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Office Address:
7-8-1 Hongo, Bunkyo, Tokyo 113-0034
Email: contact@tarij.com
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Dr Masayuki Otaki

International Conference on “2nd International Conference on Knowledge Economy, Artificial Intelligence & Social Sciences” serves as platform that aims to help the scholarly community across nations to explore the critical role of multidisciplinary innovations for sustainability and growth of human societies. This conference provides opportunity to the academicians, practitioners, scientists, and scholars from across various disciplines to discuss avenues for interdisciplinary innovations and identify effective ways to address the challenges faced by our societies globally. The research ideas and studies that we received for this conference are very promising, unique, and impactful. I believe these studies have the potential to address key challenges in various sub-domains of social sciences and applied sciences.

I am really thankful to our honorable scientific and review committee for spending much of their time in reviewing the papers for this event. I am also thankful to all the participants for being here with us to create an environment of knowledge sharing and learning. We the scholars of this world belong to the elite educated class of this society and we owe a lot to return back to this society. Let’s break all the discriminating barriers and get free from all minor affiliations. Let’s contribute even a little or single step for betterment of society and welfare of humanity to bring prosperity, peace and harmony in this world. Stay blessed.

Thank you.

Dr Masayuki Otaki
Conference Chair
KEAS-2019 Secretariat
Music Teacher in Thailand 4.0: Case Study of Piano Teachers
Sirima Panapinun*
Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, Bangkok, Thailand

Abstract
The purpose of this research was to study the needs of music teachers, especially the piano teachers and to study the necessary knowledge and competency of the piano teachers in Thailand 4.0. This research was qualitative research, data was collected by in-depth interviews with 15 music teachers, musicians and academic experts. The research results found that the piano teachers are also desirable in the field of music instruction, especially piano teaching for children aged 6-10 years. Piano skill helps them in developing children's physical, mental, emotional, social, concentrate to study, that made children success in learning achievement. The necessary knowledge for piano teachers is piano skills, child psychology, technique of teaching and innovative piano teaching that will stimulate interest and develop better learning. The essential feature for piano teachers in Thailand 4.0 is to have a good personality, lifelong learning, friendly, ability to communicate in English, use the technology well, creativity and musical talent.

Keywords— Music teacher, Thailand 4.0, Piano teachers

Introduction
At present, according to the government's policy on the change of Thai society into a system called Thailand 4.0 which is a system that involves the structure of the Thai economy into an economy driven by innovation or Value-Based Economy. This system is based on the idea of changing from commodity production to innovative products and changed from focusing on the manufacturing sector to focus on the service sector. If discussing the agricultural sector, it should be changed from traditional agriculture to modern agriculture that emphasizes technology management changed from less skilled workers to highly skilled. According to the government's policy, the policy is changed to Thailand 4.0 form of education in Thailand need to be adjusted to be consistent with the government's policies as well.

Education is an important factor in national development in terms of economy, society and politics. Education is a tool that helps the population to have quality. Education management must be consistent with economic, social and political policies. If there is a change Education management must also change accordingly. Education in Thailand 4.0 era is an educational arrangement that prepares humans to be human which means, in addition to providing knowledge, must be a moral person and can live with others by emphasizing critical thinking skills. In order to comply with the Thailand 4.0 policy that needs to develop the country to be modern and the population has increased income by having to produce new innovations as a base for national development and can also trade with foreign countries.

Music is an art that uses sound as a medium to convey emotions to listener. Music is an art that helps people to be happy, fun and joyful. Helps to relieve stress both directly and indirectly. Music is an art and an art that helps people to be happy, fun and joyful. Helps to relieve stress both directly and indirectly. Music plays an important role in human society. Music helps create and develop many abilities for learners, not just music skills but also helps improve the hearing, concentration and response to various conditions, including development body and language.

Piano is a top instrument that students will choose to study for a variety of reasons. For example, piano is an instrument that can be easily started and can produce basic sounds easily by pressing the finger down on the piano key, the sound can be generated and the sound that occurs is a correct sound.

From the importance of government policies and the importance of piano education management as mention above. This research was conducted as a guideline for preparing about the skill about the piano learning and teaching in Thailand 4.0 era.

Methodology
This research is a qualitative research. The purpose of this research was to study the need of music teacher, especially the piano teacher and to study the necessary knowledge and competency of piano teacher in Thailand 4.0. The data was collected by in-depth interview with 15 music teachers, musicians and academic experts.
Results and Discussion

The results of this research found that Piano will be a desirable in the field of music instruction because Piano teacher will teach about the basic knowledge of music. Children understand about the basic knowledge of music. Piano skill can develop in many important things for the children. The detail are as follows

1) Development of sensory function

Skills for practicing control of various organs and senses to work together therefore developing the cooperation of various organs to work together according to that function is to enhance and develop the skills of movement that are not like other types of instruments which will be very effective if start to learn in the young age.

2) Stimulate the brain

Learning the piano helps stimulate the brain in both halves to work simultaneously. The left hemisphere is responsible for thinking, making decisions, and ordering movements. The right brain will control the emotions and create imagination. Piano learning helps to stimulate the brain function of the two hemispheres because of when piano playing must use movement to play and convey the emotions of the song at the same time therefore affecting the physical and mental development at the same time too.

3) Build muscle and flexibility of hands and fingers

Piano is a musical instrument that can create melodies and harmonics at the same time. Piano lessons cannot be played either. Learning piano helps practice goal setting and find ways to reach goals. In each learning or practice of a new song, Pianist must learn which sections of each song require skills. Separated into various components that is a systematic learning process. Create learning habits in good music practice and practice step by step towards the goal.

4) Create discipline

Learning piano make the children have the discipline and patient because piano is a musical instrument that can create melodies and harmonics at the same time. Piano lessons cannot be played either. The pianist therefore requires patience, effort and discipline for practice.

5) Practice meditation

Learning and practicing piano helps to concentrate more because practicing must use reading skill and analyze the song that consist of note, tempo and signature. The brain immediately translates and orders the organs to move simultaneously. Need to concentrate on what you think and what you are doing. Learning piano from a childhood helps to concentrate on learning. Even in the early stages, there may be concentration in a short period of time. But when growing up, training will increase concentration accordingly.

About the necessary knowledge for piano teacher can summarize in 4 skills as follow

1) Piano skill

Piano teacher must to pass the piano examination from Trinity or ABRSM at least Grade 6

2) Knowing about the music theory

Piano Teacher must to understand about the music theory include

- 2.1 Notation
- 2.2 Scale
- 2.4 Interval
- 2.4 Chord

3) Understanding about teaching technique and pedagogy

Piano teacher must to understand about the technique for teaching include

3.1 Use the music instructional media

3.3 Use of word that appropriate with the age of the children.

4) Psychology in each age and Music learning behaviors in each age

Piano teacher in the Thai era 4.0 must have a good personality, friendly to learners and able to communicate in English and use the technology well because Thailand 4.0 focus on using technology to help with more work, including developing skills in the innovation that has happened or invented.

Conclusion

Piano teachers are also desirable in the field of music instruction, especially piano teaching for children aged 6-10 years. Piano skill helps them in developing children's physical, mental, emotional, social, concentrate to study, that made children success in learning achievement. The necessary knowledge for piano teachers is piano skills, child psychology, technique of teaching and innovative piano teaching that will stimulate interest and develop better learning. The essential feature for piano teachers in Thailand 4.0 is to have a good personality, lifelong learning, friendly, ability to communicate in English, use the technology well, creativity and musical talent.
References


Skills and Student Development of Music Study of Suan Sunandha Rajabhat University Consistent with the 21st Century
Thassanai Phensit
Music Department, Suan Sunandha Rajabhat University, Bangkok, Thailand

Abstract
According to the research of music study in university in Thailand, the researcher is interested in studying and finding formats and guidelines of music study in university in order to enhance skills and student development in addition to the major subjects and to meet the needs of learners, graduates’ employers as well as the needs of labor market in the society. This research is a qualitative research. The purpose is to study trends for developing skills of music students of Suan Sunandha Rajabhat University in connection with the 21st Century. The population of this research is all related persons and users of music study in Suan Sunandha Rajabhat University as follows: 1) 2 responsible persons of music study 2) 5 responsible instructors of music study 3) 10 music instructors of music study and 4) 40 music students of Suan Sunandha Rajabhat University. The data is collected from the questionnaires and the interviews and is summarized from descriptive synthetic analysis. The results are found that 1) the curriculum must be modernly-modified 2) the skills of the learners consistent with the 21st century must be according to the 3R 7C Principles by integrating into the 6 areas in Thai Qualifications Framework for Higher Education; TQF:HEd as follows: Virtue and Ethics, Knowledge, Cognitive Skills, Interpersonal Skills and Responsibility, Numerical Analysis, Communication, and Information Technology Skills, and Psychomotor Domain.

Keywords— Suan Sunandha Rajabhat University, Music, 21st Century, Skill and Development

Introduction
Music is an artistic science about sound systems which are designed methodically according to the theory that has existed for thousands of years. Also, music has been inherited until it is part of humans’ cultures or rituals with the references to evidences or notes discovered until the present time. This enables music to be widespread throughout the world. There has been in-depth research until the development of sound system, melody, rhythm, and style that is unique is created. For this reason, music has been with men for a long time because they believe that sound is a language that can convey things that we cannot touch or see. Humans therefore give that sound as a means of communication which has impacts on mind (feeling of both the sender and the recipient of that sound).

Western music originates from Greek ritual music which is considered divine and noble. The Greeks believe that the sacred or the gods that they respect are the creators of this music for the ritual purposes at that time which corresponds to the above statement that sound is a language that can communicate with all things, especially those men cannot see or touch. Sound of humans acted or created is a language to communicate to things that are believed to be sacred by singing, praying, or beating with the rhythm that the sound can be delivered to the worshiped through ceremonies such as Sacrifice etc.

According to the study discovered from the ancient evidence of the Greeks regarding the source of the sound, Pythagoras, a famous philosopher with the ability to calculate, clearly invents and creates the theory of sound. From the study and the experiment about vibrations of strings or ropes tied to the core by observing the sound characteristics from different lines, the level of sound which is different in different pairs of sounds with differently long and short lines is found. This theory is the basis for the study and the development of music theory. It has also been brought to study, teach, and apply until it can be created as a course content for those who are interested, for being used to study about music that is recognized as a universal language, for being used to create musical work as well as for developing the musical standards to perceive the importance so as to include music study in the curriculum for all levels of learners.

Music has been designed to have different characteristics in order for listeners to understand, to be able to analyze, as well as to categorize clearly and correctly. Music in Thailand can be classified into 2 major categories: Thai and Western, which can be categorized into styles, genres, specific details of music. These 2 types can also be classified into sub-categories according to the type of music.

