The Development of Curriculum Content for the Study of Undergraduate Applied Trumpet in Thailand

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Abstract

In Thailand, the trumpet is a popular instrument that is utilised in various types of musical genres and styles. These styles include Western classical, jazz, Thai pop, Thai country and Thai fusion, which combines traditional Thai music with popular styles. Thai trumpet players are often required to play in more than one style, however, there are little opportunities to study these skills at the university level. The purpose of this study was to create curriculum content for the study of undergraduate applied trumpet performance in Thailand that will make it appropriate for Thailand. A qualitative methodology was employed for a developmental research approach through the process of collecting curricula from Thai universities and international experts; conducting interviews with four expert Thai trumpet instructors; and analysing and synthesising this curriculum data to create a new core curriculum that reflects international standards yet relevant to the Thai music scene. The resultant curriculum consists of: description of the curriculum, objectives of the curriculum, undergraduate curriculum plan and content description, expected results of a study of outcome-curriculum-design theory, curriculum content guidelines, learning activity subjects, student assessment, and recommendations. Discussion points include possibilities and limitations in curriculum development, the process of curriculum development that is suitable for studying trumpet at the undergraduate level in Thailand, and trumpet curriculum development for future career paths.

Keywords: curriculum development, music education, Thailand, trumpet, trumpet curriculum

Background and Significance

In recent decades, Western classical trumpet has become a well-known and popular instrument and performing style in Thailand. There have been many activities, including regular conferences and master classes, that were initially inspired by the International Trumpet Guild Conference which was held in Bangkok in June 2005. Since then, there have been several annual events focused on enhancing the level of performance for trumpet players in Western classical performance style in Thailand. The shared goal of these events has been to support Thailand trumpet players in developing to an international standard of playing and teaching.

In addition to the development of classical trumpet playing in Thailand, the instrument is popularly employed in various other styles of music including jazz, Thai popular music, Thai country music and Thai fusion, which combines Thai traditional music with popular styles. The trumpet is also featured in a popular local tradition of small informal marching bands known as *trae-wong*, which are used in weddings and other ceremonies. According to Charoensook (2018), musicians in Southeast Asia need to blur the boundaries of genre, while still reflecting the music of the region. This is evident in the largely diverse nature of trumpet playing in Thailand (p. 4).

Trumpet players in Thailand often find success by being competent in more than one of these styles of playing. "Mostly, our Thai musicians are not professional and cannot rely on only one career. They have many jobs simultaneously because doing only one job gives inadequate earnings" (p. 56). Additionally, Puengpreeda said that "I myself play trumpet in the TPO [Thailand Philharmonic Orchestra] and sometimes I play jazz and pop piano to earn extra income" (Chitrangsan, 2011, pp. 33, 56). These issues reflect the career path of musicians after graduation who studied trumpet at university. It also reflects the local job market in Thailand.

In addition diverse musical studies for trumpet players not being offered, there are other issues with studying trumpet performance at the tertiary level in Thailand. A survey of undergraduate programmes in Thailand reveals that there is shortage of music performance emphasis majors in general. According to Thuntawech & Trakarnrung (2017), there are 94 different undergraduate level programmes in music, but only three of these programmes emphasise on performance; Mahidol University, Rangsit University and Silpakorn University. These programmes were designed using a Western music curriculum structure.

Furthermore, most undergraduate music programmes in Thailand were not created with input from performers, but were instead written by music academicians with backgrounds in music education and musicology. "Today, we still lack the appropriate performance personnel who have knowledge and understanding of writing music curricula and to make it [music] an interesting subject. Many institutions also have music teachers who did not specifically study music at university" (Luepradit, 2015). Biographical information from university websites retrieved on 6 June 2020 of the qualifications of trumpet instructors at 37 Thai universities revealed that only 63% of those teaching trumpet are trumpet players, and only 49% have a performance degree (Bowman & Laosaichuea, 2020).

These obstacles affect students' trumpet development in Thailand and show how the educational system is not systematically developed. These problems reflect the reality of music education in Thailand and as a result most learners are not able to develop their musical skills to an international standard and their performance skills are not diverse enough to find success in the job market that exists in Thailand (Suttachit, 2011).

The problems mentioned lead to the purpose of this study which is to generate an undergraduate-trumpet-curriculum-content framework to develop trumpet performers with strong knowledge and skills and can work successfully in the diverse professional music market of Thailand. The results of this study will benefit university administrators in designing appropriate performance programmes for the trumpet. It can also be used as a model develop curriculum content, courses, or lessons in other performance areas. This study will also benefit the future generation of students, performers, teachers, or freelancers. Appropriate curriculum content could strengthen the background and skills of the trumpet students leading to an increase in their quality and enhancement in their career opportunities in the future.

