

MANAGEMENT INNOVATION FOR THAI LANGUAGE
AND CULTURE PROGRAM OF INTERNATIONAL
SCHOOLS IN THAILAND BASED ON CONCEPT OF
AGILE LEARNER CHARACTERISTICS



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จุฬาลงกรณ์มหาวิทยาลัย
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นวัตกรรมการบริหาร โปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทย
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จารุวรรณ ไบรัมย์ : นวัตกรรมการบริหาร โปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว. (MANAGEMENT INNOVATION FOR THAI LANGUAGE AND CULTURE PROGRAM OF INTERNATIONAL SCHOOLS IN THAILAND BASED ON CONCEPT OF AGILE LEARNER CHARACTERISTICS) อ.ที่ปรึกษาหลัก : ศศ. ดร.ชญานิษฐ์ อูสาโท, อ.ที่ปรึกษาร่วม : ศศ. ดร.พทุทธิ ศิริบรรณ พิทักษ์

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อ 1) ศึกษากรอบแนวคิดการบริหาร โปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทย และกรอบแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว 2) ตรวจสอบความต้องการจำเป็นในการพัฒนาโปรแกรมการบริหาร โปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว และ 3) พัฒนาโปรแกรมการบริหาร โปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว ใ้ระเบียบวิธีวิจัยแบบผสมวิธีพหุระยะ กลุ่มตัวอย่างคือ โรงเรียนนานาชาติในประเทศไทย สังกัดสำนักงานการศึกษาเอกชนที่เป็นสมาชิกสมาคมโรงเรียนนานาชาติแห่งประเทศไทย รวมจำนวน 97 โรงเรียน ผู้ให้ข้อมูลคือ ครูใหญ่ฝ่ายไทย หัวหน้าหมวดภาษาไทย หรือครูภาษาไทยที่สอนในระดับปฐมวัย ประถมศึกษา มัธยมศึกษาตอนต้นและมัธยมศึกษาตอนปลายจำนวนทั้งสิ้น 71 คน เครื่องมือที่ใช้ในการวิจัยประกอบด้วย แบบสอบถาม แบบประเมินความเหมาะสมของกรอบแนวคิด แบบประเมินความเหมาะสมและความเป็นไปได้ของนวัตกรรม การวิเคราะห์ข้อมูลเชิงปริมาณด้วยการใช้สถิติเชิงพรรณนา ได้แก่ ความถี่ ค่าเฉลี่ย ร้อยละ ส่วนเบี่ยงเบนมาตรฐาน ค่าดัชนี PNI^{modified} และการวิเคราะห์เนื้อหา

ผลการวิจัยพบว่า 1) กรอบแนวคิดการบริหาร โปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทยประกอบด้วย การพัฒนาหลักสูตร การจัดการเรียนการสอน และการประเมินผล และกรอบแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่วประกอบด้วย 3 กลุ่มคุณลักษณะหลักดังนี้ (1) กลุ่มคุณลักษณะด้านพุทธิพิสัย ประกอบด้วยคุณลักษณะย่อยคือ (1.1) ความมุ่งมั่นในเป้าหมาย (1.2) การคิดวิเคราะห์ (2) กลุ่มคุณลักษณะด้านจิตพิสัย ประกอบด้วยคุณลักษณะย่อยคือ (2.1) ความใฝ่รู้ใฝ่เรียนเรื่องใหม่ๆ (2.2) การยอมรับฟังคำวิจารณ์ (3) กลุ่มคุณลักษณะด้านทักษะพิสัย ประกอบด้วยคุณลักษณะย่อยคือ (3.1) การมองหาโอกาสที่ท้าทาย (3.2) ความมีไหวพริบ (3.3) ความไวและพร้อมต่อการเปลี่ยนแปลง (3.4) การสื่อสารคล่อง 2) ความต้องการจำเป็นในการพัฒนาโปรแกรมฯ สูงสุดตามลำดับดังนี้ การพัฒนาหลักสูตร การจัดการเรียนการสอนและการประเมินผล คุณลักษณะคล่องแคล่วที่จำเป็นต้องพัฒนามากที่สุดคือ การมองหาโอกาสที่ท้าทาย การคิดวิเคราะห์ ความมีไหวพริบและการยอมรับฟังคำวิจารณ์ 3) นวัตกรรมการบริหาร โปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว คือ นวัตกรรมการบริหาร โปรแกรมไทยสวีท (SWABK) ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะการมองหาโอกาสที่ท้าทาย การคิดวิเคราะห์ ความมีไหวพริบและการยอมรับฟังคำวิจารณ์ ประกอบด้วย 3 ส่วนคือ (1) การพัฒนาหลักสูตรที่มีการกำหนดผลลัพธ์การเรียนรู้ที่สอดคล้องกับความต้องการของสังคมไทยและสังคมโลกและมีกรจัดทำหน่วยการเรียนรู้ที่บูรณาการวิชาภาษาไทยและวัฒนธรรมไทยกับสภาวะการณ์โลก (2) การจัดการเรียนการสอนที่เน้นการจัดทำสื่อการเรียนที่สามารถเรียนรู้ได้ทุกที่ทุกเวลา (3) การประเมินผล ที่เน้นการนำผลการประเมินหลักสูตรไปพัฒนาการเรียนรู้นักเรียนให้มีความพร้อมต่อโลกอนาคต

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Charuwan Byrum : MANAGEMENT INNOVATION FOR THAI LANGUAGE AND CULTURE PROGRAM OF INTERNATIONAL SCHOOLS IN THAILAND BASED ON CONCEPT OF AGILE LEARNER CHARACTERISTICS. Advisor: Asst. Prof. CHANYAPIM USAHO, Ph.D. Co-advisor: Prof. PRUET SIRIBANPITAK, Ph.D.

This research aimed to 1) review the conceptual framework for the Thai language and culture program management of international schools in Thailand and the agile learner characteristics, 2) examine priority need to develop an innovation for the Thai language and culture program management of international schools in Thailand, and 3) develop an innovation for the Thai language and culture program management based on the concept of agile learner characteristics. The study used the multiphase mixed method approach. The sample group was 97 international schools under the supervision of the Office of the Private Education Commission and the ISAT members. The informants were Thai Headmaster or Headmistress, Thai coordinator, Thai head department, or Thai teacher from early year to high school levels in the total of 71 people. The research instruments included the conceptual framework evaluation form, the questionnaire, the innovation evaluation form of feasibility and appropriateness. The data was analyzed by frequency, percentage, mean, standard deviation, $PNI_{modified}$, and content analysis.

The results showed as follows. 1) The conceptual framework for the Thai language and culture program management of international schools in Thailand was composed of curriculum development, instruction, and evaluation. The conceptual framework for the agile learner characteristics was composed of three main domains with eight characteristics as follows. (1) The cognitive domain composes of (1.1) being goal oriented, and (2.1) being a cognitive thinker. (2) The affective domain composes of (2.1) being eager and curious to learn new ideas, and (2.2) welcoming feedback and criticism. (3) The psychomotor domain composes of (3.1) seeking challenging situation, (3.2) knowing what to do when facing uncertain situations. (3.3) reacting promptly to change and ineffective strategies, and (3.4) having highly effective interpersonal skills. 2) The highest $PNI_{modified}$ to develop innovation was shown in the area of curriculum development followed by the instruction, and with the lowest need on evaluation, along with four characteristics; seeking challenging situation, being a cognitive thinker, knowing what to do when facing uncertain situations, and welcoming feedback and criticisms. 3) Management innovation for Thai language and culture program of international schools in Thailand based on concept of agile learner characteristics was titled "SWABK". It consisted of three main components that promoting agile learner characteristics of seeking challenging situations, being a cognitive thinker, knowing what to do when facing uncertain situations, and welcoming feedback and criticism: (1) curriculum development: identifying learning outcomes that align with the need of Thai and global society and designing learning units by integrating Thai language and culture into global situations, (2) instruction: constructing learning tools and materials to be accessible anytime and anywhere, and (3) evaluation: utilizing the curriculum evaluation's result to further develop learners

Field of Study: Educational Management

Student's Signature

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Chapter 1

Introduction

1.1 Rationale and Problems of Practice

It is undeniable that we are living in a world of rapid change. Technology has become a main part of our lives that provides us with conveniences in many ways, but it can become a major threat to us as evidenced by the rise of Artificial Intelligence. The academic contents that schools teach students today might not be useful for them to use at work or to live life with in the future. In the 2018 OECD report on *the Future of Education and Skill 2030*, Schleicher, the OECD Director for Education and Skills states that “ we are facing unprecedented challenges - social, economic and environmental - driven by accelerating globalization and a faster rate of technological developments. At the same time, those forces are providing us with myriad new opportunities for human advancement. The future is uncertain and we cannot predict it; but we need to be open and be ready for it. Schools can prepare students for jobs that have not yet been created, for technologies that have not yet been invented, to solve problem that have not yet been anticipated” (Howells, 2018). Anderson mentioned that nobody can pinpoint of what the future will look like and it is not easy to even predict (Anderson, 2017). Therefore, schools must prepare students for the changing world by teaching them how to handle the unexpected situations.

Along the same line with the Twenty-Year National Strategy (2017-2036) that contains six key strategies which are (1) national security, (2) competitiveness enhancement, (3) development and empowerment of human capital, (4) broadening opportunity and equality in society, (5) environmental- friendly development and growth, and (6) reforming and improving government administration (Education, 2017). It is undeniable that education has been an important vehicle to reach the above strategies. The Thailand Ministry of Education's policy is therefore aligned with the National Strategy. The expectations of the Thai people in 2036 are to have the capability to develop the country collaboratively, enable to adapt to the context of future development, be mentally and physically prepared and equipped with analytical and life-long learning skills, be immune to change, be culturally conscious mind and display Thai identity, be responsible, be solid foundation to community, society, and love the country and the monarchy. We can develop and empower of human capital and equip Thai people with analytical and life-long learning skills by having agile people.

Education should equip students with the right mix of skills to face in a world of rapid change. As quoted by Mandela in 2003 and cited in the World Development Report, “Education is the most powerful weapon we can use to change the world” (2018). Daggett referred to the American College Testing’s report of 2009 and suggested that schools need to do more to prepare students to be ready for college and career (Daggett, 2010). As cited in Daggett’s article, David Conley, the Founder and CEO of the Educational Policy Improvement Center (EPIC), helps to create an operational definition of college readiness and outlines the essential skills that students need for college success. There are four facets of college readiness. Habits of the Mind used across all content areas involves intellectual openness, inquisitiveness, research, analysis, reasoning, providing proof in interpretation, precision and accuracy, and complex problem-solving skills. Key content means areas in which Habits of Mind can be used and demonstrated. Academic behavior largely consists of having good study skills and the ability to self-monitor. Contextual skills and awareness involve knowing how a college operated (Daggett, 2010).

In Britain, APPG or All-Party Parliamentary Group for Education held a meeting in May 2017 to discuss “How Well do Schools Prepare Children for their Future?” They see the importance of young people today to be equipped with skills that allow them to be adaptable to changing circumstances. Though basic literacy and numeracy skills are still essential for their success in employment, soft skills, character and resilience are vital skills that are lacking in young people claimed by most employers (Kinahan, 2017).

This idea flows along the same stream as NSW Department of Education, Australia. Literacy and numeracy will continue to be the building blocks on which all learning rests. In an era of acceleration and increasing uncertainty, we cannot be in the business of predicting what employers will want in 2030, much less 2050. But we can describe the kind of citizen we want to emerge from our school’s students who are critical and reflective, open to a lifetime of learning and relearning, who are comfortable with change, have empathy and a global outlook (Scott, 2017). Access to information is convenient at the fingertips, memorizing facts becomes less important. Although academic skills are still vital, they are not sufficient to foster thoughtful, productive, and engaged citizens. Future generations will live in a significantly different world of work, but the current education has been still in the face of changes. Students are being left behind with challenges which will only get accumulated over time. Students will need different set of skills to dive in disruptive technology environment and competitive job markets (Torii & O’Connell, 2017). With today technology driven world, the pressure of the workforces of today is immense, they need to adjust their skills to

perform existing jobs that they did not train for when they were in school. It is time now that governments, businesses, schools and society must work together to provide education that craft the skills needed for students. Although as much as we want to prepare students for the disruptive technology driven world, specialized skills for interacting with people including creativity and collaboration are highly important as well. "The world is facing a reskilling emergency (Zahidi, 2020)." Students needs to develop a greater breadth of skills, a growth mindset, and habits of mind to evaluate and apply knowledge in ways that meet the new demands of our changing society and economy, or another word they need to be agile learners.

Another drastic change is the rising number of international schools in Thailand due to gaining its popularity among Thai parents and serving children of expatriates. According to the International Schools Association of Thailand (ISAT), there were 52,000 students in the academic year 2016 growing from 29,747 students in the academic year 2009. Among Thailand's top three long established and biggest international schools, there are approximately 24% Thai national students, the remaining students are from 50 to 60 different countries. As claimed in Bangkok Patana School's website, the school has a diverse student population of over 60 nationalities with 20% Thai nationality. While ISB (International School Bangkok) claims 22% of Thai national students among 60 countries in the school year of 2016-17. NIST has approximately 29% of Thai national students among 50 nationalities. Students are surrounded by the international environment they are and will be growing up in the future of internationality. Therefore, it is vital that schools need to prepare students to be ready to encounter and handle any future rapid changes. Also, Thai students in international schools are from well to do family background indicated by the range of tuition fee per term from around 500,000 Baht to 700,000 Baht. These students will most likely become the future leaders in social, economic, and political sectors. The program of the Thai language and culture has an important role to develop students to their fullest potential and equip them with characteristics needed to live lives successfully and to become quality citizen in the future.

The vision of the Thai language and culture program for international schools documented by the Office of the Private Education Commission (OPEC) states that the subject of Thai language, culture and history is aimed to develop student's skills to communicate in Thai at their fullest potential. Thai national students are the vital manpower to the nation's future, they are to be good, capable and happy citizen living lives according to Thai tradition and culture, and adhering to the democracy of the constitutional monarchy (OPEC, 2016). However, teaching and learning Thai in international schools have been a challenge to both teachers and students due to multi-

proficiency levels in a class and low student's motivation to learn Thai. Students who begin their early year in international schools, find learning Thai is too hard. On the other hand, students who transfer to international schools from a Thai school find Thai is too easy and not challenging. Both groups of students become demotivated to learn. As the result, there are students who show limited ability in Thai literate and students who show no eager to maximize their Thai learning potential. This poses an obstacle to reach the objectives of the Thai language and culture program stating that Thai national students are to show Thai identity by using Thai language accurately, respecting and adhering to the democracy with King as Head of State, recognizing and carrying on Thai culture and tradition, being a responsible Thai citizen, and analyzing and understanding historical events of Thai history. Having low Thai language skills and limited in Thai cultural understanding mean that Thai students in international schools are lacking one of the most important skills of good leaders must have that is the communication. According to Hattori, leaders are to satisfy the needs of others in three areas: communication, connection, and understanding (Hattori, 2015). One of the top ten leadership soft skills according to Doyle is communication, a leader must be an effective communicator at all forms including being a good listener as well (Doyle, 2019).

In search of preparation for Thai national students in international schools to be ready for a changing world and to motivate them to fully engage in learning Thai have led the focus towards the concept of agile learner characteristics. According to Spurgin, agile learners are ready for change and new learning, they are able to use what they know with new knowledge in new situations (Spurgin, 2016). Agile learners are ones who react promptly to change. As quoted in Galagan's article, Korn Ferry (a leading global leadership, people and organizational advisory firm) defines "highly agile learners as those who learn from past experiences and then apply what they learned to new situations, continually acquire new skills. Face new challenges, and perform well under changing conditions and ambiguity" (Galagan, 2015). Agile learners are proactive and always on the lookout to learn. They are engaged and inspired by the learning process. Their interpersonal skill is high and being used effectively. When coming across with any difficulties or problems, agile learners are not afraid to speak up or speak to as many people to gather as much information needed to accumulate all possibilities to solve the problem. They are comfortable to be out of their comfort zone and enjoy being in the learning zone where in which sustains their success in the world of rapid changes. As cited in Valcour's article, David Peterson, director of executive coaching and leadership at Google says, being in your comfort zone will only build your readiness to handle today's situations but not tomorrow's (Valcour, 2015).

To see improvements in student learning outcomes, Anderson learned that it was vital to combine the Habits of Mind with the development of a Growth Mindset to the concept of the Agile Learner, and he believes that mindset is the foundation of the agile learner (Anderson, 2017). Mindset can then be defined as a set of attitudes and beliefs about abilities, such as intelligence. Psychologist and author Carol Dweck coined the terms fixed and growth mindsets to describe the attitudes and beliefs people have about learning and intelligence (2006). Students with a fixed mindset believe that they are born with their abilities and that they are unchangeable. In contrast, students with a growth mindset believe that their abilities can be developed and improved over time with practice. The positive prove of the value of a growth mindset in education is shared by Carol Dweck in her TEDx talk as the following examples. First, a kindergarten class in Harlem, NY scored in the 95th percentile on the national achievement test within a year – many of those kids could not hold a pencil when they arrived at school. Second, 4th grade students in the South Bronx, way behind, become the number one 4th grade class in the state of NY on the state math test in one year. Third, Native American students in a school on a reservation went from the bottom of their district to the top, and that district included affluent sections of Seattle in a year to a year and a half.

Students who transferred from Thai schools would usually find learning Thai in an international school is too easy for them that they do not need to put any effort into the class to get an A. Some of these students find it amusing to see their classmates struggling with reading and writing simple text that is at times lower than their grade level. These A students would gradually turn into lazy A students, meaning they could perform just the least of their skills and still get A. The little work they perform is still far better than those struggling ones. They find no need to improve their learning. They are so called the SMART ones, and they believe they are. Teachers are one of the main factors supporting this mindset. Due to multi-proficiency levels in a class, teachers most likely spend more time on underachievers while leaving highflyers to do classwork on their own, and even sometimes asking these highflyers to lend their helping hands to other students who need it. These so called the SMART ones are receiving wrong messages that they are natural born smart and find no urge to learn to extend their learning. These students have a fixed mindset and their Thai ability will eventually descend. This also describes a fixed mindset among underachievers who see themselves incapable of being better. No matter how much they try, they still could not be near the level of those highflyers who perform well with no or the least effort. These underachievers would eventually stop trying and begin to believe in their limited talents. On the other hand, a growth mindset includes the belief that you can learn to be more

intelligent, improve your abilities, and develop talents. Any highflyers who have growth mindset would look for areas to learn more. Along the same line, those underachievers with the growth mindset would believe in their ability that they could do better with effective practices and effort. In order to develop the growth mindset in students, we certainly need to have teachers with a growth mindset. Teachers are powerful and influential towards student's performance in both positive and negative directions. Teachers often label students unintentionally, as they are smart or otherwise. Hence, we must develop growth mindsets not only among students, but teachers also. Then combining a growth mindset into the concept of agile learner characteristics would result in the development of the learners' fullest potential to be ready for a changing world.

Agile Learners understand that they are capable of changing themselves. They understand that they can develop their constructive habits to behave more intelligently. Agile learners know that doing their best would not be enough for success, they need to do better and are ready to change ineffective strategies to effective ones. With the previous stated problems, the concept of agile learner characteristics is focused assumingly that it would provide solutions for the preparation of today's students to be ready for future rapid changes, and also to become quality Thai citizen who live lives successfully in global and Thai contexts.

1.2 Research Questions

1. What are the conceptual frameworks of the Thai Language and Culture program management for international schools in Thailand and the agile learner characteristics?
2. What are the needs to develop the management innovation for the Thai language and Culture program of international schools based on the concept of agile learner characteristics?
3. What does the management innovation for the Thai Language and Culture program of international schools in Thailand based on the concept of agile learner characteristics look like?

1.3 Research Objectives

1. To study the conceptual framework for the Thai language and culture program management of international schools in Thailand and the agile learner characteristics.

2. To examine the needs to develop the management innovation for the Thai Language and Culture Program of international schools in Thailand based on the concept of agile learner characteristics.

3. To develop the management innovation for the Thai Language and Culture program of international schools in Thailand based on the concept of agile learner characteristics.

1.4 Operational Definition of Key Terms

1. **Agile Learner Characteristics** mean the learning behaviors in Thai class of international schools that react promptly to new situations and lead to success indicated in the curriculum, consisting of characteristics in the cognitive domain, the affective domain, and the psychomotor domain.

2. **Characteristics in the Cognitive Domain** mean behaviors that involve learner's intellectuality consisting of being a goal oriented and a cognitive thinker.

3. **Being Goal-Oriented** means a learner who sets his goals and clearly practices to reach them with moral, ethics, and Thai identity.

4. **Being a Cognitive Thinker** means a learner who is capable of examining data thoroughly and systematically in order to obtain suitable directions.

5. **Characteristics in the Affective Domain** mean behaviors that involve learner's feeling and emotions consisting of being eager and curious to learn new ideas and welcoming feedback and criticism.

6. **Being Eager and Curious to Learn New Ideas** means a learner who is active to learning and finding unknown answers.

7. **Welcoming Feedback and Criticism** means a learner who uses others' opinions as a factor of self-development.

8. **Characteristics in the Psychomotor Domain** mean behaviors that involve learner's skillful performance consisting of seeking challenging situations, knowing what to do when facing uncertain situations, reacting promptly to change and ineffective strategies, and having highly effective interpersonal skills.

9. **Seeking Challenging Situations** means a learner who look for various events as ways to progress his learning.

10. **Knowing What to Do When Facing Uncertain Situations** means a learner who is able to identify problems and promptly provide suitable solutions.

11. **Reacting Promptly to Change and Ineffective Strategies** means a learner who is aware of the constant changes and is always ready to adjust the ways of doing things to match up those changes.

12. **Having Highly Effective Interpersonal Skills** means a learner who is able to clearly and precisely perform two ways communication utilizing Thai reading, listening, speaking and writing skills.

13. **Management for the Thai Language and Culture Program of International School in Thailand** means the curriculum development, the instruction, and the evaluation that equip learners with the agile learner characteristics.

14. **Curriculum Development** means to identify learning outcomes that align with the need of Thai and global societies, to identify learning standard basing on proficiency level, and to design learning units by integrating Thai language and culture into global situations.

15. **Instruction** means to identify learning objectives aligning with learning outcomes, to construct authentic learning activities connecting to community and engaging learners at each proficiency level, to construct learning tools and materials to be accessible anytime and anywhere, and to identify assessment evidences suitably to each learner differences.

16. **Evaluation** means to examine learner's quality according to indicated learning outcomes, to examine curriculum's suitability to Thai and global societies, to examine the instructions reflecting on differences of each learner, and to utilize the curriculum evaluation's result to further develop learner to be ready for the future.

17. **Management Innovation for the Thai Language and Culture Program of International Schools in Thailand** means to define current and desirable states, to discover ideas to formulate innovation, to develop innovation, and to validate innovation for management for Thai language and culture program of international schools in Thailand based on agile learner characteristics.

18. **Defining Need for Innovation** means to examine wanting conditions for curriculum development, instruction, and curriculum evaluation with the questionnaire, and to analyze needs to develop the Thai language and culture program management based on the concept of the agile learner characteristics.

19. **Discovering Ideas to Formulate Innovation** means to draft the management innovation for the Thai language and culture program from literacy review and best practices by the researcher.

20. **Developing Innovation** means to construct the draft of the management innovation for the Thai language and culture program by the experts.

21. **Demonstrating Innovation's Feasibility** means to examine the innovation's suitability and possibility by the experts and stakeholders.

1.5 Conceptual Frameworks

1. Management for the Thai Language and Culture Program of International Schools in Thailand is composed of three elements:
 - 1.1. Curriculum Development
 - 1.2. Instruction
 - 1.3. Evaluation
2. Agile Learner Characteristics were grouped based on Bloom's learning domains cited in Clark (Clark, 2015) as follows.
 - 2.1. Characteristics in the cognitive domain
 - 2.1.1. Being goal-oriented
 - 2.1.2. Being a cognitive thinker
 - 2.2. Characteristics in the affective domain
 - 2.2.1. Being eager and curious to learn new ideas
 - 2.2.2. Welcoming feedback and criticism
 - 2.3. Characteristics in the psychomotor domain
 - 2.3.1. Seeking challenging situations
 - 2.3.2. Knowing what to do when facing uncertain situations
 - 2.3.3. Reacting promptly to change and ineffective strategies
 - 2.3.4. Having highly effective interpersonal skills
3. Innovation Development has four phases as follows: (O'Sullivan & Dooley, 2009), (Hengsberger, 2018), (GROUP), & (Ng, 2014)
 - 3.1. Define need for innovation
 - 3.2. Discover ideas to formulate innovation
 - 3.3. Develop innovation
 - 3.4. Demonstrate innovation's feasibility

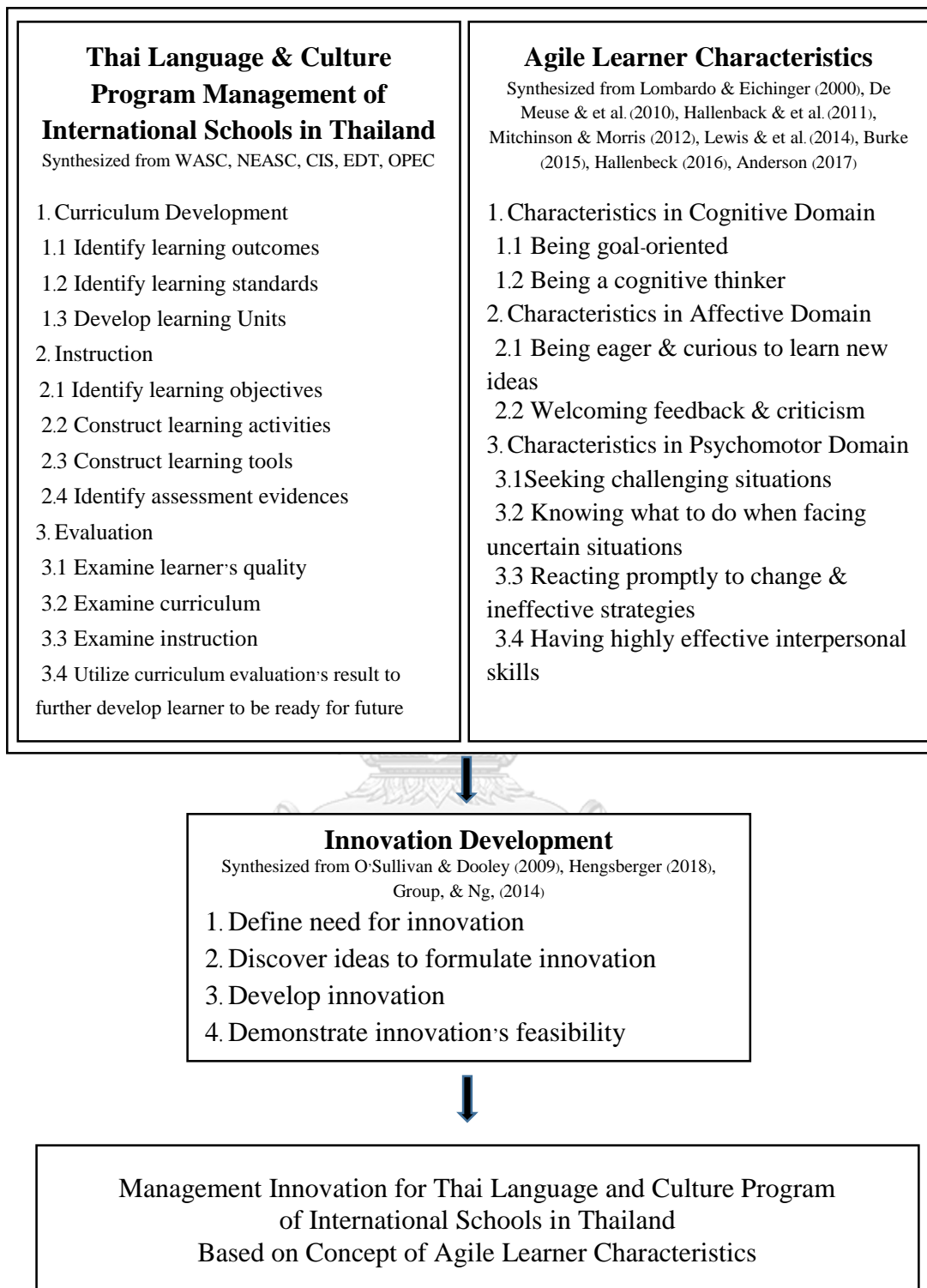


Figure 1: Conceptual Framework

1.6 Scope of the Research Study

1. Research Population

The population of this study consists of 128 international schools under the Office of Private Education Commission and the informants include Thai Headmaster and Headmistress, Thai coordinator, Thai Head Department, and Thai teachers from early year to secondary levels.