Music education in Thailand provides teaching and learning activities from kindergarten to university. Both are compulsory and supplementary subjects in order to enhance musical skills and develop emotion, mind, personality as well as sociability. Music courses in each level will focus on different contents or skills to suit each learner. This is for the reason of efficiency. Music education in university is a high-level education which emphasizes theoretical and practical knowledge in specific fields with the reference to Thai Qualifications Framework for Higher Education; TQF:HEd to show education qualification system in university as follows: Qualification Level: classifying academic fields connects to the next level of qualification to a higher level with the reference to National Education Act B.E. 2542 (1999) and Amendments (Second National Education Act B.E. 2545 (2002) as well as Thai Qualifications Framework for Higher Education; TQF:HEd and university education standards by having Thai Qualifications Framework for Higher Education; TQF:HEd worked as a tool to guide the

Modification of learners' learning methods in order to truly achieve results is important and necessary because learners can create their own knowledge and transcend traditional learning to survive in the 21st century. Teachers must play a role that is not just teaching or lecturing. Teachers must draw the potentiality of learners.

Objective

The purpose is to study trends for developing skills of music students of Suan Sunandha Rajabhat University in connection with the 21st century.
Research Methodology

This research is a qualitative research. The researcher is interested in studying the development of music curriculum in university, program in music, Suan Sunandha Rajabhat University to develop course contents which have impacts on music students of Suan Sunandha Rajabhat University to have the qualified skills, knowledge and ability in era of competition and rapid advancement. Also, the qualified are accepted and desired in the society and prepared for future career. The research is conducted as follows

1. Study the problem that affects the curriculum and define topics

The researcher study from the problem and find that many courses in the university are closed down due to reduction of the number of students in that course. The makes the available curriculum posses few students which have impacts on curriculum management and study management. This is the point that the researcher is aware of the current problems and believe it will be intensified within the near future. The researcher therefore study the guidelines for the development of Fine Arts curriculum, program in Music, Suan Sunandha Rajabhat University. These guidelines are to make the curriculum more quality which respond to learners in theoretical knowledge and enhancing the development of music practice skills to be acceptable to both internal and external societies as well as create maximum benefits for learners to be graduates in labor market in the future.

2. Study Fine Arts courses, program in music, Suan Sunandha Rajabhat University and other related documents

The researcher study from documents of Fine Arts, program in music, Suan Sunandha Rajabhat University by studying the curriculum structure, courses and expectations of courses affecting learners after graduation. The researcher also study from other research papers mentioned that affect the study and suggest guidelines for other related university courses.

3. Determine the population group

Population in this research is related persons and users of the curriculum as follows

- 3.1 2 instructors responsible for the courses
- 3.2 5 course instructors
- 3.3 10 course instructors in Music Department
- 3.4 40 music students of Suan Sunandha Rajabhat University
- 4. Data collection

The researcher has collected data as follows:

- 4.1 Data from in-depth interviews from a given population group
- 4.2 Questionnaires of music students of Suan Sunandha Rajabhat University

4. Study of Fine Arts courses, program in music, Suan Sunandha Rajabhat University and other related documents

5. Collect data and analyze data

Data analysis is done by using qualitative data analysis as follows

- 5.1 The researcher has collected data from interviews to analyze and synthesize in finding ways to develop courses on skills and development that are delivered to learners in music study, Suan Sunandha Rajabhat University in the 21st century and in accordance with Thai Qualifications Framework for Higher Education; TQF:HEd

Result

The results are found that 1) the curriculum must be modernly-modified 2) the skills of the learners consistent with the 21st century must be according to the 3R 7C Principles by integrating into the 6 areas in Thai Qualifications Framework for Higher Education; TQF:HEd as follows: Virtue and Ethics, Knowledge, Cognitive Skills, Interpersonal Skills and Responsibility, Numerical Analysis, Communication, and Information Technology Skills, and Psychomotor Domain

Conclusion

The results from the study of the development of curriculum on student development skills in music study at Suan Sunandha Rajabhat University that corresponds to the 21st century are found that teaching and learning should be adjusted by adding new teaching methods or techniques in lecture-oriented course so as to create motivation for learners to become interested in and participate in activities in the classroom. However, it is dependent on the suitability of each course by focusing on learners to participate, create familiarity between instructors and learners, create situations in which issues can be learned so that learners become interested to question and lead to the study of learners themselves and by introducing various learning resources both inside and outside the classroom or a community. Learners are emphasized to have love and unity in team work, to create collaborate or create other related networks. The learning time should not be limited so that learners can learn all the times and are able to apply what they learn to real life. The learning to be useful must have the basic 3R x 7C as follows: 3R is reading skills (R = Reading), writing skills (R = (W) Riting) and calculation skills (R = (R) rithmetic). These three skills are the basis that everyone needs to know, understand and use correctly in order to bring into use and apply to situations. 7C is 1. Critical Thinking & Problem Solving 2. Creativity & Innovation 3. Cross-Cultural Understanding 4. Collaboration, Teamwork & Leadership 5. Communication, Information & Media Literacy 6. Computing & ICT Literacy 7. Career & Learning Skills. In addition to the basic 3R x 7C required for the 21st century, the characteristics of music students of Suan Sunandha Rajabhat University must be consistent with the 6 areas in Thai Qualifications Framework for Higher Education; TQF:HEd as follows: 1. Virtue and Ethics: Honesty, Discipline, Consciousness and Realization of Academic and Professional Ethics, Responsibility to oneself and society, Open-mindedness to others’ opinion, and Public Consciousness 2. Knowledge: to be well-equipped in Fine and Applied Arts and another related study, to have an ability to find and solve problems and develop Fine and Applied Arts systematically, to have knowledge in music relating to contexts of wisdom, society and culture, and to have knowledge relating to standards and practices in Fine and Applied Arts profession 3.
Cognitive Skills: the ability to analyze, synthesize, and propose solutions creatively, the ability to integrate knowledge into another study in order to create academic and professional works, and the ability to be creative and witty in creating works. Interpersonal Skills and Responsibility: to possess leadership and good interpersonality, to understand roles and responsibilities, and to be open-minded, to take responsibility for one's tasks and to be able to work with others efficiently, and to be able to express opinions logically and straightforwardly and to pay respect to different opinions. Numerical Analysis, Communication, and Information Technology Skills: to be able to communicate by speaking, listening, reading, and writing and apply Fine-and-Applied-Arts approaches in every day communication and presentation efficiently, to be able to use information technology in searching for information for creating works or presenting efficiently, and to be able to apply numeric information or suitable technology for works of Fine and Applied Arts. Psychomotor Domain: to possess the skills of voices and musical instruments and presenting a piece of music variously and to possess good and proper personality to present a piece of music in public.

References


Role of Thai Music in Educational System in the Next Decade

Introduction

Among the changes of the world, Thai society must adapt according to move the world. Trend of education must change. The form of curriculum, teaching and learning activities, technology in school needs to be adjusted to keep up with global changes.

Thai music education is the one of subject that is important in school because it is Thai culture that students must learn to understand Thai identity and that is a succession of national art and culture. Now a day, there is one subject in curriculum to study Thai music and Thai music club in some schools that teach playing Thai music in some instruments such as Khim, Ranad Ek, Khlu, Jakae, Saw-U, and Saw-Duong respectively. Role of Thai music in teaching and learning in elementary schools in the next decade found that Thai music is encouraged to teach in schools because it is the part of Thai culture, but the teaching style should be used to innovate in teaching. Teachers must teach students love in Thai music and use Thai music as a tool for understanding Thai culture. Students must perform Thai music with quality.

Abstract

The aims of this research were to study the teaching of music in the basic education system and to study the role of Thai music in teaching and learning in schools in the basic education level in the next decade. This research was a combination of qualitative research and quantitative research, collecting data by using questionnaire 240 sets from music teachers in elementary school in Bangkok Metropolis, and in-depth interviews 7 persons from music teachers, administrators and educational experts. The research results found that currently, the teaching of music in the elementary school was divided into two types of teaching: the course of music content and teaching music activity. Students are more interested in Western music than Thai music. From the questionnaire, students interested in studying music practice rather than studying theory. The Thai musical instrument that students are most interested in that are Thai Khim, Ranad Ek, Khlu, Jakae, Saw-U and Saw-Duong respectively. Role of Thai music in teaching and learning in elementary schools in the next decade found that Thai music is encouraged to teach in schools because it is the part of Thai culture, but the teaching style should be used to innovate in teaching. Teachers must teach students love in Thai music and use Thai music as a tool for understanding Thai culture. Students must perform Thai music with quality.

Keywords— Thai Music, Educational System, Next Decade

Introduction

Among the changes of the world, Thai society must adapt according to move the world. Trend of education must change. The form of curriculum, teaching and learning activities, technology in school needs to be adjusted to keep up with global changes.

Thai music education is the one of subject that is important in school because it is Thai culture that students must learn to understand Thai identity and that is a succession of national art and culture. Now a day, there is one subject in curriculum to study Thai music and Thai music club in some schools that teach playing Thai music in some instruments such as Khim, Ranad Ek, Khlu, Jakae, Saw-U, and Saw-Duong, but there are not many students interested in Thai music.

The important of Thai music, interesting in Thai music with a small amount, the changes of the world that is my interesting to study “Role of Thai Music in Educational System in the Next Decade”

Literature Review

Terry Heick share idea about “13 Ways Education Could Change in The Next 13 Years” are as below:

1. The elementary school might evolve

Modern learners must consume, evaluate, and integrate constantly changing data in highly-dynamic and visible contexts. In 2013, most elementary schools are simply diminutive high schools, with a balance of reading, writing, mathematics, geography, and other “core” skills, while character training supplements academic work. Though that balance tends more towards literacy than it does in most high schools, this minor adjustment is insufficient to meet the needs of a modern world.

2. Connectivity could represent a new kind of assessment

Rather than measurement, true assessment is the process of uncovering understanding. Figuring out what a learner does and does not understanding, and moving forward from there.

3. Academic standards could be supplanted by “other content”

As access to information increases and social chatter reaches a never-ending crescendo, the need—and impact of—hundreds and hundreds of academic standards changes. In the current model, many students may master a “proficient” number of select standards by achieving a pre-determined “cut score,” but still fall short of being able to find, analyze, and use information in new and unfamiliar situations. This is a significant failure that isn’t a matter of “instructional adjustment,” but a new approach to why, how, and with whom students learn.

4. Personalized learning will disrupt how we think of curriculum

Personalized learning isn’t just about differentiated content, but rather just-in-time, just-enough, just-for-me access to authentic and accessible learning resources. “Curriculum” is a flexible enough term that it can bend to accept new approaches to learning, but ultimately, it may be replaced entirely.
5. New content areas could emerge
Math, science, social studies, and literacy have been the pillars of modern education for over a century. But in the face of an uber-connected and technologically-driven world, new perspectives naturally emerge. Rather than “content areas,” it is now possible to unify learning experiences by new criteria, including the ability to use specific technologies.

6. Certification could be supplemented by “online brand”
The need to see and be seen has fostered a culture of spectacle, where image, visibility, interaction, and access trump critical thinking and patience. As people seek to continuously brand themselves—just as corporations have been doing for a century—the result could be the same in education: human identity based on reputation, portfolios, and data rather than intimate and authentic human interaction, and iterative understanding.

