Teaching Method of Music Skill based on Dmitry Sitkovetsky, Wolfram Christ, and Raphael Christ

วิธีการสอนทักษะดนตรีตามแนวทางของ ดมิทรี ซิทโคเวทสกี้, โวลแฟรม คริสต์ และ ราฟาเอล คริสต์

Pattaraporn Plitakul (ภัทรภร ผลิตากุล)**
Pornphan Banternghansa (พรพรรณ บรรเทิงหรรษา)

Abstract

The purpose of this study is to study the teaching method of music skill based on Dmitry Sitkovetsky, Wolfram Christ, and Raphael Christ. The research employed a qualitative case study approach. Data were mainly collected from non-participant observation and informal interview together with video recordings. The results showed that the music skill teaching method of the three artists can be divided into three stages. The first stage, introduction stage, purposes to evaluate students' performance before providing instruction. Proposing the explanation of repertoire is included in this stage. The second stage, instruction stage, involves teaching music skill focusing on techniques and interpretation in advanced level. Demonstration with explanation is applied. Moreover, students are supported to understand their own roles and piano accompaniment. The last stage, conclusion stage, is to summarize the lesson by giving feedback about students' music skill. In this stage, the teachers give opportunities to discuss and exchange ideas.

Keywords: Teaching Method, Music Skill, Dmitry Sitkovetsky, Wolfram Christ, Raphael Christ

^{*} This research article is the requirement for the research fund of the faculty of music, Silpakorn University.
บทความวิจัยนี้เป็นข้อกำหนดของทุนวิจัยจากคณะดุริยางคศาสตร์ มหาวิทยาลัยศิลปากร

^{**} Lecturer at the faculty of music, Silpakorn University. Contact: boplitakul@gmail.com อาจารย์ประจำคณะดุริยางคศาสตร์ มหาวิทยาลัยศิลปากร ติดต่อ: boplitakul@gmail.com

^{****} Lecturer at the faculty of music, Silpakorn University ติดต่อ: ornpornphan@gmail.com อาจารย์ประจำคณะดุริยางคศาสตร์ มหาวิทยาลัยศิลปากร ติดต่อ: ornpornphan@gmail.com

บทคัดย่อ

การวิจัยในครั้งนี้มีวัตถุประสงค์เพื่อศึกษาวิธีการสอนทักษะดนตรีตามแนวทางของดมิทรี ซิทโคเวทสกี้, โวลแฟรม คริสต์ และ ราฟาเอล คริสต์ โดยใช้ระเบียบวิธีวิจัยเชิงคุณภาพ เก็บข้อมูลจากการสังเกตแบบไม่มีส่วน ร่วมและการสัมภาษณ์แบบไม่เป็นทางการเป็นหลักร่วมกับการบันทึกวิดีโอ ผลการวิจัย พบว่าวิธีการสอนของ ศิลปินทั้ง 3 ท่านสามารถแบ่งออกเป็น 3 ขั้นตอนคือ 1) ขั้นนำเป็นขั้นตอนที่ผู้เรียนแสดงทักษะการเล่นเพื่อให้ ผู้สอนประเมินศักยภาพทักษะการแสดงก่อนการเรียนการสอน รวมถึงการอธิบายเนื้อหาของบทเพลงที่เรียน 2) ขั้นสอนเป็นขั้นตอนการสอนทักษะการเล่นโดยเน้นการแก้ไขในด้านเทคนิค การตีความบทเพลงในระดับขั้นสูง ผู้สอนเน้นการสาธิตประกอบการอธิบายและส่งเสริมให้ผู้เรียนเข้าใจบทบาทของตนเองและนักเปียโนที่เล่น ประกอบ และ 3) ขั้นสรุป เป็นขั้นตอนของการสรุปบทเรียนโดยผู้สอนให้ผลสะท้อนกลับแก่ผู้เรียนเกี่ยวกับทักษะ การเล่น รวมทั้งเปิดโอกาสให้ผู้เรียนได้อภิปรายและแลกเปลี่ยนความคิดเห็น