2. Research Content

The characteristics of an agile learner are studied, analyzed, and synthesized through the review of literature. The study of the current state and desirable state for the Thai language and culture program management of international schools in Thailand based on the concept of the agile learner characteristics is conducted through the questionnaire; the information acquired from the study is analyzed to identify the highest need using $PNI_{modified}$. The study of the program management is conducted by analyzing and synthesizing through the review of literature relevant to international schools, and the result shows three elements: curriculum development, instruction, and evaluation.

3. Research Timeframe

The research study was conducted during the academic year 2019-2020.

1.7 Benefits of the Research Study

1. In the area of academic development:

1.1 The new body of knowledge consisting of management innovation is developed to promote agile learner characteristics to be instilled among Thai national students in international schools.

1.2 The research findings can be used for the study of management innovation for Thai schools based on the concept of the agile learner characteristics in further details.

2. In the area of implementing innovation:

2.1 Thai administrators of international schools in Thailand are able to implement the innovation into their schools to promote the agile learner characteristics in all learners.

2.2 Thai teachers of international schools in Thailand are able to implement the innovation into their practice to promote the agile learner characteristics in all learners.

2.3 Students in international schools will be equipped with characteristics of agile learner which enable them to live lives successfully in the future.

2.4 Thai department in international schools can employ the innovation by adjusting to meet their school context and developing a user handbook to promote agile learner characteristics among their students.



Chapter 2

Review of Literature

Literature reviews and various research studies on the concepts, theories and practices relating to “Management Innovation for the Thai Language and Culture Program of International Schools in Thailand Based on the Concept of the Agile Learner Characteristics” have been conducted. This chapter has five sections which include the following;

- 2.1 International Schools in Thailand
- 2.2 Thai Language and Culture Program Management
- 2.3 Management Innovation
- 2.4 Agile Learner Characteristics
- 2.5 Related Literature and Studies

2.1 International Schools in Thailand

2.1.1 Backgrounds of International Schools in Thailand

In 1951, the first international school to open in Thailand was called the International Children’s Center located on the grounds of the U.S. Embassy serviced U.S. Embassy families and other expatriates in Bangkok at the time. The International Children’s Center was growing rapidly and needed the expansion, at the same time Thailand Ministry of Education had ordered the Center to be legally registered which needed the Cabinet’s approval (Lawseriwanich, 1989). The establishment of any types of schools in Thailand, the licensee needs to be Thai national. Therefore, the International Children’s Center formed and registered the International School Association (ISA) in order to legalize the school registration in 1957 as International School Bangkok which is the first international school in Thailand.

The demand of international education was higher than the capacity of one international school which was ISB could handle, therefore in 1963 the Thai MOE approved the second international school to be opened and called Ruamrudee International School (RIS) with Thai Ministry of the Foreign Affair as the licensee (Trongtorgarn, 1997a). RIS was established in 1957 by the Redemptorist Fathers using American curriculum. In 1994, the third international school was approved to be opened and called Bangkok Patana School. In 1974, the Japanese Embassy submitted the proposal to the Royal Thai Government to open a school for Japanese families residing in Thailand which was originally opened within the property of the Japanese Embassy,

Thai-Japanese Association School was then approved to be opened to service Japanese. Ten years later, the Cabinet acknowledged the high number of expatriates working and residing in the area of Chiang Mai, therefore approved the establishment of Chiang Mai International School in 1983 with Ministry of the Foreign Affairs as the licensee (Trongtorgarn, 1997a). This brought the total of five international schools before 1990.

The number of international schools were limited and inadequate to provide proper education for children of the foreign investors, the corporate specialists and the diplomats who had to work in Thailand. There was also the demand for Thai children whose families had worked overseas with their children receiving education abroad, they were unable to find a school that was compatible to their ability when they were back to Thailand. Thai national students were not allowed to enroll in an international school. With this high demand on international education, on February 19, 1991, the Cabinet of the Prime Minister Anand Panyarachun passed a resolution to allow international schools to be opened case by case with rationale and necessity, children regardless of their nationality enable to enroll in an international school (MoE, 2007).

Since the regulation had changed in 1991, the International School Association of Thailand or ISAT was established in 1994 to be a link between its five members schools (ISB, Ruamrudee, Thai-Japanese, Bangkok Patana, and Chiang Mai international school) and the Thai Ministry of Education. Today's ISAT tasks are to work collaboratively among its membership schools, providing professional development, promoting networking, working with the Government to implement the resolutions and to support Government policy and requests which are approved by the ISAT Committee. The starting number of five international schools which originally opened to service its own citizens who lived and worked temporarily in Thailand, had increased to 88 schools in 2004 (Admin, 2004). The number has been continuing to grow to 128 ISAT's member schools in 2017 as shown in Figure 2. The number of international schools in Thailand has risen to 207 schools in academic year 2019 with 110 schools in Bangkok Metropolis and 97 in other provinces as shown in Table 2-1 (OPEC, 2019). There are a few schools to be opened in the academic school year of 2020-21. International schools in Thailand offer a range of curriculums from American, British, International Baccalaureate and other national curriculums such as French, Swiss, Japanese, Korean and Singaporean.

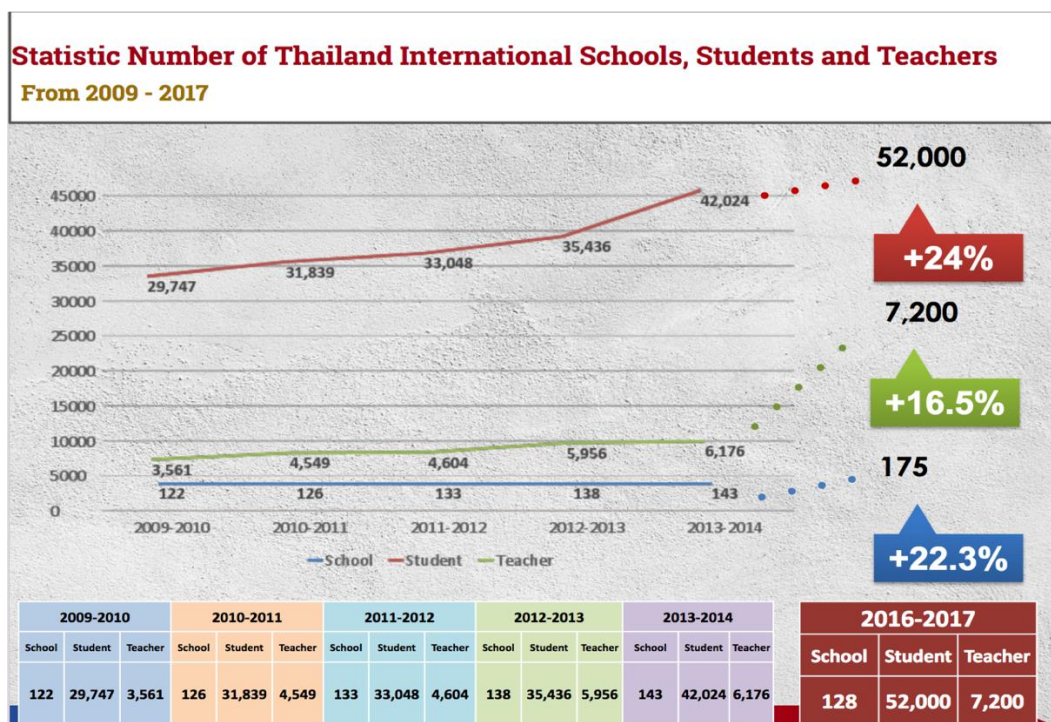


Figure 2: Number of Thailand International Schools, Students and Teachers, ISAT, 2017

Table 2-1: Number of international schools and students in international schools, Academic Years 2015-2019 (OPEC, 2019)

	2015	2016	2017	2018	2019
Number of international schools	161	175	182	206	207
Number of students in international schools	44,497	50,958	53,754	86,445	87,343

2.1.2 The 2007 Royal Gazette in regard of international school standards for early year, elementary and high school levels

In section one, number 3 mentions the meaning of “international school” as a school that administers using a foreign curriculum, an adjusted foreign curriculum, or a self-developed curriculum that is not curriculum of the Thai MOE. Foreign language is used as a medium of instruction to students regardless of races, ethnicity or religions, and not violating Thai moral or national security.

In section two, number 8 mentions the curriculum as following. The licensee must submit the curriculum to be used or using to the MOE for approval. The curriculum

can be a foreign curriculum, an adjusted foreign curriculum, or a self-developed curriculum. The school must provide the class of Thai language and culture to all students in all levels. Foreign students are required to learn Thai language and culture as a compulsory subject one period of 50 minutes weekly. Thai national students are required to learn Thai language and culture as a compulsory subject minimum of five periods of 50 minutes weekly.

In section three, number 14.2 covers that every international school except early year program must apply for a membership of an international accreditation organization within 12 months of receiving the license to operate the school. The number 14.3 covers that every international school except early year program must be accredited from an international accreditation organization that is recognized by Thai MOE within 6 years of the first operational school day. The school is required to report every step of the way to the Office of the Private Education Commission.

2.2 Thai Language and Culture Program Management

2.2.1 Thai Language and Culture Program (as reviewed from the OPEC document)

Background of the Thai language and culture program: The National Education Act 1999 states that educational management must be for developing Thai citizen to be completed in psychical, mental, knowledge, moral, ethical and cultural to live life with self and others happily. In 1995, the MOE required international schools to offer the Thai language and culture class for all students. Foreign students would learn one period per week as a compulsory subject from grade 1 to 8, and as an elective subject from grade 9 to 12 using English as a medium language of communication. In case of a student entering in between grade 9 to 12 must take Thai class for the minimum of two years. Thai national students would take Thai class for the minimum of five periods per week, with the length of 50 minutes per period. Later in 2007, the MOE regulated the curriculum of international schools to offer Thai language and culture class to students in every level. Foreign students are to take Thai language and culture class as a compulsory subject one period per week, and five periods per week for Thai national students with the length of 50 minutes per period.

The Office of the Private Education Commission (OPEC) recognized the importance of the Thai language and culture program, and worked in closed collaboration with the International School Association of Thailand (ISAT) in 2008 to firstly develop the Thai language and culture curriculum to meet diverse context of international schools. The working committee consisted of experts from international schools to develop standard and benchmark for the subject of Thai language and Thai culture that each international school is able to apply to meet its context. In 2015, the

Thai language and Thai culture curriculum was revised aligning to the policy of Royal Thai Government and MOE to instill the long-lasting love of the nation, religion, and monarchy, to communicate and use Thai language correctly and suitably in academic and social context, to appreciate, adhere to, and carry on the valuable Thai tradition and culture, to not only know but understand Thai history and make connections then apply to current Thai society smoothly.

Vision of the Thai language and culture program: The common core of Thai language, culture and history subject is aimed to develop student's skills to communicate in Thai at the fullest potential. Thai national students are the vital manpower to the nation's future, they are to be good, capable and happy citizen living lives according to Thai tradition and culture, and adhering to the democracy of the constitutional monarchy. The aim for foreign students is to develop knowledge and understanding that leads to show respect towards culture of the host country. Students are to communicate appropriately in Thai society and live quality and happy lives while residing in Thailand.

Principles of the Thai language and culture program:

1. It is the curriculum that aims to develop Thai citizenship at the fullest guided by learning goals and learning standards to develop Thai identity among Thai children to have knowledge, skills and attitudes that display the ancestor's wisdom in the areas of language, culture, tradition and leisure.

2. It is the curriculum that instills the love and honor the Royal patronage of the Thai Monarchy, the nation and their religion.

3. It is the curriculum that instills the love and respect towards the past Kings and the ancestors who influenced major changes in the past of Thai nation, and makes Thais proud of Thai wisdom.

4. It is the curriculum that supports the accurate understanding with positive attitude of foreign students towards Thai culture, history and Monarchy. Students are able to communicate in Thai with culturally appropriate gestures at their level.

5. It is the curriculum that has flexible structure to identify contents, units of study, length of each unit, and various learning activities that highly emphasize on interdisciplinary and students.

6. It is the curriculum that emphasizes on analytical, creative and innovative thinking to integrate knowledge and utilize technology in learning.

Objectives of the Thai language and culture program:

1. For Thai national students: To show Thai identity by using Thai language accurately, respecting and adhering to the democracy with King as Head of State, recognizing and carrying on Thai culture and tradition, being a responsible Thai citizen,

analyzing and understanding situations of Thai history. Students are expected to be as follows.

1.1 To show Thai identity with morals, ethics and expected values, to be proud and follow Thai tradition and culture to be carried on into future.

1.2 To be an effective communicator in Thai language.

1.3 To love and honor the nation, religion, and Monarchy, to be consciously aware of being a Thai and global citizen, and to hold on to the democracy with King as Head of State.

1.4 To conserve Thai culture and wisdom, and to have service mind to give back to Thai and global society.

1.5 To have self-discipline and follow the principles of Buddhism or own religion, and to practice the sufficiency economy philosophy.

2. For foreign students: To know, understand and respect Thai culture, and to practice Thai culture and communicate in Thai appropriately.

Structure of the curriculum for the Thai language and culture program:

The curriculum for Thai language and culture consists of two subjects; one is for Thai national students and the other is for foreign students.

The Thai language, culture and history subject for Thai national students consists of two strands; 1) Thai language comprised of reading, writing, listening, speaking, language and literature, 2) Thai culture and history comprised of religions, morals, ethics, Thai geography, Thai history, civic duty, Thai arts, Thai culture and Thai ways of living.

The Thai language, culture and history subject for foreign students consists of three strands; 1) Thai language for communication, 2) Thai culture and culture of students, and 3) Thai society, geography and history.

Management of the Thai language and culture program

The Office of the Private Education Commission (OPEC) provides procedures for the Thai language and culture program management as follows.

1. Preparation in personnel and information technology

1.1. Raise the awareness among administrators, teachers and stakeholders within school through various ways such as organizing workshop to build up understanding regarding to curriculum design that is aligned with school vision, mission and context.

1.2. Set up a curriculum committee.

1.3. Work on curriculum overview that is aligned with school mission and context.

1.4. Provide professional development regarding to the curriculum design of the Thai language and culture program to all Thai teachers when occasions arise.

- 1.5. Survey stakeholders for basic information and needs for curriculum development.
2. Curriculum design of the Thai language and culture subject
 - 2.1. Arrange a stakeholder meeting to analyze school's strengths and weaknesses, brainstorm for vision, mission, goal, learner characteristics, activity structure to develop learners, and learning schedule.
 - 2.2. Design curriculum that is aligned with school's philosophy and its context including units of learning, learning activities, scopes and sequences.
3. Curriculum Implementation
 - 3.1. Utilize level benchmark
 - 3.2. Plan learning activities
 - 3.2.1. During school hours
 - 3.2.2. Extra curriculums such as after school activity, social club or others
 - 3.2.3. Special events, assembly, field trip
 - 3.3. Evaluate learning
4. Curriculum monitoring and evaluation

2.2.2 Program management

Clare defined curriculum or program management that is “a structured set of activities designed to assess and adjust your curriculum”. The set of activities are as followed (Clare, 2014).

1. Curriculum mapping: It is a process of linking the structural elements of the curriculum with each other and with learning outcomes and contents areas.
2. Content and structure analysis: It is a process to assess whether the content is relevant, or the structure supports its learning goals.
3. Student assessment: The assessment results provide vital information regarding to the quality of the curriculum.
4. Program evaluation: It is as important as student assessment, and it provides insight into curriculum problems, and a great source of curriculum feedback.
5. Research, review, and revise: It is a process of combining all data collected above and making decision whether or not curriculum changes are needed.

The review from published documents of international accreditation organizations

International schools in Thailand are required to be accredited by one or more of the following international accreditation organizations; ACS WASC, NEASC, CIS, and EDT. The accessed information in the area of program management was from their published documents.

1. The Accrediting Commission for Schools, Western Association of Schools and Colleges (ACS WASC) is a world-renowned accrediting association. ACS WASC provides standard criteria for the accreditation of international schools that is relative to the program management under Category B, which includes curriculum, instruction, and assessment (WASC, 2016). Criteria under Category B are as follows.

1. What Students Learn Criterion
2. How Students Learn Criterion
3. How Assessment is Used Criterion – Reporting and Accountability Processes
4. How Assessment is Used Criterion - Classroom Assessment Strategies

2. New England Association of Schools and Colleges (NEASC) is an independent, voluntary, nonprofit membership organization, which has been working to establish and maintain high standards for all levels of education. NEASC provides standard criteria for the accreditation of international schools that is relative to the program management under LEARNING STRUCTURE. “The school has in place clear statements that express a definition of learning and a set of learning principles and objectives that shape and drive its programs and practices. A curriculum articulating learning outcomes, expected teaching practices, and principles of assessment exists (NEASC).” LEARNING PRINCIPLES include the following.

1. Learning Goals
2. Dimensions of learning
3. Assessment for, of, and as Learning
4. Learning Perspectives
5. Learner Engagement & Autonomy
6. Research and Reflection on Learning
7. Inclusiveness of Learning
8. Governance and Leadership
9. Learning Space and Time
10. Learning Community

3. Council of International Schools (CIS) is a membership community working collaboratively to shape international education through professional services to schools, higher education institutions, and individual. CIS provides standard criteria for the accreditation of international schools that is relative to the program management under Domain C: the curriculum, and Domain D: teaching and assessing for learning. The details are followed (CIS).

Domain C: The Curriculum

1. The documented curriculum is broad, balanced and sequenced in a way to promote students' access and progression. It is guided by the mission of the school and the needs of the enrolled students. (CORE)
2. The scope and sequence of the curriculum is thoroughly documented and articulated horizontally and vertically.
3. The curriculum promotes the development of global citizenship and intercultural learning.
4. The curriculum promotes the development of digital citizenship.
5. The curriculum offers challenge, supports the students' academic, social, physical and emotional needs. It fosters the development of skills, attributes and abilities relevant to their development.
6. The curriculum is reviewed and evaluated on a systematic and planned basis with the outcomes of such reviews providing a means of developing the curriculum in line with the students' changing needs.
7. The school offers a breadth of programs and activities to complement the formal curriculum in supporting the school's Guiding Statements.

Domain D: Teaching and Assessing for Learning

1. Teaching enables all students to gain access to the curriculum and to have the opportunities for success in their learning, relative to their abilities. (CORE)
2. There are effective procedures in place, supported by policies, to identify the varied needs of students, both at admission and whilst enrolled, to ensure that all students may benefit from the school's programs. (CORE)
3. Teaching and the assessment of learning are monitored and evaluated in a planned manner in response to students' needs, data from varied assessment of students' learning and reflection upon pedagogy.
4. Students' progress is tracked systematically, using a range of achievement data in order to support the students in maximizing their potential.
5. Teaching engages the students in their learning to ensure that planned learning outcomes may be achieved.
6. The assessment of students' learning and its reporting is based on clear, shared and intelligible criteria that represent the attainment of knowledge, understanding, skills and behaviors.
7. Teaching draws on appropriate cultural and authentic contexts to provide meaning to the students in their intercultural development.
8. A range of high-quality media and information technology is used meaningfully to enrich the quality of the students' learning.

9. There are formal processes in place for recording, analyzing, and reporting evidence of both school-wide achievement and individual student's performance to parents and other appropriate stakeholders as a means of measuring success in meeting stated goals.
10. There is sufficient teaching time allocated throughout the school to enable the planned curriculum to be taught effectively.
11. Students with specific learning needs, including gifted and talented students, are given support from suitably qualified personnel to gain access to the curriculum and to make suitable progress, relative to their capabilities.
12. Students with specific language needs are given support from suitably qualified personnel to gain access to the curriculum and to make suitable progress, relative to their capabilities.

4. Education Development Trust (EDT) provides its own inspection framework specifically for international schools called International Schools Quality mark (ISQM), that is relative to the program management under Standard 1, 3 and 4. The details are as followed.

Standard 1: The standards reached by students in their work and the progress they make

- 1.1 The levels of knowledge, understanding and skills that students reach, demonstrated in tests and examinations.
- 1.2 Attainment against appropriate international standards.
- 1.3 The progress students make towards the standard in relation to their level when they entered the school.

Standard 3: Teaching learning and assessment

- 3.1 The teachers' command of the areas of learning, subjects and courses they teach.
- 3.2 The extent to which the teachers plan effectively, with clear learning objectives and suitable teaching strategies.
- 3.3 How well the teaching methods engage the students' interest and encourage and challenge them to do their best.
- 3.4 How well the teachers deploy teaching assistants and any other support staff.
- 3.5 How well the teachers use their assessment of the students' work to plan for their needs and help them to make progress.
- 3.6 The extent to which the students acquire new knowledge and skills, develop ideas and increase their understanding.

3.7 How well the students understand what they are doing, how well they have done and how they can improve.

3.8 The extent to which the students develop the skills and capacity to work independently and collaboratively.

Standard 4: The curriculum

4.1 The extent to which the curriculum provides worthwhile experiences that cater for the interests, aptitudes and particular needs of the students, so that they all have an equal opportunity to participate and make progress in their learning.

4.2 How fully the school satisfies the requirements of its chosen “declared” curriculum.

4.3 How well the curriculum provides for students who have special educational needs and/or disabilities.

4.4 The quality of the schools’ provision for personal, social and health education.

4.5 How well the school guides and prepares the students for subsequent stages of education or employment.

4.6 The extent to which the curriculum is enriched through additional provision, including, as appropriate.

The information above can be summarized that the Thai Language and Culture Program management consists of three main elements; curriculum development, instruction, and evaluation. As the result, this study focuses on curriculum innovation, instructional innovation, and assessment innovation.

Table 2-2: Synthesis of the Thai language and culture program management

	WASC	NEASC	CIS	EDT	OPEC	Program Management For this study
What students learn criterion	✓					Curriculum Development
Curriculum learning outcomes		✓				
The Curriculum (Domain C)			✓			
The Curriculum (Standard 4)				✓		
Development of school's Thai language, culture & history program					✓	
How students learn criterion	✓					Instruction
Expected teaching practices		✓				
Teaching and Assessing for Learning (Domain D)			✓			
Teaching learning and assessment (Standard 3)				✓		
Curriculum implementation					✓	
How assessment is used criterion- classroom assessment strategies	✓					Evaluation
How assessment is used criterion - reporting & accountability processes	✓					
Principles of assessment exists		✓				
Appropriate definition of high-quality learning & identified expected learning outcomes at each stage of a student's pathway through the school (Domain A7)			✓			
The standards reached by students in their work and the progress they make (Standard 1)				✓		
Curriculum monitoring and evaluation					✓	

2.2.3 Innovation of Program Management

2.2.3.1 Curriculum Innovation

What we teach in schools has to align with our rapidly changing world. Students need to be equipped with knowledge and skills for personal and professional success in the future. The report of the UK's National Foundation for Educational Research suggests to aiming towards personalized approaches to innovative curriculum design and planning. Curriculum innovation comprises of the following components (Williamson & Payton, 2009).

- 21st century skills
- Children's and young people's experiences
- Competences
- Continuous professional development
- Critical thinking skills
- Cross-curricular/interdisciplinary connections
- Emotional literacy
- Global learning
- Media literacy
- Stakeholder engagement
- Partnership pedagogy
- Personalization
- Student voice
- Teacher-student relations
- Thematic curricula
- Well-being

The Office for Standards in Education of UK has conducted a survey to identify the factors, which contribute to successful curriculum innovation in schools. Their key findings of curriculum innovation are identified four broad categories as followed (Ofsted, 2008).