7. There could be a shrinking demand for some forms of certification
Dominated by digital media, social media, video games, and an increasingly blurred line between them all, the work a connected, 21st-century adult “does for a living” is taking an unprecedented number of forms. Unable to keep up with this explosion of “careers,” many academic institutions (which were paid larger sums of money to prepare for careers in law, medicine, and engineering) may see the end of—or radical rethinking of—“certification,” a relic of a time when people, information, and communities stood still. Certainly, specific fields will continue to require highly-specialized training, and provide universities with a lifejacket—or motivation to rebrand themselves as cultural cornerstones of wisdom.

8. There may be new reasons “to go to school”
Growing discontent with a corporate-dominated world, a fresh demand for equity, and the democratization of information access will cause the rise of “good work,” where hyper-interdependent students seek to understand the ultimate impact of their work on the world around them. The days of “going to school to get a job” could be slowly replaced by “critically learning so that we come to understand what must be done.” This shift causes schools of all levels and size to respond.

9. Networks could trump content
Networks trumping content is an odd possibility—the idea that who you interact with becomes more important than what you study or desire to understand. But it’s already happening—and it doesn’t have to be all bad.
Imagine a community of artists, doctors, or engineers that gather, exchange ideas, and interact on a consistent basis. This kind of interaction would offer a very organic form of value exchange and even “intellectual conditioning,” and membership in such a community would provide a learner with considerable opportunity to acquire knowledge, forge relationships, and pursue apprenticeship.

10. The Maker Movement could spawn a design and/or entrepreneurial “culture” in education
Tinkering with physical and digital tools encourages playfulness, creativity, and a relaxed state of mind where genius has room to bloom. Just as project-based learning has taken years to find credibility in the average classroom, the Maker Movement will as well, but could see an accelerated implementation in light of the natural thinking patterns of the 21st century students.

11. Mobile Learning & self-directed learning could form the core of formal education models
Whether through adaptive learning apps, “1:1 blended learning,” personalized learning algorithms, or self-directed learning, the future of learning is undoubtedly mobile, personal, and self-directed. Whether it is effective or not depends on what exactly is being “personalized,” but “getting out of the way” and focusing on how to learn rather than what to learn is a shift difficult to fault.

12. Elite academic institutions could become the new “fringe”
Or begin to anyway.
While autodidacts, homeschoolers, unschoolers, and apprenticeships are currently the “fringe” of education, that could change. As the focus of learning shifts from pure academic proficiency to a tone more open, fluid, and self-directed, many will naturally resist such a change. Those that believe in the value of top-down, compliance-based, text-driven, test-centered, letter-grade approach will catalyze a fringe return to a “golden era” of academics, including focus on classical education, failure and success, academic standards, good grades, and professional preparation.
Socioeconomic realities will keep such a trend from finding widespread traction, as public schools continue to experiment with new approaches to learning, and spend their budgets in pursuit.

13. Curriculum will change, both in form as well as content
Evaluation of learning will see the ability of students to merge content and access high-value content areas as leading indicators of understanding. “Mastery,” “proficiency” and related terms become old language from an era of closed and institutionally-controlled system of education. New notions of “mastery” will focus not on academic standards, but media literacy, problem-solving, networking, and other critical strands of a modern, technology-driven society.

About Thai music, there are some instruments that the students interested to study, such as:

1. The Ranad Ek
The Ranad Ek has a similar look to xylophones. The keys from the Ranad ek do not touch the base of the instrument, but rather hang over it, similar to a suspension bridge. The keys are wooden, and are different sizes in order to make different sounds.

2. Saw Duang
The Saw Duang is a string instrument that is played with a bow. The box of the saw duang is made from either bamboo or hardwood, and the skin on the end of the sound chamber is often made from snake skin. The strings are often made from silk.
3. Saw U

The Saw U is similar to the Saw Duang, but larger and produces a lower pitch. It has 2 strings, and can produce 8 notes. The soundbox of the Saw U is made from a coconut shell with the open side covered with cowskin. The silk strings of the Saw U are played with a bow.

4. Khlu

The Khlu is mostly made from bamboo, but is made from hardwood, and sometimes even plastic too. The seven lower holes on the Khlu are where the fingers sit, covering and uncovering them in order to change the note that comes out.

5. Jakhe

Approximately 20cm high, and 140cm long, the Jakhe has two strings made from silk, and two strings made from brass. In order to play this instrument, your left hand goes on the frets, to change the pitching, while your right hand strikes the strings with an ivory plectrum tied to your index finger.

6. Thai Khim

The khim is a percussive string instrument in that the strings are struck with two special sticks. A very popular instrument with Thai students. Each note is formed from three metal strings tightly drawn across two bridges much in the manner of piano strings. The sound indeed is similar to that of the piano strings when plucked from inside a piano. The anchor for each string also closely resembles that of a piano. The similarity ends there however. Both the music played and the tuning of the Thai khim is different. The sound box, usually made of hardwood has two holes placed between the bridges and below the strings.

Santi Yimpluem, Manat Watanachaiyot, Banjong honwirojana (2015) study “The Study of Music Teaching on Basic Education Curriculum Level 3 of The Schools Under The Suratthani Educational Service Area Office 3”. This survey research had the objectives to study the state of Music teaching and to study the problems and suggestions of the teachers who taught Music in Basic Education curriculum level 3 of the schools under the Suratthani Education Service Area Office 3. The population used in research were 60 teachers teaching Music in Basic Education curriculum level 3 of the schools under the Suratthani Education Service Area Office 3. The tool used in research was questionnaires with 67 questions. The statistics used in data analysis were percentage, mean (X) and standard deviation (S.D.) by analyzing data and evaluating with Package Program of SPSS/PC. The research results concluded as follows:

The study results found that general conditions of the teachers who taught music being male more than female. They had educational qualification of bachelor degree and had no educational qualification on music and teaching the most western music. Musical experiences, most of them have never learnt music and have not been able to play the music. The learning and teaching conditions found that had performance level on changing the curriculum into teaching and musical teaching activities establishment were in much level. Using teaching media supporting learning and teaching, musical assessment and learning and teaching devices was in less level and having the viewpoint on the support from school administrator was in moderate level.

Objectives

1. to study the teaching of music in the basic education system
2. to study the role of Thai music in teaching and learning in schools in the basic education level in the next decade.

Methodology

This research was a combination of qualitative research and quantitative research. Population of questionnaire are music teachers in elementary school in Bangkok Metropolis, sample size was selected by simple sampling, collecting data by using questionnaire 240 sets, and in-depth interviews 7 persons from music teachers, administrators and educational experts. The questionnaires were analyzed by finding the mean and standard deviation with statistical program and analyzed data from in-depth interview with content analysis.

Conclusion

The research results found that currently, the teaching of music in the elementary school was divided into two types of teaching: the course of music content and teaching music activity.

Table 1 the course of music content

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<tr>
<th>No.</th>
<th>What is the student's interest in studying the following courses?</th>
<th>Mean</th>
<th>S.D.</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Western music theory</td>
<td>3.78</td>
<td>0.985</td>
<td>very interest</td>
</tr>
<tr>
<td>2</td>
<td>Thai music theory</td>
<td>3.22</td>
<td>0.855</td>
<td>moderate interest</td>
</tr>
<tr>
<td>3</td>
<td>Western music history</td>
<td>3.45</td>
<td>0.652</td>
<td>moderate interest</td>
</tr>
<tr>
<td>4</td>
<td>Thai music history</td>
<td>3.49</td>
<td>0.884</td>
<td>moderate interest</td>
</tr>
<tr>
<td>5</td>
<td>Western music practice</td>
<td>4.01</td>
<td>0.565</td>
<td>very interest</td>
</tr>
<tr>
<td>6</td>
<td>Thai music practice</td>
<td>3.87</td>
<td>0.662</td>
<td>very interest</td>
</tr>
<tr>
<td>7</td>
<td>General Western music</td>
<td>3.77</td>
<td>0.947</td>
<td>very interest</td>
</tr>
</tbody>
</table>
No. | What is the student's interest in studying the following courses? | Mean | S.D. | Meaning
--- | --- | --- | --- | ---
8 | General Thai music | 3.54 | 0.986 | very interest

From the table 1 found that the students are more interested in Western music than Thai music and the students interested in studying music practice rather than studying theory.

**Table 2** Thai musical instruments that students are interested in learning

\(n = 240\)

<table>
<thead>
<tr>
<th>No.</th>
<th>What musical instruments are Thai students interested in studying?</th>
<th>Mean</th>
<th>S.D.</th>
<th>Meaning</th>
<th>Level of interesting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ranad Ek</td>
<td>4.52</td>
<td>0.87</td>
<td>most interesting</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Jakae,</td>
<td>4.15</td>
<td>0.82</td>
<td>very interesting</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Thai Khim,</td>
<td>4.67</td>
<td>0.77</td>
<td>most interesting</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Khlu</td>
<td>4.32</td>
<td>0.84</td>
<td>very interesting</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Saw-U</td>
<td>3.98</td>
<td>0.98</td>
<td>very interesting</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Saw-Duong</td>
<td>3.76</td>
<td>0.78</td>
<td>very interesting</td>
<td>6</td>
</tr>
</tbody>
</table>

From table 2 the Thai musical instrument that students are most interested in that are Khim (4.67), Ranad Ek (4.52), Khlu (4.32), Jakae (4.15), Saw-U (3.98) and Saw-Duong (3.76) respectively. Thai music teachers told that Khim is an instrument that practice and can play song faster than other musical instruments, opposite of Saw, it is very difficult to control the sound to be distorted, therefore making students interested in studying less, except the students who like Thai music very much.

Role of Thai music in teaching and learning in elementary schools in the next decade found that Thai music is encouraged to teach in schools because it is the part of Thai culture, but the teaching style should be used to innovate in teaching. Teachers must teach students love in Thai music and use Thai music as a tool for understanding Thai culture. Students must perform Thai music with quality.

Education in the 21st century requires changes in the curriculum structure, teaching style, activity, self-learning. Therefore, the management of Thai music teaching must have a new course that is in accordance with the needs of learners, develop innovative teaching materials that students can use to learn by themselves, and create opportunities for dissemination of Thai music performances via online media It is an incentive for students to become more interested in learning Thai music.

**Acknowledgement**

The research was conducted under the policy of Suan Sunandha Rajabhat University in promoting and enhancing the faculty members’ potentials in term of research. The researcher would like to express my grateful thanks to Asst.Prof.Dr.Sansanee Jasuwan for guiding and proof reading this research paper and all of faculty members of the music division.
References


Finding the appropriate method for student is not only improve the playing technique, but it will increase level of motivation, and will affect music learning process predominantly. Learning process will show different result when using each different methodology. The objective of this research is to find the most practical guitar resource for Suan Sunandha Rajabhat university (SSRU) music student (Classical guitar major). The research instrument includes: 1) In-depth interview with guitar professor from 4 different universities in Bangkok 2) Focus group discussion with 5 SSRU music students (Classical guitar major). The research tools will indicate creditable result because most participant are proficiency and expert in classical guitar. The result has shown that “Pumping Nylon: The Classical Guitarist’s Technique Handbook” (Scott, 2002) is the most mentioning resource in the discussion and interview process. In conclusion, “Pumping Nylon: The Classical Guitarist’s Technique Handbook” (Scott, 2002) consider the most practical guitar resource for SSRU classical guitar students.