คำสำคัญ: วิธีการสอน, ทักษะดนตรี, ดมิทรี ซิทโคเวทสกี้, โวลแฟรม คริสต์, ราฟาเอล คริสต์

Introduction

Music has co-existed with human for centuries, taking part in daily life and in many significant occasions for instance birth anniversary, amusement events, or marriage ceremony. One who involves in music activities or experiences in studying music is likely to be embedded with creative thinking, concentration, and intelligence development (Lertvicha, 2009: 63; Raucher, Shaw, and Ky, 1995: 44-47). The importance of music has an influence on music education system and parents support their children to participate in formal music lessons.

Teaching method is an essential factor for supporting learners' competency toward expected goals. It refers to processes or stages for improving students' learning. Each teaching method has components and features brought forward to particular objectives (Khemmani, 2011: 477). As in music, the teaching methods and specific techniques in each instrument may vary depending on one's concepts and experiences. All instructors should value teaching methods as practical guidelines to complete teaching principles and missions. Music theory, professional skills, and practicing techniques should be interpolated in performing class. Moreover, the instructors should support learners to be capable of self-evaluation so that learners' competency will be enhanced as expected goals (Suttachitt, 2012: 241).

Studying with expert artists or instructors is crucial; since they have experiences in communication, instructional strategies, and techniques to improve learners' performing skill. In this study, the researchers selected three artists who are outstanding performers in

classical music. Firstly, Dmitry Sitkovetsky, a famous violin artist and conductor in Russia, who experiences in international concerts such as ones with the Philharmonic Orchestra in Berlin, New York, and Los Angeles as a soloist. In 1996, he was appointed to be a conductor and advisor for artists in Ulster Orchestra for 5 years, later on was assigned to be an honor conductor and invited to conduct Russian State Orchestra (Sitkovetsky,n.d.). Secondly, Wolfram Christ was entitled as the best viola player of Berlin Philharmonic Orchestra and one of the most famous conductors in classical music who is invited to conduct many orchestras such as Royal Danish Orchestra Copenhagen, the Mozart Orchestra of Bologna, and the Munich Chamber Orchestra. His performances were often radio broadcasted in Germany (Christ, Wolfram, n.d.). Finally, Raphael Christ, a German violinist who was awarded in the following competitions: Classic Prize Münster, the International Competition of Arles, the competition of the Patronatsgesellschaft Baden-Baden, the competition of the "Deutsche Apothekenkammer". Also in 2005, he won the first prize in the international BDI competition. Besides, Christ was usually invited to perform with orchestras under famous conductors, Daniel Barenboim and Claudio Abbado (Christ, Raphael, n.d.). Therefore, the researchers are very interested in their teaching methods. Additionally, data were collected and summarized as an academic reference in the area of music skill teaching.

Objective

The objective of this research is to study the teaching methods of music skill based on Dmitry Sitkovetsky, Wolfram Christ, and Raphael Christ.

Scopes of the Study

This research recognized the following scopes:

- 1. Three selected artists, Dmitry Sitkovetsky, Wolfram Christ, and Raphael Christ, are located in Europe and they are able to film the master classes in Spain.
 - 2. There are three repertoires used in the lessons.
- 2.1) Dmitry Sitkovetsky, violinist, taught Violin Concerto in E minor, op. 64 composed by Felix Mendelssohn.
- 2.2) Wolfram Christ, violist, taught Märchenbilder composed by Robert Schumann.
- 2.3) Raphael Christ, violinist, taught Violin Concerto in D minor, op. 47 composed by Jean Sibelius.