1. Organizing the curriculum through themes or inter-disciplinary links rather than discrete subjects, themes are to be developed according to students' interests and abilities.
2. Using curriculum time flexibly to pursue a particular theme or project in depth.
3. Providing alternative curriculum pathways towards either vocational education or traditional one.
4. Developing learning skills; research skills, sophisticated information and communication technology competences, personal and social skills such as

teamwork, negotiation, independent thinking, decision-making, self-review and target-setting.

Curriculum innovation in this study refers to the ways in which school leaders and teachers design curriculum based on students' needs and interests. Curriculum focuses highly on developing students' personal, learning and thinking skills so that they are well equipped and ready for the future. Curriculum is organized through themes including Thai social, culture, history and monarchy.

2.2.3.2 Instructional Innovation

According to Bruce (Bruce, 1989), instructional innovation means the learning that is interacted between the learners and the learning environment, adopting technology in teaching and using suitable strategic skills to produce better learning outcomes.

Lee (Lee, 2008) mentioned that instructional innovation meant the creative ways that teachers prepare lessons, teaching and learning activities, and assessment that address students' individual differences and result in satisfied learning outcomes.

According to ERIC Thesaurus, instructional innovation means the introduction of new teaching ideas, methods, or devices.

The needs of all students can be met by the digital curriculum that offers personalized learning experience, supporting every single student who has different learning needs, and actively student's engagement (Frank, 2018).

Innovative Instruction will provide opportunities for students to develop the 21st century skills through learning process that involves collaboration, critical thinking, accessing information locally and globally, problem solving, and feedback giving and providing (Edler).

Professional development is also important to maintain teacher's quality in providing quality learning experiences to students. As Lee mentioned that teachers must have good professional ethics, which have direct impact on the teaching's quality (Lee, 2008). The basic professional ethics are being responsible to his profession and devotion to the quality of his teaching. Teachers need to regularly update their knowledge in all areas including ICT in order to cruise along with the rapidly changing world and meet the demands of innovation. Looney pointed out a worldwide focus on the substance of developing students' ICT literacy, as well as its use as a learning tool therefore teacher development must cover ICT related field (Looney, 2009). Teachers are to work corroboratively, share resources and skills with colleagues.

Instructional innovation can be concluded as new teaching approaches with or without ICT that actively engage students in learning, offer opportunities to personalize

the learning experiences according to the learning needs and interests of individual students, and provide adequate scaffolding to support all students to the next level.

2.2.3.3 Assessment Innovation

According to Looney, assessment innovation gears towards identifying where students' learning at so that teachers would be able to adjust teaching and learning activities suitably to students' needs, instead of judging their achievement (Looney, 2009). ICT-based assessment is an undeniable assessing tool in this era. It provides efficient feedback, measures students' complex cognitive skills, facilitates scoring of large-scale assessments, and it is cost-effective (Looney, 2009). Assessment is preferred if it directly connects to students' life or interests, or reflects real life situations. Teacher's feedback is considered as valuable tips to move students' learning forward (Bevitt, 2014). Students also need to have opportunities to self-assessed in order to navigate their learning to right directions.

Assessment innovation can be concluded as an assessing tool responding to real-time of students' learning by providing meaningful feedback on students' performance. It must support diversity and complexity, accurately and efficiently assess, monitor and communicate student progress. Students are able to demonstrate mastery of their learning in different ways at their level.

2.3 Management Innovation

2.3.1 Definitions of innovation

Business Dictionary(Dictionary) provides the definition of innovation as the process of translation an idea or invention into a good or service that creates value or for which customers will pay.

Innovation is defined in Oxford Advanced Learner's Dictionary as 1) the introduction of new things, ideas or ways of doing something, and 2) a new idea, way of doing something, etc. that has been introduced or discovered (Hornby, 2000) (p.700).

Sullivan & Dooley define that innovation is "the process of making changes, large and small, radical and incremental, to products, processes, and services that results in the introduction of something new for the organization that adds value to customers and contributes to the knowledge store of the organization" (O'Sullivan & Dooley, 2009)(p. 5).

Stamm defines that innovation is "the art of making new connections, and continuously challenging the status quo -without changing things for change's sake" (Stamm, 2008)(p.10).

Innovation is the creation of something new and better, or a change for better of its existence. Innovation is not necessary to be a thing, task or technology, but it is a way of thinking to considering concepts, processes, and potential outcomes (Couros, 2015) pp.19-20.

In the study titled "Towards a multidisciplinary definition of innovation", innovation is defined as "the multi-stage process whereby organizations transform ideas into new or improved products, service or processes, in order to advance, compete and differentiate themselves successfully in their marketplace" (Baregheh, Rowley, & Sambrook, 2009).

Innovation is a new idea, item, or method that is expected to generate better result in relation to aimed goals (Nicholls, 2018).

Innovation is an idea, practice, or object that is recognized as new by a person or a group of people, and is later adopted, used or rejected (Rogers, 1983).

Innovation is the creation of a new product, service, or process (Tushman & Nadler, 1986).

Innovation is "turning an idea into a solution that adds value from a customer's perspective" (Skillicorn, 2016).

Innovation is "the application of ideas that are novel and useful. Creativity, the ability to generate novel and useful ideas, is the seed of innovation but unless it's applied and scaled it's still just an idea" (Burkus, 2016) cited in Skillicorn, 2016.

Innovation is about staying relevant. An organization needs to adjust itself to constant changes. The past success is not guaranteed another success of the future (Shapiro, 2016) cited in Skillicorn, 2016.

Innovation is either a big or small, but great idea that creates something new or totally transforms an existing one. It must attract and cater a basic human need (Foley, 2016) cited in Skillicorn, 2016.

Innovation is "a feasible relevant offering such as a product, service, process or experience with a viable business model that is perceived as new and is adopted by customer" (Wulfen, 2016) cited in Skillicorn, 2016.

Innovation is "the introduction of new products and services that add value to the organization" (McFarthing, 2016) cited in Skillicorn, 2016.

Innovation is something new that serves customer needs and wants (Brands, 2016) cited in Skillicorn, 2016.

Innovation is "the fundamental way the company brings constant value to their customer's business or life, and consequently their shareholders and stakeholders" (Hobcraft, 2016) cited in Skillicorn, 2016.

Innovation is “work that delivers new goodness to new customers in new markets, and does it in a way that radically improves the profitability equation” (Shipulski, 2016) cited in Skillicorn, 2016.

Innovation is something creative, new and being implemented (Sloane, 2016) cited in Skillicorn, 2016.

Innovation is a creative and cost effective idea that being implemented to generate more revenues (Baumgartner, 2016) cited in Skillicorn, 2016.

Innovation is something new and useful. It can be something simple but surprising (Boyd, 2016) cited in Skillicorn, 2016.

Innovation is “new, organic value creation by applying creativity, in-depth relationships with consumers and customers, and new thinking” (Graber, 2016) cited in Skillicorn, 2016.

Innovation is something new and unique in which elevates people’s lives (Barba, 2016) cited in Skillicorn, 2016.

All the above definitions of innovation can be analyzed and concluded that innovation is a new or radical idea that is adopted for the benefit of people. Innovation can occur in anywhere from a small household to a big corporate, and in any forms both tangible and intangible. Therefore, having clear focus on a specific type of innovation can lead one to be an effective and strategic innovator (Baer, 2017). Baer mentioned three types of innovation as follows.

1. Product Innovation: There are three forms which are 1) the development of a new product, 2) an improvement of the performance of the existing product, and 3) a new feature to an existing product.
2. Process Innovation: It is various ways combining to make changes on how a product or service being created or delivered.
3. Business Model Innovation: It is a major transformation of an organization by disrupting its existing business model.

Zapfl stated that innovation can occur anywhere within an organization therefore knowing what is being innovated is a starting point (Zapfl, 2018). Zapfl mentioned four types of innovation as follows.

1. Product innovation: It includes both tangible products and intangible services that address client needs.
2. Service innovation: It is related directly to customers.
3. Business model innovation: It is how a company functions and earns revenue.

4. Process and technology innovation: It is the production process that involves technology

Tidd, Bessant, and Pavitt stated that innovation is about change that can take several forms (Tidd, Bessant, & Pavitt, 2005). They categorized four types of innovation.

1. Product innovation - changes in products or services
2. Process innovation - changes how products or services being created or delivered
3. Position innovation - changes how products or services being introduced
4. Paradigm innovation - changes in the underlying mental models which frame what the organization does.

2.3.2 Management Methods

Management methods represent specific types of management. Different management styles and techniques have different outcomes in terms of effectiveness, organizational culture, work performance, and other key factors influencing an organization.

According to Picincu, there are six different styles of management as followed (Picincu, 2019).

1. Authoritative style: Leaders hold absolute power, require no inputs from staff, and provide no room for creativity.
2. Directive style: It is suitable with emergency situations that need prompt decision-making.
3. Affiliate style: It focuses on harmonious working environment with constant positive feedback at most times. The downside of this style is to achieve at highest and fullest potential.
4. Democratic (participative) style: It promotes collaboration and effective communication. Staff's inputs are vital for decision-making process. The downside of this style is that disagreements and procrastination may arise.
5. Coaching style: Leaders acts as a mentor or a coach to support the staff to grow professionally and reach their full potential.
6. Pacesetter style: It is suitable to use with experience team members who know their roles. Leaders hold high standards and expect staff to follow their example and to strive for the best.

Sling Team has provided 10 types of management, three of them are the same as Picincu mentioned that are democratic style, authoritative style, and affiliative style. Ten types of management by Sling Team are as followed (Team, 2018).

1. Democratic management style
2. Inspirational management style: Leaders hold high people skills with determination to provide full support in helping staff to develop to their fullest potential.
3. Authoritative management style
4. Results-based management style: It focuses on efficient results.
5. Laissez-Faire management style: Leaders have high trust on their staff that they can get their work done.
6. Collaborative Management Style: It is similar to democratic style, but involves staff participation to provide feedback and possibly innovative solutions.
7. Example-Setting Management Style: Leaders ensure high expectations occurred in their organization by being a flawless example.
8. Strategic Management Style: Leaders focus on long-term goal and lay their trust on their staff to perform day-to-day operation.
9. Affiliative Management Style: Leaders are a part of the team and support their staff when needed. Staff has high regard for this type of leaders.
10. Charismatic (Persuasive) Management Style: Leaders focus on building personal relationships with staff that leads to cooperative working environment.

According to Pra Thepsophon, the best management method is Dharmacratic. This management style focuses on dharma. Leaders must hold four forces as principles; scholar, perseverance, honesty and human relations (PraThepsophon, 2003).

- Scholar: Being knowledgeable and wise
- Perseverance: Having high effort and determination
- Honesty: Being truthful and moral
- Human relations: Having high EQ and interpersonal skills

2.3.3 Management Innovation

Hamel defined as cited in (Dearlove & Crainer, 2006) that “management innovation is innovation in management principles and processes that ultimately changes the practice of what managers do, and how they do it. It is different from operational innovation; which is about how the work of transforming inputs into outputs actually gets done” (para.1). It significantly alters traditional management processes such as strategic planning, capital budgeting, project management, hiring and promotion,

employee assessment, executive development, internal communications, and knowledge management (Hamel, 2006).

Birkinshaw & Mol defined that management innovation is “the implementation of new management practices, processes and structures that represents a significant departure from current norms, and it has over time dramatically transformed the way many functions and activities work in organizations” (J. M. Birkinshaw & Mol, 2006) (p.81).

Birkinshaw, Hamel & Mol defined that management innovation is “the invention and implementation of a management practice, process, structure, or technique that is new to the state of the art and is intended to further organizational goals” (J. Birkinshaw, Hamel, & Mol, 2008) (p.825).

Damanpour & Aravind defined that management innovation is changes in management functions in order to reach organization goals successfully (Damanpour & Aravind, 2012).

From the above definitions on management innovation, a single perspective can be obtained on the notions and concepts to suit the context of this study. The management innovation is the implementation of a new management practice and process in the areas of curriculum, instruction and assessment that drastically impacts student quality as expected.

2.3.4 Innovation Development

Hengsberger shared similar concept that there are four steps of innovation process (Hengsberger, 2018).

1. **Idea:** Searching for innovation potentials.
2. **Concept:** Finalizing the innovative idea.
3. **Solution:** Developing the selected innovation.
4. **Market:** Launching the innovation with the target group and collecting feedback to increase satisfaction.

Ng mentioned that innovation is turning ideas into reality by following these innovation process (Ng, 2014).

1. **DEFINE** the problem: It begins with an intention or idea, and ends with a very clear idea of the problem or opportunity.
2. **DISCOVER** relevant insights: This phase is to search for more information on the problem or opportunity for affirmation.
3. **DESIGN** the solution: This phase is to come up with possible and detailed solutions.

4. **DEVELOP** the solution: This phase is to turn the possible idea for solution into reality.
5. **DEPLOY** the solution: This phase is to try out the developed innovation for validation.

Sullivan & Dooley mentioned that innovation starts from generating ideas, recognizing opportunity to pursue on an innovative idea, developing the idea into a potential innovation, and realizing the innovation which details are followed (O'Sullivan & Dooley, 2009).

1. **Idea Generation:** Looking for threats and opportunities within and outside organization, or solutions to problems that can be turned into an innovation.
2. **Opportunity recognition:** Selecting one idea that is most likely worth pursuing to be developed as innovation.
3. **Development:** Turning selected idea into innovation where in which can be a tangible product, process or service that is expected to meet organizational goals.
4. **Realization:** Validating the innovation whether it meets set goals or expected needs.

Lean Methods Group(GROUP) showcases their D4 Methodology that consists of:

1. **Define the opportunity** by establishing teams to identify the Job To Be Done,
2. **Discover ideas** to solve the problems from external sources in order to gain new knowledge, diminish outcome expectation gaps, and finalize ideas for further development and design,
3. **Develop designs** which is turning great ideas into workable models by identifying functions and formulating designs, strengthening and optimizing the designs, and communicating and selling designs internally,
4. **Demonstrate feasibility** by developing prototypes, piloting and testing with a select and representative group of customers.

With the above reviews, the process of the innovation development can be analyzed and synthesized as four phases.

1. Define need for innovation.
2. Discover idea to formulate innovation by gathering, as much information regarding to needs as possible in order to take actions on its importance accordingly.
3. Develop innovation with the help from experts.
4. Demonstrate feasibility by stakeholders' evaluation

Table 2-3: Synthesis of the innovation development

Innovation Process	Hengsberger (2018)	Ng (2014)	Sullivan & Dooley (2009)	Lean Methods Group	Innovation Development for this study
Idea: Searching for innovation potentials	✓				Define needs for innovation
DEFINE the problem		✓			
Idea Generation			✓		
Define the opportunity				✓	
Concept: Finalizing the innovative idea	✓				Discover ideas to formulate innovation
DISCOVER relevant insights		✓			
Opportunity recognition			✓		
Discover ideas				✓	
Solution:	✓				Develop innovation
DESIGN the solution		✓			
DEVELOP the solution		✓			
Development:			✓		
Develop designs				✓	
Market:	✓				Demonstrate feasibility
DEPLOY the solution		✓			
Realization			✓		
Demonstrate feasibility				✓	

2.4 Agile Learner Characteristics

2.4.1 Definitions

According to Cambridge Dictionary, the definition of agile is to be able to move your body quickly and easily, or to be able to think quickly and clearly. The Oxford Dictionary defines agile as being able to think and understand quickly.

An agile learner is one who is able to figure way out when encountering never experienced situation and has no clue what to do at first (Hoff, 2018).

Agile learners are open-minded, willing to learn new ideas and change their ways of doing things to find success (Mitchinson & Morris, 2012).

Agile learners are reflective, quick in adjusting to change, and able to apply experiences to new situations (Valcour, 2015).

Agile learners are comfortable to put themselves out of their comfort zone to explore new experiences and skills, they learn from success in the past and move on to the new (Taylor, 2014).

Agile learners are flexible and adaptable to new situations because the past success will not repeat the same path to new success (Ruyle, 2010).

As cited in Galagen, Vicki Swisher defines agile learners as who are always ready to learn new ideas and use them to accomplish their goals. Korn Ferry defines agile learners as who continue learning new skills, encounter challenging situations and handle uncertain situations well (Galagan, 2015).

2.4.2 Characteristics of Agile learners

Lombardo and Eichinger conducted a research to look for the characteristics of agile learners. The results are as follows (Lombardo & Eichinger, 2000).

1. Being eager to learn about self, others, and ideas.
2. Showing genuine willingness to learn from feedback and experience and change their behavior and viewpoints as a result.
3. Being interested in helping people think and experiment.
4. Being resilient and philosophical about what happens to people who push change.
5. Being uncompromising with their notions that are well-thought-through ideas and logic.

De Meuse (cited in Flora, 2016) defines “Learning agility is the ability and willingness to learn quickly, and then apply those lessons to perform well in new and challenging leadership situations.” De Meuse’s research completed in 2014 shows 7 factors of learning agility as follows (Flora, 2016).

1. Cognitive Perspective: Thinks critically and strategically, approaches organizational situations from a broad high-level viewpoint, and focuses on multiple inputs rather than from only one or two functional/technical perspectives.
2. Interpersonal Acumen: Interacts effectively with a diversity of people, understands their motives, values, and goals as well as their strengths and limitations, instills confidence in them, and leverages them to perform well.

3. Change Alacrity: Relishes change, demonstrates curiosity and eagerness to learn new ideas and ways of behaving, open-minded to new situations, and continuously seeks innovative (and at times risky) approaches to perform jobs.
4. Drive to Excel: Sets challenging personal and organizational goals, resourceful, and delivers outstanding results in new and untested jobs.
5. Self-Insight: Understands themselves, their capabilities, weaknesses, beliefs, values, feelings, and personal goals as it relates to the workplace.
6. Environmental Mindfulness: Observes their external surroundings carefully, attends fully to changing job duties and requirements in new organizational roles, approaches environmental changes in a nonjudgmental manner, and regulates emotions effectively.
7. Feedback Responsiveness: Solicits, listens to, and accepts personal feedback from others, carefully considers its merits, and subsequently takes corrective action for performance improvement.

The Korn Ferry Institute has published a number of articles regarding to learning agility. One article under Lewis, Orr, and Buxton (2014) defines agile learning as the ability and willingness to learn from experience, and to subsequently apply that learning to perform successfully under new or first-time conditions. The Korn Ferry/Springboard survey assessed the agile learning abilities of participants, and its result reveals the following attributes (J. Lewis, Orr, & Buxton, 2014).

1. Tolerance of ambiguity - comfort with vague or contradictory information and the ability to make decisions when things are uncertain.
2. Intellectual curiosity - The extent to which a person is likely to tackle problems in a novel way, see patterns in complex information, and pursue deep understanding.
3. Emotional intelligence - The ability to influence, collaborate, and communicate effectively with others and use interpersonal awareness in a way that advances collective goals.

The other article under (G Hallenbeck, Swisher, & Orr, 2011) provides seven profiles of high learning agility people as follows.

1. Problem Solver: Being in a challenging situation, they thorough determine its difficulties, come up with solutions by utilizing variety of sources, involve stakeholders and maximize their potentials and possibilities.
2. Thought Leaders: Tenacious explorers of insight and fact, they look thoroughly at all angles to make possible connections. They are progress oriented.

3. Trailblazers: They are confident and clear in their path and strategies of moving forward.
4. Champions: They cannot only handle difficult situations but people at ease. They are result oriented.
5. Pillars: They strive to refine best solutions for improvement involving insightful thinking, focused actions, and an open, inclusive manner.
6. Diplomats: They are highly capable of handling people in difficult or confronted situations.
7. Energizers: They are goal-oriented, very hardworking, and able to inspire others to strive for success.

Mitchinson and Morris state that learning agility is a vital leadership attribute that is the ability to let go their current practice and look for new knowledge and skills to equip them to handle future challenges. The research team at Teachers College, Columbia University worked collaboratively with CCL displayed the characteristics of agile learners as follows. (Mitchinson & Morris, 2012)

1. Not afraid to challenge the status quo
2. Calm in the face of difficulty
3. Take time to reflect on their experiences
4. Purposefully be in challenging situations
5. Open to learning and resist the temptation to become defensive in the face of adversity

Burke defines "Learning agility is a combination of motivation; that is being willing to face new and perhaps ambiguous situations by taking actions that help one to stay engaged, and the skill to discern quickly the consequences of these actions and then determine what to do next to continue the process of learning" (Flora, 2016). Based on his research at Columbia Teachers' s College and the Center for Creative Leadership, Burke identifies 9 cognitive and behavioral processes that construct learning agility which are cited in (Jaw-Madson, 2015) as follows.

1. Flexibility: Being open to new ideas and proposing new solutions.
2. Speed: Acting on ideas quickly so that those not working are discarded and other possibilities are accelerated.
3. Experimenting: Trying out new behaviors (such as approaches, ideas) to determine what is effective.

4. Performance Risk Taking: Seeking new activities (tasks, assignments, roles) that provide opportunities to be challenged.
5. Interpersonal Risk Taking: Confronting differences with others in ways that lead to learning and change.
6. Collaborating: Finding ways to work with others that generate unique opportunities for learning.
7. Information Gathering: Using various methods to remain current in one's area of expertise.
8. Feedback Seeking: Asking others for feedback on one's ideas and overall performance.
9. Reflecting: Slowing down to evaluate one's own performance to be more effective.

Agile learners show their eagerness and ability to learn from experience where in which guides their performance to success in unfamiliar and challenging situations (George Hallenbeck, 2016). Hallenbeck refers to CCL's research that shows four sets of behaviors of agile learners as follows.

1. SEEKING: Agile learners always eye different and challenging situations that enhance their experiences. They view these unfamiliar situations as opportunities for development and growth.
2. SENSEMAKING: Agile learners are constantly alert and curious about their surroundings. Questioning "Why?" "How?" and "Why not?" are vital to gaining the insight and perspective that ignites learning. They learn from mistakes and correct mistakes. They welcome criticism and use it as a drive to solutions.
3. INTERNALIZING: Agile learners take time for reflections and look for feedback in order to better prepare themselves with other challenges to come.
4. APPLYING: Agile learners utilize and apply what they have learned to maneuver unfamiliar and challenging situations. They react promptly to situations and ready to adjust their ways when needed.

Anderson defines an agile learner is someone who is aware of the world he or she lives in that is uncertain. Therefore, they realize that their present education does not equip them with capabilities to solve all problems they are likely to encounter. However, the agile learner understands that they are capable of adjusting themselves, behaving intelligently and engaging effectively in Virtuous Practice in order to get themselves through difficult problems. To develop agile learners, Anderson claims that

three concepts needed which are the Growth Mindset by Dweck, the Habits of Mind by Costa and Kallick, and Virtuous Practice by Ericsson. The characteristics of agile learners are as follows (Anderson, 2017).

1. Embrace challenges
2. Celebrate success of others and learn from them
3. Persist when encountering difficulty
4. Learn from feedback and criticism
5. Apply effort to learn something new
6. Seek help and support
7. Learn from mistakes

The characteristics previously reviewed have been synthesized to find their similarities, and connections as shown in Table 2-4. The result shows eight characteristics of agile learners as follows.

Agile Learner Characteristics are composed of:

1. Being eager and curious to learn new ideas
2. Welcoming feedback and criticism
3. Having highly effective interpersonal skills
4. Seeking challenging situations
5. Being a cognitive thinker
6. Being goal-oriented
7. Knowing what to do when facing uncertain situations
8. Reacting promptly to change or ineffective strategies

Table 2-4: Synthesis of the Agile Learner Characteristics

<div style="text-align: center;">Concept</div> Agile Learner Characteristics	Lombardo & Eichinger 2000	DeMeuse, Dai, & Hallenbeck 2010	Hallenbeck, Swisher, & Orr 2011	Mitchinson & Morris 2012	Lewis, Orr, & Buxton 2014	Burke (cited in Jaw-Madson) 2015	Hallenbeck 2016	Anerson 2017	Conceptual Framework
Being eager to learn about self, others, and ideas	✓								Being eager and curious to learn new ideas
Change Alacrity		✓							
Intellectual curiosity					✓				
Thought Leaders			✓						
Flexibility						✓			
Experimenting					✓				
Sense making						✓			
Apply effort to learn something new								✓	
Showing genuine willingness to learn from feedback and experience and change their behavior and viewpoints as result.	✓								Welcoming feedback and criticism
Feedback Responsiveness		✓							
Take time to reflect on their experiences				✓					
Open to learning and resist the temptation to become defensive in the face of adversity				✓					
Feedback Seeking					✓				
Reflecting					✓				
Internalizing						✓			
Celebrate success of others and learn from them								✓	
Learn from feedback and criticism								✓	
Seek help and support								✓	
Learn from mistakes								✓	

Agile Learner Characteristics / Concept	Lombardo & Eichinger 2000	DeMeuse, Dai, & Hallenbeck 2010	Hallenbeck, Swisher, & Orr 2011	Mitchinson & Morris 2012	Lewis, Orr, & Buxton 2014	Burke (cited in Jaw-Madson) 2015	Hallenbeck 2016	Anerson 2017	Conceptual Framework
Being interested in helping people think and experiment	✓								Having highly effective interpersonal skills
Interpersonal Acumen		✓							
Emotional intelligence					✓				
Champions			✓						
Diplomats			✓						
Energizers			✓						
Interpersonal Risk Taking						✓			
Collaborating						✓			
Being resilient and philosophical about what happens.	✓								Seeking challenging situations
Environmental Mindfulness		✓							
Not afraid to challenge the status quo				✓					
Calm in the face of difficulty				✓					
Purposefully be in challenging situations				✓					
Performance Risk Taking						✓			
Seeking opportunities for development							✓		
Embrace challenges								✓	
Persist when encountering difficulty								✓	
Being uncompromising with their notions that are well-thought-through ideas and logic.	✓								Being a cognitive thinker
Cognitive Perspective		✓							
Pillars			✓						
Information Gathering						✓			
Drive to Excel		✓							Being goal-oriented
Self-insight		✓							
Trailblazers			✓						

Agile Learner Characteristics / Concept	Lombardo & Eichinger 2000	DeMeuse, Dai, & Hallenbeck 2010	Hallenbeck, Swisher, & Orr 2011	Mitchinson & Morris 2012	Lewis, Orr, & Buxton 2014	Burke (cited in Jaw-Madson) 2015	Hallenbeck 2016	Anerson 2017	Conceptual Framework
Tolerance of ambiguity					✓				Knowing what to do when facing uncertain situations.
Problem Solver			✓						
Speed						✓			Reacting promptly to change and ineffective strategies.
Applying								✓	

2.4.3 Grouping of the agile learner characteristics

The agile learner characteristics in this research are grouped based on the Bloom's Taxonomy of learning domains. The Bloom's Taxonomy involves three types of learning domains that are widely used in learning process to make learning better for different learning needs among students. The three domains of learning are cognitive, affective, and psychomotor.