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Peer-review under responsibility of the Scientific & Review committee of KEAS-2019.

Keywords— Classical Guitar, Guitar Resources, Suan Sunandha Rajabhat University

Abstract

Finding the appropriate method for student is not only improve the playing technique, but it will increase level of motivation, and will affect music learning process predominantly. Learning process will show different result when using each different methodology. The objective of this research is to find the most practical guitar resource for Suan Sunandha Rajabhat university (SSRU) music student (Classical guitar major). The valuable result will be received from both participant professor and participant student. The information from those two participant groups will be analyzed and use it for finding most practical method. The information from professor will be mainly about the methodology usage. Nevertheless, the information from student will be the discussion of learning process result. Receiving information or data from different groups of study will represent more precise and honorable result.

Motivational Classroom Design

In one study about understanding teacher and student conception, participant in this research mention that in the teaching implementation section, participant teacher encouraged participant student to take the leading role in musical class. Participant teacher ask student in class to learn specific lesson by using different activities. Eventually, participant teacher helps student immediately by providing study resources, which it might not suitable for student. In addition to the knowledge of music. Both physically and behavioral of music teaching, piano instructor needs to have high level of understanding of the student. If not teaching will not be effective (Panapipun, 2018). It will be better if student is part of the curriculum design. That ways in-class methodology will be more effective. (Leung & Wong 2005)

The appropriate method will increase level of motivational drive, and will affect music learning process predominantly. Motivation drive is one of study factor quality, when students are motivated, they will study and perform better. Knowing how the motivational aspect works are important for both teachers and students. “Motivation and engagement are important factors that guide behavior and as a result, it is very important for teachers to understand and use this knowledge in their teaching. By knowing how intrinsic and extrinsic motivations and engagement relate to students and their learning, the teacher is well placed to
provide a more supportive environment for student learning and their own teaching”. (Saeed & Zyngier, 2012). Sitwat and David also mentions that in the classroom, student motivation relies on the level of their focal point and achievement. Motivation and commitment are important for sound student learning. (Saeed & Zyngier, 2012).

Literature Review

There are great numbers of research on methodology of learning and motivation, which is process of finding appropriate or practical method for particular group of learner. The study from Hong Kong Institute of Education set the semi-structured interview mean to find good practice of music teaching. Participants teachers were observed in 4 factors (Personality, Pedagogy, Musical Competence, and Teaching Philosophy). This research is about finding teacher and student perception. Research structure helps the analysis of both groups to reflect on quality of good practice (Leung & Wong 2005). The extrinsic and intrinsic motivation has been exam and compare in one research from Faculty of Education Monash University, Melbourne Australia. The participant of the research is Elementary student (grade 5 and grade 6). “In this particular study was present, intrinsic motivation assisted authentic student engagement in learning, and that extrinsic motivation served to develop ritual engagement in students however, students who had both types of motivation showed different types of engagement in their learning” (Saeed & Zyngier, 2012). Agrey and Lampadon (2014) claim that learning environment and job prospects factor is the highest score in the result. It indicates that student prioritize modern facility and learning surrounding support as well as the possible of good job anticipation. This particular study is qualitative, which getting result by collect data from survey and interview. The interviews and survey is about the study contributing factor of student university selection. As the information below indicate that learning environment and job prospects factor got the highest score in the exam. Additionally, one study about roles of administrators in supporting science study for the music education indicates that factors that influence the development of science study were the education institute, scientific skills, course management, and student factors (Jasuwan, 2018). Obviously, that student prioritizes on institution facility, which is different from the result in this study.

Result & Discussion

To get most creditable result, researcher need to collect most participant are proficiency and expert in classical guitar, which are Suan Sunandha Rajabhat university (SSRU) music student (Classical guitar major) and Guitar professors from 4 different universities in Bangkok. Those focus group will indicate valuable information, the research instrument includes: 1) In-depth interview 2) Focus group discussion. Guitar professor will ask to do the In-depth interview. The questions and contents of the interview will relate to student method selection. Such as: What factor do you consider in order to finding the best method? What method that you prefer to use for developing guitar technique, why? SSRU guitar students are responsible for joining the focus group discussion. The result from discussion will indicate the straightforward result because participants are experiencing directly.

Most student from focus group discussions prefer online resources, such as, learning with videos, website, or electronic document. Amazingly, motivation drive is playing important role in order for them to keep learning confidently. “Motivation was inspired of the Latin term ‘Move’ For the first time, means movement and it is an English word. Motivation is a force which cause people to behavior particularly and according to management point of view, the aim of creating motivation in employees is to have a behavior in which brings the highest benefits for the organization …. Motivation is the force that causes movement in human. In fact, any agent that causes (internal or external) activity in living creature is considered as a kind of motivation” (Tohidi, 2012). One of participant student mentions that every time he picks up the instrument, he need music listening which motivate him to start practice sections confidently.

It is important that to support and energize the motivated musicians and the path to supply direction on the approach through sustaining flexible aspects and keeping inflexible aspects low (Martin & Collie 2016). Student tend to have better performance quality after motivated practice sections, unlike student who have forced to practice. Student who always keep the motivational level high, will get better result in practice section. One questions of the discussion were asking participant students about the comparison between their motivated and unmotivated practice sections.

The result shown that motivational practice section seems unhealthy for all participants and lead to performance anxiety and attitude misconception issues. Student who are unmotivated and anxious about exam assignment tend to not to do the best that they can, producing low quality in assignment and general performance. As a result, they will be underestimating their level of ability, especially in the exam (Wise, 2009). When participant students are unmotivated many time in practice sections, they likely not do it well in the actual performance. Performance anxiety is related with the motivation respectively. One student suggests that performance anxiety often cause by unprepared tasks and encouragement. Performance on stage is always difficult to control by missing those elements. On the other side, one of professor participant claims that performance quality mostly relies on the level of encouragement. If the encouragement level really low, performance quality percentage will be decrease even in well prepare situation.

Obviously, motivation is one of important factor of student method selection. The result indicates that 70% of participant students select guitar method by divertsissement factor, which students prefer this factor because it increases their motivational
level. One student claims that to study complicated task is always monotonous, so he searched for different resources on multiple platform rather than study on only assigned textbook. Also, when students don’t understand some concepts that might explain too academic in assigned textbook, they can search for those concept that might be more approachable to them on other study platforms. Those situation shows that the practical method is deeply connected with student learning behavior, which need to design individually. The second rank factor is instructor suggestion. The instructor also persuades participant student to select particular method. Students usually start their first method book by suggestion of the instructor. One of participants indicate that “I will use method that has been suggested by the instructor because they know my skill level and I trust them whatever I like it or not” Surprisingly, Methodology reputation and Physical Method usability factor got very few percent.

<table>
<thead>
<tr>
<th>Table 1. Factor Affect Guitar Method Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent %</td>
</tr>
<tr>
<td>Instructor suggestion</td>
</tr>
<tr>
<td>Divertissement</td>
</tr>
<tr>
<td>Methodology reputation</td>
</tr>
<tr>
<td>Physical Method Usability</td>
</tr>
<tr>
<td>Others (Appearance, Language, Author, etc.)</td>
</tr>
</tbody>
</table>

“Pumping Nylon: The Classical Guitarist’s Technique Handbook by Scott Tennent” (Scott, 2002) is the most mentioning resource in the discussion and interview process. This particular guitar method is classical guitar technique book which is suitable for every level of classical guitar player. “The goal of pumping nylon is to offer idea that will help solve various technical problems. The idea was to steer clear of assembling anything that resembled a method book” (Scott, 2002). Also Scott mentions that the guitar exercises in Pumping Nylon is writing from the exercise and lesson that Scott had been used for the past workshop. Nevertheless, Scott has been improving and make it more accessible for every level of players. Nathaniel Gonud who are the vice president of production and senior acquisitions editor for Alfred music’s MI division, says that “Pumping Nylon is joyful attitude toward problem-solving on classical guitar. There is an underlying message that says if you are willing and able to look at an issue from different perspective, and if you can bring to your music-making to your technique work, you can overcome obstacles” (Scott, 2002). One of participant student has used the horizontal character builder exercise on page to fix his own technical problem of the piece that he is working on. Another are always start the practice section with daily warm-up routine on page 48, which participant have improved in term of strength and flexibility. The result from Thai guitar professors in-depth interview concludes that “Pumping Nylon: The Classical Guitarist’s Technique Handbook by Scott Tennent” (Scott, 2002) is a great method to use. It makes student get better at classical guitar technique and better motivation. One professor from interview section says that “I always include exercise in this book to my student practice section, and keep motivate them by assign them to read the quote that appear in the method book” Scott includes the powerful quotes throughout different section of the book to keep his reader motivated. Obviously, when student is motivated lesson always excellent. “Pumping Nylon” is the most mentioning resource in both discussion and interview process.

Conclusion

The divertissement factor got really high percent in this study that means participant students prioritize mental aspect of learning more than the physical one. Participants indicates that they need drive to start the motivation and also individual method to make them study difficult task. “Pumping Nylon: The Classical Guitarist’s Technique Handbook by Scott Tennent” (Scott, 2002) is the method that has been selected by participant professors and participant students. It has a quality that suits their study manner in term of content condition and motivation. To conclude that Pumping Nylon: The Classical Guitarist’s Technique Handbook by Scott Tennent” (Scott, 2002), is the most practical classical guitar method for Suan Sunandha Rajabhat University Music Student. Because each student has their own study character. the prototype of individual guitar method need to be done in further research, and method should be built from using some element that will increase student motivation.

Acknowledgement

Suan Sunandha Rajabhat University Staff of Music Department of Suan Sunandha Rajabhat University
References


This research on basic vocal skills development of the first-year students, majoring in Vocal, department of Music, Suan Sunandha Rajabhat University was a qualitative research. The researcher collected scholastic document data, research works and several textbooks including interviews of the first-year students, majoring in Vocal, department of Music for 18 persons and other 2 vocal skills professionals. Moreover, the researcher also had observed students in the classrooms. In data analysis, the researcher arranged description by using an explanation and data categorization method. This research had the objectives as follows: 1) to solve problems in basic vocal skills of the first-year students, majoring in Vocal 2) to improve basic vocal skills of the students, and 3) to apply the research data for development of teaching arrangement appropriate to the students of practical music skills in basic vocal. From the study, the results of the research were found that individual students had different problems in basic vocal skills, 14 students did not have any basic vocal skills before studying at a higher education level, which caused them could not know the accurate basic vocal skills. In this group of students, it could be categorized into 5 subgroups as follows: 1) those who did not have accurate breathing and wind using 2) those who did not have accurate singing and vocalization methods 3) those whose singing did not match musical tone levels 4) those who had bad skills in musical note reading on treble and bass clefs and 5) those who did not have practical skills in synchronizing between piano and singing. The researcher used those 5 categories of the research results as a guideline for teaching arrangement to improve basic vocal skills of the first-year students, majoring in Vocal, department of Music as follows: 1) focusing on group skills practice and explanations to each student individually 2) the instructor added additional teaching periods in skills practice for the first-year students, majoring in Vocal, department of Music 3) added teaching contents in synchronizing between piano and singing 4) more focusing on practical skills in listening and singing on the learning exercises and musical scales. It was important for the students majoring in basic vocal skills should practice regularly and continuously after the classes for their development with more effectiveness. 