3. The master class is the main aspect of this research, a class where learners need to perform a repertoire which they have prepared, to the master, an artist or expert on a particular music instrument. Then, the master will give them advice and how to play it in front of the class. (Phanchareon, 2009: 221)

Research Methodology

Research methodology followed qualitative research that can be divided into six steps as follows:

- 1. Studying related documents, theories, research and literature: The study covered teaching methods, three artists' biographies and repertoires for the master classes.
- 2. Specifying the criteria to select: 2.1) artists who experienced in performing with international artists and conductors for at least 15 years, 2.2) artists who are world-famous in classical music, and 2.3) artists who live in Europe and be capable of traveling to Museo Evaristo Valle, Gijón, Spain in February 2015.
- 3. Creating research tools: 3.1) observational form to collect the behaviors of three artists and learners during class which can be classified into three stages: introduction, instruction, and conclusion and 3.2) interview form which questions relate to artists' biographies and teaching background. Before collecting data, the questions were tried out with pilot study to verify the appropriateness when gathering data.
- 4. Collecting data for three days at Museo Evaristo Valle, Gijón, Spain in February 2015: The researchers spent two hours each day to observe the master class and to interview one artist at a time, whereas the researchers had appointed artist and learners to the venue, date and time in advance. Then on the appointed date and time, the researchers had set up audiovisual recording system and had inspected the premise early. Non-participant observation and informal interview are used during data collection.
- 4.1) The researchers conducted Non-participant observation by observing the behaviors of all three artists and learners during classes while video recording were being used for one hour and thirty minutes on each class. Moreover, the researchers took short note in observational form.

- 4.2) The thirty minutes informal interview for each artist started after the observation had finished. Taking notes was also used for the interview.
- 4.3) Video recording were being used both in the master classes and the interviews to collect all teaching context and keep all data from being lost.
- 5. Analyzing data: 5.1) transcribing video recording, observational form, and note taking from three artists' interviews, 5.2) recognizing data into three stages comprising of introduction, instruction, and conclusion, and 5.3) comparing the similarities and differences among three artists' teaching methods followed by summarizing knowledge in the form of description and comparison table.
 - 6. Summarizing, discussing, and presenting in the form of documentary videodisc.

Results

As cited in the scope of the study, the main aspect focuses on master class. Therefore, the learners have to prepare completed repertoires. For this study, three new artists were selected as learners for the master classes. The learners' background information are proposed as below.

Table 1: Three Learners' Background Information

	Learner's Background Information				
Artist	Learner	Educational	Instrument	Repertoire	Performance
		Background			Experience
1. Dmitry	The first	Master Degree	Violin	Mendelssohn'	Soloist
Sitkovetsky	learner	in Music		s Violin	Violinist in
		Performance,		Concerto in E	orchestras
		Zurich High		minor, op. 64	
		School of Music			
2. Wolfram	The second	Master Degree in	Viola	Schumann's	Soloist
Christ	learner	Music		Märchenbilde	Violist in
		Performance,		r	orchestras
		Musikhochschule			
		Freiburg			

3. Raphael	The third	Master Degree	Violin	Sibelius's	Soloist
Christ	learner	in Music		Violin	Violinist in
		Performance,		Concerto in D	orchestras
		Hogeschool		minor, op. 47	
		voor Kunsten			
		van Fontyn en			
		Zuyd			

1. Teaching methods of music skill based on Dmitry Sitkovetsky, Wolfram Christ, and Raphael Christ

Teaching methods from all three artists can be divided into three stages. They are introduction, instruction, and conclusion. The results of this research are proposed as follows:

Dmitry Sitkovetsky (violinist)

Introduction

Felix Mendelssohn's composition, Concerto in E minor, op. 64, was played by the first learner. After Sitkovetsky had listened to the performance, he introduced the repertoire's background. "This concerto was composed before three years of Mendelssohn's death. While he was creating the piece, he was a maestro and a great conductor. Therefore, this piece is one of perfect concertos. Most of concertos begin with tutti but in this concerto, the part of violin solo is created at the beginning of the piece."