The cognitive domain focuses on developing knowledge and intellectual skills of individual. There are six categories of cognitive domain starting from the simplest to the most complex as follows. 1) Knowledge involves the ability to remember or recall learned information. 2) Comprehension involves the ability to understand learned information then explain in his own words. 3) Application involves the ability to apply learned knowledge into new situations. 4) Analysis involves the ability to identify each component of information. 5) Synthesis involves the ability to put together pieces of information to form a new idea or meaning. 6) Evaluation involves the ability to make judgements about situations or ideas (Khan, 2019).

The affective domain involves individual's feelings, emotions and attitudes. There are five categories of affective domain as follows. 1) Receiving information involves the ability to be willing to hear or listen to others with respect. 2) Responding

to the situation involves the ability to participate actively and attentively. 3) Valuing involves the ability to demonstrate appreciation on something or someone. 4) Organization involves the ability to recognize or prioritize the need. 5) Characterization involves the ability to form the internalized value to guide their behavior (Khan, 2019).

The psychomotor domain involves physical movement and the use of motor skills. There are seven categories of psychomotor domain starting from the simplest to the most complex as follows. 1) Perception involves the ability to detect sensory cues to guide motor reaction. 2) Set involves the mental, physical, and emotional ability to react promptly on given opportunity. 3) Guided response involves the ability to follow directions to further develop skills that need practices. 4) Mechanism involves the ability to assemble product or process using learned knowledges with fluency. 5) Complex clear response involves the ability to assemble product or process using learned knowledges with high fluency and accuracy. 6) Adaptation involves the ability to adapt skills or knowledge to suit a new situation or requirement. 7) Organization involves the ability to create new product or knowledge indicating highly developed skills (Khan, 2019).

The synthesis result of eight characteristics of agile learners were grouped into three learning domains of Bloom's Taxonomy as shown in Table 2-5.

Table 2-5: Synthesis of the Agile Learner Characteristics grouped by basing on the Bloom's Taxonomy of Learning domains (Bloom, 2006)

Bloom's Taxonomy Learning domains	Cognitive domain	Affective domain	Psychomotor domain
Agile learner characteristics			
Being eager and curious to learn new ideas		✓	
Welcoming feedback and criticism		✓	
Having highly effective interpersonal skill			✓
Seeking challenging situations			✓
Being a cognitive thinker	✓		
Being goal-oriented	✓		
Knowing what to do when facing with uncertain situations.			✓
Reacting promptly to change and ineffective strategies.			✓

The agile learner characteristics are grouped into three learning domains and reordered for suitability as follows.

1. Characteristics in cognitive domain:
 - 1.1. Being goal-oriented
 - 1.2. Being a cognitive thinker
2. Characteristics in affective domain:
 - 2.1. Being eager and curious to learn new ideas
 - 2.2. Welcoming feedback and criticism
3. Characteristics in psychomotor domain:
 - 3.1. Seeking challenging situations
 - 3.2. Knowing what to do when facing with uncertain situations.
 - 3.3. Reacting promptly to change and ineffective strategies.
 - 3.4. Having highly effective interpersonal skill

2.5 Related Literature and Studies

2.5.1 Related literature in the area of agile learner characteristics

A learning community formed with faculty members from six public universities in the US did the research and came up with “Agile Manifesto for Teaching and Learning” to enhance collaboration and creation among learners in higher education. Agile way has proven to be successful and beneficial to positive learning outcome (Krehbiel et al., 2017).

The outstanding characteristics of being agile learners are to seeking feedback along with to self-reflecting which would lead to better in learning, performance, adaptability, and well-being. These characteristics are identified to be important for the success in 21st century (Anseel, 2017).

Learning agility is essential attribute of successful leaders. A group of researchers at the Center for Creative Leadership and Teacher College, Columbia University studied and provided the answer on how to be agile, and to assess how agile we are (Mitchinson & Morris, 2012).

Learning agile person is who can quickly adjust their strategies to situation or problem they are in. They are active, information finding, welcoming feedback, self-reflecting, and most importantly avoiding being defensive (Burke, Roloff, & Mitchinson, 2016).

In the rapid changing world, organizations need leaders who are learning agile. Key characteristics of highly agile learners were grouped into five areas of learning

agility. Mental agility composes of being curious, getting to root cause, being comfortable with ambiguity and complexity, finding parallels and contrasts easily, questioning conventional wisdom, finding solutions to difficult problems, and reading broadly and having wide interests. People agility composes of being open-minded and tolerant, having self-awareness, being comfortable with differences of opinions, being effective communicator. Change agility composes of enjoying new experiences, being out of the comfort zone, being a risk taker, and offering initiative. Result agility composes of being a goal getter, having high determination, being flexible and adaptable, and having presentable personalities (De Meuse, Dai, & Hallenbeck, 2010).

We are in a technologically driven world, teaching and learning have to change and adopt technology into learning process. Students need to be equipped with 21st century skills including problem solving, information processing, working collaboratively, and knowing what to do when facing with uncertain situations (Daggett, 2010).

All-Party Parliamentary Group for Education of the United Kingdom had put together the report in 2017 titled “How well do schools prepare children for their future? This was due to the fact that the job vacancies in the UK are unable to be filled by the youth unemployment because they lack of the skills needed. Other than literacy and numeracy skills that are still essential, soft skills are also not to be overlooked. These soft skills includes confidence, motivation, and self-awareness along with life skills as problem-solving and working collaboratively (Kinahan, 2017).

Schools that prepare future-ready students focus highly on students’ well-being, and they work closely with parents and local companies to provide authentic learning experiences or real-world situations. Schools emphasize on individual learning needs and interests. Teaching literacy and numeracy are definitely still important, but additional skills like digital literacy, problem-solving, globally competent are as of importance (Price et al., 2017).

Learning agility is evidence in the science classroom that practices Scrum method. It is a student-centered that evolves students in collaborative group work which provides opportunities to develop 21st century skills of creativity, critical thinking, communicating, and collaborating. Students fully engage during class activity and achieve learning objectives and performance expectations (Cook, 2017).

As cited in Hardie, Tony Wagner (2008) has identified “Survival Skills” for students in the 21st century: critical thinking and problem solving, collaboration across networks and leading by influence, agility and adaptability, initiative and entrepreneurship, effective oral and written communication, accessing and analyzing

information, and curiosity and imagination. A typical classroom provide unrelated and meaningless lesson to students, agility and adaptability are absolutely missing from the classroom. Students need learning to be active, challenging and meaningful (Hardie, 2019).

2.5.2 Related literature in the area of international schools in Thailand

Vacharakittanond studied the implementation of Thai language and culture curriculum in international schools accredited by international organization in three areas; curriculum management, instruction, and the support of the curriculum implementation in order to compare opinions on using the Thai language and culture curriculum of Thai teachers and Thai administrators. The finding revealed as follows. The overall current state of implementing the Thai language and culture curriculum was at the moderate level. Considering each element found that the curriculum implementation in the instruction was at the high level, the curriculum management and the support of the curriculum implementation were at the moderate level (Vacharakittanond, 2008).

Trongtorgarn studied the academic management of international schools in Bangkok and found as follows. There are two types of curriculum used in international schools; the American and the British curriculum. The American curriculum emphasizes on student development in communication skills, analytical thinking skills, balancing of physical, mental and social skills, social responsibility, and respect differences of others and the culture of the host country. The British curriculum emphasizes on designing teaching and learning experiences strictly to the UK National Curriculum. Students are to be fully developed in academic contents and skills of both core and foundation subjects (Trongtorgarn, 1997b).

Kotarak studied the feasibility of Agile philosophy for educational management in order to propose advantages of establishing an Agile international school. The findings showed that an agile international school would provide students with equity, international context with decent ability to communicate in English, and collaborative learning experiences. Management of an agile international school would be dynamic and prompt to reach goals (Kotarak, 2017).

Thontua studied the factors affecting Thai parents' decisions on enrolling their primary aged child into a British curriculum international school in Thailand. The finding showed that parents who graduated from abroad indicated the number one factor in academic area was the learning experiences and activities promoting student's creativity. Parents who graduated within Thailand indicated the number one factor in

academic area was the homework assigned to students on a regular basis (Thongtua, 2009).

Lertprasertkong studied the situation and problems of the Thai language and culture program management within international schools in Thailand. The findings showed that parents and school administrators under supported the program, inadequate number of experienced Thai teachers, inequity of compensation between Thai and foreign teachers, lack of thorough understanding on curriculum by administrators, multi-level of students' Thai language proficiency in a class leading to difficulty in instruction and evaluation, and lack of suitable learning materials for international school context (Lertprasertkong, 2009).

Phiewthon studied the next decade scenario of international schools in primary level and found as follows. The change in the next ten years caused by globalization, informational technology, and education reform has led to following planning for the future. Management aims towards the same goal, flexibility, and collaboration. Teachers are proactive and skillful in their field of teaching. Curriculum is international, flexible and democratic. Teaching and learning activities are varied and suitable to students aligning with internationalism. Standard and benchmark of being internationalism are explicitly identified. Government offers adequate financial support and suitable policy. International image is promoted. Schools are able to develop their own learning and teaching materials. Students are bilingual and able to communicate effectively. Buddhism international school is promoted to be further presented in international level (Phiewthon, 2019).

Sangkhapun studied teamworking among faculty in international schools and showed the finding related to Thai language and culture program as follows. Schools lack of qualified Thai teachers. Faculty plays no part in goal setting process of the school. There is minimum offer on professional development (Sangkhapun, 2013).

Chapter 3

Research Methodology

This chapter describes the research design employed in the study of Management Innovation for the Thai Language and Culture Program of International Schools in Thailand based on the concept of agile learner characteristics. The study explored the characteristics of the agile learners, the management for the Thai language and culture program of international schools under the Office of Private Education Commission (OPEC) relating to curriculum development, instruction, and evaluation; and the development of management innovation. The purposes of the study were to study the conceptual framework of the agile learner characteristics and the Thai language and culture program management; to examine the current and desirable states of management to promote agile learner characteristics in the Thai language and culture program for international schools in Thailand; and to identify needs to develop innovation for the Thai language and culture program management based on the concept of agile learner characteristics. The chapter explains the process of research design, the research population, the sample selection, the research instrument, the methods of data collection and data analysis.

3.1 Research Design

This research used a multiphase mixed method design of quantitative and qualitative analysis comprised of three stages.

3.2 Research Process

The research study has been designed based on the research objectives. There are three stages of the research process.

Stage One. To study the conceptual framework of the Thai language and culture program management for international schools in Thailand and the agile learner characteristics.

Stage Two. To examine the current and desirable states for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics.

Stage Three. To develop the management innovation for the Thai language and culture program of international schools in Thailand according to the concept of agile learner characteristics. There are three steps in this stage.

Stage One: To study the conceptual framework of the Thai language and culture program management of international schools in Thailand and the agile learner characteristics.

Related literature and researches in the areas of Thai language and culture program management and agile learner characteristics are studied in order to formulate conceptual frameworks and its evaluation form to be further presented and evaluated by experts. The process details are as follows.

1.1 Informants

1.1.1 Related literature, text books, and researches in the areas of the Thai language and culture program management, agile learner characteristics, and innovation development are studied.

1.1.2 Five experts selected from purposive sampling consisted of two experts in the area of agile learner characteristics, two experts in the area of Thai language and culture program management, and one in the area of management innovation

1.2 Research instruments

1.2.1 Tables of content analysis in the areas of the Thai language and culture program management, the agile learner characteristics, and the innovation development

1.2.2 Conceptual framework's evaluation form consisted of two parts

Part I: Conceptual framework's evaluation form for its suitability using checklist

Part II: Additional comments and suggestions

1.3 Data collection

1.3.1 The study of related literature, theories, text books, articles, and researches in the areas of the Thai language and culture program management, the agile learner characteristics, and the innovation development is conducted following with content analysis. The summary and data organization are conducted by using frequency and content analysis into categories. Then the conceptual framework is finalized.

1.3.2 The quantitative data are collected from five experts in the areas of the Thai language and culture program management, the agile learner characteristics, and the innovation development to evaluate the conceptual framework. The process is as follows

1) The data collection process starts with requesting the letter asking for cooperation in conceptual framework validation from the Graduate School, Chulalongkorn University submitted to the experts to evaluate the conceptual framework for the Thai language and culture program management of international schools in Thailand based on the concept of agile learner characteristics.

2) The specialists are contacted via email and phone call for the appointment.

3)The specialists examine and evaluate the conceptual framework using the evaluation form with quantitative data collection including the open-ended questions for additional comments and suggestions.

4)The revised conceptual framework is further recommended by the dissertation advisor and co-advisor.

1.4 Data analysis

1.4.1 Frequency and content analysis are conducted. The key ideas are finalized as the first draft of the conceptual framework.

1.4.2 Data collected from the conceptual framework's evaluation are analyzed using frequency and percentage to find correlation between the conceptual framework and the research objectives. The comments and suggestions are analyzed with content analysis.

1.4.3 The percentage between 80-100 % meaning the conceptual framework is suitable to be used for the research.

1.5 Expected result

The conceptual framework of the Thai language and culture program management, agile learner characteristics and innovation development

Stage Two: To examine the current and the desirable states, and analyze needs to develop the Thai language and culture program management of international schools in Thailand based on the concept of agile learner characteristics

(The process of management innovation development, Phase One: Define needs for innovation)

The constructed questionnaire is used to collect quantitative data for the current and desirable states of the Thai language and culture program management.

2.1 Population and sampling

Population used in this research are 128 international schools in Thailand under the Office of Private Education Commission and ISAT members which use American, British, International Baccalaureate, and another national curriculum.

Sampling is 97 international schools in Thailand.

- a. The sample size is determined by the calculation using the Yamane formula with the confidence interval at 95% and allowable error (e) at $\pm 5\%$ (YAMANE, 1973). The calculation using Taro Yamane formula is displayed below.

$$n = \frac{N}{1 + Ne^2}$$

N = the population of 128 schools

e = allowable error at 5%

n = the sample size required

- b. The selection of sample schools is conducted using simple random sampling from 5 regions:

North	= 15 schools
South	= 10 schools
Northeast	= 5 schools
East	= 8 schools
Central	= 59 schools

The informants include the administrators of the Thai department and Thai teachers of all grade levels.

2.2 Research instruments

The research instrument employed in this study is the questionnaire which contains three parts.

Part 1: Questions about the informant's demographic data: The informant can use a checklist to answer question about his/her gender, age, the highest education level, and the current working position.

Part 2: Questions about the current and desirable states of the Thai language and culture program management based on the concept of agile learner characteristics. The informant can answer questions by selecting a number from a rating scale of 1 to 5; each number represents the level of practices.

The rating scale of 1 to 5 in the current state refers to the level of practices as follows:

- 5 = the highest level of practice
- 4 = the high level of practice
- 3 = the middle level of practice
- 2 = the low level of practice
- 1 = the lowest level of practice

The rating scale of 1 to 5 in the desirable state refers to the level of need for the practices as follows:

5 = the highest level of need for practice

4 = the high level of need for practice

3 = the middle level of need for practice

2 = the low level of need for practice

1 = the lowest level of need for practice

Part 3: Additional comments and suggestions to develop the Thai language and culture program management based on the concept of agile learner characteristics.

The process to construct a questionnaire is as follows.

1) Related literature, article, and researches in the areas of Thai language and culture program management and agile learner characteristics are studied.

2) Analysis table of each variable structure aligning with the conceptual framework and the operational definition of key terms are created, then questions are formulated.

3) The created questionnaire is presented to the dissertation advisor and co-advisor to examine the content validity of questions, the language usage in the questionnaire and the breadth of coverage based on the conceptual framework and the operational definition of terms.

4) Five experts evaluate the feasibility, the coverage and the content validity of the questionnaire using Index of item Objective Congruence (IOC) to find correlation between the questions and the research objectives. Questions with the IOC starting from 0.50 and above are selected to be used. The comments and suggestions are analyzed with content analysis.

$$IOC = \frac{\sum \square}{N}$$

IOC = the value of the index of consistency between the questions and objectives

$\sum \square$ = the total scores of the experts' opinions

N = the total number of the experts

Scoring criteria:

+1 = agree to use this question

0 = not certain to use this question

-1 = disagree to use this question

5) The evaluated questionnaire by the experts is tried out with thirty Thai teachers of international schools in Thailand whom are not the sample group (six teachers from British curriculum schools, thirteen teachers from American curriculum

schools, and eleven teachers from International Baccalaureate curriculum schools) to validate reliability. The Cronbach's Alpha Coefficient formula is used to compute the data collected to identify the reliability value of the questions; the alpha reliability coefficients are 0.96 for the questions inquiring about the current state and for those inquiring about the desirable state meaning the questionnaire has a high reliability value and can be used to collect data.

2.3 Data collection

The quantitative data collection using the questionnaire to examine the current and desirable states for the Thai language and culture program management of international schools in Thailand from the sample population of 97 international schools has detailed process as follows.

1) Request the letter asking for cooperation in research data collection from the Faculty of Education, Chulalongkorn University to be emailed to the Thai administrators of 97 international schools to fill out the questionnaire for the Thai language and culture program management of international schools in Thailand based on the concept of agile learner characteristics.

2) Email the letter of cooperation for data collection from the Faculty of Education, Chulalongkorn University along with the questionnaire in the google form to 97 administrators of international schools.

3) Response of the questionnaire received via google form.

2.4 Data analysis

2.4.1 To examine current and desirable states for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics.

The data analysis of the questionnaire consists of two parts.

Part 1: The informant's basic information is analyzed using the descriptive statistics to identify frequency distribution and percentage.

Part 2: The information on the current and desirable states of Thai language and culture program management of international schools in Thailand is analyzed using a statistical tool, SPSS for Windows, to identify mean and standard deviation (S.D.). The analysis is conducted to find the \bar{x} and S.D. of the overall environment. The criteria to define the range of the mean scores are described as follows:

The current state of the Thai language and culture program management for international schools in Thailand based on the concept of agile learner characteristics

4.51 - 5.00 = the highest level of practice

3.51 - 4.50 = the high level of practice

2.51 - 3.50 = the middle level of practice

1.51 - 2.50 = the low level of practice

0.51 - 1.50 = the lowest level of practice

The desirable state of the Thai language and culture program management for international schools in Thailand based on the concept of agile learner characteristics

4.51 - 5.00 = the highest level of need for practice

3.51 - 4.50 = the high level of need for practice

2.51 - 3.50 = the middle level of need for practice

1.51 - 2.50 = the low level of need for practice

0.51 - 1.50 = the lowest level of need for practice

Part 3: Additional comments on 1) new ways to develop curriculum that promotes agile learner characteristics, 2) new ways to develop instruction that promotes agile learner characteristics, 3) new ways to evaluate learning that promotes agile learner characteristics, and 4) new management that promotes agile learner characteristics.

2.4.2 To conduct need analysis for developing management innovation of the Thai language and culture program based on the concept of agile learner characteristics.

The Priority Needs Index technique (PNI_{modified}) used in the computation to prioritize need is described below.

$$PNI_{\text{modified}} = (I-D)/D$$

I = The desirable state of Thai language and culture program management

D = The current state of Thai language and culture program management

2.5 Expected result

1) The current and desirable states of the Thai language and culture program management of international schools in Thailand based on the concept of agile learner characteristics

2) Needs for the Thai language and culture program management of international schools in Thailand based on the concept of agile learner

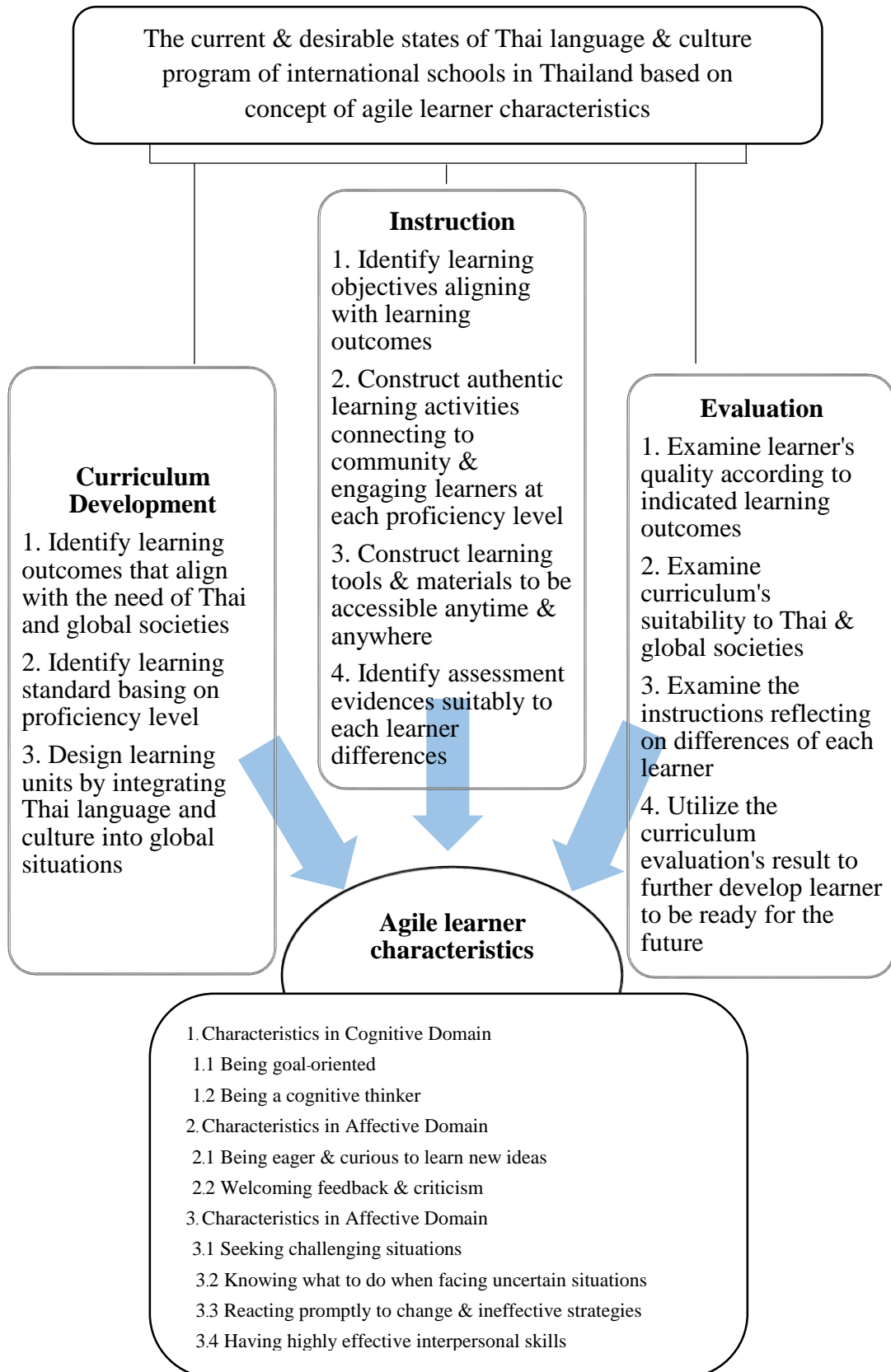


Figure 3: Questionnaire's structure

Stage Three: To develop management innovation for the Thai language and culture program based on the concept of agile learner characteristics

(The process of management innovation development, Phase Two: Discover new ideas to formulate innovation, Phase Three: Develop innovation, and Phase Four: Demonstrate feasibility)

This stage involves qualitative and quantitative data analysis with the following details.

3.1 Draft the management innovation for the Thai language and culture program management based on the concept of agile learner characteristics

(The process of management innovation development, Phase Two: Discover new ideas to formulate innovation)

3.1.1 Informants

- 1) Literature and researches of best practices in relation to the program management based on the concept of agile learner characteristics
- 2) The open-ended questions from the questionnaire
- 3) The current and desirable states, and need analysis results for the Thai language and culture program management based on the concept of agile learner characteristics
- 4) Suggestions from the dissertation advisor and co-advisor

3.1.2 Data analysis

Frequency and content analysis are conducted.

3.1.3 Expected result

The first draft of the management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics

3.2 Develop a draft of management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics via focus group

(The process of management innovation, Phase Three: Develop innovation)

3.2.1 Informants

Nine experts and stakeholders selected from purposive sampling in the areas of educational management, agile learner, and Thai language and culture program management

3.2.2 Developing a draft innovation

- 1) Invite experts and stakeholders to attend the focus group
- 2) Present the first draft of innovation
- 3) Begin the focus group to develop the suitability and possibility to utilize the draft innovation for the Thai language and culture program management based on the concept of agile learner characteristics, record dialogues of the experts and stakeholders for further adjust the draft of the innovation
- 4) Adjust the draft of the innovation as recommended by the experts and stakeholders, and consult with the dissertation advisor and co-advisor.

3.2.3 Data analysis

Content analysis is conducted to conclude each aspect.

3.2.4 Expected result

The second draft of the management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics.

3.3 Evaluate the feasibility and suitability of the innovation by individual

(The process of management innovation development, Phase Four: Demonstrate feasibility)

3.3.1 Informants

Fifteen stakeholders selected with purposive sampling

3.3.2 Research instrument

The evaluation form for the feasibility of the innovation for the Thai language and culture program management of international schools in Thailand based on the concept of agile learner characteristics consists of three parts.

Part 1: Demographic information of informants using checklists

Part 2: Evaluation form on content coverage, suitability and possibility of its implementation using rating scale

Part 3: Additional comments or suggestions

The scoring guide is as follows.