Abstract

Background and Importance

The research on basic vocal skills development of the first-year students, majoring in Vocal, department of Music, Suan Sunandha Rajabhat University was a consequence of the researcher as an instructor at a department of Music, majoring in Vocal; who had observed the students during the classes of basic vocal skills and had noticed that the students’ skills should be more practiced and developed for the better vocal background in all students. In addition, the researcher had interviewed and discussed with the students for 18 persons in the classroom and found that 4 students had some background; they used to study basic singing before studying at a bachelor degree level. The other 14 students did not have a background or had never studied international song singing before studying at a bachelor degree level. The researcher also found problems in skills teaching e.g. 1) there was neither accuracy in breathing nor wind using 2) singing did not match musical tone levels 3) bad skills in musical note reading on Treble and bass clefs 4) there was no skills in synchronizing between piano and singing. By these reasons the researcher started to study and research to find out the solutions of singing skills for the students’ skills developments, knowledge and their abilities to practice by themselves.

Objectives

1) To solve the problems in basic vocal skills of the first-year students, majoring in Vocal.
2) To develop basic vocal skills of the first-year students, majoring in Vocal for further improvement in their skills.
3) To apply the research data for development of teaching arrangement appropriate to the students of practical music skills in basic vocal.

The Hypothesis of this Research

The first-year students, majoring in Vocal, department of Music could have good vocal skills and improvements in the followings:

1. The students could sing in major scale accurately, including simultaneous breathing and singing with accuracy and effectiveness.
2. The students could sing vocal exercises and songs matching with vocal tones accurately and not distortedly. In addition, they could use international singing methods accurately and appropriately.

3. The students could read musical notes in treble and bass clefs better and could play piano synchronizing with singing in various musical learning exercises including playing piano in major scale.

**Expected Benefits**

1. The students could sing basic international songs better.
2. The students could gain knowledge, read notes, play piano in major scale and could play piano synchronizing with singing in various musical learning exercises.
3. Taking data from the research to apply for teaching development appropriate to the students of musical skills in basic vocal by the next academic years.

**The Related Theories and Researches**

1. **Theories in Musicology, Ethnomusicology and Music Education**
   
   Theories in Musicology, Ethnomusicology and Music Education, by using literature reviews as a main point, which were specified in western music studies including field surveys. (Allan P. Merriam, 1964, pp. 1-24)

   The researcher had observed teaching and recorded data for analyses of each student’s skills together with individual student interviews to solve the students’ problems and gain more effectiveness in teaching arrangement by focusing on the students as the main point. (Supang Chantawanich, 1988, pp. 1-2)

2. **Voice Training Manual by Beth Allen**

   Voice Training, When the singer begins training, or enters their intensive training, they must be assessed in a number of key areas. The assessment includes:
   - Vocal health
   - Technical control
   - Interpretive skills
   - Stylistic skills
   - Musicianship skills

   From this assessment, the singer can be guided into a program that continues to develop their strengths, and concentrates on improving their weaknesses. This voice manual gives the singer a guide on what to practice and when, a description of the vocal exercise for reference, how to maintain vocal health, ideas on song interpretation, and hints on performance preparation. The vocal exercises address the areas of principle concern for the potential professional singer, and are designed to build control and stamina, yet maintain a free instrument. They are presented as a Vocal Gym, developing the following areas:
   - Posture and body strength
   - Warm Up
   - Range extension
   - Breathing and breath control
   - Specific Vocal color control
   - Agility for vocal decorations or licks
   - Musicianship as a preparation for improvisation
   - Technical song preparation
   - Warm down
   - Relaxation (Beth Allen, 2003, pp. 1-3)

3. **Scale Major**

   A scale is nothing more than an arrangement of notes in specific patterns of half-steps and whole-steps. Scales are important tools in the music, as the basis for creating melodies, key and harmony. (Blake Neely, 2000, pp.17)

   **C Major Scale Ascending (Treble Clef)**

   ![C Major Scale Ascending (Treble Clef)](image_url)
4. Active Learning

Active Learning is a form of learning in which teaching strives to involve students in the learning process more directly than in other methods. (Yanudda Sirphathada, 2010, pp. 1-2)

The Research Methodology

The researcher used qualitative methodology to study musical and vocal data, literatures, textbooks and related researches including data analyses by observations during class work (Supang Chantawanich, 1988, pp. 12) in all teaching periods weekly and interviews with skilled teachers in Vocal, majoring in Music from other universities; both state and private; together with interviews and discussions with students individually about their basic knowledge and problems in vocal skills. All interview forms had been investigated by 2 experts. The data analysis was arranged by description and data categorization method.

In this research, the researcher used the following procedures:
1. Studying and researching from data, literatures, handbooks, textbooks, theories and other related researches.
2. The researcher tested the students individually by using learning exercises in vocal before classes.
3. Using interviews, questionnaires and discussions with individual students.
4. Interviewing experts, who were instructors in Vocal skills from other universities for 2 persons.
5. Observations during weekly teaching in all periods including data recording of vocal skills in individual students.
6. By testing the students with learning exercises and their singing abilities in songs used for teaching after the classes at the late of academic semester.
7. Analyses of data and finding a guideline for solving the problems including developing of basic vocal skills the first-year students, majoring in Vocal, Department of Music, Faculty of Liberal Arts.
8. Summary and discussion

Demography of the population sampling: The first-year students, majoring in Vocal, Department of Music, Faculty of Liberal Arts for 18 persons.

Research Tools

1. Interview forms for students (learners)
2. Interview forms for experts in Vocal, 2 persons
3. A sound recorder
4. A camera
5. A computer
6. Learning exercises for pre and post learning
7. Songs used as complementary teaching documents and for testing after classes
**Data Analysis**

During data collection and analysis, the researcher found that each 18 students had different problems in basic vocal skills, 14 students did not have any basic vocal skills before studying at a higher education level, while the other 4 students had ever studied basic vocal classes but were not longer than 3 months before studying at a bachelor degree level, so that they did not have accurate methods nor basic vocal skills. By study and problem analyses of the students’ basic vocal skills, the researcher solved these problems by categorization of their problems and then used methods and leaning exercises to correct vocal skills problems at all problematic points together with using vocal examinations at midterm and final of the academic semester, and gave suggestions for their improvements individually. It was important that the learners in vocal skills should practice regularly and continuously after the classes to develop their skills effectively.

In those 18 students, they should develop and improve vocal skills in 5 categories as follows: 1) correction their breathing and wind using 2) correction their inaccurate singing and vocalizing 3) matching their singing with musical tones 4) their inabilities in note reading in treble and bass clefs 5) they did not have skills in using piano synchronizing with singing. After data analyses, the researcher suggested a guideline for using in classrooms to solve those students’ problems as the followings.

To solve the problem of basic vocal skills learning

1. Practice in vocalization and using accurate voice by vocalizing according to learning exercises for voice warming by using the following sounds (Awasdakan poomee, 2018, pp. 1-2)
   - yam yam yam/ yaayaaya
   - laahaaahaa
   - yaeyaeaye
   - maamaemeemomuu
   - huem / haahaa
   - hweehweehee

2. To solve the problem of distorted singing or voices that could not match the tones by playing main songs, and then let the students to sing along with words “lalaa” or “hwee” and practice to sing in Major scale.

3. Let the students review and practice breathing and control wind every time before singing, together with using learning exercises for practice.

4. Let the students practice breathing, wind releasing simultaneously with slow body movements to train breathing during singing and to relieve body spasm before singing.

5. Let the students review note reading in treble and bass clefs in every week of learning.

**Picture 4  Warm up exercises in class**

The Results of Study

The results from the study were found that those 18 students had different problems in vocal skills, 14 students did not have basic vocal skills before studying at the higher education level, the other 4 students had basic vocal skills for 3 months before studying at Bachelor degree, so all of them did not know accurate methods and basic vocal skills.

The group of 18 students needed to be developed, improved and corrected in basic vocal skills, which were categorized into 5 groups as follows: 1) accurate breathing and wind using 2) accuracy in singing and vocalization methods 3) their singing
did not match musical tone levels 4) they had bad skills in musical note reading in treble and bass clefs and, 5) they did not have skills in synchronizing between piano and singing.

The researcher had evaluated, analyzed and used those 5 groups of the results as a guideline for teaching arrangement to develop basic vocal skills of the first-year students, majoring in Vocal, department of Music as follows: 1) focusing on group practice, explained and suggested the students individually 2) the instructor added more time for teaching skills to all 18 first-year students, majoring in Vocal, department of Music 3) added more teaching contents in piano playing synchronizing with singing 4) more focusing on listening skills and singing practice in learning exercises and in Major scale 5) testing the students with quizzes in each skills practice.

Discussion of the Results of Study

For the study in “Basic Vocal Skills Development of the First-Year Students, Majoring in Vocal, Department of Music, Suan Sunandha Rajabhat University”. The researcher collected data from textbooks, musical handbooks, Vocal Diary and her teaching experiences to find out a guideline for solving some problems. In addition, the researcher had observed during her teaching throughout the academic semester, together with analyses on individual students’ problems, and then used those weak points to be a guideline to improve and develop vocal skills technics.

From testing before and after classes at the late of the semester, found that all 18 students had better singing and vocal skills in learning exercises, they also could play piano and read notes in treble and bass clefs quicker and more skillfully, which were classified into 3 levels i.e. 1) with the best skills for 6 persons 2) with good skills for 8 persons and 3) with moderate skills for 4 persons.

Summary of the Study

In the study of “Basic Vocal Skills Development of the First-Year Students, Majoring in Vocal, Department of Music, Suan Sunandha Rajabhat University”, the researcher used the research samples from the first-year students, majoring in Vocal, department of Music, faculty of Liberal Arts, Suan Sunandha Rajabhat University for 18 persons. Data were collected, Vocal Diary and analyzed from the researcher’s observations including interviews with the students individually and closely to find out a guideline to solve the students’ skills problems. These provided the researcher could improve and develop the students’ skills better.