Literature Review

Curriculum Design and Development

While there are many ways to create a curriculum, one basic cycle for curriculum development is analysis, design, implementation, and evaluation (Wiles & Bondi, 2015). The focus of this research covers the analysis and design of curricula.

Analysis. The fundamental areas that were analysed included needs, goals, and purposes/objectives.

- Needs, which is the starting point of a curriculum, this focuses on the student's inherent desire to improve themselves. Needs are crucial as the impetus for one to develop themself. Whether instructor or student, both have needs from the curriculum, and it should lead to the design or the development of the study programme that can serve those needs.
- Goals are the educational targets that have been set as such that the student can reach the desired outcomes. Educational goals are generally recognised as having dual purposes; a) to prepare individuals to be productive members of society, and b) to enable individuals to develop their own potential (Saylor et al., 1981; Wulf & Schave, 1984).

- Purposes/Objectives—the purpose of the curriculum creation is to support the needs and goals that were recognised at an early stage of curriculum design. An operational definition for objectives by Wulf and Schave (1984, p. 51) states:
 - 1. Objectives graphically describe the terminal behaviour—that is where the student will stand or what he will be doing at the time he has achieved the objective.
 - 2. Objectives include any qualifying condition or restrictions that must exist for the terminal behaviour to be acceptable.
 - 3. Objectives state the criteria of an acceptable performance; time limits, productivity levels, quality control standards, minimum essentials, thresholds, and cut off scores.

Design. There are varieties of curriculum design depending on the nature of each education field. The outcome, or result of the degree should be the focus. In fact, one might consider using the "backward design" curriculum design tool developed by Wiggins and McTighe (2006) rather than start from the beginning. According to Wiggins and McTighe (2006), the idea of designing curriculum from the end to the start is composed of three stages, including identifying desired results, determining acceptable evidence, and planning learning experiences and instruction. Thus, there are many ways to design a curriculum depending on the concept of the responsible educator, along with the requirements of the national framework, university requirements, and faculty/area requirements.

Trumpet Curriculum Content at the Undergraduate Level

One teaching resource for creating trumpet curricula that is generated from the experience and expertise of many national instructors called "A Common Approach" (Federation of Music Services (FMS), Royal College of Music (RCM), National Association of Music Education (NAME), 2015). The "Common Approach" provides a framework to design teaching and learning strategies, activities, and experiences and supportive course work that will help a student to reach the minimum competencies expected from a person completing a programme. In a framework for performance-based degrees such as brass instrument performance, there are four suggestions for students that should be offered so they will have an opportunity to exercise the following skills:

- 1. Express their musical ideas and feelings
- 2. Use their creativity, imagination, and intuition
- 3. Develop their skills, knowledge and understanding
- 4. Reflect on and evaluate their progress (FMS, RCM, NAME, 2015, p.12)

Trumpet Curriculum Content in Thailand

The Thailand Qualification Framework, or TQF, is the system of curriculum design and implementation mandated for use throughout the country by the Thailand Ministry of Higher Education, Science, Technology and Innovation. It features an outcome-based backward design in which each curriculum contains outcomes in the domains of morals and ethics, knowledge, cognitive skills, interpersonal skills and responsibility, analytical and communication skills, and psychomotor skills. Also, Buddhist concepts exist in all levels of education in Thailand (Thai Qualifications Framework for Higher Education, 2009), and can be seen in the TQF in several domains, including morals and ethics as well interpersonal skills and responsibility.

The researchers gathered and studied trumpet curricula available in Thailand. Most of the curricula in Thailand are based on the United States models including programme structure, design and content. Thailand college/university course content was collected by accessing publicly available trumpet course information available on individual university websites and via direct requests from individual instructors at these institutions where materials were not readily available. The investigation revealed three types of documentation, which had related content on trumpet; a) course descriptions, b) course syllabi, and c) curriculum course handbooks.

Course Descriptions. The content of course descriptions generally provides sequential steps to help students develop specific skills and concepts, for example the Brass subject course description of Chiang Mai Rajabhat University, which progresses from Brass 1 to Brass 6. Presumably, this represents six

semesters of trumpet instruction. The course description of these subjects appeared in the core curriculum in 2016 with the following details.