The suitability level:

5= the suitability at the highest level with highest need for practice

4= the suitability at the high level with high need for practice

3= the suitability at the middle level with moderate need for practice

2= the suitability at the low level with low need for practice

1= the suitability at the lowest level with highest need for practice

The possibility level:

- 5= the possibility at the highest level for practice
- 4= the possibility at the high level for practice
- 3= the possibility at the middle level for practice
- 2= the possibility at the low level for practice
- 1= the possibility at the lowest level for practice

3.3.3 Data analysis

1) The demographic information is analyzed using frequency (f) and percentage (%) with descriptive report.

2) The rating scale is utilized to evaluate the feasibility and possibility of the management innovation.

The analysis is conducted to find mean (\bar{x}) and standard deviation (S.D.). The criteria to define the range of the mean scores are described as follows:

- 4.51 – 5.00 = the highest level of the suitability and possibility level
- 3.51 – 4.50 = the high level of the suitability and possibility level
- 2.51 – 3.50 = the middle level of the suitability and possibility level
- 1.51 – 2.50 = the low level of the suitability and possibility level
- 0.51 – 1.50 = the lowest level of the suitability and possibility level

3.3.4 The feasibility's evaluation by individuals for the 2nd draft of the management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics

1) Email the evaluation form created in google form to the stakeholders individually

2) Analyze the collected data received back via google form

3) Adjust the second draft of the management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics as suggested by the stakeholders and finalize the final draft into the complete management innovation

3.3.5 Expected result

1) The result of the suitability and possibility of the second draft of the management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics

2) The complete management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics

Table 3-1: Research Process

Objectives	Process	Participant/ Sampling/ Population	Instruments	Data Analysis	Result
1. To study conceptual framework of Thai language & culture program management for international schools in Thailand, & agile learner characteristics	Stage1 :To study, synthesize, and evaluate the conceptual framework of the Thai language and culture program management for international schools in Thailand, agile learner characteristics, and innovation development				
	1.1 Study related literature & researches to Thai language & culture & program management, agile learner characteristics, and innovation development	Related literature & researches to Thai language & culture program management, and agile learner characteristics	Synthesis table	1.Content Analysis 2. Frequency	1) Draft of the conceptual framework for the Thai language & culture program management 2) Draft of the conceptual framework for agile learner characteristics 3) Draft of the conceptual framework for innovation development
	1.2 Synthesize concepts related to Thai language & culture program management, agile learner characteristics, and innovation development				
1.3 Evaluate the conceptual framework for this study	Five specialists in the areas of educational management, agile learner characteristics, innovation development	Conceptual framework evaluation form	Frequency and Percentage	Revised conceptual framework for Thai language & culture management, agile learner characteristics,	

Objectives	Process	Participant/ Sampling/ Population	Instruments	Data Analysis	Result
					and innovation development
2. To study the needs to develop the Thai language culture & program management based on the concept of agile learner characteristics	Stage 2: Preliminary study the current and the desirable states, and analyze needs to develop the Thai language & culture program management based on the concept of agile learner characteristics <i>(The process of management innovation development, Phase 1: Define needs for innovation)</i>				
	2.1 Draft the questionnaire	Revised conceptual framework for Thai language & culture management, agile learner characteristics, and innovation development	Questionnaire Structure	Content analysis	Draft the questionnaire to study the current and desirable states of the Thai language & culture program management based on the concept of agile learner characteristics
	2.2 Evaluate validity of the questionnaire	5 Professionals in the areas of 1. Educational management 2. Agile learner 3. Research	Questionnaire's Evaluation form	IOC Analysis	Draft of the validated questionnaire to study current and desirable states for the Thai language & culture program management based on the concept of agile learner characteristics
2.3 Try out the questionnaire for its reliability	Administrators, and Thai teachers of international schools that are not the sample group	The questionnaires with the IOC more than 0.70	Validity Analysis	The complete questionnaire to study current & desirable states for the Thai language & culture program	

Objectives	Process	Participant/ Sampling/ Population	Instruments	Data Analysis	Result
					management based on the concept of agile learner characteristics
	2.4 To study current and desirable states	Thai administrators and Thai teachers of 97 international schools in Thailand	Questionnaire to study current and desirable states of the Thai language & culture program management based on the concept of agile learner characteristics	Mean and Standard deviation analysis	The current and desirable states
	2.5 Need Analysis	The current and desirable states	PNI _{Modified}	1) Need analysis via PNI _{Modified} 2) Prioritize needs	Needs for the Thai language culture & program management based on the concept of agile learner characteristics
3. To develop the management innovation for the Thai language & culture program of international schools in Thailand based on the concept of agile learner characteristics	Stage 3: Develop management innovation for the Thai language & culture program management based on the concept of agile learner characteristics <i>(The process of management innovation development, Phase 2: Discover ideas to formulate innovation, Phase 3: Develop innovation, and Phase 4: Demonstrate feasibility)</i>				
	3.1 Draft the management innovation for the Thai language & culture program based on the concept of agile learner characteristics	1) Literature & researches of best practices related to the program and the concept of agile learner characteristics 2) The analysis result of the current and desirable	Synthesis table	Content analysis	1 st Draft of the management innovation for the Thai language & culture program of international schools in Thailand based on the concept

Objectives	Process	Participant/ Sampling/ Population	Instruments	Data Analysis	Result
	<i>(The process of management innovation development, Phase 2: Discover ideas to formulate innovation)</i>	states, and needs			of agile learner characteristics
	3.2 Develop management innovation for the Thai language & culture program management based on the concept of agile learner characteristics via focus group <i>(The process of management innovation development, Phase 3: Develop innovation)</i>	9 experts & stakeholders in the areas of: 1) Thai language & culture program management 2) Agile learners 3) Innovation development	1 st Draft of the management innovation for the Thai language & culture program for international schools in Thailand based on the concept of agile learner characteristics	Content analysis	2 nd Draft of the management innovation for the Thai language & culture program for international schools in Thailand based on the concept of agile learner characteristics
	3.3 Evaluate feasibility of the innovation by individuals <i>(The process of management innovation development, Phase 4: Evaluate feasibility)</i>	15 Stakeholders or innovation users	1) 2 nd Draft of the management innovation for the Thai language & culture program of international schools in Thailand based on the concept of agile learner characteristics	1) Mean and Standard deviation analysis 2) Content analysis	1) The feasibility analysis result for the 2 nd Draft of the management innovation for the Thai language & culture program of international schools in

Objectives	Process	Participant/ Sampling/ Population	Instruments	Data Analysis	Result
	<i>Demonstrate feasibility)</i>		2) The form to evaluate feasibility of the management innovation		Thailand based on the concept of agile learner characteristics 2) Completed draft of the management innovation for the Thai language & culture program of international schools in Thailand based on the concept of agile learner characteristics

Chapter 4

Results of Data Analysis

In this chapter the study presents the results of the data analysis of the research study on “Management Innovation for the Thai Language and Culture Program of International Schools in Thailand Based on the Concept of Agile Learner Characteristics”. The data collection through the conceptual framework evaluation form is employed twice to gather inputs from five experts each time. The survey questionnaire is used to collect data from 97 international schools that are the member of the International School Association of Thailand (ISAT). The informants include a Thai Headmaster or Headmistress, one Thai Head Department or Thai Coordinator, or one Thai teacher. The focus group of nine experts and stakeholders is conducted to collect data to develop the innovation. Fifteen stakeholders are asked to validate the innovation. The analysis result is presented in narrative along with tables describing frequency distribution, percentage, means, standard deviation (S.D.) and PNI_{modified} index. The content analysis was used on the qualitative study. The results of data analysis are presented as follows:

- 4.1 The conceptual framework for the Thai language and culture program management, agile learner characteristics, and innovation development
 - 4.1.1 Draft the conceptual framework
 - 4.1.2 The suitability of the draft conceptual framework (1st evaluation)
 - 4.1.3 The suitability of the draft conceptual framework (2nd evaluation)
 - 4.1.4 The completed conceptual framework
- 4.2 The current and desirable states for the Thai language and culture program management based on the concept of agile learner characteristics
 - 4.2.1 Demographic data of the informants
 - 4.2.2 The current and desirable states
 - 4.2.3 Need analysis of the current and desirable states
- 4.3 Management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics
 - 4.3.1 Best practices in relation to the program management that promotes the concept of agile learner characteristics

4.3.2 The 1st Draft of management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics

4.3.3 Suitability and feasibility of the 1st draft of management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics (1st Draft)

4.3.4 The 2nd Draft of management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics

4.3.5 Suitability and feasibility of the 2nd draft of management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics

4.3.6 Management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics (Completed innovation)

4.1 The conceptual framework for the Thai language and culture program management, agile learner characteristics, and innovation development

4.1.1 Draft the conceptual framework for the Thai language and culture program management of international schools in Thailand based on the concept of agile learner characteristics

The conceptual framework for the Thai language and culture program management of international schools in Thailand based on the concept of agile learner characteristics was drafted by basing on literature review, theories and researches in the areas related to the Thai language and culture program management, agile learner characteristics, and innovation development. The findings were synthesized and presented to the doctoral dissertation advisor and co-advisor for further improvement as shown in the Figure 4.

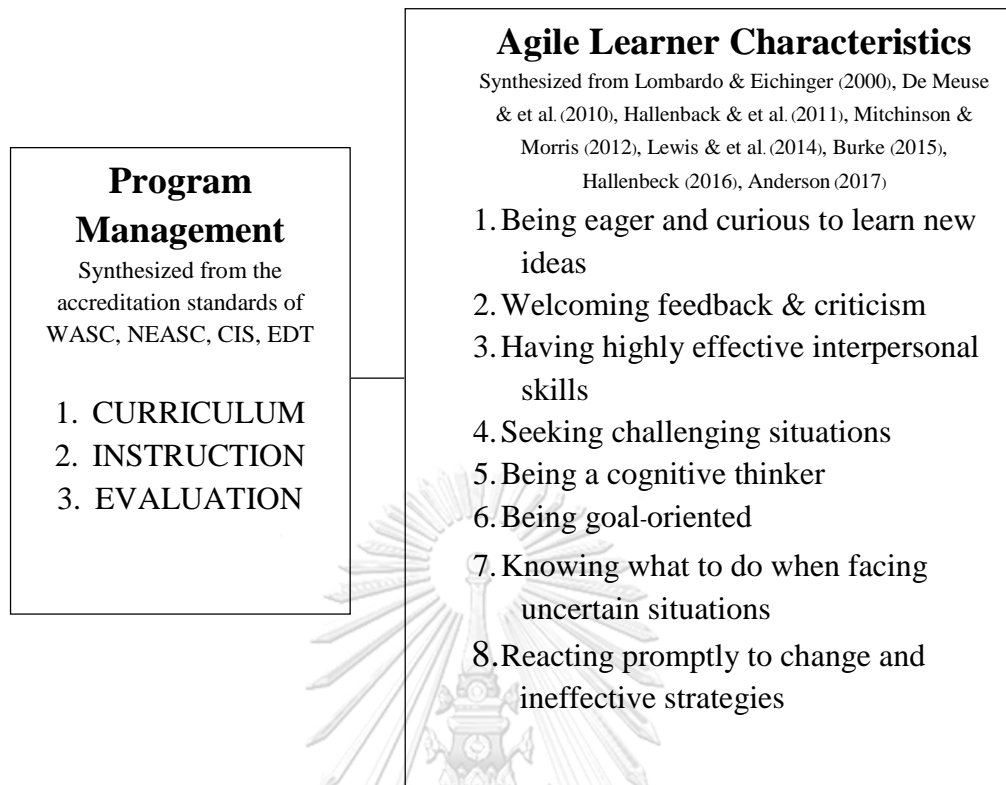


Figure 4: Draft Conceptual Framework

4.1.2 The suitability of the draft conceptual framework for the Thai language and culture program management based on the concept of agile learner characteristics (1st evaluation)

The suitability evaluation result of the draft conceptual framework collected from five experts in the areas of the Thai language and culture program management, agile learner characteristics, and innovation development was analyzed as table 4-1 below.

Table 4-1: The suitability evaluation result of the conceptual framework for the Thai language & culture program management (1st evaluation)

Evaluation List	Evaluation's result					
	Suitable		Need improvement		Not suitable	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Thai language & culture program management						
1. Curriculum	5	100	-	-	-	-
2. Instruction	5	100	-	-	-	-
3. Assessment	5	100	-	-	-	-
TOTAL		100				
Agile Learner Characteristics						
1. Being eager and curious to learn new ideas that lead to new opportunities	5	100	-	-	-	-
2. Welcoming feedback and criticism, and taking corrective action for improvement	5	100	-	-	-	-
3. Having highly effective interpersonal skills, and inspiring others to strive for success	5	100	-	-	-	-
4. Seeking challenging situations that provide opportunities for learning, development, and growth	5	100	-	-	-	-
5. Being a cognitive thinker who strives to refine viable solutions for improvement	5	100	-	-	-	-
6. Being goal oriented and confident, having clear path and strategies for moving forward	5	100	-	-	-	-
7. Knowing what to do when facing uncertain situations	5	100	-	-	-	-
8. Reacting promptly to both change and ineffective strategies	5	100	-	-	-	-
TOTAL		100				
Innovation Development						
1. Define current and desirable states	5	100	-	-	-	-
2. Discover ideas to formulate innovation	5	100	-	-	-	-
3. Develop innovation	5	100	-	-	-	-
4. Validate innovation	5	100	-	-	-	-
TOTAL		100				

The synthesis of experts' opinions and suggestions are overall in agreement to the conceptual framework with additional suggestions as follows.

1. The concept of the Thai language and culture program management
 - 1.1 Review the MOE regulations and Curriculum and Standards by OPEC.
 - 1.2 Accreditation standards of Overseas Accrediting Agencies (WASC, NEASC, CIS, and EDT) can be used as reference.
 - 1.3 Professional Development should be considered.
2. The concept of the Agile Learner Characteristics
 - 2.1 Review good language learner characteristics.
 - 2.2 Define each term to align with Thai language and culture program of international schools in Thailand.
 - 2.3 Classify characteristics into three types of Bloom's learning domain.
3. The concept of management innovation development
 - 3.1 Provide a clear statement in the last phase on how to validate the innovation, which format the innovation will hold either a model or a handbook, and whether the innovation will be implemented.

4.1.3 Suitability of the draft conceptual framework for the Thai language and culture program management of international schools in Thailand based on the concept of agile learner characteristics (2nd Evaluation)

The conceptual framework has been adjusted according to the experts' opinions and rewrote the 2nd draft for evaluation. The suitability evaluation result of the 2nd draft conceptual framework collected from five experts in the areas of the Thai language and culture program management, the agile learner characteristics, and the innovation development was analyzed as table 4-2.

According to the table 4-2, the data analysis found that the conceptual framework for the Thai language and culture program management displays suitability in every factor with the percentage from 95 to 100.

The synthesis of experts' opinions and suggestions including the consultation with the dissertation advisor and co-advisor are overall in agreement to the conceptual framework with additional suggestions as follows.

1. The concept of the Thai language and culture program management
 - 1.1. Professional development can be integrated in each element of curriculum development, instruction and evaluation.
 - 1.2. The evaluation of the academic management has to pertain to learners; therefore, the evaluation has to emphasize on student's learning.

2. The concept of the agile learner characteristics
 - 2.1. Adjustment on the definition of some characteristic is needed to explicitly define its meaning as intended.
3. The concept of the innovation development
 - 3.1. Place the consideration into organizing a user handbook for innovation's implementation



Table 4-2: The suitability evaluation result of the conceptual framework for the Thai language and culture program management (2nd evaluation)

Evaluation List	Evaluation's result					
	Suitable		Need improvement		Not suitable	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Thai language & culture program management						
1. Curriculum Development	5	100	-	-	-	-
2. Instruction	5	100	-	-	-	-
3. Evaluation	5	100	-	-	-	-
TOTAL		100				
Agile Learner Characteristics						
1. Characteristics in cognitive domain						
1.1 Being goal-oriented เป้าหมายชัด	5	100	-	-	-	-
1.2 Being a cognitive thinker ปัญญาปรีื่อง	5	100	-	-	-	-
2. Characteristics in affective domain						
2.1 Being eager & curious to learn new ideas	4	80	1	20	-	-
2.2 Welcoming feedback & criticism ใจกว้าง	5	100	-	-	-	-
3. Characteristics in psychomotor domain						
3.1 Seeking challenging situations	5	100	-	-	-	-
3.2 Knowing what to do when facing uncertain situations	5	100	-	-	-	-
3.3 Reacting promptly to change & ineffective strategies	4	80	1	20	-	-
3.4 Having highly effective interpersonal skills	5	100	-	-	-	-
TOTAL		95		5		
Innovation Development						
1. Define need for innovation	5	100	-	-	-	-
2. Discover ideas to formulate innovation	5	100	-	-	-	-
3. Develop innovation	5	100	-	-	-	-
4. Demonstrate feasibility	5	100	-	-	-	-
TOTAL		100				

4.1.4 The completed conceptual framework for the Thai language and culture program management of international schools in Thailand based on the concept of agile learner characteristics

The suitability results have been gathered from both evaluation of the conceptual framework collected from experts, adjusted as recommended and later presented to the advisor for the final and complete conceptual framework as figure 4-2 and details follow.

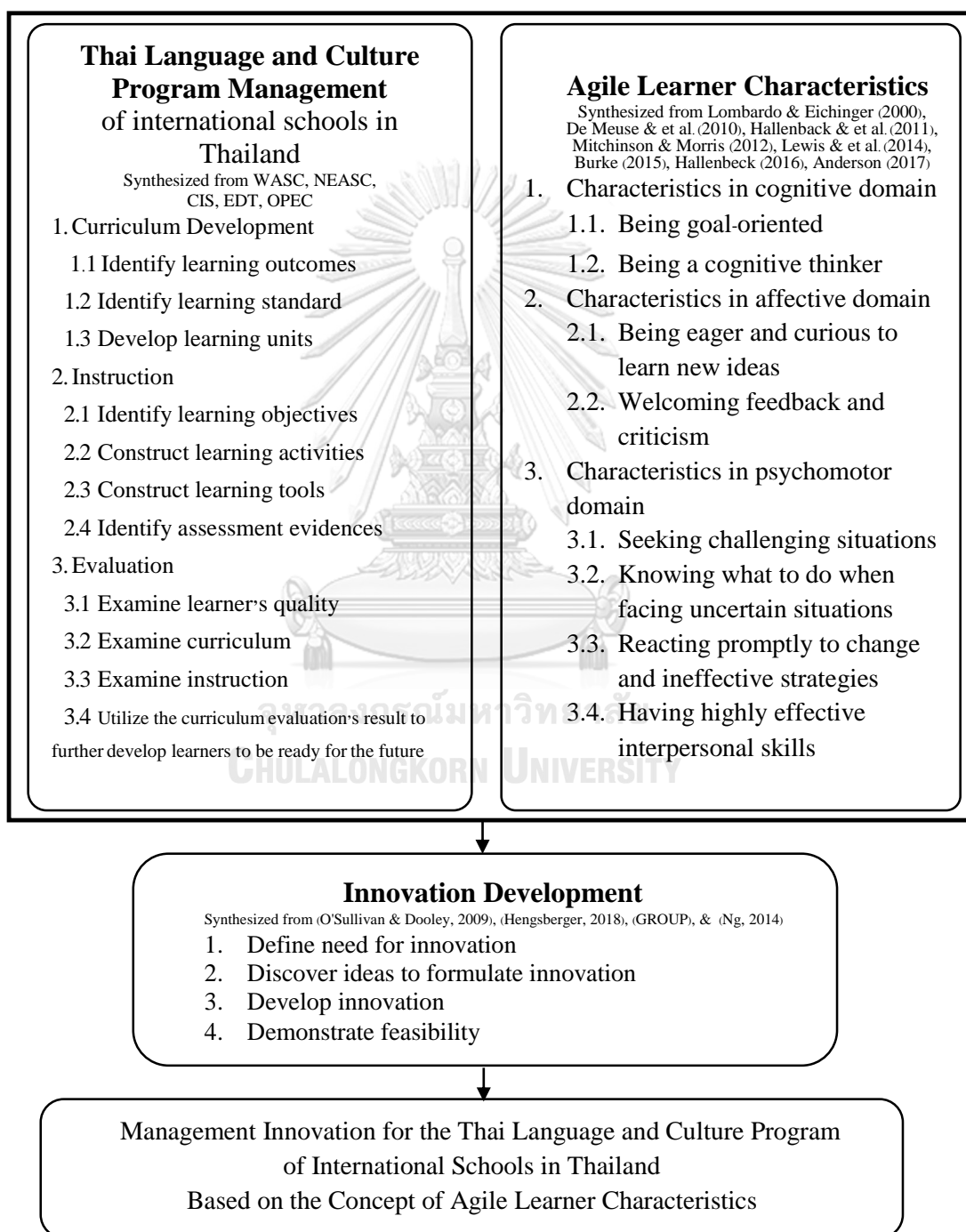


Figure 5: The completed conceptual framework

1. Thai language and culture program management of international schools in Thailand means the curriculum development, the instruction, and the evaluation that equip learners with agile learner characteristics.
 - 1.1. Curriculum development means to identify learning outcomes that align with the need of Thai and global societies, to identify learning standard basing on proficiency level, and to design learning units by integrating Thai language and culture into global situations.
 - 1.2. Instruction means to identify learning objectives aligning with learning outcomes, to construct authentic learning activities connecting to community and engaging learners at each proficiency level, to construct learning tools and materials to be accessible anytime and anywhere, and to identify assessment evidences suitably to each learner differences.
 - 1.3. Evaluation means to examine learner's quality according to indicated learning outcomes, to examine curriculum's suitability to Thai and global societies, to examine the instruction reflecting on differences of each learner, and to utilize the curriculum evaluation's result to further develop learner to be ready for the future.
2. Agile learner characteristics means the learning behaviors of Thai national students in Thai class of international schools in Thailand that react promptly to new situations and lead to success indicated in the curriculum, consisting of characteristics in the cognitive domain the affective domain, and the psychomotor domain.
 - 2.1. Characteristics in Cognitive Domain mean behaviors that involve learner's intellectuality consisting of being a goal oriented and being a cognitive thinker.
 - 2.1.1. Being goal-oriented means a learner who sets his goals and clearly practices to reach them with moral, ethics, and Thai identity.
 - 2.1.2. Being a cognitive thinker means a learner who is capable of examining data thoroughly and systematically in order to obtain suitable directions.
 - 2.2. Characteristics in Affective Domain mean behaviors that involve learner's feeling and emotions consisting of being eager and curious to learn new ideas, and welcoming feedback and criticism.
 - 2.2.1. Being eager and curious to learn new ideas means a learner who is active to learning and finding unknown answers.
 - 2.2.2. Welcoming feedback and criticism mean a learner who uses others' opinions as a factor of self-development.
 - 2.3. Characteristics in Psychomotor Domain mean behaviors that involve learner's skillful performance consisting of seeking challenging situations, knowing

what to do when facing uncertain situations, reacting promptly to change and ineffective strategies, and having highly effective interpersonal skills.

- 2.3.1. Seeking challenging situations means a learner who looks for various events as ways to progress his learning.
 - 2.3.2. Knowing what to do when facing uncertain situations means a learner who is able to identify problems and promptly provide suitable solutions.
 - 2.3.3. Reacting promptly to change and ineffective strategies means a learner who is aware of the constant changes and is always ready to adjust the ways of doing things to match up those changes.
 - 2.3.4. Having highly effective interpersonal skills means a learner who is able to clearly and precisely perform two ways communication utilizing Thai reading, listening, speaking and writing skills.
3. Management innovation for the Thai language and culture program for international schools in Thailand means to define need for innovation, to discover ideas to formulate innovation, to develop innovation, and to demonstrate innovation's feasibility.
 - 3.1. Defining need for innovation means to examine wanting conditions for curriculum development, instruction, and evaluation with the questionnaire, and to analyze needs to develop the Thai language and culture program management according to the concept of agile learner characteristics.
 - 3.2. Discovering ideas to formulate innovation means to draft the innovation management for the Thai language and culture program from literature review and best practices by the researcher.
 - 3.3. Developing innovation means to construct and develop innovation from the 1st draft of the innovation by the experts.
 - 3.4. Demonstrating innovation's feasibility means to examine the innovation's suitability and possibility by stakeholders.

4.2 Current and desirable states, and need analysis to develop management innovation for the Thai language and culture program based on the concept of agile learner characteristics

(The process of management innovation development, Phase 1: Define needs for innovation)

The need analysis for the development of the Thai language and culture program management based on the concept of agile learner characteristics is presented in two parts as follows.

4.2.1 Demographic data of informants:

Presented in the table format including descriptive text as follows. The number and percentage of the questionnaire received was 71 people (73.20%). 50.70% of the informants work in the British curriculum schools, 21.13% work in American curriculum schools, 8.45 % work in the International Baccalaureate curriculum schools, and 19.72 % work in other national curriculum schools such as French curriculum or Singaporean curriculum. 94.37% of the informants are female and 5.63% are male. The biggest group of the informants, 30 people, aged between 41- 50 years old, is 42.25%. The other groups of the informants are 30 - 40 years old, 51 - 60 years old, 30 years old or below, and 61 years old or above, respectively. 43 people or 60.56% of all the informants have a Master's Degree as their highest level of education; the others have Bachelor's Degree and Doctoral Degree respectively. The biggest group of the informants whose position is the Thai head department are 24 people or 33.80% of all the informants. The others are Thai Headmaster or Headmistress 19.72%, Thai teacher of many grade levels 18.31%, Elementary teacher 14.08%, Middle school teacher 7.04%, High school teacher 4.23%, and Early Year teacher 2.82%, respectively.

