (1995) concluded that critical thinking strategies should be employed in various fields of music activities, including creativity, performance, and appreciation and listening; students can reflect their critical responses by using appropriate presentation media in different musical fields. Besides, learning and understanding music could develop students' problem-solving skills through the process of different music activities. Teachers should learn how to facilitate students' thinking more critically. The music teacher should be familiar with the strategies that know how music can contribute to the quality of life, integrate life's experiences, and help facilitate students' enjoyment of the process of critical thinking response (Elliott, 1995)

Musical literacy-Students: learn to classify the terms that refer to musical concepts; become familiar with various realizations of the same musical phenomenon; collect information about a period in music history and identify its principal tendencies; relate abstract concepts to the use of specific techniques; cross-link the items of data that they have on an issue and give an opinion on their precision or correctness; deal with school course-books as just one source that may be enriched or checked for accuracy; go more deeply into questions of the functional role and influence of music in human life; apply new knowledge in daily life.

The teaching of double bass and scientific research was relatively late compared to other stringed instruments such as violin and cello that the number of double bass scores books or textbooks published in China so far still small. Many double bass teachers often worry about choosing textbooks in teaching and playing practice (Yin Fuyuan, 2017). Although the grading test materials are currently selected by most double bass teachers, their content not enough in the actual teaching of children, while the teaching materials of professional institutes were not matching the abilities and time of children (Zhao Yue, 2013). Music education in the 21st

century should change the learning mode of music knowledge and skills and put the knowledge and skills in vivid and specific music practice activities (Yi qi, 2005). On September 13, 2016, after three years of research, the press conference of Chinese student development core accomplishment was held in Beijing normal university, releasing the six major core accomplishments of Chinese students, therefore, were another factor in the development of the double bass workbook development framework (see Figure 1).

Six Core Qualities of Chinese Students	
Cultural Foundation	<i>1.Human tic connotations</i>
	<i>2.Scientific spirit</i>
Independent Development	<i>3.Learning to learn</i>
	<i>4.Healthy life</i>
Social participation	<i>5.Responsibility</i>
	<i>6.Practice and Innovation</i>

Figure 1. Six Core Qualities of Chinese Students (Lin Lu, 2016)

Among them, the consciousness of solving problems and the ability to criticize and questioning. Learn to think and judge independently, have imagination and curiosity, boldly seek a variety of ways to solve problems, learn to learn independently (Lin Lu, 2016). Critical thinking is regarded as a higher-order thinking skill, which important in developing a comprehensive competency in modern times. In the process of music education emphasizing the cultivation of critical thinking of the students helps them to master the thinking method of active study to promote the development of students' abilities of analysis, strategy, wholeness, and independence and improve the innovative thinking ability of the students (Liang Li-hong, 2008). Elliott (1995) states the importance of students' critical response to music; students should respond critically to all aspects of integrated music activities, including listening, performance, and creative activities. Music activities offered students opportunities for active participation, experience, and the value of promoting critical thinking in music was translated into action and practice, and not only theoretical (Kokkidou, 2013). Custodero (2002) view, music activities should offer students opportunities for active participation; when carrying out a lesson, students' suggestions and interests should be considered. Open approaches to education promote critical thinking and are linked to students' decisions in favor of life-long engagement with music. Therefore, the researcher must be aware of such ideas to develop the content of the research tool.

Instrument training needs to start at a young age. Children (7 to 9 years old) have a very small number of learners, and bachelor instruments have to be reduced in size with double bass-

mini to fit the learner's body size. The researchers, therefore, sought advice-interviewed double bass academics, focus group teachers, and artists during January 2018. To find problems with teaching double bass. A result of the focus group, the researcher concluded the issues as follows: 1) Lack of double bass workbook for children to practice; 2) Focusing on critical thinking. From the perspective of the process of learning musical instruments, the workbook often affects children's interest and progress in learning instruments. Before starting the process, the researcher had a conversation with parents of students, to request permission to try the double bass workbook for children at the beginning stage and for the parents to observe - join the practice. In the process of teaching, the workbook plays an important role.

Teachers are the most important part of teaching, involving mainly teaching methods, teaching materials the basis of teaching, the media for students to learn music, that promotes significantly, and meaningful music learning should ideally form the basis for general music instruction. (Campbell & Scott-Kassner, 2006) Therefore, the development of the workbook has become a topic worthy of study. Jin Yule, (2002) mentioned, the researcher is interested in the double bass workbook that focuses on critical thinking and to know the efficiency of learning, the results will be used to improve in the future. Based on the background any two research questions on this study including what should do to create the double bass workbook that focuses on critical thinking and how should experiments and assessments be performed?. This study aimed to create the concept of the double bass workbook that focuses on critical thinking, and to know the efficiency of learning.