Brass 1; "The education of brass instruments that focuses on the development of the ability in an instrumental practice to help the student in reaching higher skill with understanding of the components of musical instruments, instrumental playing position and body posture, care and maintenance, breathing, mouthpiece placement, articulations and intonation, tone quality, techniques, musical expression, etudes and music literature, musician philosophy and music instrumental practice" (Chiang Mai Rajabhat, Music Education Programme, 2016, pp. 70-71). Brass 2 to Brass 6 has the same content as Brass 1 with the additional sentence of "training student at a higher-level content from previous level throughout the course" (Chiang Mai Rajabhat, Music Education Programme, 2016, p. 70-71).

Course Syllabi. Course syllabi in Thailand that were selected were written under the TQF format. Kamwachirapitak (2010) further defined the contents and structure of a course consisting of significant elements such as; a) general subject information such as a name of the subject, code, and credit, b) essential elements such as course description, purposes, and lesson times, c) topics for teachings throughout the semester, d) assessment system, and e) facilities or the accessories for teaching (Kamwachirapitak, 2010, p. 1).

Curriculum Course Handbook. A curriculum course handbook is a document that provides information specific for a course in a programme. It will generally include information related to policies and procedures, course content and degree requirements, materials needed, and other curriculum course content information for students and teachers about a specific programme of study (Summers, 2004, p. 734). One university in Thailand utilises a trumpet curriculum course handbook designed by the trumpet instructor.

International Trumpet Curriculum Content Models

Included in the study were model-trumpet-curriculum-content documents at the undergraduate level from representative trumpet university programmes in the United States. The selection criteria were specific to well-regarded trumpet professors who had designed trumpet curriculum content at the undergraduate level and lead vibrant and successful trumpet programmes. The information was requested via email. Three responded (from twenty contacted) with shared materials. Curriculum content models from the United States were targeted due to the similarities in both education systems and programme structures relative to Thailand. Those contacted were trumpet performers and pedagogues who have established a strong reputation for both performing and teaching. Curriculum content received included trumpet history, pedagogy, and performance skills in different types of ensembles. Curriculum content information was analysed for content.

The study found that all documents of the three professors have a systematic curriculum structure. They all contain explanations of learning objectives, curriculum requirements, and learning processes which students can use as a guide to study. For the learning content, there are differences according to the characteristics and ideas of each instructor, for example, choosing exercise books for developing a singing-style technique or lists of suitable literature for studying each semester to provide students with opportunities to select the pieces that they want to study.

Methodology

The purpose of this study was to collect curricula in Thailand and abroad, conduct interviews with Thai trumpet experts and synthesise a new curriculum that will answer the research question "What is the suitable content of a trumpet curriculum that will support an undergraduate student's trumpet development to have employment success in the diverse musical context of Thailand?" The researchers conducted qualitative research where data collection can be divided into two parts; documents and interviews.

The first phase of analysis was to collect and review curricula documents for content including requirements, design, structure, and content for study. The documents were studied and collected from different places including books, journals, internet databases, and documents from well-known international trumpet instructors' curricula, as well as from Thai universities.

The second phase of this study consisted of face-to-face in-depth interviews with trumpet professors in Thailand who met the following criteria; full-time trumpet instructors with a minimum of eight years of teaching experience, and who perform trumpet regularly. Eight years of experience represents a reasonable amount of time for the participants to develop, refine, and evolve pedagogical skills, teach through the entire curriculum process multiple times, and are more likely to have a strong understanding of the curriculum within the context of the Thai music market. Also, participants should have experience in regular public performance including performances such as solo recitals, master classes, workshops, or performances with ensembles. Four Thai trumpet professors met all the criteria. Participants were full-time trumpet instructors from the Faculty of Fine Arts, Songkhla Rajabhat University; College of Music, Mahidol University; Conservatory of Music, Rangsit University; and the Department of Music, Kasetsart University. The instructor participant from Mahidol University was not the co-author of the study, but a departmental colleague.

After gathering information from curriculum documents and interviews, the information was synthesised under the research purpose. This process was divided into three steps. Firstly, the content of trumpet curriculum documents collected were placed into the general framework of "The Common Approach" FMS, RCM, NAME (2015, p. 12).

Secondly, interview results were translated from Thai to English and analysed according to three main theme topics, as follows:

- 1. Perspectives on the trumpet curriculum at the undergraduate level in Thailand.
- 2. The process of teaching.
- 3. Perspectives on teaching styles, availability of study resources, and lesson management in the undergraduate level from past to present and future.