Table 4.3: Number and Percentage of Informants

Informants Demographic Data		British Curriculum	American Curriculum	International Baccalaureate Curriculum	Other Curriculum (i.e., French)	Total (N=71)	
						Number	Percentage
Gender	Male	1	1	0	2	4	5.63
	Female	35	14	6	12	67	94.37
Age	Below 30	4	0	0	1	5	7.04
	30-40	7	4	1	7	19	26.76
	41-50	13	8	4	5	30	42.25
	51-60	9	3	1	0	13	18.31
	61 up	3	0	0	1	4	5.63
Highest level of education	Bachelor's Degree	10	3	1	7	21	29.58
	Master's Degree	20	11	5	7	43	60.56
	Doctorate Degree	6	1	0	0	7	9.86
Current position	Thai Headmaster/ Headmistress	10	2	1	1	14	19.72
	Thai Head department	13	6	2	3	24	33.80
	Thai Teacher in early year	0	0	0	2	2	2.82
	Thai Teacher in Middle school	4	0	0	1	5	7.04
	Thai Teacher in High School	0	2	1	0	3	4.23
	Thai Teacher in Elementary	3	4	0	3	10	14.08
	Thai Teacher in various grade levels	6	1	2	4	13	18.31
Total number		36	15	6	14	71	100
Total percentage		50.70	21.13	8.45	19.72	100	

4.2.2 The current and desirable states, and need prioritization of the Thai language and culture program management based on the concept of agile learner characteristics

The analysis of the overall current and desirable states, and need prioritization of the Thai language and culture program management are presented in the table including descriptive text as follows.

Table 4-4: The overall current and desirable states, and need prioritization of the Thai language and culture program management for international schools in Thailand based on the concept of agile learner characteristics

Thai Language and Culture Program Management	Current state				Desirable state				Need	
	\bar{x}	S.D.	Level	Order	\bar{x}	S.D.	Level	Order	PNI_{modified}	Order
1. Curriculum Development	3.61	0.77	high	3	4.51	highest		2	0.249	1
2. Instruction	3.64	0.73	high	2	4.53	highest		1	0.245	2
3. Evaluation	3.65	0.77	high	1	4.49	high		3	0.230	3
TOTAL	3.63	0.76	high		4.51	highest				

The table 4-4 shows the overall current state of the Thai language and culture program management based on the concept of agile learner characteristics at the high level ($\bar{x}=3.63$, S.D. = 0.76). Considering each factor finds that the evaluation has the highest average score at the high level ($\bar{x}=3.65$, S.D. = 0.77), following with the instruction at the high level ($\bar{x}=3.64$, S.D. = 0.73), and the curriculum development with the lowest average score at the high level ($\bar{x}=3.61$, S.D. = 0.77).

The overall desirable state of the Thai language and culture program management based on the concept of agile learner characteristics is at the highest level ($\bar{x}=4.51$, S.D. = 0.67). Considering each factor finds that the instruction has the highest average score of the desirable state at the highest level ($\bar{x}=4.53$, S.D. = 0.67), following with the curriculum development at the highest level ($\bar{x}=4.51$, S.D. = 0.65), and the evaluation with the lowest average score at the high level ($\bar{x}=4.49$, S.D. = 0.70).

The need analysis indicates that the curriculum development is needed to be further developed with the highest $PNI_{\text{modified}} = 0.249$. The second highest is the instruction with the $PNI_{\text{modified}} = 0.245$, and the evaluation comes in last with the $PNI_{\text{modified}} = 0.230$.

Table 4-5: The current and desirable states, and need prioritization of the Thai language and culture program management for international schools in Thailand based on the concept of agile learner characteristics in the element of curriculum development

Thai Language & Culture Program Management in the element of curriculum development	Current state				Desirable state				Need	
	\bar{x}	S.D.	level	order	\bar{x}	S.D.	level	order	$PN_{i, Modified}$	Order
1. Identify learning outcomes that align with the need of Thai and global society	3.61	0.76	high	2	4.51	0.65	highest	2	0.249	1
1.1 Characteristic in Cognitive Domain	3.58	0.76	high	2	4.48	0.68	highest	3	0.251	2
1.1.1 Being goal-oriented	3.68	0.73	high	1	4.49	0.65	high	1	0.220	2
1.1.2 Being a cognitive thinker	3.48	0.79	moderate	2	4.46	0.71	high	2	0.282	1
1.2 Characteristic in Affective Domain	3.73	0.71	high	1	4.53	0.61	highest	1	0.214	3
1.2.1 Being eager & curious to learn new ideas	3.76	0.73	high	1	4.58	0.60	highest	2	0.218	1
1.2.2 Welcoming feedback & criticism	3.70	0.68	high	2	4.48	0.61	high	1	0.211	2
1.3 Characteristics in Psychomotor Domain	3.57	0.79	high	3	4.52	0.66	highest	2	0.266	1
1.3.1 Seeking challenging situations	3.51	0.81	high	3	4.52	0.61	highest	2	0.288	1
1.3.2 Knowing what to do when facing uncertain situations	3.61	0.73	high	2	4.52	0.65	highest	2	0.252	3
1.3.3 Reacting promptly to change & ineffective strategies	3.66	0.79	high	1	4.56	0.60	highest	1	0.246	4
1.3.4 Having highly effective interpersonal skills	3.51	0.84	high	3	4.48	0.77	high	3	0.276	2
2. Identify learning standard basing on proficiency level	3.61	0.78	high	2	4.50	0.64	highest	3	0.247	2

Thai Language & Culture Program Management in the element of curriculum development	Current state				Desirable state				Need	
	\bar{x}	S.D.	level	order	\bar{x}	S.D.	level	order	$PN_{i,modified}$	Order
2.1 Characteristics in Cognitive Domain	3.61	0.75	high	2	4.46	0.69	high	3	0.235	3
2.1.1 Being goal-oriented	3.68	0.75	high	1	4.51	0.63	highest	1	0.226	2
2.1.2 Being a cognitive thinker	3.54	0.75	high	2	4.41	0.75	high	2	0.246	1
2.2 Characteristics in Affective Domain	3.68	0.76	high	1	4.55	0.56	highest	1	0.236	2
2.2.1 Being eager & curious to learn new ideas	3.77	0.72	high	1	4.58	0.55	highest	1	0.215	2
2.2.2 Welcoming feedback & criticism	3.59	0.80	high	2	4.51	0.56	highest	2	0.256	1
2.3 Characteristics in Psychomotor Domain	3.58	0.80	high	3	4.51	0.65	highest	2	0.260	1
2.3.1 Seeking challenging situations	3.51	0.81	high	4	4.52	0.63	highest	2	0.288	1
2.3.2 Knowing what to do when facing uncertain situations	3.59	0.69	high	2	4.48	0.65	high	3	0.248	3
2.3.3 Reacting promptly to change & ineffective strategies	3.69	0.84	high	1	4.54	0.63	highest	1	0.230	4
2.3.4 Having highly effective interpersonal skills	3.54	0.86	high	3	4.48	0.69	high	3	0.266	2
3. Design learning units by integrating Thai language and culture into global situations	3.62	0.78	high	1	4.52	0.66	highest	1	0.249	1
3.1 Characteristics in Cognitive Domain	3.59	0.74	high	3	4.54	0.67	highest	1	0.265	1
3.1.1 Being goal-oriented	3.59	0.75	high	1	4.49	0.67	high	2	0.251	2
3.1.2 Being a cognitive thinker	3.59	0.73	high	1	4.58	0.67	highest	1	0.276	1
3.2 Characteristics in Affective Domain	3.66	0.79	high	1	4.51	0.67	highest	3	0.232	3

Thai Language & Culture Program Management in the element of curriculum development	Current state				Desirable state				Need	
	\bar{x}	S.D.	level	order	\bar{x}	S.D.	level	order	$PN_{i,modified}$	Order
3.2.1 Being eager & curious to learn new ideas	3.73	0.74	high	1	4.54	0.65	highest	1	0.217	2
3.2.2 Welcoming feedback & criticism	3.58	0.84	high	2	4.48	0.69	high	2	0.251	1
3.3 Characteristics in Psychomotor Domain	3.62	0.79	high	2	4.52	0.65	highest	2	0.249	2
3.3.1 Seeking challenging situations	3.61	0.80	high	3	4.45	0.65	high	4	0.233	4
3.3.2 Knowing what to do when facing uncertain situations	3.55	0.77	high	4	4.52	0.65	highest	3	0.273	1
3.3.3 Reacting promptly to change & ineffective strategies	3.68	0.75	high	1	4.56	0.63	highest	1	0.239	3
3.3.4 Having highly effective interpersonal skills	3.62	0.83	high	2	4.54	0.65	highest	2	0.254	2

The table 4-2 shows that the overall current state of the Thai language and culture program management based on the concept of agile learner characteristics in the element of curriculum development is at the high level. Considering each factor finds that designing learning units by integrating Thai Language and culture into global situation has the highest average. The second orders show two factors. The first factor is identifying learning standard basing on proficiency level which is at the high level ($\bar{x}=3.61$, S.D. = 0.76). The characteristics in affective domain show the highest average score at the high level ($\bar{x}= 3.73$, S.D. = 0.71), following with the characteristics in the cognitive domain at the high level ($\bar{x}= 3.58$, S.D. = 0.76), and the characteristics in the psychomotor domain at the high level ($\bar{x}= 3.57$, S.D. = 0.79). The second factor is identifying learning outcomes that align with the need of Thai and global society which is also at the high level ($\bar{x}=3.61$, S.D. = 0.78). The characteristics in affective domain show the highest average score at the high level ($\bar{x}= 3.68$, S.D. = 0.76), following with the characteristics in the cognitive domain at the high level ($\bar{x}= 3.61$, S.D. = 0.75), and the characteristics in the psychomotor domain at the high level ($\bar{x}= 3.58$, S.D. = 0.80).

The overall desirable state of the Thai language and culture program management based on the concept of agile learner characteristics in the element of

curriculum development is at the highest level ($\bar{x}=4.51$, S.D. = 0.67). Considering each factor finds that designing learning units by integrating Thai Language and culture into global situation has the highest average score of the desirable state at the highest level ($\bar{x}=4.52$, S.D. = 0.66). The characteristics in cognitive domain show the highest average score at the high level ($\bar{x}=4.54$, S.D. = 0.67), following with the characteristics in the psychomotor domain at the high level ($\bar{x}=4.52$, S.D. = 0.65), and the characteristics in the affective domain at the high level ($\bar{x}=4.51$, S.D. = 0.67).

The second order is identifying learning outcomes that align with the need of Thai and global society at the highest level ($\bar{x}=4.51$, S.D. = 0.65). The characteristics in affective domain show the highest average score at the highest level ($\bar{x}=4.53$, S.D. = 0.61), following with the characteristics in the psychomotor domain at the highest level ($\bar{x}=4.52$, S.D. = 0.66), and the characteristics in the cognitive domain at the highest level ($\bar{x}=4.48$, S.D. = 0.68).

The third and last order is identifying learning standard basing on proficiency level with the lowest average score at the highest level ($\bar{x}=4.50$, S.D. = 0.64). The characteristics in affective domain show the highest average score at the highest level ($\bar{x}=4.55$, S.D. = 0.56), following with the characteristics in the psychomotor domain at the highest level ($\bar{x}=4.51$, S.D. = 0.65), and the characteristics in the cognitive domain at the high level ($\bar{x}=4.46$, S.D. = 0.69).

The need analysis indicates that identifying learning outcomes aligning with the need of Thai and global society of characteristics in psychomotor domain is needed to be further developed with the highest $PNI_{\text{modified}} = 0.249$. Furthermore, designing learning units by integrating Thai language and culture into global situation of characteristics in cognitive domain is also needed to be further developed with the same highest $PNI_{\text{modified}} = 0.249$. Identifying learning standard basing on proficiency shows the lowest $PNI_{\text{modified}} = 0.247$.

Table 4-6: The current and desirable states, and need prioritization of the Thai language and culture program management for international schools in Thailand based on the concept of agile learner characteristics in the element of Instruction

Thai Language & Culture Program Management in the element of instruction	Current state				Desirable state				Need	
	\bar{x}	S.D.	level	order	\bar{x}	S.D.	level	order	$PNI_{Modified}$	Order
1. Identify learning objectives aligning with learning outcomes	3.71	0.72	high	1	4.59	0.59	highest	1	0.237	3
1.1 Characteristic in Cognitive Domain	3.74	0.72	high	2	4.61	0.58	highest	1	0.233	2
1.1.1 Being goal-oriented	3.79	0.70	high	2	4.62	0.54	highest	2	0.219	2
1.1.2 Being a cognitive thinker	3.68	0.73	high	6	4.59	0.62	highest	3	0.247	1
1.2 Characteristic in Affective Domain	3.75	0.72	high	1	4.60	0.58	highest	2	0.227	3
1.2.1 Being eager & curious to learn new ideas	3.80	0.67	high	1	4.65	0.56	highest	1	0.234	1
1.2.2 Welcoming feedback & criticism	3.70	0.76	high	4	4.55	0.60	highest	6	0.230	2
1.3 Characteristics in Psychomotor Domain	3.67	0.74	high	3	4.57	0.59	highest	3	0.245	1
1.3.1 Seeking challenging situations	3.65	0.74	high	4	4.52	0.56	highest	4	0.238	3
1.3.2 Knowing what to do when facing uncertain situations	3.66	0.63	high	3	4.59	0.58	highest	2	0.254	2
1.3.3 Reacting promptly to change & ineffective strategies	3.68	0.73	high	2	4.62	0.57	high	1	0.255	1
1.3.4 Having highly effective interpersonal skills	3.69	0.84	high	1	4.55	0.65	highest	3	0.233	4
2. Construct authentic learning activities connecting to community & engaging learners at each proficiency level	3.62	0.74	high	3	4.54	0.66	highest	2	0.254	2

Thai Language & Culture Program Management in the element of instruction	Current state				Desirable state				Need	
	\bar{x}	S.D.	level	order	\bar{x}	S.D.	level	order	$PN_{i,modified}$	Order
2.1 Characteristics in Cognitive Domain	3.53	0.72	high	3	4.49	0.66	high	3	0.272	1
2.1.1 Being goal-oriented	3.54	0.72	high	1	4.51	0.65	highest	1	0.274	1
2.1.2 Being a cognitive thinker	3.51	0.71	high	2	4.46	0.67	high	2	0.271	2
2.2 Characteristics in Affective Domain	3.70	0.80	high	1	4.56	0.61	highest	1	0.232	3
2.2.1 Being eager & curious to learn new ideas	3.72	0.78	high	1	4.58	0.58	highest	1	0.231	2
2.2.2 Welcoming feedback & criticism	3.68	0.81	high	2	4.54	0.63	highest	2	0.234	1
2.3 Characteristics in Psychomotor Domain	3.63	0.74	high	2	4.55	0.68	highest	2	0.253	2
2.3.1 Seeking challenging situations	3.59	0.71	high	3	4.51	0.67	highest	4	0.256	2
2.3.2 Knowing what to do when facing uncertain situations	3.59	0.69	high	3	4.56	0.69	highest	2	0.270	1
2.3.3 Reacting promptly to change & ineffective strategies	3.72	0.76	high	1	4.62	0.62	highest	1	0.242	4
2.3.4 Having highly effective interpersonal skills	3.61	0.78	high	2	4.52	0.73	highest	3	0.252	3
3. Construct learning tools & materials to be accessible anytime & anywhere	3.57	0.72	high	4	4.50	0.67	highest	3	0.261	1
3.1 Characteristics in Cognitive Domain	3.55	0.68	high	3	4.49	0.68	high	2	0.265	1
3.1.1 Being goal-oriented	3.56	0.67	high	1	4.51	0.65	highest	1	0.267	2
3.1.2 Being a cognitive thinker	3.54	0.69	high	2	4.46	0.71	high	2	0.260	1
3.2 Characteristics in Affective Domain	3.59	0.73	high	1	4.54	0.64	highest	1	0.265	1

Thai Language & Culture Program Management in the element of instruction	Current state				Desirable state				Need	
	\bar{x}	S.D.	level	order	\bar{x}	S.D.	level	order	$PN_{i,modified}$	Order
3.2.1 Being eager & curious to learn new ideas	3.61	0.67	high	1	4.56	0.60	highest	1	0.263	2
3.2.2 Welcoming feedback & criticism	3.56	0.79	high	2	4.51	0.67	highest	2	0.267	1
3.3 Characteristics in Psychomotor Domain	3.57	0.74	high	2	4.49	0.68	high	2	0.258	2
3.3.1 Seeking challenging situations	3.54	0.75	high	3	4.52	0.63	highest	1	0.277	2
3.3.2 Knowing what to do when facing uncertain situations	3.55	0.71	high	2	4.45	0.71	high	4	0.254	3
3.3.3 Reacting promptly to change & ineffective strategies	3.66	0.70	high	1	4.51	0.71	highest	2	0.232	4
3.3.4 Having highly effective interpersonal skills	3.51	0.79	high	4	4.49	0.67	high	3	0.279	1
4. Identify assessment evidences suitably to each learner differences	3.66	0.72	high	2	4.49	0.74	high	4	0.227	4
4.1 Characteristics in Cognitive Domain	3.69	0.68	high	1	4.48	0.76	high	2	0.214	3
4.1.1 Being goal-oriented	3.70	0.66	high	1	4.48	0.79	high	2	0.211	2
4.1.2 Being a cognitive thinker	3.68	0.69	high	2	4.58	0.73	highest	1	0.245	1
4.2 Characteristics in Affective Domain	3.69	0.73	high	1	4.55	0.71	highest	1	0.233	2
4.2.1 Being eager & curious to learn new ideas	3.68	0.75	high	2	4.54	0.69	highest	2	0.234	1
4.2.2 Welcoming feedback & criticism	3.70	0.70	high	1	4.55	0.73	highest	1	0.230	2
4.3 Characteristics in Psychomotor Domain	3.63	0.74	high	2	4.48	0.73	high	2	0.234	1
4.3.1 Seeking challenging situations	3.54	0.73	high	4	4.44	0.73	high	3	0.254	1

Thai Language & Culture Program Management in the element of instruction	Current state				Desirable state				Need	
	\bar{x}	S.D.	level	order	\bar{x}	S.D.	level	order	$PN_{i,modified}$	Order
4.3.2 Knowing what to do when facing uncertain situations	3.66	0.70	high	2	4.49	0.73	high	1	0.227	3
4.3.3 Reacting promptly to change & ineffective strategies	3.63	0.74	high	3	4.49	0.71	high	1	0.237	2
4.3.4 Having highly effective interpersonal skills	3.70	0.80	high	1	4.48	0.75	high	2	0.211	4

The table 4-6 shows that the overall current state of the Thai language and culture program management based on the concept of agile learner characteristics in the element of instruction is at the high level. Considering each factor finds that identifying learning objectives aligning with learning outcomes has the highest average score at the high level ($\bar{x}=3.71$, S.D.=0.72). The characteristics in affective domain show the highest average score at the high level ($\bar{x}=3.75$, S.D.=0.72), following with the characteristics in the cognitive domain at the high level ($\bar{x}=3.74$, S.D.=0.72), and the characteristics in the psychomotor domain at the high level ($\bar{x}=3.67$, S.D.=0.74).

The second order is identifying assessment evidences suitably to each learner differences at the high level ($\bar{x}=3.66$, S.D.=0.72). The characteristics in cognitive and affective domains show the highest average score at the high level ($\bar{x}=3.69$, S.D.=0.68, and $\bar{x}=3.69$, S.D.=0.73). Lastly, the characteristics in the psychomotor domain are at the high level ($\bar{x}=3.63$, S.D.=0.74).

The third order is constructing authentic learning activities connecting to community and engaging learners at each proficiency level at the high level ($\bar{x}=3.62$, S.D.=0.74). The characteristics in affective domain show the highest average score at the high level ($\bar{x}=3.70$, S.D.=0.80), following with the characteristics in psychomotor domain at the high level ($\bar{x}=3.63$, S.D.=0.74), and lastly the characteristics in cognitive domain at the high level ($\bar{x}=3.53$, S.D.=0.72).

The fourth and last order is constructing learning tools and materials to be accessible anytime and anywhere at the high level ($\bar{x}=3.57$, S.D.=0.72). The characteristics in affective domain show the highest average score at the high level ($\bar{x}=3.59$, S.D.=0.73), following with the characteristics in psychomotor domain at the high

level ($\bar{x}=3.57$, S.D.=0.74), and lastly the characteristics in cognitive domain at the high level ($\bar{x}=3.55$, S.D.=0.68).

The overall desirable state of the Thai language and culture program management based on the concept of agile learner characteristics in the element of instruction is from high to the highest level. Considering each factor finds that identifying learning objectives aligning with learning outcomes has the highest average score at the highest level ($\bar{x}=4.59$, S.D.=0.59). The characteristics in the cognitive domain show the highest average score at the highest level ($\bar{x}=4.61$, S.D.=0.58), following with the characteristics in the affective domain at the highest level ($\bar{x}=4.60$, S.D.=0.58), and the characteristics in the psychomotor domain at the highest level ($\bar{x}=4.57$, S.D.=0.59).

The second order is constructing authentic learning activities connecting to community and engaging learners at each proficiency level at the highest level ($\bar{x}=4.54$, S.D.=0.66). The characteristics in the affective domain show the highest average score at the highest level ($\bar{x}=4.56$, S.D.=0.61), following with the characteristics in the psychomotor domain at the highest level ($\bar{x}=4.55$, S.D.=0.68), and the characteristics in the cognitive domain at the high level ($\bar{x}=4.49$, S.D.=0.66).

The third order is constructing learning tools and materials to be accessible anytime and anywhere at the highest level ($\bar{x}=4.50$, S.D.=0.68). The characteristics in the affective domain show the highest average score at the highest level ($\bar{x}=4.54$, S.D.=0.64), following with the characteristics in the cognitive and the psychomotor domains at the same high level ($\bar{x}=4.49$, S.D.=0.68).

The fourth and last order is identifying assessment evidences suitably to each learner differences at the high level ($\bar{x}=4.49$, S.D.=0.74). The characteristics in the affective domain show the highest average score at the highest level ($\bar{x}=4.55$, S.D.=0.71), following with the characteristics in the cognitive and the psychomotor domains at the same high level ($\bar{x}=4.49$, S.D.=0.76, and $\bar{x}=4.49$, S.D.=0.73 accordingly).

The need analysis indicates that constructing learning tools and materials to be accessible anytime and anywhere with the characteristics in the cognitive and the affective domains are needed to be further developed with the same highest $PNI_{\text{modified}} = 0.265$. The characteristics in the psychomotor domain shows the lowest $PNI_{\text{modified}} = 0.258$.

The second highest $PNI_{\text{modified}} = 0.254$ is constructing authentic learning activities connecting to community and engaging learners at each proficiency level with the characteristics in the cognitive domain at the highest $PNI_{\text{modified}} = 0.272$. The characteristics in the psychomotor domain with the $PNI_{\text{modified}} = 0.253$, and the characteristics in the affective domain with the $PNI_{\text{modified}} = 0.232$ come second and last.

The third highest $PNI_{\text{modified}} = 0.237$ is identifying learning objectives aligning with learning outcomes with the characteristics in the psychomotor domain with the highest $PNI_{\text{modified}} = 0.245$. The characteristics in the cognitive domain with the $PNI_{\text{modified}} = 0.233$, and the characteristics in the affective domain with the $PNI_{\text{modified}} = 0.227$ come second and last.

The lowest $PNI_{\text{modified}} = 0.227$ is identifying assessment evidences suitably to each learner differences with the characteristics in the psychomotor domain with the highest $PNI_{\text{modified}} = 0.234$. The characteristics in the affective domain with the $PNI_{\text{modified}} = 0.233$, and the characteristics in the cognitive domain with the $PNI_{\text{modified}} = 0.214$ come second and last.