Instruction

Demonstration method with explanation was emphasized in this stage. The learner then imitated Sitkovetsky's model. Sitkovetsky also clarified the interpretation and communication of this concerto by describing the overall image of the repertoire and its elements as background information. Besides, he encouraged his learner to listen carefully to the music to appreciate the expression. This supported the learner to perform beautifully. "The second movement's character and the final period of Mozart's composition are alike. It's not an extreme emotional repertoire. Similar to painting, painters always specify the framework of colors."

For evaluation, Sitkovetsky supported the learner to listen and evaluate her own performance. Importantly, he gave an importance on the structure of harmony because

this element creates and shapes the melodic lines.

Conclusion

For the conclusion stage, Sitkovetsky gave the learner an opportunity to exchange ideas of the piece. He also reminded the learner to realize the harmony and the roles of orchestra that accompanies this concerto.

Wolfram Christ (violist)

Introduction

The second learner performed Märchenbilder composed by Robert Schumann at the beginning of the lesson. Christ motivated the learner with the repertoire's story and images. "Pictures of a Fairy tale influences from a poem from a German poet. The poet sent Schumann this poem and the name is Märchenbilder in 1850. It's very romantic and emotional. It has to do with love fairy tale, youth and old age. The whole mood of this poem is extremely emotional very sensitive and over romantic. It's a difficulty in finding the right tone and the right sound and atmosphere. You need to take a little more time before you start. Setting up the atmosphere before you start."

Instruction

He emphasized all details even the concentration before playing the first note. He described the principle and perspective of Schumann including related information of the era when the repertoire was composed. Moreover, he educated the learner about articulations in terms of reasons and thoughts of the composer to improve the learner's performance. Importantly, he focused on the roles of violist and piano accompanist so his learner could realize the piano accompanist's part and soloist's part. During his teaching, he demonstrated his performance along with his explanation as well. "After the introduction, when the piano has the melody, it's like the new chapter begins. It's a dialogue between the viola and the piano. The viola has to continue what the piano has just played."

Conclusion

Wolfram Christ gave feedback to his learner about vibrato technique. He reminded that the vibrato needs to be decided more consciously and should connect from finger to finger. Moreover, He emphasized the roles of soloist and piano accompanist.

Raphael Christ (violinist)

Introduction

For the first stage, the third learner played Violin Concerto in D minor, op. 47 composed by Jean Sibelius. Furthermore, Raphael Christ let the learner present the ideas on this concerto.

Instruction

Raphael Christ often applied the demonstration method with his learner. He paid attention in all details of the repertoire since the first note, tempo, melodies, harmonies, techniques, and interpretation. He compared piano sound with an orchestra to let the learner be familiar with each timbre and harmony. He demonstrated to his learner and expressed opinions or attitudes toward the repertoire before giving advice and correcting errors. He also instructed techniques to take control of the sound production. "Feel the dissonance on the first note. Feel like it's a bit off. Even though it's only marked mf, but you should have a feeling that your sound projects right away. Use more bow so that the sound has more life. Don't make accents on the 16th notes in the introduction. Make it sound like a shadow over a beautiful landscape."

Conclusion

At the conclusion stage, Christ suggested the advantage and disadvantage points of the learner especially the relationship between note values and bow. He guided to continue the bow during the longer notes. The long notes and the up bow must coordinate more. The short notes should not have less energy than the long notes.