Descriptive analysis was used in this qualitative study to explain information that the researcher gathered. Interview transcripts were sent to participants to for approval of content. If the participants did not respond within a week, the researcher assumed that the text was verified and approved, and it was then translated into English. Information from interview subjects who have experience in diverse performance areas or allied music fields were also included (i.e., one interview subject has a strong marching band and Thai pop music background).

Finally, with the results of the literature review, the conclusions of the review of Thai and international curricula, interviews with prominent Thai trumpet teachers, analysis and synthesis of the data, a new model of trumpet curriculum was created that could be appropriate for students in Thailand.

Results

Thai Trumpet Instructor Interview Results

The following summary of the Thai interviews was considered for synthesis in the new trumpet curriculum. Important themes from the interviews include the importance of being a well-rounded trumpet player, having morals, and being a contributing member of society.

According to Aksornteang (personal communication, January 27, 2017), the term "trae" is usually used for the trumpet in Thailand. The trumpet is used for various ceremonial occasions, such as ordination ceremonies, wedding ceremonies and so on. It serves as one of the instruments in trae–wong, a small marching band. In the Thai context "trae" is the word widely used for this instrument.

Potavanich stated that the trumpet curriculum content should not be fixed because students from different backgrounds have a wide variety of musical skills (personal communication, January 27, 2017). It would be difficult to create one curriculum and apply it to every student. Aksornteang (personal communication, January 27, 2017) explained that the content should be categorised into two-parts. Firstly, it should focus on the basics and principal knowledge and secondly, it should focus on the creativity of new ideas by applying knowledge in combination various music styles.

Puengpreeda mentioned that in addition to musical and pedagogical training for students in the curriculum, the courses should emphasise on moral training as well (personal communication, February 9, 2017). The interviewee believes that moral training for the student would lead to both musical excellence and excellence for society. "For me, I will train students on morals as well, I think apart from being an

excellent musician, being a good person is also important and I have a mission to achieve this" (Puengpreeda, personal communication, February 9, 2017).

Potavanich (personal communication, January 27, 2017) states that the trumpet curriculum in the context of Thailand, he thinks that focusing on one instrument or specialty is quite good in terms of skill and competency, however playing only one style can be a limitation in competing in the Thai music job market. He further clarified that the university music courses provided in Thailand are quite specific and adopt content from Western countries, but the job market is based on the Thai musical market. If the student has limited skills, then they cannot be competitive. The job market in Thailand is such that a variety of skills to earn income might serve students better.

Chanoksakul states "The trumpet curriculum in the context of Thailand should be modern and have a connection between the past, the present and the future" (personal communication, February 25, 2017). Thus, with private lessons, the teaching content should be prepared in the most modern ways to support students who will graduate and can get a job. Students with a strong sense of music history can utilised that to update themselves effectively. No matter what kind of music a student prefers to perform, they must play with understanding and know how to contribute to their society. According to Aksornteang (personal communication, January 27, 2017), under his concept of "Shining in a corner where you live," this will make the student a useful person in their place in society.

"The goal is to try to fill in what they are missing and solve the problem that they have, to have the right knowledge and to get a job" (Chanoksakul, personal communication, February 25, 2017). His statements then went on to emphasise that all Thai students have a desire to get a job and have a good career. Finally, Puengpreeda mentioned:

I will not teach them to have knowledge only in trumpet, but I will have to teach otherwise about life skills. To let them have knowledge of both playing trumpet and living a good life. They will realise that the trumpet is not the destination. I will guide them toward the right way appropriately. Thus, we must spend some time with them to know what they are like and what their goals are (Puengpreeda, personal communication, February 9, 2017).

New Curriculum for Trumpet in Thailand

A curriculum plan for undergraduate trumpet studies appropriate for Thailand was developed from the relevant documentation review, interviews, and synthesis of this information. All acquired materials studied were analysed and synthesised to create a content framework for a trumpet curriculum using an outcome-based curriculum design, or "backward design method" developed by Wiggins and McTighe (2006). Therefore, curricular choices were made based on the expected results of the entire programme. The process, as shown in Figure 1, is composed of objectives, content description, expected results, assessment practices, and year-by-year activities.

Description of the Curriculum

This curriculum is intended to develop potential trumpet instrument performance skills for undergraduate students in Thailand. Students who successfully complete this degree will have comprehensive knowledge and skills that should prepare them for a career in the diverse professional music market of Thailand.