Table 4-7: The current and desirable states, and need prioritization of the Thai language and culture program management for international schools in Thailand based on the concept of agile learner characteristics in the element of evaluation

Thai Language and Culture Program Management in the element of evaluation	Current state				Desirable state				Need	
	\bar{x}	S.D.	level	order	\bar{x}	S.D.	level	order	PNI_{modified}	order
1.Examine learner's quality according to indicated learning outcomes	3.69	0.74	high	1	4.52	0.67	highest	1	0.225	3
1.1 Characteristic in Cognitive Domain	3.73	0.70	high	1	4.46	0.71	high	3	0.196	3
1.1.1 Being goal-oriented	3.73	0.68	high	1	4.48	0.69	high	1	0.201	1
1.1.2 Being a cognitive thinker	3.72	0.72	high	2	4.44	0.73	high	2	0.194	2
1.2 Characteristic in Affective Domain	3.69	0.75	high	2	4.57	0.59	highest	1	0.238	1
1.2.1 Being eager & curious to learn new ideas	3.69	0.75	high	1	4.56	0.55	highest	2	0.236	2
1.2.2 Welcoming feedback & criticism	3.68	0.75	high	2	4.58	0.62	highest	1	0.245	1
1.3 Characteristics in Psychomotor Domain	3.69	0.76	high	2	4.53	0.68	highest	2	0.228	2
1.3.1 Seeking challenging situations	3.62	0.74	high	3	4.52	0.67	highest	2	0.249	1

Thai Language and Culture Program Management in the element of evaluation	Current state				Desirable state				Need	
	\bar{x}	S.D.	level	order	\bar{x}	S.D.	level	order	$PN_{i,modified}$	order
1.3.2 Knowing what to do when facing uncertain situations	3.72	0.70	high	1	4.56	0.63	highest	1	0.226	3
1.3.3 Reacting promptly to change & ineffective strategies	3.72	0.74	high	1	4.52	0.67	highest	2	0.215	4
1.3.4 Having highly effective interpersonal skills	3.68	0.87	high	2	4.52	0.75	highest	2	0.228	2
2.Examine curriculum's suitability to Thai & global societies	3.68	0.76	high	2	4.48	0.72	high	3	0.217	4
2.1 Characteristics in Cognitive Domain	3.74	0.82	high	1	4.49	0.74	high	2	0.201	3
2.1.1 Being goal-oriented	3.76	0.87	high	1	4.48	0.77	high	2	0.191	2
2.1.2 Being a cognitive thinker	3.72	0.76	high	2	4.49	0.71	high	1	0.207	1
2.2 Characteristics in Affective Domain	3.73	0.72	high	2	4.50	0.69	highest	1	0.206	2
2.2.1 Being eager & curious to learn new ideas	3.76	0.73	high	1	4.48	0.73	high	2	0.191	2
2.2.2 Welcoming feedback & criticism	3.70	0.70	high	2	4.52	0.65	highest	1	0.222	1
2.3 Characteristics in Psychomotor Domain	3.63	0.75	high	3	4.47	0.72	high	3	0.231	1
2.3.1 Seeking challenging situations	3.62	0.74	high	2	4.46	0.71	high	2	0.232	3
2.3.2 Knowing what to do when facing uncertain situations	3.59	0.75	high	3	4.46	0.69	high	2	0.242	2
2.3.3 Reacting promptly to change & ineffective strategies	3.59	0.71	high	3	4.48	0.71	high	1	0.248	1
2.3.4 Having highly effective interpersonal skills	3.70	0.80	high	1	4.46	0.69	high	2	0.202	4

Thai Language and Culture Program Management in the element of evaluation	Current state				Desirable state				Need	
	\bar{x}	S.D.	level	order	\bar{x}	S.D.	level	order	$PN_{i,modified}$	order
3.Examine the instructions reflecting on differences of each learner	3.64	0.76	high	3	4.49	0.71	high	2	0.234	2
3.1 Characteristics in Cognitive Domain	3.65	0.79	high	2	4.49	0.72	high	2	0.230	2
3.1.1 Being goal-oriented	3.68	0.81	high	1	4.46	0.77	high	2	0.212	2
3.1.2 Being a cognitive thinker	3.62	0.76	high	2	4.51	0.67	highest	1	0.246	1
3.2 Characteristics in Affective Domain	3.70	0.76	high	1	4.53	0.65	highest	1	0.224	3
3.2.1 Being eager & curious to learn new ideas	3.69	0.75	high	2	4.52	0.69	highest	2	0.225	2
3.2.2 Welcoming feedback & criticism	3.70	0.76	high	1	4.54	0.61	highest	1	0.227	1
3.3 Characteristics in Psychomotor Domain	3.61	0.75	high	3	4.48	0.73	high	3	0.241	1
3.3.1 Seeking challenging situations	3.62	0.74	high	2	4.45	0.63	high	3	0.229	3
3.3.2 Knowing what to do when facing uncertain situations	3.61	0.75	high	3	4.52	0.71	highest	1	0.252	2
3.3.3 Reacting promptly to change & ineffective strategies	3.54	0.79	high	4	4.49	0.71	high	2	0.268	1
3.3.4 Having highly effective interpersonal skills	3.66	0.72	high	1	4.45	0.67	high	3	0.216	4
4.Utilize the curriculum evaluation's result to further develop learners to be ready for the future	3.59	0.82	high	4	4.46	0.71	high	4	0.242	1
4.1 Characteristics in Cognitive Domain	3.56	0.82	high	3	4.46	0.75	high	2	0.253	1
4.1.1 Being goal-oriented	3.54	0.86	high	2	4.44	0.79	high	2	0.254	1

Thai Language and Culture Program Management in the element of evaluation	Current state				Desirable state				Need	
	\bar{x}	S.D.	level	order	\bar{x}	S.D.	level	order	$PN_{i,modified}$	order
4.1.2 Being a cognitive thinker	3.58	0.77	high	1	4.48	0.71	high	1	0.251	2
4.2 Characteristics in Affective Domain	3.61	0.86	high	1	4.49	0.66	high	1	0.244	2
4.2.1 Being eager & curious to learn new ideas	3.65	0.83	high	1	4.48	0.69	high	2	0.227	2
4.2.2 Welcoming feedback & criticism	3.56	0.89	high	2	4.49	0.63	high	1	0.261	1
4.3 Characteristics in Psychomotor Domain	3.60	0.80	high	2	4.44	0.71	high	3	0.233	3
4.3.1 Seeking challenging situations	3.52	0.79	high	3	4.41	0.69	high	4	0.253	1
4.3.2 Knowing what to do when facing uncertain situations	3.58	0.82	high	2	4.44	0.73	high	3	0.240	2
4.3.3 Reacting promptly to change & ineffective strategies	3.65	0.79	high	1	4.46	0.69	high	1	0.222	3
4.3.4 Having highly effective interpersonal skills	3.65	0.79	high	1	4.45	0.71	high	2	0.219	4

The table 4-7 shows that the overall current state of the Thai language and culture program management based on the concept of agile learner characteristics in the element of evaluation is at the high level. Considering each factor finds that examining learner's quality according to indicated learning outcomes has the highest average score at the high level (\bar{x} = 3.69, S.D. = 0.74). The characteristics in the cognitive domain show the highest average score at the high level (\bar{x} = 3.73, S.D. = 0.70), following with the characteristics in the cognitive and the psychomotor domain at the same high level (\bar{x} = 3.69, S.D. = 0.75).

The second order is examining curriculum's suitability to Thai and global societies at the high level (\bar{x} = 3.66, S.D. = 0.75). The characteristics in the cognitive domains show the highest average score at the high level (\bar{x} = 3.74, S.D. = 0.82), following with the characteristics in the affective domain at the high level (\bar{x} = 3.73, S.D. = 0.72), and the characteristics in the psychomotor domain at the high level (\bar{x} = 3.63, S.D. = 0.75).

The third order is examining the instructions reflecting on differences of each learner at the high level ($\bar{x}=3.64$, S.D. = 0.76). The characteristics in the affective domain show the highest average score at the high level ($\bar{x}=3.70$, S.D. = 0.76), following with the characteristics in the cognitive domain at the high level ($\bar{x}=3.65$, S.D. = 0.79), and lastly the characteristics in the psychomotor domain at the high level ($\bar{x}=3.61$, S.D. = 0.75).

The fourth and last order is utilizing the curriculum evaluation's result to further develop learners to be ready for the future at the high level ($\bar{x}=3.59$, S.D. = 0.82). The characteristics in the affective domain show the highest average score at the high level ($\bar{x}=3.61$, S.D. = 0.86), following with the characteristics in the psychomotor domain at the high level ($\bar{x}=3.60$, S.D. = 0.80), and lastly the characteristics in the cognitive domain at the high level ($\bar{x}=3.56$, S.D. = 0.82).

The overall desirable state of the Thai language and culture program management based on the concept of agile learner characteristics in the element of evaluation is from high to the highest level. Considering each factor finds that examining learner's quality according to indicated learning outcomes has the highest average score at the highest level ($\bar{x}=4.52$, S.D. = 0.67). The characteristics in the affective domain show the highest average score at the highest level ($\bar{x}=4.57$, S.D. = 0.59), following with the characteristics in the psychomotor domain at the highest level ($\bar{x}=4.53$, S.D. = 0.68), and the characteristics in the cognitive domain at the high level ($\bar{x}=4.46$, S.D. = 0.71).

The second order is examining the instructions reflecting on differences of each learner at the high level ($\bar{x}=4.49$, S.D. = 0.71). The characteristics in the affective domain show the highest average score at the highest level ($\bar{x}=4.53$, S.D. = 0.65), following with the characteristics in the cognitive domain at the high level ($\bar{x}=4.49$, S.D. = 0.72), and the characteristics in the psychomotor domain at the high level ($\bar{x}=4.48$, S.D. = 0.73).

The third order is examining curriculum's suitability to Thai and global societies at the high level ($\bar{x}=4.48$, S.D. = 0.72). The characteristics in the affective domain show the highest average score at the highest level ($\bar{x}=4.50$, S.D. = 0.69), following with the characteristics in the cognitive domains at the high level ($\bar{x}=4.49$, S.D. = 0.74), and lastly the characteristics in the psychomotor domain at the high level ($\bar{x}=4.47$, S.D. = 0.72).

The fourth and last order is utilizing the curriculum evaluation's result to further develop learners to be ready for the future at the high level ($\bar{x}=4.46$, S.D. = 0.75). The characteristics in the affective domain show the highest average score at the high level ($\bar{x}=4.49$, S.D. = 0.66), following with the characteristics in the cognitive domain at the high level ($\bar{x}=4.46$, S.D. = 0.75), and the characteristics in the psychomotor domain at the high level ($\bar{x}=4.44$, S.D. = 0.71).

The need analysis indicates the highest $PNI_{\text{modified}} = 0.242$ of utilizing the curriculum evaluation's result to further develop learners to be ready for the future with the characteristics in the cognitive domain ($PNI_{\text{modified}} = 0.253$) that is needed to be further developed. The characteristics in the affective domain with the $PNI_{\text{modified}} = 0.244$, and the characteristics in psychomotor domain with the $PNI_{\text{modified}} = 0.233$ come second and last order.

The second highest $PNI_{\text{modified}} = 0.234$ is examining the instructions reflecting on differences of each learner with the characteristics in the psychomotor domain at the highest $PNI_{\text{modified}} = 0.241$. The characteristics in the cognitive domain with the $PNI_{\text{modified}} = 0.230$, and the characteristics in the affective domain with the $PNI_{\text{modified}} = 0.224$ come second and last order.

The third highest $PNI_{\text{modified}} = 0.225$ is examining learner's quality according to indicated learning outcomes with the characteristics in the affective domain with the highest $PNI_{\text{modified}} = 0.238$. The characteristics in the psychomotor domain with the $PNI_{\text{modified}} = 0.228$, and the characteristics in the cognitive domain with the $PNI_{\text{modified}} = 0.196$ come second and last order.

The lowest $PNI_{\text{modified}} = 0.227$ is examine curriculum's suitability to Thai and global societies with the characteristics in the psychomotor domain with the highest $PNI_{\text{modified}} = 0.231$. The characteristics in the affective domain with the $PNI_{\text{modified}} = 0.206$, and the characteristics in the cognitive domain with the $PNI_{\text{modified}} = 0.201$ come second and last order.

4.2.3 Need analysis of the current and desirable states of the Thai language and culture program management based on the concept of agile learner characteristics

The PNI_{modified} of each aspect is presented in table along with the descriptive text. (see Table 4-8 below). The highest PNI_{modified} of each characteristic domain is indicated as the weakness except for the psychomotor domain that its top two highest PNI_{modified} are selected. The data is later used to present an innovation to decrease weaknesses. The data synthesis is also used to develop the first draft of innovation.

Table 4-8. Need prioritization for the Thai language and culture program management based on the concept of agile learner characteristics

Thai Language and Culture Program Management	Agile learner Characteristics									
	Cognitive Domain			Affective Domain			Psychomotor Domain			
	Being goal oriented	Being a cognitive thinker	Being eager to learn new idea	Welcoming feedback & criticism	Seeking challenging situations	Knowing what to do when facing uncertain situations	Reacting promptly to change and ineffective strategies	Having highly effective interpersonal skills		
Curriculum Development 0.249 (1)	Identify learning outcomes that align with the need of Thai and global society 0.249 (1)	0.220 (2)	0.282 (1)	0.218 (1)	0.211 (2)	0.288 (1)	0.252 (3)	0.246 (4)	0.276 (2)	
	Identify learning standard basing on proficiency level 0.247 (2)	0.250 (2)		0.214 (3)			0.266 (1)			
	Design learning units by integrating Thai language and culture into global situations 0.249 (1)	0.226 (2)	0.246 (1)	0.215 (2)	0.236 (1)	0.288 (1)	0.248 (3)	0.230 (4)	0.266 (2)	
		0.235 (3)		0.236 (2)			0.260 (1)			
		0.251 (2)	0.276 (1)	0.217 (2)	0.239 (1)	0.233 (4)	0.273 (1)	0.239 (3)	0.254 (2)	
	0.265 (1)		0.232 (3)			0.249 (2)				
Total	0.232 (3)	0.277 (1)	0.217 (3)	0.239 (2)	0.269 (1)	0.261 (3)	0.238 (4)	0.265 (2)		
	0.254 (2)		0.228 (3)			0.258 (1)				
Instruction 0.245 (2)	Identify learning objectives aligning with learning outcomes 0.237 (3)	0.219 (2)	0.247 (1)	0.234 (1)	0.230 (2)	0.238 (3)	0.254 (2)	0.255 (1)	0.233 (4)	
	Construct authentic learning activities connecting to community & engaging learners at each proficiency level 0.254 (2)	0.133 (2)		0.227 (3)			0.245 (1)			
	Construct learning tools & materials to be accessible anytime & anywhere 0.261 (1)	0.274 (1)	0.271 (2)	0.231 (2)	0.234 (1)	0.256 (2)	0.270 (1)	0.242 (4)	0.252 (3)	
	Identify assessment evidences suitably to each learner differences 0.227 (4)	0.272 (1)		0.232 (3)			0.253 (2)			
		0.267 (1)	0.260 (2)	0.263 (2)	0.267 (1)	0.277 (2)	0.254 (3)	0.232 (4)	0.279 (1)	
	0.265 (1)		0.265 (1)			0.258 (2)				
	0.211 (2)	0.245 (1)	0.234 (1)	0.230 (2)	0.254 (1)	0.227 (3)	0.237 (2)	0.211 (4)		
	0.214 (3)		0.233 (2)			0.234 (1)				
	0.332 (2)	0.255 (2)	0.238 (1)	0.240 (1)	0.237 (4)	0.251 (1)	0.242 (3)	0.243 (2)		
Total	0.249 (1)		0.235 (1)			0.248 (2)				
	0.201 (1)	0.194 (2)	0.236 (2)	0.245 (1)	0.249 (1)	0.226 (3)	0.215 (4)	0.228 (2)		
	0.196 (3)		0.238 (1)			0.228 (2)				
	0.191 (2)	0.207 (1)	0.191 (2)	0.222 (1)	0.232 (3)	0.242 (2)	0.248 (1)	0.205 (4)		
	0.201 (3)		0.206 (2)			0.231 (1)				
	0.212 (2)	0.246 (1)	0.225 (2)	0.227 (1)	0.229 (3)	0.252 (2)	0.268 (1)	0.216 (4)		
	0.230 (2)		0.224 (3)			0.241 (1)				
	0.254 (1)	0.251 (2)	0.227 (2)	0.261 (1)	0.253 (1)	0.240 (2)	0.222 (3)	0.219 (4)		
	0.253 (1)		0.244 (2)			0.233 (3)				
Total	0.259 (1)	0.234 (3)	0.220 (2)	0.238 (3)	0.241 (1)	0.240 (2)	0.238 (3)	0.217 (4)		
	0.219 (3)		0.228 (2)			0.233 (1)				
Grand Total	0.229 (2)	0.247 (1)	0.225 (2)	0.239 (1)	0.254 (1)	0.242 (2)	0.239 (4)	0.245 (1)		
				0.232 (3)				0.240 (3)		

According to the table 4-8, the agile learner characteristics of psychomotor domain shows the highest $PNI_{\text{modified}} = 0.245$ and is indicated as weakness. The top two sub-characteristics with the highest PNI_{modified} are 1) seeking challenging situations with the $PNI_{\text{modified}} = 0.254$, and 2) knowing what to do when facing uncertain situations with the $PNI_{\text{modified}} = 0.242$.

The second highest is the cognitive domain with $PNI_{\text{modified}} = 0.239$. The highest sub-characteristic that is the weakness is being a cognitive thinker with the $PNI_{\text{modified}} = 0.247$.

The third highest is the affective domain with the $PNI_{\text{modified}} = 0.232$. The highest sub-characteristic that is the weakness is welcoming feedback and criticism with the $PNI_{\text{modified}} = 0.239$.

Other than need prioritization of the desirable states of the Thai language and culture program management of international schools in Thailand based on the agile learner characteristics, the data collected from the open-ended questions is also analyzed and the findings show as follows.

Table 4-9: The desirable states of the Thai language and culture program management for international schools in Thailand based on the concept of the agile learner characteristics in the element of curriculum development from the open-ended questions

No	Comments	Frequency
1	Flexible, adjustable, and current to local and global issues	28
2	Active learning curriculum	16
3	Incorporate expected learner's characteristics into curriculum	14
4	Aware of different learning needs	8
5	Technology driven curriculum	2

No.1: Curriculum is flexible enough to be adjusted suitably to school's context, and emphasizes on cognitive thinking skills and application to real life situations. It is interdisciplinary and current to local and global situations. Students become quality global citizen while maintaining Thai's identity.

No.2: Curriculum features active learning at its core. Students are provided with opportunities to explore, be curious, and find out answers or solutions on their own with teacher as the facilitator. Curriculum is promoting hands-on activities and constant

student-student and student-teacher interactions to enhance not only interpersonal skills, but also life skills.

No.3: Setting clear curriculum's goals and objectives by incorporating expected characteristics into curriculum is the main principle.

No.4: Curriculum is designed to cater different learning needs of each student, to captivate student's engagement, and to motivate and arouse their interest to learn. Learning is meaningful and students are aware of its importance or why they are learning it.

No.5: Technology is utilized to maintain consistency in using curriculum among teachers. Also, technology is used to enhance student's engagement and motivation to learn at their conveniences.

Table 4-10: The desirable states of the Thai language and culture program management for international schools in Thailand based on the concept of the agile learner characteristics in the element of instruction from the open-ended questions

No	Comments	Frequency
1	Provide authentic learning experiences, problem-based learning or project-based learning to enhance communication skills	44
2	Personalized learning	10
3	Design learning experiences by incorporating agile learner's characteristics into.	6
4	Teacher training to keep up with new pedagogy	5
5	Using technology as a learning tool	2

No.1: Authentic learning experiences are provided to promote independence, decision making, collaboration, creativity, discussions, and problem solving. Students are guided to explore, question and discover the unknown matters. Teachers act as facilitators who guide students to be on the right track and provide constructive feedback for their learning.

No 2: Personalized learning is to provide the ownership of student's own learning. Learning is meaningful and beneficial to themselves.

No 3: Learning objectives incorporating agile learner's characteristics is identified to ensure expected learning outcomes for all students.

No.4: Teachers must be on professional training on a regular basis to be up to new educational pedagogy and teaching strategies that benefit to student's learning.

No.5: Technology is used as a learning and teaching tool enabling students to be engaged in learning. Technology can make learning accessible to students anytime and anywhere.

Table 4-11: The desirable states of the Thai language and culture program management for international schools in Thailand based on the agile learner characteristics in the element of evaluation from the open-ended questions

No	Comments	Frequency
1	Focus on formative assessment	8
2	Self, peer and teacher assessment	15
3	Assess skills not contents	24
4	Use various types of assessment including technology to suit different learning needs.	9

No.1: Formative assessment is crucial to inform where student's learning is so that teacher can design or adjust learning experiences to support and extend their learning.

No.2: Students set their learning goals and self-assess themselves, by doing so students are accountable for their learning. Students get to practice giving and receiving feedback to and from peers in order to develop interpersonal skills and working collaboratively with others. While teacher's assessment is still important to ensure expected learning outcomes being performed or presented by students.

No.3: The focus of assessment is on skills not contents. Assessment criteria must be stated to students explicitly thus they know what is expected of them and move their learning forward to the right directions.

No.4: Using various types of assessment including technology to meet different learning needs is suggested. Each student has different learning styles, they should be given opportunities to show their learning in the way they are comfortable to.

The need analysis of the Thai language and culture program management shows that curriculum development has the highest need with the $PNI_{\text{modified}} = 0.249$. There are two elements of the curriculum development that have the highest need with the same $PNI_{\text{modified}} = 0.249$. Firstly, identifying learning outcomes that align with the need of Thai and global society with the characteristics in psychomotor domain shows the highest need with the $PNI_{\text{modified}} = 0.266$, and the highest need among the sub characteristics with the $PNI_{\text{modified}} = 0.288$ is to seeking challenging situations. The suggestion from the open-ended questions is to provide active learning curriculum. **The main issue is that the**

learning outcomes do not align with the need of Thai and global society ($PNI_{\text{modified}} = 0.249$). The characteristics in psychomotor domain are needed to be instilled in students starting with seeking challenging situations, having highly effective interpersonal skills, knowing what to do when facing uncertain situations, and reacting promptly to change and ineffective strategies.

Secondly, designing learning units by integrating Thai language and culture into global situations with the characteristics in affective domain shows the highest need with the $PNI_{\text{modified}} = 0.265$, and the highest need among the sub characteristics with the $PNI_{\text{modified}} = 0.276$ is to being a cognitive thinker. The suggestion from the open-ended questions is to integrate local and global issues into the units of learning. **The main issue is that learning units are lacking the integration between Thai language and culture and global situations.** The characteristics in affective domain are needed to be instilled in students starting with being a cognitive thinker, and being goal oriented.

The instruction is the second highest need with the $PNI_{\text{modified}} = 0.245$. The element of the instruction that has the highest $PNI_{\text{modified}} = 0.261$ is to constructing learning tools and materials to be accessible anytime and anywhere with the two characteristics' domains that have the same highest $PNI_{\text{modified}} = 0.265$; the cognitive and the affective domains. The suggestions from the open-ended question are to provide authentic learning experiences to engage student's interest and to use more technology as a learning tool. **The main issue is the convenient access to learning materials anytime and anywhere.** The characteristics in cognitive domains are needed to be instilled in students starting with being goal oriented, and being a cognitive thinker. The characteristics in affective domains are also needed to be instilled in students starting with welcoming feedback and criticism, and being eager and curious to learn new ideas.

The evaluation shows the lowest need with the $PNI_{\text{modified}} = 0.242$. The element of the curriculum evaluation that has the highest $PNI_{\text{modified}} = 0.242$ is to utilizing the curriculum evaluation's result to further develop learners to be ready for the future. The characteristics in cognitive domain show the highest need with the $PNI_{\text{modified}} = 0.253$ starting with being goal oriented, and being a cognitive thinker. The suggestions from the open-ended questions are to assess skills not content, to conduct not only teacher assessment, but self and peer assessment, and to use various types of assessment including technology to suit different learning needs. **The main issue is the lack of using the curriculum evaluation's result to further develop learners to be ready for the future.** The characteristics in cognitive domain is needed to be instilled in students starting with being goal oriented, and being a cognitive thinker.

Table 4-12: Define Need for Innovation

Thai language & culture program management	High Need	Define Need for Innovation
	<p>The characteristics in the psychomotor domain showed the highest need with the $PNI_{\text{modified}} = 0.245$.</p> <p>The sub characteristics in the psychomotor domain that showed the highest need was to seeking challenging situation with the $PNI_{\text{modified}} = 0.254$. The second highest needed characteristic was to knowing what to do when facing uncertain situations with the $PNI_{\text{modified}} = 0.249$.</p>	<p>Thai language and culture program is needed to develop management innovation that promotes two characteristics which are; seeking challenging situations, and knowing what to do when facing uncertain situations</p>
CURRICULUM DEVELOPMENT	<p>The elements of the curriculum development that showed the highest need were 1) to identifying learning outcomes that align with the need of Thai and global society, and 2) to designing learning units by integrating Thai language and culture into global situations with the same $PNI_{\text{modified}} = 0.249$.</p>	<p>Curriculum development needs to focus highly on two elements.</p> <p>First element is to identifying learning outcomes that align with the need of Thai and global society that promotes the characteristic of seeking challenging situation and knowing what to do when facing uncertain situations.</p> <p>Second element is to designing learning units by integrating Thai language and culture into global situations which promotes the characteristics of seeking challenging situation and knowing what to do when facing uncertain situations.</p>
INSTRUCTION	<p>The element of the instruction that showed the highest need was to constructing learning</p>	<p>Instruction needs to focus highly on constructing learning tools and materials to</p>

Thai language & culture program management	High Need	Define Need for Innovation
	tools and materials to be accessible anytime and anywhere with the $PNI_{\text{modified}} = 0.261$.	be accessible anytime and anywhere that promotes the characteristics of seeking challenging situation and knowing what to do when facing uncertain situations.
EVALUATION	The element of the evaluation that showed the highest need was to utilizing the curriculum evaluation's result to further develop learner to be ready for the future with the $PNI_{\text{modified}} = 0.242$.	Evaluation needs to focus highly on utilizing the curriculum evaluation's result to further develop learner to be ready for the future that promotes the characteristics of seeking challenging situation and knowing what to do when facing uncertain situations.

4.3 Management innovation for the Thai language and culture program based on the concept of agile learner characteristics

(The process of management innovation development, Phase 2: Discover ideas to formulate innovation, Phase 3: Develop innovation, and Phase 4: Demonstrate feasibility)

This research is conducted under the process of management innovation development phase 1 which is to define needs for innovation by studying current and desirable states of the Thai language and culture program management based on the concept of agile learner characteristics. Then the need analysis is conducted to define needs which are brought into phase 2 to discover ideas to formulate innovation. Literature reviews, content analysis of feedbacks from open-ended questions, and best practices are studied and later to formulate the first draft of the innovation. The focus-group of nine experts and stakeholders is conducted to obtain suggestions and to move along to phase 3 which is to develop innovation. The first draft of innovation is adjusted according to the expert and stakeholder's inputs and resulted in the second draft of innovation. The second draft of the innovation is to evaluate its suitability and possibility by 15 stakeholders or innovation users individually.

4.3.1 The reviews of literature, researches, theories, methodologies and best practices in relation to the program management that promotes the concept of agile learner characteristics

The reviews cover the following.

1. Agile/Scrum classroom
2. Project-based learning
3. Future-ready curriculum, instruction and assessment
4. Summit Public Schools in the US

1. Agile / Scrum classroom: Scrum is a learning process that engaged students in a meaningful and enjoyable way. Students organize their own learning starting with setting measurable and realistic goals, establishing action plan, activating the plan where in which is regularly self-inspected to maintain on the right track toward the goals (Rossum, Kadras, & Miller, 2013).

Himmelsbach states that educators today need to design their course to be agile and engaging with the following strategies (Himmelsbach, 2018).

1. Learning sprints: It requires achieving a specific outcome in a specific duration of time by starting with setting learning goal or expected outcome, then dive into the learning in sprint mode. Once the learning is completed followed up with assessment to see progress or areas for improvement.
2. Scrums: It is a process that students work in a small team with specific role of their interests or expertise in effort to complete the task effectively.
3. Backchannel is a high-tech version for students to ask questions or share opinions online in a real time. This technique is helpful for shy students to be a part in learning. Questions are projected on screen either with student's name or an avatar or anonymously.
4. Open Curriculums involve student to set the agenda and determine the path that makes sense to them as learners.
5. Think-Pair-Share: It is a way to encourage participation by using interactive learning technologies or apps that can help analyzing student responses.

Agile is about teamwork and collaboration to accomplish either group or personal goals in a set time. The team will start with goal setting and end each class with reflection toward the set goal as expected, areas for improvement, what worked or did not (Prieto, 2016).

Scrum is a project-based learning framework where students would work in small teams to achieve the learning objectives by completing a project that is a real world issues or related to them (Krebs, 2018b).