Table 2: The comparison table of teaching method of music skill based on Dmitry Sitkovetsky, Wolfram Christ, and Raphael Christ

Teaching Stage	Dmitry Sitkovetsky	Wolfram Christ	Raphael Christ
1. Introduction	Explaining	Telling an interesting	Discussing with learners
	background of	story related to	about repertoires'
	repertoires and	repertoires and	concept and
	supporting learners	describing repertoires'	interpretation.
	about the	era.	
	repertoires' concept		

	and interpretation.		
2. Instruction	Demonstrating	Proposing the way to	Giving learners
	performance skill	concentrate and	opportunities for
	with describing,	create emotion	discussing about the
	explaining	before playing,	concept of repertoires,
	repertoires'	explaining	indicating the causes
	elements including	repertoires' elements	and effects happening
	the communication	and history of music	in performance skill
	of music.	as well as supporting	together with
		the roles of violist	demonstrating playing
		and piano	skill.
		accompanist.	
3. Conclusion	Summarizing	Summarizing pros and	Summarizing the
	techniques,	cons of learners'	problems happening in
	proposing the	performance skill and	repertoires and
	suggestions to	providing guidelines	proposing suitable
	improve music skill,	to improve music	guidelines.
	and exchanging ideas	skill.	
	of composition.		
4. Advantage	Describing	Telling interesting	Explaining the
Point	repertoires'	story of composition,	importance of
	background and	indicating the roles of	repertoires' elements
	emphasizing	violist and piano	and presenting the
	demonstration	accompanist along	causes and effects
	method with	with demonstration	happening in
	explanation.	method.	performance skill, and
			demonstrating
			performance skill.

From the above, the results can be concluded that all selected artists have similar teaching methods divided into three stages: the first stage is to provide the information background of repertoires, context, and music elements as basic information for the performance. The second stage is to correct errors and suggest the interpretation of

composition. This stage focuses on performance demonstration and explanation of composers' conceptual thoughts and principle, sound tuning between piano and orchestra. Importantly, supporting soloist and piano accompanist to understand their own roles are important. The last stage is to summarize all techniques being used in repertoires and propose suggestions and errors corrections so that the learners can improve their future performance.

2. Content of Teaching Methods in Music

From data analysis, the teaching method can be divided into three stages: introduction, instruction, and conclusion. These stages are interrelated and taught in the form of masterclass.

Introduction Stage: This stage purposes to evaluate the performing ability of learners and the basic information of the repertoires. Informing the interesting ideas of composition and the aspects of composers is vital. Additionally, suggesting learners to concentrate and to create the atmosphere before playing is necessary.

Instruction stage: It involves teaching musical techniques and interpretation including solving the problems of music skill. Demonstration method is mainly used for this stage along with description. Moreover, proposing music theories and music history related to repertoires enhances learners to appreciate music. If learners play melodic instruments accompanied with piano, teaching the roles of soloist and piano accompanist is essential.

Conclusion Stage: It is to summarize the lessons from the beginning of the class until the end and to give feedback to learners. This stage includes technique discussion and error correction towards repertoires.

Discussion

After summarizing research results, there were few interesting issues as presented below:

Teacher: Selected as teachers for the masterclasses, Dmitry Sitkovetsky, Wolfram Christ, and Raphael Christ, have been famous artists in classical music. Masterclass is the class for artists who need to develop their playing skill for performance (Phanchareon, 2009: 221). Therefore, the qualifications of masterclass teacher comprise the experiences of performance of international stages as soloist and chamber and orchestral musician. Additionally, guarantee from expert classical musicians and references fromreliable media are considered. Significantly, the skill of music teaching is also the roles of masterclass teacher. Obviously, the three artists

completely have had the qualifications. The further information found by the researchers was the three artists' age group. In the researchers' opinions, teachers' ages affect teaching methods. Raphael Christ, about 33 years old, was the youngest teacher categorized in early adulthood (Keawkungwal, 1997: 391). While teaching, he looked serious and sometimes quickly spoke to his learner. When the learner did errors, he repeated the instruction two or three times so the learner obviously felt worried. In contrast, Dmitry Sitkovetsky and Wolfram Christ, about 62 years old, are in the period of old age (Keawkungwal, 1997: 513). They spoke everything clearly and looked calm. When their learners showed some errors, they still kept smiling and motivated the learners by telling an interesting story related to the pieces. Their learners therefore felt comfortable.