- Identify the results
 - Consider goals or outcomes
 - · Determine acceptable levels of evidence
 - Consider culminating assessment tasks and methods
 - Plan learning experiences and instruction.
 - · Create learning activities, consider teaching methods, content, materials and supplemental activities

Figure 1. "Backward design" outcome-based curriculum content developed by Wiggins and McTighe (2006)

Objectives of the Curriculum

The objectives of the curriculum are to:

- 1. develop student trumpet performance skills in a variety of styles, including both Western and Thaispecific styles, as well as knowledge of instrumental practice, music theory and analysis skills.
- 2. promote the development of knowledge and skills of students to cover standardised, comprehensive content in trumpet performance skills, trumpet history and literature, trumpet pedagogy, principles of instrumental performance, music interpretation, and practicing.
- 3. enhance the experience, morals, including discipline, responsibility, respect and service to others, as well as application of problem-solving skills needed to be an effective professional musician.

Undergraduate Curriculum Plan and Content Description

The objectives led to the design of the curriculum content with a 4-year study duration as follows.

Table1

Curriculum plan and annual content description

Study Year	Plan	Content Description
First year	Consider the student's stated goals and integrate into the teaching plan to be consistent with the student needs. Develop musician morals (discipline) and the ability of trumpet practice by focusing on correct technical skills and musical expression.	Enhancement of the fundamental instrumental skills and providing knowledge on a proper methodology in practicing trumpet, including techniques, musical style and performance through the lessons, the exercises as well as variety of repertoire.
Second year	Further develop musician morals (responsibility) and performance skills focusing on both technical and expressive skills. Students will also perform in public within the styles found in Western classical music and popular music genres.	Extending the development of both technical and musical skills from the first academic year, adding related content that supports in applying to the Western classical music performance and other music styles and genres as well as the capability in performing in public.
Third year	Continued development of musician morals (respect) and skills and concept development will be supplemented with additional direct and ancillary content including Thai/Western trumpet history, important repertoire works by Western and Thai composers, pedagogy, performance skills, analysis, interpretation, and jazz performance styles.	Continue the development of instrumental skills to higher level along with providing the various musical knowledge contents that include trumpet history and literature, trumpet pedagogy, important repertoire, performance skills, analysis, and interpretation.
Fourth year	Continued development of musician morals (service to others) and Thai music styles of Thai fusion and Thai country (<i>Luk Thung</i>), culminating experiences including professional auditions, competitions, and recitals, as well as the creation of music projects, special works, or performances that are beneficial to oneself and society.	Demonstrate various styles of music along with preparing students to be ready to compete in various professional music job markets with plans and suggestions for post-graduation.

Expected Results of a Study of Outcome Curriculum Design Theory

The expected competencies of students each year have been developed from the objectives of the curriculum. In each academic year, content should be determined to achieve the goals thus meeting the targets from the first year of study through programme completion.

Table 2

Expected student competencies

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Yearly	Expected Student Competencies	
First year	First-year content focuses on correct fundamental skills such as breathing, embouchure formation and development, tone quality, technique, articulation, intonation along with exercises, etudes, and musical pieces. Various additional content is included such as the introduction to trumpet history, parts of the trumpet, basic instrument care and maintenance, improving practice skills, time management, and demonstrating personal discipline.	
Second year	Second-year content continues skills and concepts from the first year and focuses on content enhancement to a higher level. This includes elements such as tone quality, technique, articulation, intonation, and includes musical knowledge and skills such as form and analysis, as well as interpretation of repertoire from various time periods. Transposition and use of the C, E-flat trumpet and cornet are necessary to study the repertoire at this level. Additional content such as Thai/Western trumpet history, parts of trumpet and maintenance or the literature that improves practice skills like music analysis and interpretation should be emphasised. Other important musical content, Thai popular or commercial music styles should be taught instructors as supplementary teaching, as well as personal responsibility.	
Third year	Third-year study builds upon second-year content by increasing the level of difficulty with emphasis on the performance skills of exercises, etudes, transposition and musical skills from various repertoire, including the practice of C, E, E-flat/D trumpets, flugel horn, and cornet. In addition, the performance of jazz should be supplemented for the student, along with the study of Thai/Western trumpet history and literature, trumpet pedagogy, form and analysis, and interpretation, as well as respecting others	
Fourth year	Fourth-year content extends skills and concepts developed during the entire programme. Content consists of exercises, methods, etudes, transposition, and musical skills. The student will also learn more repertoire including contemporary pieces from the 20 th and 21 st centuries including the practice of C, E-flat/D, and B-flat/A piccolo trumpets. Additional content in Thai/Western trumpet literature and history, trumpet pedagogy, form and analysis and interpretation or other related trumpet performance skills, as well as Thai fusion and Thai country (<i>Luk Thung</i>) styles, as well as a service mind for helping others.	