Advantages from this Study

1. The students gained better vocal skills from basic learning exercises and classical music
2. The students could read musical notes in treble and bass clefs better. They also could play piano in Major scale. Moreover, they could play piano synchronizing with singing in various basic learning exercises.
3. The research data could be applied as a guideline to solve the problems and develop teaching arrangements appropriate for the students in practical musical skills, majoring in Vocal by the next academic years.

Suggestions from this Research

1. The study in “Basic Vocal Skills Development of the First-Year Students, Majoring in Vocal, Department of Music, Faculty of Liberal Arts, Suan Sunandha Rajabhat University” could be used as a guideline to solve the problems in vocal skills or
to develop basic vocal skills in a group of learners who did not have a background or had a little background in vocal skills before studying at university levels.

2. Interested persons could use this research for further study to develop vocal skills at medium and higher levels.

References


Desirable Characteristics of Academy Administrators in Thailand 4.0
Ssansanee Jasuwan*
Suan Sunandha Rajabhat University, Bangkok, Thailand

Abstract
The purpose of this qualitative research were to study the desirable characteristics of academy administrators in Thailand 4.0 and to propose the effective ways to develop the desirable characteristics of school administrators in Thailand 4.0. The data was collected by conducting in-depth interviews the 9 successful and experienced educational administrators of Thailand 4.0, along with the data summarizing as well as the content analysis. The results of this research indicate that the desirable characteristics of academy administrator in Thailand 4.0 consist of 5 elements as follow 1) Decision-making skill 2) Competence in motivating people 3) Responsibility 4) Intelligence and Competence 5) Personality. Guidelines for developing desirable characteristics, including 1) training to develop desirable knowledge and skills 2) prior experience assessment into position 3) organizing activities to create experiences

Introduction
The key person who plays an important role in improving quality of the educational institute in order to catch up the globalization is its own educational administer. Along with the rapidly advancing information technology of the vision plan Thailand 4.0 in pursuing to move forward to the innovative economic under main factors of Stability, Prosperity and Sustainability. In the meantime, the success of the model has to be cooperated by the private sectors such as banks, Thai citizen, educational and research institutes whereby the promoting of SME and Startup within the united moving direction. More importantly, the high technological infrastructure is one of key success in connecting people and enhancing standard communication system. Nevertheless, ICT is an important factor to make country comes across the middle to high financial income under the supportive circumstances from all source of factors.

The modern educational administrators should have a specific attitude that could possibly lead their education along with country’s educational policy. Meanwhile, decision-making skill, competence in motivating people, responsibility, intelligence and competence and personality are the needs to be in all administrators. Therefore, the result of the research could effectively be the way to form qualified educational administrators that country needed.

Objectives
1. to study the desirable characteristics of school administrators in Thailand 4.0
2. to propose the effective ways to develop the desirable characteristics of school administrators in Thailand 4.0

Literature Review
Dr. Suwit Masinatree had been proposed that Thailand 4.0 was the country’s stability linked to the World economic globalization. And those present dynamic consequences had not been avoided by Thailand. Those 3 consequences were:
- Globalization with concerning to,
- Digitization trend that caused behavior attitude deviated in running Business.
- Urbanization trend that caused by the city life style had become popular and spread to urban and surrounded regions.
- Communication trend that caused by the common chaos and crisis the whole world had been effected from climate change, terrorist, and disease outbreak.
- Regionalization had been the trend of grouping people in the regional area regardless of landscape or economic landscape.
- Localization was the trend of local and community strength in their uniqueness and identity which had been inherited in connecting people and their culture for along time.

In the past, Thai economy had relied on foreign investors such as BOI, and the exported income whereby those business companies and money investment belong to foreigners. Unfortunately, Thai had earned only the low labor cost and the imaginative export statistic. These consequence problems had trapped Thailand into an exaggerated country that depend upon foreigners and had become a middle income country instead of developing to be a high income country. Thailand 4.0 was the strategic plan to reduce inequality in wealthy, business power and business opportunity whereby strengthening ecological and social balance to maintain country stability, prosperity and sustainability.

*Corresponding author: sansanee.jasuwan@sru.ac.th
Thailand 4.0 has consisted of 2 important factors. “Strength from Within”, which is the strengthening from inside country that relied on 3 moving propositions:
- Innovation Driven Proposition in every involving sector in country
- Entrepreneur Driven Proposition
- Community Driven Proposition
“Connect to the World”, which is the economic connecting between Thailand and the World and it is concerned to 3 levels system.
- Domestic Economy within country
- Regional Economy of country region
- Global Economy of the World

Those are the jigsaw of Thailand 4.0 that believed to lead country to economic stability, long term sustainability and wealthy by hoping that the consequences would provide Thai society with Happiness, Hope and Harmony.

Meanwhile the desirable characteristics of the people must be reached to 7 of the important standards (Teera Runchareon, 2017) including:
- Acceptance to the dynamic change
- Flexibility for not sticking to the edge
- Having creative viewpoint
- Integrating capability knowhow
- Adaptability to circumstances and needs
- Capability in predicting future
- Knowledgeable and technological skillful

Rajamangala University of Technology Phra Nakhon (2018) has proposed the meaning of attitude as the people potential in their behavior and thinking, moreover, it could possibly be effected to surrounded circumstances. Those basic attitudes are as followed:
- Motivation, the power that leads and motivates people to act toward the goal desired or avoiding to react in some undesirable situations. In the meantime, it can motivate people intension in pursuing the target expected and improve their work to upper standard quality.
- Trait, the personality human behavior that reacts toward general of their life style such as emotional control, creative thinking, and pressure situation depending on the person’s background, education, experience, and learning capacity.
  - Self-Concept, the people believe about themselves, attitude, value and Self-Image.
  - Social Role, the people played their part in society as the role of leader or social service.
  - Knowledge, the understanding, the source of knowledge that people has toward their professional career, related job, labor laws and job personal.
- Skill, the ability to perform and think finically and mentally.
- The Office of the Civil Service Commission (2010) has defined administrative competencies for those who will enter the position. Which the administrative competency means behavioral characteristics that are defined as co-characteristics of the type of office and administrative type. In order to create the most effective and competencies administrators, there are capacity consist of
  1. Leadership
  2. Vision
  3. Government strategy
  4. Potential to apply modifications
  5. Self-control
  6. Coaching and assignment
- Tongporn Rungreongsri (2018) has been studied on the desirable characteristics of the educational administers in the Century 21st and discovered that the main potential needs were the work profession. The job capacity for example analytical potential, the creative view point, people care and improvement, source of knowledge, understanding of the cultural diversity, prospective reaction, self-confident, arts of motivation and communication. Meanwhile, the managing capacity such as vision, state policy, self-control.

Wacharaphong Sormanee, Sansanee Jasuwan, (2018) studied Desirable Characteristics of Thailand 4.0 Era School Administrators under Secondary Educational Service Area Office 1, Bangkok Metropolitan. The objectives of this study are as follows: 1) to study the desirable characteristics of Thailand 4.0 era school administrators, 2) to investigate the qualifications of administrators in secondary schools in Thailand 4.0. The samples of this study consist of 9 scholars with administrative and Thailand 4.0 economic model experience as well as 400 secondary school administrators and instructors under Secondary Educational Service Area Office 1, Bangkok Metropolitan. The data was collected by means of oral interviews and questionnaires with 5-Likert rating scales. The statistics employed in this research are frequency, percentage and standard deviation. The factor analysis is the maximum likelihood method and the content analysis method.

The results of this research indicate that the desirable characteristics of Thailand 4.0, school administrators under Secondary Educational Service Area Office 1, Bangkok Metropolitan are 1) decision-making skills, 2) competence in motivating
people, 3) responsibility, 4) intelligence and competence, and 5) personality. The variations in the desirable characteristics of school administrators are: 1) decision-making skills with 6 variations, weighing .417-.75, 2) competence in motivating people with 12 variations, weighing .340-.650, 3) responsibility with 9 variations, weighing .367-.668, 4) intelligence and competence with 16 variations, weighing .369-.78, and 5) personality with 9 variations, weighing .458-.630.

Methodology

This qualitative research was implemented in the collection of related source of information, the in-depth interview the 9 successful and experienced educational administrators of the Thailand 4.0 by using the following issues:

The important characteristics of the educational administrators in cases as decision making, motivation, responsibility, knowledgeable and skill capacity, and personality.

Desirable characteristics of the educational administrators of the Thailand 4.0.

Guidelines for developing desirable characteristics of the educational administrators in Thailand 4.0

The data analysis of the in-depth interview and bibliography's content were written as the content essay.

Results and Discussion

The research has discovered the desirable characteristics of academy administrators in Thailand 4.0 in 5 factors:

The decision making is consisted of the confident in making decision by integrating knowledge and source of information, experience, technological skill, business knowhow and the update global network.

The motivation capacity is consisted of the skill in problem solving, the guts in moving forward an organization, accepting point of view in order to make decision, starting the integrate innovation in organization, inspiring staff and colleague in administrative positions, sincerity to staff and workers, ability in speech communication, intension in completing the project, having a appropriate manner to impress people organization, having honesty toward all workers, awarding prizes or presents to success staff.

Responsibility is consisted of listening to colleague point of view in order to bright some certain points in improving organization, friendly and be able to rely on others, devoting all capacities to complete mission received, having courage in public presentation, not hesitate in full steam working, always be a learner, be able to catch up global situation, receiving fast track information, intelligent and be ready to adapt himself to situations.

Capacity and knowledge is consisted of religious practicing, believed in the rights and honest in job responsibility, be able to listen to defamation with kind heart, having an update knowledge to improve working quality, having the bird eyes view vision, having good friendship, having good skill in working with others, promote educators in having technological skill and knowledge, promote ICT in improving teaching and learning outcome, promote cooperation between parents and community, having skill in analysis and critic, always be enthusiastic, having a good EQ, having creative idea, and having self-confident.

Personality is consisted of having alert movement, having a leading role, having intension in complete mission, lively and healthy appearance, humble personality and giving advise to all staff, having love and care to others, be able to handle mental strain, having good human relationship, and being in good governance.

Guidelines for developing desirable characteristics of educational administrators in Thailand 4.0, consisting of 1) training to develop desirable knowledge and skills both of the knowledge for executives administrative skills and information technology knowledge, 2) experience assessment before entering the position, which the management should have experience in management at various levels before entering the position of executive unit, 3) organizing activities to create administrative experience for creating personality, develop leadership, various personality development. Another important factor are continuous development because of the change of the world, administrators need to be aware of changes to be able to improve quickly.

Conclusion

Desirable characteristics of administrators in Thailand 4.0 comprising 5 elements: leadership, administrative skills, personality and information technology. The guidelines for developing desirable characteristics include 1) training to develop desirable knowledge and skills, 2) prior experience assessment into position, 3) organizing activities to create experiences. However, the characteristics of the administrators must be consistent with the country's development policy in Thailand 4.0 that focuses on upgrading innovation and strengthening communities and networks for contribute to economic development both at the national and global levels. Therefore, the role of executives must be leaders in creating innovation. As well as cultivating entrepreneurship for young people so that they can keep up with changes and in the direction of national development.