Learners: There were three learners participated with this study, one teacher per one student. All of them have master degree in music performance and also have had experiences to perform as soloists and orchestra musicians. Although teachers reflected advantage and disadvantage points of their skills such as vibrato technique and interpretation, they completely learned their repertoires and could perform beautifully in front of teachers. Consequently, they could easily follow the instructions with confidence. This doesn't mean that every learner who has the ability to join master classes can imitate and follow teachers' instructions. Basically, teachers or artists who provide master classes are necessary to access learners' information background, ages, and competency levels. These components are beneficial to analyze the styles of learners' learning.

Music Content: There were three repertoires selected by learners for this study. They were, Violin Concerto in E minor op. 64 by Mendelssohn, Märchenbuilder by Schumann, and Violin Concerto in D minor op. 47 by Sibelius. These compositions are categorized in the Romantic period. For Mendelssohn's Violin Concerto in E minor op. 64 and Sibelius's Violin Concerto in D minor op. 47, they are based on the standard of concerto and are emotional in the Romantic idiom. Dmitry Sitkovetsky and Raphael Christ who taught these pieces mainly focused on the role of soloist to perform string techniques as virtuoso with orchestra. For Märchenbuilder, this work gives the imagination of a fairy tale so Wolfram Christ can motivate his learner to appreciate the piece by telling an interesting story. He often related sound production to beautiful pictures. Importantly, he emphasized the roles of soloist and piano accompanist because the piano part supported soloist to deeply communicate this composition.

Teaching Method: As results, the researchers divided teaching method into three stages. To introduce information background of repertoires and to consider learners' playing skill are called the stage of introduction. The second stage, instruction, purposes to solve the problems of musical techniques, interpretation, and expression. The last stage is conclusion that involves summarizing overall lesson. Giving beneficial guidelines to improve music skill is included in final stage. From analyzing, three teachers mainly used demonstration method with explanation. They suggested the advantage and disadvantage points after they had listened to learners' performance. The important point of demonstration method is model. The teachers who applied demonstration method have to be the best model because the learners observe and imitate teachers' performance. Additionally, the model is one of vital factors of learners' motivation. It also enhances effective learning (Bandura, 1986: 100). After imitating the model, the learners should be allowed to evaluate their own performances with criteria. Self-evaluation is significant for music lessons because it raises learners' musical thinking (Suttachitt, 2012: 241). Although the stages of teaching method were presented in the form of master classes, general and private music lessons should cover all of these stages as well. The result corresponds to Saya Thuntawech's research, which she studied the development of an instructional model for vocal accompanying courses focusing on the enhancement of the unity of the ensemble performance for pianists (Thuntawech, 2011: 44). The result showed that an instructional model can be divided into four stages: the preparation of musical theory and context stage, the preparation of individual performance skill stage, the ensemble rehearsal stage, and the assessment stage. Although these stages are separated, they are interrelated (Phuangphae and Sirisamphan, 2015: 430-447; Kantunyaluk, 2014: 666-681). Dividing teaching into different stages, both in this current research and in Thuntawech's work, can easily guide future practitioners.

Recommendations

1. The master class was the main aspect of this research attended by expert artists and young artist learners. The method is sufficient yet time consuming with thoroughly prepared lessons. Furthermore, the learners are new young generation artists and have many experiences as soloists and musicians in orchestras. They well concentrated on the lessons and could follow the instructions. Therefore, adjusted methods are recommended for different age groups of learners, teen learners in middle school, or higher education for instance. Music teachers should examine learners in all aspects, especially, music competency and cognitive

development as experience in music matters. Telling interesting ideas or stories can motivate learners' attention. Moreover, giving opportunities to exchange musical ideas and to share some experiences support participatory learning.