Curriculum Content Guidelines

The guidelines in adopting the curriculum content are presented to support the instructor in guiding students in achieving the required competencies and skills. Table 3 summarises the outcomes of the curriculum content.

Table 3

Annual outcomes of curriculum content

Yearly	Outcomes of Curriculum Content	
First Year	• Establish and demonstrate strong fundamentals of breathing, embouchure, and characteristic tone quality	
	 Establish and demonstrate strong fundamentals of articulation, intonation, lip flexibility, finger dexterity, technique, and musicianship Introduce transposition techniques 	
	 Develop initial knowledge of related literature, theory, history, and composition Gain performing experience on the B-flat trumpet Demonstrate personal discipline 	
Second Year	 Make continual improvement of tone quality through all ranges and dynamic levels Make continual improvement of articulation, intonation, lip flexibilities, range, finger dexterity, techniques, and musicianship 	

- Demonstrate basic transposition techniques
- Gain performing experience on B-flat and C trumpets and the cornet
- Discuss music literature related history, composition, and musical forms
- Gain basic performance ability in Thai popular or commercial music
- Demonstrate personal responsibility

Third Year

- Make continued development of characteristic tone quality throughout increased range and dynamic levels
- Make continued development of articulation, intonation, lip flexibilities, range, finger dexterity, techniques, and musicianship
- Make continued development of transposition skill
- Gain experience performing on B-flat, C, E-flat/D trumpet, flugel horn and cornet
- Introduce topics related to Thai/Western trumpet history and literature, composition, musical forms, etc.
- Gain basic performance ability in jazz styles
- Demonstrate respect for others

Fourth Year

- Make continued development of characteristic tone quality
- Make continued development of all technique and musical skills
- Make continued development of transposition
- Gain experience on B-flat, C, E-flat/D, flugel horn, cornet and B-flat/A piccolo trumpet
- Develop stronger awareness of music literature related to history, composition, and musical forms
- Gain basic performance ability in Thai fusion and Thai middle/Northeaster Thai Country (Luk Thung) styles
- Demonstrate service for others

Learning Activity Topics

For learning activities in lesson class, the researcher proposes the activities created referring to the curriculum outcome process as shown in Table 4.

Table 4

Yearly content of learning activity topics

Yearly	Learning Activity Topics	
First Year	Warm-up studies, tone development, position development, technical studies, musical studies, literature studies and discussion, assessment, feedback, and personal and professional discipline.	
Second Year	Technical studies, musical studies, transposition studies, literature studies, performance studies, sharing feedback and discussion, self, peer assessment, and personal and professional responsibility.	
Third Year	Technical studies, musical studies, interpretation studies, transposition studies, literature and pedagogy studies, performance development, improvisation development, sharing feedback and discussion, self, and peer assessment, and respect for self and others.	
Fourth Year	Technical development, musical development, interpretation development, transposition studies, literature and pedagogy studies, performance development, improvisation development, sharing feedback and discussion, self, and peer assessment, and service to others.	

In addition to learning activities topics as mention above, instructors should arrange a weekly class meeting, e.g., "studio class", that brings together all trumpet students as a curricular activity to provide opportunities for students to gain more relevant knowledge and share knowledge and techniques in various musical styles found in Thailand. These studio classes could be organised in various formats including, but not limited to peer-to-peer presentations lecture classes, student performances, improvisation demonstrations, daily routine group sessions, mock solo competitions, mock orchestral audition, orchestral excerpt discussions, etc. Studio class activities can strengthen the academic experience of all students as these can supplement activities taught one-on-one as well as give students opportunities to play for one another and learn together in a group setting.

Student Assessment

Evaluation was organised according to expected curricular outcomes as with any assessment protocol, and detailed performance expectations and rubrics should be provided to students to clarify specific expectations whenever possible.

Table 5
Student assessment

Yearly	Assessment	
First Year	Class participation, technical tests, musical tests, literature quizzes, studio class recitals, student self-assessment and teacher assessment and feedback, jury examinations.	
Second Year	Class participation, technical tests, musical tests, transposition tests, literature quizzes, studio class recitals, student self-assessment and teacher assessment and feedback, jury examinations.	
Third Year	Class participation, technical tests, musical tests, transposition tests, literature and pedagogy quizzes, paperwork or presentations, studio class recitals, improvisation performance tests, student self-assessment and teacher assessment and feedback, jury examinations.	
Fourth Year	Class participation, technical tests, musical tests, transposition tests, literature and pedagogy quiz or paperwork, presentations, studio class recitals, improvisation performance tests, lecture and/or performance recitals, student self-assessment and teacher assessment and feedback, jury examinations.	