## **METHOD**

The research design and development methods to develop the double bass workbook for children (7-9 years old), with single-group experiments, validation, consistency and efficiency of the tool, observations, and interviews with those involved in the trial. The study was conducted under the development concept of Western and Eastern mixed teach music. Including melodies of Chinese and Western music, such as the 21st century teaching skills needed and practical action research.

The target population of this study are students who enrolled in the fundamental double bass course. The samples in this study were 3-4 children of the entire private classroom who enrolled in Chong-Wen-Men children's palace and the experimental school attached to Chinese Science Academy, Beijing, China. Therefore, there were 6 volunteer students and 5 experienced teachers. They were selected by the purposive sampling technique by the researcher with the agreement of double bass teachers. There were also specific interviews with double bass experts, Double bass teachers, and experienced double bass musicians to give comments and suggestions on the double bass workbook.

Designing research and development methods to develop the double bass workbook with single-group experiments. The research process is as follows:

1. Review the related literature and analyze problems by focus group. The researcher reviewed the knowledge, especially the good qualities of "The good double bass workbook". Besides, the concept of research design, development of teaching psychology, and critical thinking.
2. Drafting the double bass workbook. After a consultation, the consultant set the framework with a draft of the double bass workbook to allow the consultant to consider 10 lessons. The adviser discounted to 10 lessons and made additional tools.
3. Having the double bass 3 experts check the draft of the double bass workbook. Then improved by the advice of experts to obtain a good quality workbook before try out. Each lesson has 7 test items which evaluated content validity by 3 experts with the IOC (Index of Item-Objective Congruence) and improve until the research tool has been evaluated in various aspects equal to 1.
4. Try out by using the double bass workbook to train the teacher and have him/her teach 3 children, then getting the result for revising the workbook. The researcher then used the student's whole room for testing equipment and another room for practical use. In this regard, parents' permission was requested and chat with learners before starting the experiment.
5. Using the revision double bass workbook for the first experimenting group consists of 1 teacher and 3 children of Chong-Wen-Men School, gathering results by using observation form and questionnaire, then analyze the data for revising the workbook once again.
6. Using the new revision workbook for the second experimenting group consists of 1 teacher and 3 children of the experimental school attached to Chinese Science Academy, gathering results by using observation form and questionnaire, then analyze the data for final approval of double bass workbook. The researcher brought the results of the assessment to the sub-committee meeting of the expert committee and introduced the recommendations to improve the book.

The researcher focused on the effects of the fundamental double bass workbook. Each semester is held 40 times per 2 hours. So the researcher made a tool covering the full-time content or 10 lessons. The main instruments employed for this study were as follows:

1. The double bass workbook: Consists of two parts: a teacher's lesson plans and exercises for students.
  - 1.1 Lesson plans based on Critical thinking were written by the researcher.
  - 1.2 Researcher and experienced double bass teachers help structure bass workbooks, including 10 lessons. In addition to the exercises in each lesson, there was also a development assessment (scoring criteria) in the final exam. Assessment results for all 7

test items which evaluated content validity by 3 experts with the IOC, greater than 0.8 were deemed acceptable.

2. Assessment form and interview form: The questionnaire was used to measure the efficiency of evaluation of teaching, which was adjusted to 7 items per lesson. The level of assessment was 5 levels. The researcher took the double bass workbook to try out and explain the part of the activity (like fill in notes and compose music) to the double bass teacher in Beijing. In each of these activities, children were required to have a basic concept for each assignment. The researcher observed and collected their reactions and found out which part of the workbook needed revision. There were several positive and negative aspects of the workbooks when presenting the double bass workbook to the students and teacher. This included the order of lessons, the need for more content within the lessons, and the layout of the workbook. Use the calculation by average and percentage to calculate and explain.

## RESULTS AND DISCUSSION

Purpose 1: To create the concept of the double bass workbook that focuses on critical thinking, which consists of 10 lessons and 5 appropriate content: lesson plan, learning activities, learning materials, the colorful design, and evaluation. The important teaching activities are singing/reading notes, adding notes from missing melodies, writing notes, and including other games. the result was:

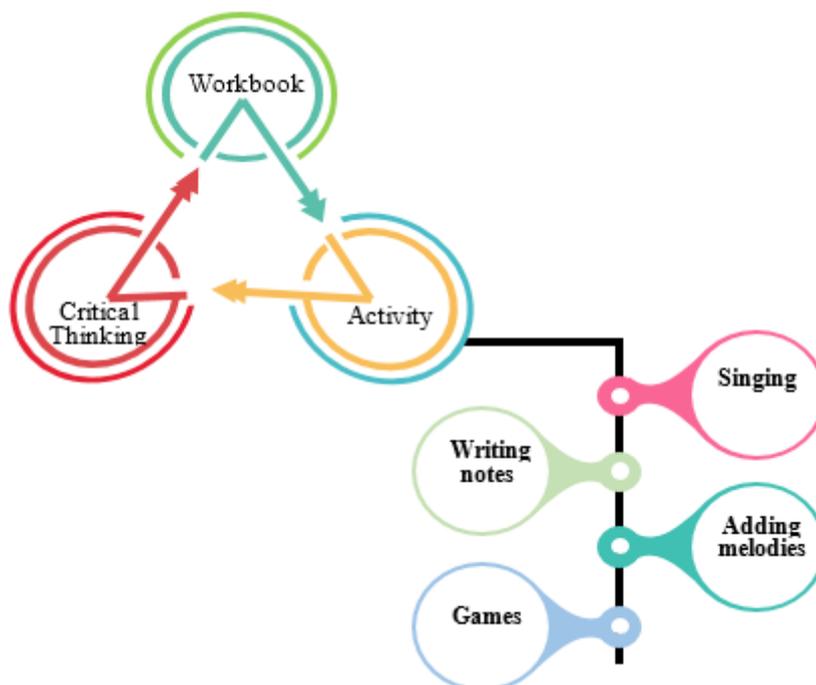


Figure 2. The Concept of the Double Bass Workbook that Focuses on Critical Thinking

Purpose 2: To know the efficiency of learning; the results were:

For experiment 1: Assessment results for all 3 students who participated in the 3rd round of the experiment. The teacher's assessment with the workbook was 90% that means the teacher was highly effective on using the double bass workbook. The students passed the exam, the average score was 32.7. They had a good performance. For experiment 2: The teacher's assessment with the workbook was 93%, which means the teacher was highly effective in using the double bass workbook. The students passed the exam, the average score was 33. They had a good performance.

The report results of the expert committee meeting were as follows:

Activities were integrated into the workbook; thus, the children's independent exploration ability can be developed, their thinking of learning can be inspired and their interest in exploring and learning can be improved. The finely designed activities will decompose the difficulties and then recompose in steps reaching the goal of resolving difficulties in an open manner which the participation of various sense organs, like the brain and hands. It can train children's ability to recognize and remember, improve their learning efficiency and with stepped learning (i.e. step by step and from simple to complicate). There will make children's understanding and mastery of knowledge develop progressively and conform to cognitive rules. The setting of music activities will make children's music learning change from boring learning to interesting exploration as well as improve their communication, cooperation, and critical thinking: lesson plan, learning activities, learning materials, design, and evaluation (see Figure 3)



Figure 3. The Double Bass Workbook Consists of 5 Appropriate Contents

When given a questionnaire regarding the double bass Workbook, several children responded that they enjoyed the illustrations, Chinese songs, and activity. They enjoyed practice with the teacher and made them want to know what to teach in the next class, the cover and the pictures are so love. They love to play the song, easy to remember. The finding partially was

consistent with Custodero (2002) who said that for students, music workbooks provide specific learning materials, and their quality will directly affect the learning effect of music. Providing a variety of repertory and pieces that the learner already familiar with, plus repertory that can be easily assimilated aurally, can also help to motivate in the way, repetition may be an effective practice strategy for beginners who are trying to assimilate a variety of complex skills.

The adoption of more expert practice habits probably therefore unrealistic, given the underdeveloped knowledge base of most beginners, reflected from the findings, knowledge point needs one or two lessons of exercises, each lesson supplemented by a rich repertoire corresponding to the knowledge points, to consolidate the knowledge points, repeated skills training to help children solving the difficulties in bass playing. Music education in the 21st century should change the learning mode of music knowledge and skills and put the knowledge and skills in vivid and specific music practice activities (Yi qi and Shi Lixin, 2005). From this survey interview the teacher said that “When I used another double bass material to teach children, I thought too much and provided too much information to children and they followed my ideas and my lesson became teacher-oriented. But the activities of the workbook offer a positive learning atmosphere that motivated everyone during the double Bass class, which became more interesting. I like to discuss with students and let them express their opinions.” Setting the stage for a cognitive challenge in the classroom environment important, and structuring an event to cause intellectual unrest puts the students on course toward higher-level thinking. A well-developed repertoire of questions to activate the reasoning process can help students reach satisfying conclusions and feel good about significantly using their minds whenever they participate in music (Small, 1987).

According to the interviews, experts point out that activity is integrated into the workbook, thus the children's independent exploration ability can be developed, their thinking of learning can be inspired and their interest in exploring and learning can be improved. The finely designed activities will decompose the difficulties and then recompose in steps, reaching the goal of resolving difficulties more efficiently. From this survey interview, the teacher said that Express their ideas and felt more confident. Researchers thought it was very important for children to present their learning outcomes, and reflect on their work. According to the report taken from the interviews of teachers, children were keen on discussing, and sharing ideas with the teacher through activity. They became more motivated for learning significantly increased; Children thought they could express their ideas and felt more confident. The teacher often asks children, why, how to do this makes children activate their brains and answer questions positively and the students responded best to engaging activities. They loved anything that could be cooperation, thinking and the finding consistent with Kamarulzaman (2015) explore the

perceptions of preservice teachers on the effect of play on critical thinking, and how they perceive the current curriculum in terms of helping children to be critical thinkers.