2. The repertoires in this research were selected by the learners as each recital or necessity in practice and needed other artists' perspectives. To apply with general music lessons, music teachers should consider about learners' music skill or let them involve in the repertoire selection with guidelines or advice. About planning, music teachers may spend many lessons to achieve expected goals. Consequently, music teachers should study musical elements and allocate what to be used for the lessons. For example, before teaching a new composition, music teachers should study musical elements related to the piece such as melodic line, harmony, texture, and expressions followed by creating music lesson plans and setting the clear goal.

Acknowledgement

This research paper is made possible through support from Mr. Damrih Banawitayakit, Dean of Faculty of Music, Silpakorn University, who recognized the importance of teaching method in music from famous artists and intended the researchers to prepare this report for further knowledge to music instructors. Our sincere gratitude to Mr. Dmitry Sitkovetsky, Mr. Wolfram Christ, and Mr. Raphael Christ, in providing us the most precious time and expertise that greatly, assisted the research.

Moreover, we are thankful for the three learners in attending the master class and providing the precious time for us. Lastly, our special thanks to Silpakorn University in providing fund to complete this research.

References

- Bandura, Albert. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, N.J.: Prentice-Hall.
- Christ, Raphael. (n.d.). **Raphael Christ violine: Vita.** Accessed June 2015. Available from http://www.raphaelchrist.de/vita.html.
- Christ, Wolfram. (n.d.). **Wolfram Christ conductor: Biography.** Accessed June 2015. Available from http://www.wolframchrist.de/biography.
- Daverio, John. (2001). "Schumann, Robert." In **The new grove dictionary of music and musicians**, 760-816. Edited by Stanley Sadie. New York: Oxford University Press.
- Hepokoski, James. (2001). "Sibelius, Jean." In **The new grove dictionary of music and musicians**, 319-347. Edited by Stanley Sadie. New York: Oxford University Press.
- Kantunyaluk, Paitoon. (2014). "Development of a blended instructional model using collaborative problem solving learning and synectics technique to enhance creative problem solving ability of student teachers." **Veridian E-Journal, Silpakorn University** 7, 3 (September-December: 666-681.
- Khemmani, Tissana. (2011). **Teaching science:** The knowledge of providing effective learning process. 14th ed. Bangkok: Chulalongkorn University Press.
- Keawkungwal, Sri-Ruen. (1997). **Development psychology life in every age book 2: Adolescence old age.** 7th ed. Bangkok: Thammasat University Press.
- Lertvicha, Pornpilai. (2009). **Brain journey: Brain-based learning.** Bangkok: Office of the Basic Education Commission.
- Phancharoen, Natcha. (2009). Dictionary of music. 3rd ed. Bangkok: Katekarat Publishing.
- Phuangphae, Phenphanor, and Orapin Sirisamphan. (2015). "The development of an instructional model to enhance social studies learning activities design competency for pre-service teachers." **Veridian E-Journal, Silpakorn University** 8, 1 (January-April): 430-447.
- Rauscher, Frances H., Shaw, Gordon L., & Ky, Katherine N. (1995). "Listening to Mozart enhances spatial-temporal reasoning." Neuroscience Letters 185, 1 (February): 44-47.
- Sitkovetsky, Dmitry (n.d.). Dmitry Sitkovetsky violinist conductor arranger: Biography.

 Accessed June 2015. Available from http://www.dmitrysitkovetsky.com/.
- Suttachitt, Narutt. (2012). Music education: Principles and important content. 9th ed.

 Bangkok: Chulalongkorn University Press.

- Thuntawech, Saya. (2011). "The development of an instructional model for vocal accompanying courses focusing on the enhancement of the unity of the ensemble performance for pianists" M.A. Thesis, Music Education, Faculty of Education, Chulalongkorn University.
- Todd, Larry (2001). "Mendelssohn(-Bartholdy), (Jacob Ludwig) Felix." In **The new grove**dictionary of music and musicians, 389-424. Edited by Stanley Sadie. New York:

 Oxford University Press.