Remark: Since there are many forms of assessment, students and teachers should discuss and design the assessment together to identify the assessment that satisfies the student's needs and achieves stated goals. The evaluation should also be made on the student's practice to reflect their musical performance skills. The teacher should also consider the assessment of the surrounding environment such as participation in various activities, behaviour, and assignment. In addition, students should be able to assess their own study progress or exchange evaluations between their peers to train students on how to give constructive comments.

Recommendations

The following recommendations are for both instructors and students. While these recommendations are based on extant data, contexts of specific schools and programmes needs to be factored in. For instance, in the first year of study, instructors should assess student trumpet performance and practice skills to develop meaningful and relevant student goals and to develop a mutual understanding of expectations. These initial assessments and discussions can be used to inform the curriculum design expected competencies. Instructors can set the basic criteria to assess skills in different topics such as tone quality, technical skills, and musical skills and select appropriate resources that will help the student reach the expected level of performance and knowledge. This differentiated instruction approach allows the professor to select any method or exercise books needed to address individual student needs. Regular assessment periods can be utilised to determine specific areas of focus for each subsequent semester. These will help to determine the scope of studying and help to organise the content of outcome-based curriculum design.

In addition to the guidance, there are suggested ideas for teachers and students as follows:

Recommendations for instructors. Instructors should advise and encourage students to be creative and apply their musical knowledge to instrumental practice. They should update their teaching content, books, method books, and musical repertoire regularly. Each semester, the instructors should create a lesson plan according to each student's development level and specific areas of need. During the lessons, instructors should be able to demonstrate playing on the trumpet with a high standard of performance skill for students. Instructors should have knowledge and experience in various styles such as classical, jazz, Thai pop, commercial, Thai country, or Thai fusion music as well as performing in a variety of large and small ensembles. Institutions or instructors should have enough resources, such as instruments, music scores, textbooks, recordings, and online resources. Also, instructors should own the most-often-performed trumpets in various keys, the related equipment (e.g., mutes, mouthpieces, metronomes, etc.) and be proficient with this equipment such that can be sued to demonstrate and teach students the skills necessary to utilise said equipment. In addition to private lessons, instructors should support students to participate in various activities such as master classes, workshops, and ensemble classes as well as attending live concerts. These activities will help students develop their potential in trumpet skills. It is the responsibility of instructors to teach morals and ethics in addition to music students.

Recommendations for students. Before the learning process begins each semester, students are encouraged to discuss and plan with their instructors. In order to design a lesson plan together between instructors and students, which makes the content of the lesson meet the needs of students. During the lessons, students should demonstrate responsibility and self-discipline in studying and practicing. As well as demonstrate a desire to improve through regular practice, active engagement in studio activities, and rehearsals. Students should participate in a variety of different music events featuring different styles of music. By participating in activities, students will gain knowledge and experience that can be applied to develop their musical skills. It is also important to have quality instruments and equipment to help support study (e.g., mutes, digital recorder, tuner, metronome, etc.).

Discussion

The result of the development of curriculum content for the study of the undergraduate applied trumpet in Thailand brings three issues for discussion and consideration as follows.

Possibilities and Limitations in Curriculum Development

The development of a curriculum model for trumpet at the undergraduate level in Thailand gives insights into the past, present and possible futures for trumpet curricula in the country. The curriculum can be used as a planning aid and as a path for students and teachers to use in developing both practical and academic development. It is also a tool for teachers to consider in helping students to prepare for development throughout the study duration and to achieve the set goals as suggested by Wiles and Bondi (2015).

The results of the study support the development of an outcome-based curriculum design as an effective and efficient way to develop undergraduate trumpet performance majors in Thailand. For one, this approach necessitates frequent communication of goals and expectations between student and teacher and can function to develop a positive and open student-teacher relationship much like the information provided by Puengpreeda (personal communication, February 9, 2017) who mentioned that many students were being taught trumpet fundamentals incorrectly early on, thus leading to difficulties in advancing at the university level. These fundamental deficiencies can hinder a student's ability to compete and succeed as a professional musician in Thailand. Potavanich (personal communication, January 27, 2017) also recommended that students develop a variety of skills as a basic requirement in order to be employable in a variety of musical genres. In Thailand it is necessary to supplement the curriculum with additional skills (e.g., improvisation, jazz styles, etc.) to help broaden student's potential and achieve higher employability.