Daniel Johnson (2011) claims that music teaching that following critical thinking strengthens all the higher functions of thought as well as reviving students' interest. Learning activities provided singing, writing notes, adding melodies, games that improved open-ended questions, discussion, and project assignment, encouraging students to present their ideas in various formats, there are two approaches to teaching critical thinking: "the integrated approach, which relate students' daily and academic experiences, and the interactive approach, which contributions readings, group exercises, and reflective writing assignments". Savage (1998) states that "it is common knowledge that the strategy that can have the greatest impact on student thinking is teacher questioning". It had the teachers' responsibility to plan a music lesson that allows students to use their knowledge on different subjects to create new statements with the Help of well-designed questions. Through teaching strategies, students should be encouraged to understand, discover, analyze, and synthesize issues or challenges (Krathwohl, 2002). According to the report taken from the interviews of teachers, traditional teaching used in the initial stage, some specific imitation exercises are necessary, but with the deepening of the exercises, we need to exercise children's ability to think independently and solve problems I often ask children why, how to do. This makes children activate their brains and answer questions positively.

Findings suggested that those preservice teachers are sentient of the importance of play in cultivating critical thinking skills in children they agreed that children learn through play and they construct knowledge while playing. It beyond doubts that the implementation of critical thinking skills in teaching and learning provides positive effects on students' learning. (Abrami et al., 2008) From this survey interview, the teacher said that the part of the activity (like Fill in notes and compose music with the teacher In the workbook can offer a positive learning atmosphere motivated everyone during the double bass class, which became more interesting and several children responded that they enjoyed practice with a teacher and made them want to know what to teach in the next class and children like to fill in Because they will be able to play with their teachers when they finish the work. They always look forward to their creation. In Custodero's (2002) view, music activities should offer students opportunities for active participation; when carrying out a lesson, students' Suggestions and interests should be considered. Open approaches to education promote critical thinking and are linked to students' Decisions in favor of life-long engagement with music.

Through different integrated music activities during class, the music subject provides a suitable context for developing critical thinking skills (Kokkidou, 2013). According to the

report taken from the interviews, With the participation of various sense organs, like the brain and hands, can train children's ability to recognize and remember, improve their learning efficiency; and with stepped learning (i.e. step by step and from simple to Complicate), it will make children's understanding and mastery of knowledge develop progressively and conform to cognitive rules. Another study done by Salmon (2007) was to find out the critical thinking skills of children when they were drilled with thinking routine activities, a few teachers implemented the thinking routines activities to children so that the children would engage their minds in the thinking ability. According to the report taken from the interviews of teachers like to discuss with students and let them express their opinions. Sometimes when the results are not good, they will lead them to try to amend it by themselves. It was easier for them to examine the students ' level of knowledge.

As Wuhongzhi (2015) stated, Good place to acquire and assess critical thinking skills in traditional classrooms (small class teaching, no selective question type test, requiring students to explain each answer to teachers with critical thinking skills, teachers have during care and time to read, listen and respond every answer and explanation), there was no shortcut. Indeed, the development of basic skills is the key to future skill development. The development of the double bass workbook is therefore the transfer of knowledge, ideas. For 15 years, the bass has been used as a model for the practice of interested Chinese children and may continue to expand to other children because in addition to solving the problem of special

## **CONCLUSION**

The research found that the double bass workbook consists of 10 lessons and 5 appropriate content: lesson plan, learning activities, learning materials, the colorful design, and evaluation. The important teaching activities make children's music learning interesting their communication, cooperation, and critical thinking through listening activities, singing, playing games, writing notes, filling notes (adding melodies), etc. The teacher's assessment with the workbook was at 93% that means the teacher was highly effective on using the double bass workbook. The students passed the exam, the average score was 33 from 35.

## **SUGGESTIONS**

When writing an initiatory workbook, "learning from activity" should be taken as a teaching purpose, i.e. integrating game elements into it, so that the children's independent exhibiting ability can be developed, their thinking of learning can be inspired, and their interest in Exploring and learning can be improved.

More comprehensive research should be carried out to educate people on what critical thinking means to education and the work world. For those who want to replicate or improve upon this study, consideration should be given to using another concept.

In the future, teachers should develop teaching by listening to learners, the needs of learners. Because new generation students have a learning concept, music practice very different, so research needs to focusing based on new learners and modern perceptions.

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