Acknowledgements

The success of the research had been done by the inspiration and the policy of Suan Sunandha Rajabhat University in promoting and enhancing the faculty members’ potentials in term of research. Moreover, all of the Graduate school members and staff of the department of Educational Administration, Suan Sunandha Rajabhat University who had put their effort, encouragement and support to the research and academic project. The researcher would like to express my grateful thanks Graduate school, Suan Sunandha Rajabhat University tand more importantly, Prof. Dr.Weerachat Premananda for guiding and proof reading this research paper.
References


The Basic Thai Clarinet Development Using Standard Notation Method of Student in Music Department, Suan Sunandha Rajabhat University

Pramot Teangtrong

Music Department, Suan Sunandha Rajabhat University, Bangkok, Thailand

Abstract

The purpose of this research is to study the basic Thai Clarinet development using standard notation of Suan Sunandha Rajabhat university music student. In the past, Thai clarinet lesson was learning by ear conducted by the instructor, which was really slow processing. Therefore, researcher now using the standard notation for teaching by comparison between learning by ear, and learning using the standard notation, student learning faster using standard notation. Moreover, the instructor had more time to teach more technique and knowledge, also student got more time to practice by using notation. In conclusion, learning using standard music notation make student learning faster and more virtuously.

Keywords— Student in Music Department, Suan Sunandha Rajabhat University, Standard Notation Method, Note, Clarinet, Pi-Nai

Introduction

In the previous day, the teacher teaches Thai music to a student by demonstrating and copying which means teacher shows students how to play the song and students copy what the teacher plays. After that, teachers teach students by telling one-on-one. Students must memorize songs from teachers. In the past, Thai melody of Thai songs was not recorded as musical notes. Memorizing the song is based on the way each teacher who invented it to make his students can easily recognize the song. This style of teaching is a learning culture that requires the closeness between teachers and students including with various experiences in performing musical works that can lead to the development of student’s skills.

Nowadays, Thai music becomes part of the education. This participation makes teaching and learning better than previous day both in theory and practice. Educational development focuses on the development of students’ potential. The improvement and application of teaching and learning processes in various forms shows that the progress of Thai music education continually develops the knowledge.

Music is one of many subjects that focuses on the use of practical skills. The teaching process focuses on practicality in order to maximize musical instrumentation skills. The result is in the form of practice. This is an indicator of the skill level of the musician. To be a musician with expertise and recognition in music society, students must be a hardworking person. Furthermore, students can persevere in continuous training and learning correctly in instrumental practice.

Teaching Thai musical instrument skills required not only the suitable instructional design for students but also the perseverance in training in order to develop their music skills and be ready to learn from the teacher next time. The clarinet is a Thai musical instrument. This clarinet is a part of Pi Paat band. It is a musical instrument that is considered a very difficult type, so there are not many students want to study this clarinet because it takes a lot of time to practice and it is a noisy instrument. It’s hard to find a place to practice. Furthermore, the method of teaching is still in an old way. Students have to remember specific sounds; Tue, Hor, Hae and etc. which is very hard for students in the present day. As a result, the teacher uses Thai music notes in teaching clarinet to make it easier to memorize the song and to develop skills in better performing musical instruments.

The researcher realizes that the use of music notes in teaching would help learners to develop better clarinet skills and suitable for modern day’s teaching method. This provides more time for the teacher to teach more specific techniques. Moreover, this method allows learners to self-study through the instructor's notes. The researcher created a practice clarinet note in order to study the guidelines for developing basic clarinet skills by using the standard notation of Suan Sunandha Rajabhat University music student.

Objectives

1. To compare the skills of the students in the old method and standard notation method.
2. To propose guidelines for developing basic clarinet skills using standard notation method of Music Department’s Student, Suan Sunandha Rajabhat University.

Benefit : Students can learn and develop clarinet skills faster by using standard notation method.
**Definitions of Terms**

Pi-Nai refers to a kind of Thai clarinet that used in Pi Paat band. Pi-Nai’s shape is as same as Pi-Nog. Pi-Nai is the biggest clarinet together with the lowest tone among clarinets. Pi-Nai is the most favorable among Thai musician. Pi-Nai is a single reed musical instrument with long, hollow shape. There are holes for control the pitch.

Hoarse sound refers to the high-pitched note of Pi-Nai.

Tor sound refers to a low-pitched note of Pi-Nai.

Clarinet Style refers to a way for the specific play of different clarinet or may be similar to other musical instruments.

Skill refers to recognition of songs and special techniques, various blown methods such as playing clarinet in swinging style, wind ventilation, and longing.

Music note refers to Thai musical notes used in studying in Pi-Nai.

Students refer to student who study Pi-Nai in Music department, Suan Sunandha Rajabhat University.

**Literature Review**

Pi-Nai

Pi-Nai is a biggest clarinet with lowest tone among single reed musical instrument. It is made in single piece. The clarinet’s body that acts as a sound amplifier is called "Lao". It is a blowing musical instrument contains reed. This clarinet is a part of Pi-Paat band since the ancient time. We called Pi-Nai because this clarinet has a sound that match with the tone’s set called “Siang-Nai” which Pi-Paat-Nai-Khang always use in playing music. Pi-Nai is a part of Pi-Paat-Krueng-Ha band, Pi-Paat-Wong-Khuu abnd and Pi-Paat-Krueng-Yai band.

*The Appearance of Pi-Nai*

Pi-Nai made from wood such as rosewood, with a length of about 52 cm, its width is about 4 cm. Its head looks like a tail end and bloated in the middle. Its body is drilled to make a hole throughout the head. There are holes for controlling 6 holes, with 4 holes with the same space. The other 2 holes are between the middle of each hole. At the end of the clarinet, there is around flat material made of rubber or wood. Especially at the top, for insert reed called “Tuan-Lang”. The other part will use the lead to reduce the noise call “Tuan-Puad” which made from metal. It is a small round shape, slender inside, small one side, and another side is a big one. Use a palm leaf and strong, cut into 4 layers or 4 petals. Tied with a rope in a “Ta-Krung-Beth” knot to be attached to the small side. The big side will knit or a small line in the same size as the top hole of the clarinet and reed.

**How to Play**

From the principle of playing Thai clarinet, resulting in the basic blowing and sound methods as follows

- Tor sound is La
- Hue sound is Re
- Tor sound is La
- Tae Sound is Ti
- Ue Sound is Higher Re (Hoarseness)
- Ue (higher) Sound is Higher Me (Hoarseness)
- Ue Sound is Higher Re (Hoarseness) (Same sound as number 7)
- Tor Sound is La (Same sound as number 5)
- Tor Sound is So (It is a Siang-Bon, use the same finger as Tor – Re but using different air pressure)
- Ue Sound is Fa
- Tae Sound is So (Same sound as number 11)
- TorLot Sound is La (It is different from other La sound because of the controlling of reed of a clarinet)

**Playing Clarinet Principle**

The musician sits in the folded posture or squat with a straight body, hold the clarinet to the sound hole on the top. By conventional, use the right hand on top, the left hand is below and keep the thumb to support the holding. Use the index finger, middle finger and ring finger of both hands to control the sound hole to make the sound high or low as needed. The two little fingers used to support the clarinet. Both arms lifted up and spread out enough to allow the elbow is below the shoulder level. The musician must keep reed of the clarinet in the mouth until the lips close up. Tilted the tongue 45 degrees. There are 2 types of air using in playing clarinet; using wind directly from the lungs (chest) and the use of controlled wind from within the cheek bulge. This is used alternately in a manner called "ventilation", which is pumping the air from the nose to the cheek and then squeezing the air from the cheek to the tongue while also pumping the air into the cheek continually.

In the Pi Paat band, there is a duty to blow by conducting the melody frequently, some howling for a long voice. There is a way to perform the melody that is bound to be the unique verse of the pi. This called “The way of Pi” which consists of the following blowing methods;

- Pao-Keb is a playing style to perform melodies with syllables frequently with the melody by means of ventilation.
- Pao-Hoi is a playing style to perform some melodies for a long sound. By dragging through one sound to another
  - Pao-Tod is a playing style to control the sound to be clear by using the tongue at the tip of the clarinet.
  - Pao-Kuang-Siang is a playing style to control the following sound in the same volume.
- Pao-Prom is a playing style to perform melodies with syllables frequently in the same sound by opening the finger quickly which can be done in 2 ways: one-finger carpet (double sound effect 2) and a 2-inch carpet (resulting in a triple sound) will generate a dense sound.
- Pao-Prib is a playing style to control wind and fingers to give a short rattle sound
- Pao-Krun is a playing style to make the clarinet sound like a chorus.
- Ventilation is a playing style with the wind switch technique within the body of the blower between the wind straight from the lungs (wind, chest) and the wind from the cheek bulge (wind, bulge, cheek) so that the continuous wind power can blow the blown sound continuously. (นพธ. ปณ. 2552, หน้า 70)

Basic principles of Thai note reading

For those who have started studying Thai music and have no background in music before, may not understand the characteristics of Thai music reading. To make it easy to understand, this research would like to use the principles of Thai notation according to the theory of Maj. Gen. Apai Pholphon (Peng Penkun) who is the author of the musicology textbook since 1907 and prescribing the principle of recording letters in form, which is considered to be a very popular theory by using Thai characters to compare with the sounds of international notes as follows;

\[
\begin{align*}
\text{a} &= \text{Do} \\
\text{b} &= \text{Re} \\
\text{c} &= \text{Me} \\
\text{d} &= \text{Fa} \\
\text{e} &= \text{So} \\
\text{f} &= \text{La} \\
\text{g} &= \text{Ti}
\end{align*}
\]

In the case of a high-pitched note, use a dot on the note, such as \( \text{a} \) is higher Do. This principle will make those who begin to study easy to understand. For how to record Thai notes, use the recording on the table, divided into 8 note rooms with 4 notes in each room. If it is a 2-stroke rate, the last note of each room will be a rhythmic note, which will explain only the 2-grade note reading.