An appropriately designed curricular structure is not a guarantee of success. There are many other factors involved in the successful development of a professional musician (Puengpreeda, personal communication, February 9, 2017) including the need for highly qualified teaching personnel, consistent and purposeful attention to teaching activities, consistent establishment of student expectations, quality of

student discipline (e.g., time management, self-discipline), and the availability or lack of proper equipment. These factors can affect the results of any curriculum design.

Curriculum Development Suitable for Undergraduate Trumpet Study in Thailand

It is important to develop a trumpet course at the tertiary level to suit the context of Thai society. Although there are quality curricula from outside of Thailand, mainly from the West, if they are used without applying them to the context of the Thai society they would not be able to develop students to find work in the local market. However, the results of this research show that there can be harmonisation between Western music programmes and the context of Thai society, as a major priority of every curriculum is to develop quality in students. Furthermore, in Thailand it is necessary to embrace musical genres of the past, most notably Thai traditional music, and its future in Thai fusion music. These genres, along with the ability to play other music styles, as well as adherence to other local traditions, for example the importance of Buddhist morals, can develop students to be successful in the job market of Thailand.

Trumpet Curriculum Development for Future Career Paths

Consistent with the view from Potavanich (personal communication, January 27, 2017), it is possible to develop a trumpet curriculum to meet the market needs and future careers within the context of the Thailand music market. However, this can be a challenge due to limitations such as current music consumption trends, available performance opportunities, and working to develop more acceptance of music as a career choice in society, among others. Despite these limitations, there has been an expansion of the number of music programmes offered in the country over the last two decades. Therefore, in order to support and prepare students to enter a career in music, as well as opportunities for students to further their study in music in higher education, instructors must seek the appropriate curriculum content and methods to support students in both skills and knowledge so that their capacity can be built and their potential can be enhanced to have the best chance to be gainfully employed in the context of Thailand.

There are still many pathways of work in music that can be developed in Thailand. There are various careers that can be developed such as in the performance of classical music, including professional orchestras or wind bands, as well as jazz music, professional pop and commercial music, Thai fusion and Thai country music, or freelance professionals (i.e., studio recording musicians, musician backup artists, performing in various events, teachers or professors, and freelance instructors, among others) as well as careers in allied music fields such as music technology, music business, conducting, and composition to name a few. Further research in needed to determine societal trends and needs in Thailand to prepare Trumpet students for careers beyond university.

Conclusions

This study suggests several important points in the development of the curriculum for the trumpet performance in Thailand. Students and instructors should together identify the targets and needs of students before each semester to formulate and revise the student's academic plan as it relates to the student's post-graduation goals. They should determine acceptable levels of student achievement that supports demonstrable student progress towards semester goals. According to the outcome curriculum design, acceptable levels can be classified into two groups; (a) practice skills and (b) knowledge skills. Also, the criteria in student assessment must be consistent with the semester goals and objectives.

Design learning activities intended to achieve desired results. This is the process of defining the content of the lessons that students must learn, both academic and practical skills, including activities that will deepen students' knowledge. These should be incorporated in both core and extracurricular content to support student goals. Therefore, content must be consistent with goals, including the criteria that are used for learning evaluation as well. The teaching and learning method and the assessment should be designed to suit student needs in the context of a private lesson. It should have both lecture and practice-based courses under the supervision of the instructor. Through their study in this ideal outcomes-based curriculum, the goal is for students to develop the skill of "teaching themselves" by diagnosing playing problems and working to solve them. They should study technical and musical studies through important repertoire and arranged classes like studio class which allow students to discuss and share feedback among the group. The class could be organised to include mini-recitals, orchestra excerpts, academic presentations or seminars,

demonstrations of various playing styles, and discussion of any other topics which are appropriate for the student expectations and skill level. In the evaluation, both instructors and students should discuss indicators for the assessment of their progress since students will have opportunity to perform self-assessment of their skill development.

This curriculum framework was created to include appropriate core content for all trumpet teaching in an undergraduate programme as well as develop individual student skills of each student. Instructors can adapt, apply, and revise specific course and programme content to suit the needs of their students and programme. This curriculum is designed as a framework that allows for flexibility and revision of content and experiences to meet the changing needs of the students, the area's musical context and the needs of the university, however, within the context of Thailand. As a result, this could be adapted to the context of the music career market in Thailand.

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Biography

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