<table>
<thead>
<tr>
<th>Ching</th>
<th>Chub</th>
</tr>
</thead>
<tbody>
<tr>
<td>1234</td>
<td>1234</td>
</tr>
</tbody>
</table>

In addition to notes in the box, there is also a sign - which represents the note as well, with 1 tick (-) instead of 1 note indicating the sound of the note in front of the marker is a longer sound. The more (-), the longer sound it is, as follows

If there is - the sound length is equal to the ¼ rhythm
If there is -- the sound length is equal to the 2/4 rhythm
If there is ---- the sound length is equal to the ¾ rhythm
If there is ---- the sound length is equal to the 4/4 rhythm or equal to 1 stroke

When you understand the signs, the method of reading Thai notes will use the tapping of the notes at the end of the room instead of the ChingChub sound. In a 2-tier rate, there will always be a final note. 1 line of notes equal to 1 Na Tub Prob Kai (as described in Chapter 1) so when reading the 2-layer rate note, should tap the beat at the last room note instead of ChingChub. So when reading the 2-layer rate note, the musician should tap the beat at the last room note instead of ChingChub. This will make it easier to understand the method of Thai notes. In general, there are 6 types of recordings which are the most common forms as follows;

1. 4 Notes per room

<table>
<thead>
<tr>
<th>ChingChub</th>
<th>ChingChub</th>
<th>ChingChub</th>
<th>ChingChub</th>
<th>ChingChub</th>
<th>ChingChub</th>
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</thead>
<tbody>
<tr>
<td>1234</td>
<td>1234</td>
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<td>1234</td>
<td>1234</td>
<td>1234</td>
</tr>
</tbody>
</table>

2. 3 Notes per room

<table>
<thead>
<tr>
<th>ChingChub</th>
<th>ChingChub</th>
<th>ChingChub</th>
<th>ChingChub</th>
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<td>1234</td>
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<td>1234</td>
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</table>

3. 2 Notes per room (Second and Forth note)

<table>
<thead>
<tr>
<th>ChingChub</th>
<th>ChingChub</th>
<th>ChingChub</th>
<th>ChingChub</th>
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<tr>
<td>1234</td>
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<td>1234</td>
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</table>

4. 2 Notes per room (Third and Forth note)

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<th>ChingChub</th>
<th>ChingChub</th>
<th>ChingChub</th>
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<tr>
<td>1234</td>
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</table>

5. 1 Notes per room (Forth note)

<table>
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<tr>
<th>ChingChub</th>
<th>ChingChub</th>
<th>ChingChub</th>
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<tbody>
<tr>
<td>1234</td>
<td>1234</td>
<td>1234</td>
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</table>

6. 1 Notes in very 2 rooms (Forth note) (sign - means long notes)

<table>
<thead>
<tr>
<th>ChingChub</th>
<th>ChingChub</th>
<th>ChingChub</th>
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</table>

From the method of Thai note recording, all 6 types of Thai notes are considered as an important basis for starting to read the 2-grade music score. Students must study this method because it can cover all the methods of reading music scores because studying Thai music should have to know how to read Thai notes first.
Memorizing Techniques

There are 8 techniques to improve memorizing skill

1. **Focus on it**
   Multitask is the cause of worsening memorizing or missed from the work. Our brain needs time to code data. If we don't spend enough time with it, the data will not be properly stored in our memory. Furthermore, we can’t recall it properly. If we have a need to remember something, we should focus on it and reduce many actions at the same time.

2. **Smell, Touch, Taste, Hear and see it**
   For example, remembering someone's name will allow us to remember him more. If we find his face (looking with his eyes), talking, greeting (hearing) and holding his hand (touching). Same as remembering food names, we can remember the food’s name more easily when we smell it, we can see, eat, recognize the taste, etc. When applied to read a book, we read (look), we listen (hear, listen to the recording tape), we write down the summary (touch).

3. **Repeat it**
   When we want to remember something. The most thing that people tend to do is to repeat, do it over and over again which psychology called "Overlearning". Repetition helps us not have to cram the information into our brain. Moreover, it makes the information entered into the intervals between each other and remain in our memory for a longer time. Practice doing exercises and answering questions manually helps us remember and understand the lesson more and be useful for taking the exam.

4. **Chunk it**
   Interestingly, most people do not have problems remembering phone numbers. Although, the phone number has many numbers in common. This technique is called "Chunk" which we will use when you want to digest large group data or data set to be smaller and easier to remember. For instance, phone number, if we remember each one separately, it means we have to waste space to remember the XXXXXXXXX 10 units, but when we arrange to be a chunk, we can easily remember by organizing XXX-XXX-XXX. That means we save space from 10 units to only 3 units. We may use this technique. Helps us to remember more easily by organizing subgroups and organized them according to the categories that are similar to each other, or arranged with the opposite.

5. **Organize it**
   In each book contains each lesson, in each lesson, there are many topics. Systematization like this works like our brain. Therefore, we should organize the information from the beginning because it will help our brain to encode information and remember more easily.

6. **Use Mnemonic device**
   In this world, there are many ways to remember but one thing that is a common point is to help us memorize complex information, through imagination, use of abbreviations, use of rhythms or compositions. For instance, medical students in foreign countries often remember the parts of the body’s bones or symptoms of the disease by remembering the first letter of that word which links to the words of parts of the bone or symptoms of the disease. Then, bring the first several letters that will be remembered together as a sentence. In the previous day, we may familiar with children and how to remember. Whether it is remembering the central characters in Thai (Kai Jig Dek Tai B Ong) or memorizing words through singing. Those methods can also be applied to university studies as well.

7. **Learn it the way that works for you**
   Sometimes, we may stick to the memory methods that we know and thought that it is suitable for us. However, nowadays, there are many new learning styles to help remember. Some people may review the lesson by repeating the content of the course, some people will listen to the content learned from listening to the recording tape in the classroom repeatedly then concluded again We are all different. So how to remember so we should choose a suitable method for ourselves. No need to be like most people. Find the right way for us.

8. **Connect with dots**
   When we learn new things, often we will forget the same things that exist and do not create a link between new things and the same things that are in our memory. Research has shown that our memory will last more when we try to create links with the same information during we are learning or remembering new information. For example, let us think about the things that are linked between old and new information, or think about our own past experiences which are linked to new information or things that we want to remember. (http://psychcentral.com/blog/archives/2010/09/03/8-tips-for-improving-yo.

Research Progression

To study the basic Thai clarinet development using the standard notation of student in Music Department, Suan Sunandha Rajabhat University, the researcher has compiled both relevant documents and applied to teach methods for students to develop Pi-Nai skills.

The population is a student of the first and second year, majoring in music with no skill in play clarinet. The experimental period is 1 semester which is semester 2, academic year 2018, Faculty of Fine and Applied Arts Suan Sunandha Rajabhat University.

Studying Period: Study in skills classes for 15 weeks
### Tables 1: Teaching Plan (Pi-Nai)

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic / Details</th>
<th>Period (Hrs.)</th>
<th>Teaching Activities / Media</th>
<th>Note</th>
</tr>
</thead>
</table>
| 1    | Elements of Pi-Nai and How to Read Note      | 4             | - Study about elements of Pi-Nai   
          - Basic note reading practice                                      |                                       |
| 2    | Medium Tone 1 Rhythm                         | 4             | - Play clarinet in all level in Medium Tone (7 notes). Blow each note with a continuous 1 stroke of note room. |                                       |
| 3    | Medium Tone 2 Rhythm                         | 4             | - Play clarinet in all level in Medium Tone (7 notes). Blow each note with a continuous 2 stroke of note room. |                                       |
| 4    | Practice Hoarse sound and Tor sound          | 4             | - Play clarinet in Tor sound (3 notes). Blow each note with a continuous 1 stroke of note room.   
          - Play clarinet in Hoarse sound (5 notes). Blow each note with a continuous 1 stroke of note room. |                                       |
| 5    | Tao-Kin-Pak-Bung Song Verse 1                | 4             | - Play clarinet in Tao-Kin-Pak-Bung Song of the first verse of the note   
          - Practice special techniques 1. Tod-Lin                              |                                       |
| 6    | Tao-Kin-Pak-Bung Song Verse 2                | 4             | - Review playing clarinet in Tao-Kin-Pak-Bung Song of the first verse of the note   
          - Play clarinet in Tao-Kin-Pak-Bung Song of the second verse of the note   
          - Practice special techniques 1. Tod-Lin                              |                                       |
| 7    | Tao-Kin-Pak-Bung Song Verse 3                | 4             | - Review playing clarinet in Tao-Kin-Pak-Bung Song of the first and second verse of the note   
          - Play clarinet in Tao-Kin-Pak-Bung Song of the third verse of the note   
          - Practice special techniques 1. Tod-Lin                              |                                       |
| 8    | Lo Song Verse 1                              | 4             | - Play clarinet in Lo Song of the first verse of the note   
          - Practice special techniques 1. Tod-Lin                              
          2. Ventilation                                                        |                                       |
| 9    | Lo Song Verse 2                              | 4             | - Review playing clarinet in Lo Song of the first verse of the note   
          - Play clarinet in Lo Song of the second verse of the note   
          - Practice special techniques 1. Tod-Lin                              
          2. Ventilation                                                        |                                       |
| 10   | Hor Song Verse 1                             | 4             | - Play clarinet in Hor Song of the first verse of the note   
          - Practice special techniques 1. Tod-Lin                              
          2. Ventilation                                                        
          3. Tee-New                                                             |                                       |
### Summary and Discussion

The objectives of this study are 1) To compare the skills of the students in the old method and standard notation method and 2) To propose guidelines for developing basic clarinet skills using standard notation method of Music Department’s Student, Suan Sunandha Rajabhat University. This research is experimental research. The population in this research is a student of the first and second year, majoring in music with no skill in play clarinet. The experimental period is 1 semester which is semester 2, the academic year 2018. Faculty of Fine and Applied Arts Suan Sunandha Rajabhat University. Divided into 2 students study in the old way of teaching which is demonstrating and copying the style and another is using standard notation. The result shows that student who studies in standard notation method can study song in Pi-Nai faster. This allows the teacher can teach more special techniques to students. Furthermore, students can also go to practice outside of their own lessons from music scores which helps learners develop their own clarinet skills faster and more efficiently. As for learners who have learned the traditional style, they can play clarinet less in songs and gain fewer techniques than the students who use the music score. The instructor must prepare the score, describe the symbols used to practice Pi-Nai and make clear study plans and assessments. This will help students develop the clarinet skills.

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| 11 | Hor Song Verse 2 | 4 | - Review playing clarinet in Hor Song of the first verse of the note  
- Play clarinet in Hor Song of the second verse of the note  
- Practice special techniques  
  1. Tod-Lin  
  2. Ventilation  
  3. Tee-New |
| 12 | Muu-Long Song Verse 1 | 4 | - Play clarinet in Muu-Long Song Verse 1 of the first verse of the note  
- Practice special techniques  
  1. Tod-Lin  
  2. Ventilation  
  3. Tee-New  
  4. Prom-New |
| 13 | Muu-Long Song Verse 2 | 4 | - Review playing clarinet in Muu-Long Song of the first verse of the note  
- Play clarinet in Muu-Long Song Verse 2 of the first verse of the note  
- Practice special techniques  
  1. Tod-Lin  
  2. Ventilation  
  3. Tee-New  
  4. Prom-New |
| 14 | Muu-Long song Verse 3 | 4 | - Review playing clarinet in Muu-Long Song of the first and second verse of the note  
- Play clarinet in Muu-Long Song Verse 3 of the first verse of the note  
- Practice special techniques  
  1. Tod-Lin  
  2. Ventilation  
  3. Tee-New  
  4. Prom-New |
| 15 | Muu-Long song Verse 1-3 | 4 | - Play clarinet in Muu-Long Song Verse 1-3 of the first verse of the note  
- Practice special techniques  
  1. Tod-Lin  
  2. Ventilation  
  3. Tee-New  
  4. Prom-New  
  5. Continually Blowing Note |
References

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