In summary of the agile and scrum classroom, it emphasizes highly on the outcome, collaboration, goal and action plan setting, and implementing the plan effectively.

2. Project-based learning: PBL is claimed by many researchers that it is the suitable way to take today's students to their future success. PBL offers opportunities to students to be engaged with real-world problems. It is challenging and interdisciplinary. Students are required to apply knowledge and skills in different context or situations and create products to solutions at the end. It is a student-centered that empower student's ownership of their learning. Students must be prepared for the rapid changing world, and PBL help develop 21st century skills for critical thinking, communication, collaboration, and creativity that they need to live life successfully in the future (O'Brien).

3. Future-ready curriculum, instruction and assessment: Future Ready Schools (FRS) is the nation's largest network of innovative and passionate educators of America. FRS believes that if schools want to prepare student to be ready for the future, then the future-ready skills needed to be integrated into curriculum, instruction and assessment. FRS sees the importance of engaging students in 21st century skills, personalized, technology-enabled, deeper learning. Curriculum and instruction must highly emphasize on authentic and real-world problem solving. Students are able to interact with digital content 24/7. Assessment is geared toward performance-based and technology integrated. Self-reflection and critical thinking become a common practice (FRS). There are four ways to prepare student to be future-ready. First is to include future-ready skill outcomes in assessment, second is to design instruction in a way that supports achievements of those outcomes, third is to create a classroom environment that supports development of future-ready skills, and last is to model and encourage classroom discussions around each skill (Bednar).

4. The model of Summit School in the United States is studied (Summit, 2017). Summit Public School was founded in 2003 by Diane Tavenner, CEO and Co-Founder of Summit, with the vision of preparing a diverse student population for success in a four-year college or university, and to be thoughtful, contributing members of society. It is a reputable and innovative school that offers effective personalized learning and project-based curriculum that empowering students to drive their learning and success. The schools engage students in interdisciplinary and real-world projects. Students would set their learning goal weekly and surround with peers so they could help each

other solving problems. By internalizing a sense of purpose, self-direction, self-sufficiency, collaboration, students learn the cognitive and life skills needed. The Summit model emphasizes on four measurable outcomes; cognitive skills, content knowledge, habits of success, and sense of purpose. Cognitive skill is essential and transferable lifelong skills, such as communication, critical thinking, collaboration, and creativity. Summit places the grading on the cognitive skills at the top priority where the rubric has been created to assess student work. Content knowledge is a vital element to exercise cognitive skills. Students need to master and understand what they are learning thoroughly, and they engage in learning at their own pace and can only move on when they demonstrate proficiency. Habits of success are mindsets and behaviors that support well-being and develop purpose. Students are to develop and demonstrate habits independently and able to transfer these habits to various life situations. Sense of purpose is self-awareness and pursuit of interests and goals.

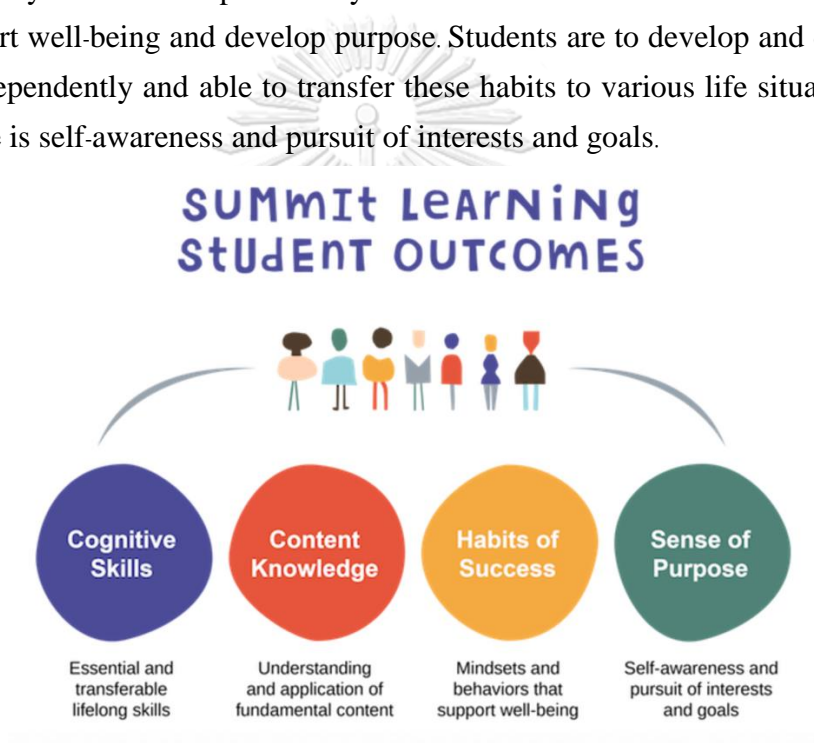


Figure 6: Summit Learning Student Outcomes (Learning, 2017)

1. Summit's focus on cognitive skill is based on various researches and reputable frameworks. Summit has worked closely with Standard Center for Assessment in developing cognitive skills rubric in the total of 36 cognitive skills under seven domains:

1. Textual Analysis: Theme/central idea, point of view/purpose, development, structure, word choice
2. Using Sources: Selecting relevant sources, contextualizing source, synthesizing multiple sources

3. Inquiry: Asking questions, predicting/hypothesizing, designing processes and procedure
4. Analysis and Synthesis: Identifying patterns and relationships, comparing/contrasting, making connections and inferences, critiquing the reasoning of others, justifying/constructing an explanation, interpreting data/information modeling
5. Composing / Writing: Argumentative claim, narrative, counterclaims, informational/explanatory thesis, selection of evidence, explanation of evidence, integration of evidence, organization (transitions, cohesion, structure), introduction and conclusion
6. Speaking and Listening: Discussion/contribution, preparation, norms/active listening
7. Products and Presentation: Style and language (tone, academic language, syntax), oral presentation, multimedia in writing production, multimedia in oral presentation, conventions, precision

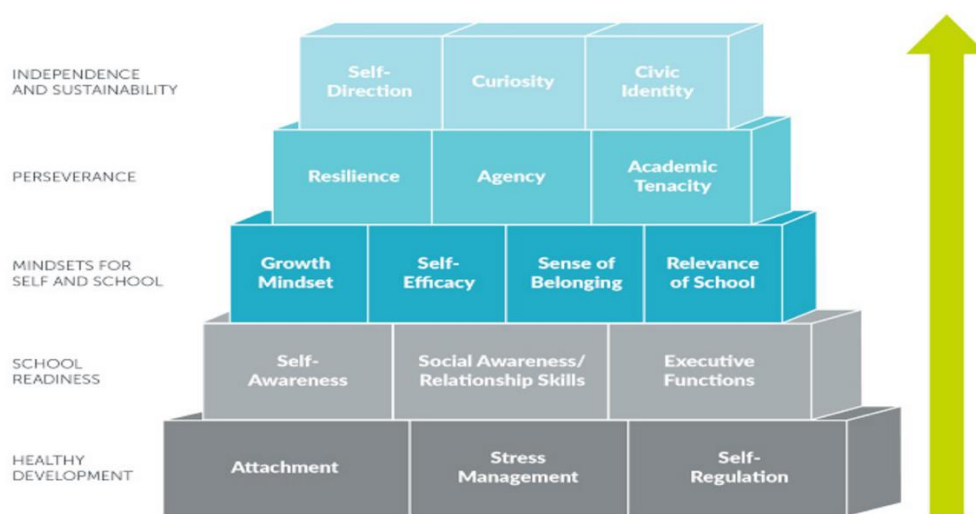
Students are engaged in learning to develop and improve their cognitive skills through project-based learning where students get to showcase their learning and are assessed based on their performance

2. Content knowledge is a vehicle to cognitive skills development. Summit has developed standards-aligned resources to teach content knowledge in each subject. The content has been divided into key focus areas that are closely aligned to the Common Core Standards. Power focus areas are specific focus areas that are required for advancement to the next course. Each focus area contains playlists of various learning materials that students have the access to learning at all times. Students manage their own learning time at their pace and act as a responsible self-directed learner. Teachers' roles are facilitator of self-directed learning, guiding students who might need support in content and in self-directed learning. Students also have access to peers and teachers, they are empowered to organize when and how to learn.

3. Habits of success are mindsets, behaviors, and the social and emotional skills that lead and guide students to be successful at both academic and non-academic tasks. Summit has adopted the Building Blocks for Learning framework developed by Dr. Brooke Stafford-Brizard on behalf of Turnaround for Children (2016) cited in (Summit, 2017). There are five categories to development of skills.

1. Healthy Development (attachment, stress management, self-regulation)

2. School Readiness (self-awareness, social awareness/relationship skills, executive functions)
3. Mindsets for Self and School (growth mindset, self-efficacy, sense of belonging, relevance of school)
4. Perseverance (resilience, agency, academic, tenacity)
5. Independence and Sustainability (self-direction, curiosity, civic identity)



Stafford-Brizard, K. B. (2016). Turnaround for Children.

Figure 7: Building blocks for learning: A Framework for comprehensive student development (Stafford-Brizard, 2016)

Summit has designed the framework to the development of Habits of Success as follows.

1. Individualized, Weekly Mentoring: Teacher's role is as a mentor who provides one on one support weekly in setting goals, constructing action plans, and providing feedback on progress. Teacher as a mentor would closely oversee student or mentee overall progress in both academic content and social experiences.
2. Self-Directed Learning has played vital part in developing Habits of Success as it is about learning content knowledge. Teacher would closely monitor and guide students to develop self-awareness, academic tenacity, curiosity, and self-direction. Students use the Self-Directed Learning Cycle to set goals, develop a plan to achieve those goals, learn what they need to know, show evidence of what they have learned, and reflect on the process.

3. Project-Based learning provides opportunities and spaces for Habits of Success to be integrated into.
4. Professional Development for Teachers would provide strategies that teachers could use to promote the Habits of Success.
5. Home-School Connections further support Habits of Success. Knowing student's background, home culture and language are beneficial to tailor habits supporting students' contexts.
6. Belonging in a Community enables students to make connection and see themselves as a part of community they live in. Interaction with community would provide real life experiences and urge students to do projects that address community's issues.
7. Restorative Practices help improving relationships between people and communities to foster positive and healthy school environment and atmosphere.
8. Assessment on Habits of Success is used to support student's improvement and growth as individuals, it is not used for student reporting.



Figure 8: Self-Directed Learning Cycle (Summit, 2017)

4. Sense of Purpose is student's interests, values, and skills which are articulated to be translated into fulfilled lives. Summit has laid out five critical components for Sense of Purpose.

1. Self-Awareness (Interest, Skills, Knowledge, and Habits): Students are exposed to varied interests, encouraged to explore interests and to pursue those interests.

2. Values: Students need support understanding what they value and how to live those values in order to lead a fulfilled life.
3. Relationships: Students build relationships effectively, and associate themselves with people who want them to be their best selves.
4. Credible Path Toward Long-Term Goals: Students need to be able to articulate their future goals and have a credible path toward meeting those goals.
5. Transition: Next step plan aligned with their interests, skills, knowledge, habits, values, and the long-term goals is set and supported by family members, teachers, and other important people in their life.

Summit has designed ways that students are able to develop purpose as follows.

1. Goal-Setting: Students get to practice setting short-, medium-, and long-term goals in almost every learning activity. The goals are revisited regularly and frequently in order to keep track on their path to reach the goals.
2. Mentor Community: Each student is a part of a mentor group that meets about one hour each week to build self-awareness and interact with those who hold different values, life experiences, interests and cultural norm to providing bonding, academic belonging, and the development of Habits of Success.
3. Expeditionary Learning: Expeditions, Internships, and Service Trips: Students have opportunities to explore their interests and to pursue passions in-depth, authentic and project-based learning for two weeks at a time, eight week per year.

Summit has been developing the assessment of sense of purport as they believe that any outcomes that the school values should have an aligned assessment. Currently, there are three components.

1. Portfolio: It is an accumulative body of evidence that a student has selected and thoroughly analyzed in writing, along with the student's long-term plan and next step. The portfolio should project the student's growth and whom s/he has become. Other evidence in the portfolio includes peer testimonials, mentor testimonials, and outside-of-school artifacts.
2. Personal Advisory Board: It is assembled at the end of the school year, the board comprises of family members, teachers, mentors, Expedition leaders, and other adults in the student's life whom are chosen by the student. The board is the key audience for the oral defense other than reviewing and providing feedback on the portfolio.

3. Oral Defense: It is a golden opportunity for a student to present his or her portfolio to a personal advisory board which includes the following components.
 - a. A brief narrative of overall learning journey including a discussion of his or her strengths, areas for growth, interests, and passions.
 - b. A discussion of a student's transition that aligns with his or her self-knowledge and values and includes a possible path toward accomplishing a long-term goal. The transition must be explained and defended relative to past and future.
 - c. A descriptive and thank-you to members of the advisory board that have been major parts of shaping who s/he has become.

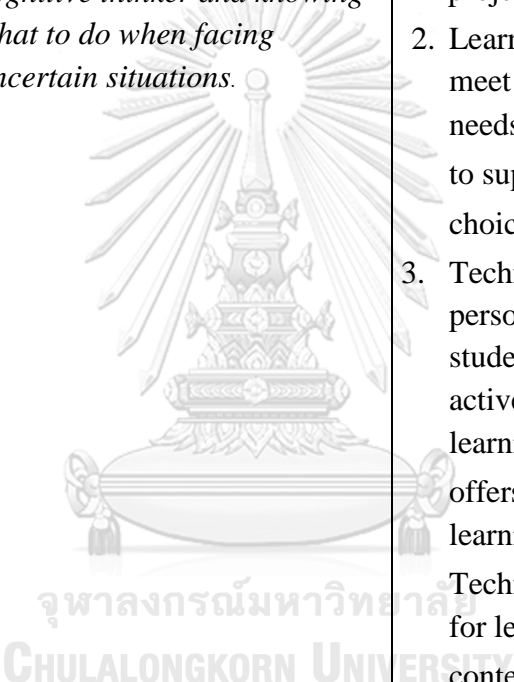
4.3.2 Draft the management innovation of the Thai language and culture program based on the concept of agile learner characteristics (1st Draft)

(The process of management innovation development, Phase 2: Discover ideas to formulate innovation)

Phase 2: Discover ideas to formulate innovation is to bring the analysis result of the current and desirable states and need defined for synthesis. The findings showed that the agile learner characteristics are needed to be implemented in the Thai language and culture program management. Also, literature and researches of best practices related to the Thai language and culture program management based on the concept of agile learner characteristics had been obtained.

Table 4-13: Analysis and synthesis to formulate innovation for the Thai language and culture program management based on the concept of agile learner characteristics

Innovation Development	Define Needs Phase 1	Discover new ideas to formulate innovation Phase 2
Curriculum Development	<p>From the analysis of current and desirable states of Thai language and culture program for international schools in Thailand based on the concept of agile learner characteristics found the highest need in curriculum development as follows.</p> <ol style="list-style-type: none"> 1. <i>Identifying learning outcomes that align with the need of Thai and global society which promotes the characteristics of seeking challenging situation and knowing what to do when facing uncertain situations.</i> 2. <i>Designing learning units by integrating Thai language and culture into global situations and promoting the characteristic of seeking challenging situation, being a cognitive thinker and knowing what to do when facing uncertain situations.</i> 	<p>Literature and researches of best practices in the area of new way for curriculum development had been conducted and found the following.</p> <ol style="list-style-type: none"> 1. Project-based curriculum is a student-centered pedagogy that students acquire a deeper knowledge through active exploration of real-world challenges and problems. 2. Curriculum is interdisciplinary. Thai subject is integrated to global context. 3. Curriculum promotes characteristics of seeking challenging situations, being a cognitive thinker and knowing what to do when facing uncertain situations. 4. Curriculum promotes problem finding to enhance intellectual and imaginative vision.
Instructions	<p>From the analysis of current and desirable states of Thai language and culture program for international schools in Thailand based on the concept of agile learner characteristics</p>	<p>Literature and researches of best practices in the area of new way for instruction had been conducted and found the following.</p>

Innovation Development	Define Needs Phase 1	Discover new ideas to formulate innovation Phase 2
	<p>found the highest need in instruction as followed.</p> <p><i>Constructing learning tools and materials to be accessible anytime and anywhere with the characteristics of seeking challenging situation, being a cognitive thinker and knowing what to do when facing uncertain situations.</i></p> 	<ol style="list-style-type: none"> 1. Learners have opportunities to interact with what they are learning or content, with peers or classmates, with teacher, and with community to practice cognitive thinking skills, collaborative skills, and taking or giving criticisms via project-based learning. 2. Learning is personalized to meet individual interests and needs. Instruction is designed to support learner's voice and choice. 3. Technology enables personalized pathways for student learning through active and collaborative learning activities. Technology offers anywhere, anytime learning opportunities. <p>Technology provides pathway for learner's interaction with content, peers, teachers, and community.</p>
Evaluation	<p>From the analysis of current and desirable states of Thai language and culture program for international schools in Thailand based on the concept of agile learner characteristics found the highest need in instruction as followed.</p> <p><i>Utilizing the curriculum evaluation's result to further develop learner to be ready</i></p>	<p>Literature and researches of best practices in the area of new way for curriculum evaluation had been conducted and found the following.</p> <ol style="list-style-type: none"> 1. Build in future ready skill outcomes in formative and summative assessments and encourage more

Innovation Development	Define Needs Phase 1	Discover new ideas to formulate innovation Phase 2
	<i>for the future with characteristics of seeking challenging situation, being a cognitive thinker and knowing what to do when facing uncertain situations.</i>	performance-based or contributing assessments. 2. Assessment is data-driven decision making that impacts, informs, and improves learning in real time.

The innovation development for the Thai language and culture program management based on the concept of agile learner characteristics that is the result of this research study is called “SBK” Innovation with following details.

1. Innovation Title:

Management Innovation for the Thai Language and Culture Program of International Schools in Thailand: “SBK Innovation”

2. Principles and Rationale of Innovation

It is undeniable that we are living in a world of rapid change. Technology has become a main part of our lives that provides us with conveniences in many ways, but it can become a major threat to us as evidenced by the rise of Artificial Intelligence. The academic contents that schools teach students today might not be useful for them to use at work or to live life with in the future. The rise of the number of Thai national students attending international schools has ignited the question on the effectiveness of the Thai language and culture program has to offer our future leaders. The Thai language and culture program structures the pathway to future in hoping that it will equip students with characteristics needed to live successfully in future life.

Agile learner characteristics are needed to be instilled in today’s students to prepare them to be ready for the future. As the future is unpredictable and rapidly changing, we do not know what we teach students today will be useful for them in the future. Therefore, students are to be evolved with characteristics needed for future. Agile individual is flexible, adaptable, applying knowledge to perform successfully under new or first-time situations (De Meuse et al., 2010). Collaborative work, stepping out of comfort zone, welcoming feedback and criticisms, learning from success and failure are also vital characteristics of agile learners.

The literature and best practices were studied to obtained new ways and principles to draft the innovation. The Scrum for Education was studied, its theory

coincides with agile learner characteristics. Scrum is used in schools to support more effective learning where it keeps students to be accountable for their own learning objectives by completing a project through working in small groups. The eduScrum Theory is established on empirical process control theory that experience generates knowledge, and knowledge is the solid ground for decision making. There are three elements supporting every implementation of empirical process control; transparency, inspection, and adaptation. Transparency means process involving learning outcomes must be visible and agreeable to all participants; teacher and students. Inspection means the measurement of the progress toward learning goals to detect undesirable deviations. Adaptation means the instant correction of the plan to limit further deviation (Delhij, van Solingen, & Wijnands, 2015). Scrum is the project-based learning framework that would equip students with future-based mindset and characteristics; curiosity, initiative, persistence, adaptability, social and cultural awareness (Krebs, 2018a). The Scrum Framework enhance student's collaboration, meaningful learning, locally and globally connectedness, and content creation. Hence Scrum could be the new way to manage the Thai language and culture program in the elements of curriculum development, instruction, and curriculum evaluation to promote the following characteristics to students; seeking challenging situations, being a cognitive thinker, and knowing what to do when facing uncertain situations.

Management Innovation for the Thai Language and Culture Program of International Schools in Thailand Based on the Concept of Agile Learner Characteristics derived from the innovation development as following. Phase one was to study the current and desirable states of the Thai language and culture program management based on the concept of agile learner characteristics via qualitative and quantitative data collection, and the highest needs were identified. The top two of the highest needs were; seeking challenging situations, and knowing what to do when facing uncertain situations, and were utilized in phase two of the innovation development process; discover ideas to formulate innovation. The analysis in phase one showed that curriculum development, instruction, and curriculum evaluation were vital elements to promote agile learner characteristics. The study of Scrum theory was conducted and utilized in promoting agile learner characteristics in students.

3. Objective of the Innovation:

To develop the program management that is integrated agile learner characteristics into curriculum development, instruction, and evaluation.

4. Result of the Innovation

“Management Innovation for the Thai Language and Culture Program of International Schools in Thailand Based on the concept of Agile Learner Characteristics with SBK Innovation” will promote the effectiveness of the Thai language and culture program management to instill agile learner characteristics in students so that they are well equipped and ready to live life successfully in the future.

5. Innovation Features

SBK is the Thai language and culture program management in the elements of curriculum development, instruction, and curriculum evaluation to instill agile learner characteristic within students, and emphasize highly on two characteristics; seeking challenging situations, being a cognitive thinker, and knowing what to do when facing uncertain situations.

6. Structure and infographic of Innovation

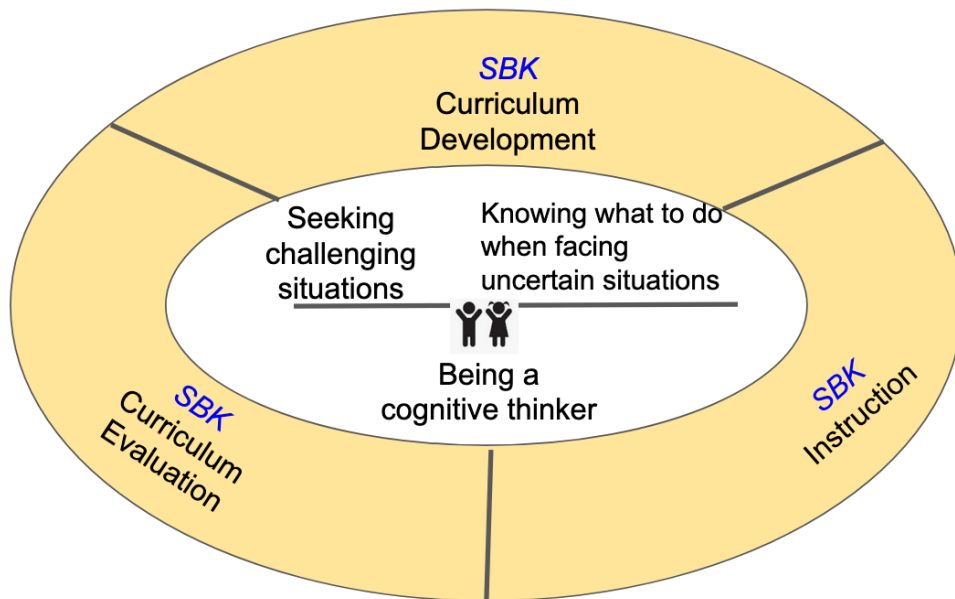


Figure 9: The 1st Draft of the Management Innovation for the Thai Language and Culture Program of International Schools in Thailand Based on the Concept of the Agile Learner Characteristics with SBK Innovation

7. Essence, Practice, and Benchmark of Innovation

Table 4-14: Essence, Practice and Benchmark of Innovation

Essence of Innovation	Practice	Benchmarks
Management Innovation for the Thai Language and Culture Program of International Schools in Thailand with <i>SBK Agile Learners</i>		
The Thai Language and Culture program management with SBK Agile Learners. S stands for seeking challenging situation, B stands for being a cognitive thinker, and K stands for knowing what to do when facing uncertain situations.	<ol style="list-style-type: none"> 1. SBK Curriculum Development 2. SBK Instruction 3. SBK Evaluation 	Curriculum development, instruction, and curriculum evaluation promote the characteristics of seeking challenging situations, being a cognitive thinker, and knowing what to do when facing uncertain situations.
Innovation 1: SBK Curriculum Development		
Curriculum is current to local and global issues, combined Thai and other subjects together, challenging to enhance intellectual, collaboratively oriented, and content creation oriented.	<ol style="list-style-type: none"> 1. Identifying learning outcomes that align with the need of Thai and global society which promotes the characteristics of seeking challenging situation, being a cognitive thinker, and knowing what to do when facing uncertain situations. 2. Designing learning units by integrating Thai language and culture into global situations and promoting the characteristic of seeking challenging situation, being a cognitive thinker, and knowing what to do when facing uncertain situations. 	<ol style="list-style-type: none"> 1. The number of student's projects in relation to local and global issues. 2. Student's engagement and motivation to learn 3. Positive and constructive atmosphere in classroom.
Innovation 2: SBK Instruction		
Instruction provides opportunities for students to interact with peers, content, community, and	Constructing learning tools and materials to be accessible anytime and anywhere with the	1. Hybrid instruction is regularly offered throughout the year, and

<p>teacher, and engage in learning activities before, during, and after the face to face class or 24/7 through Scrum framework.</p>	<p>characteristics of seeking challenging situation, being a cognitive thinker, and knowing what to do when facing uncertain situations.</p>	<p>becomes norm of learning activity.</p> <ol style="list-style-type: none"> 2. Agile classroom 3. Students interact with peers online and on site collaboratively. 4. Students interact with community online and on site to experience real issues or to learn from. 5. Students interact with content which is accessible anytime anywhere at their convenience happening 24/7 in asynchronous lessons.
<p>Innovation 3: SBK Evaluation</p>		
<p>Evaluation inspects future-ready pathways for students.</p>	<p>Utilizing the curriculum evaluation's result to further develop learner to be ready for the future with characteristics of seeking challenging situation, being a cognitive thinker, and knowing what to do when facing uncertain situations.</p>	<ol style="list-style-type: none"> 1. Future-Ready Curriculum: current, interdisciplinary, meaningful or relevant to students, and requires collaboration and contribution 2. Future-Ready Instruction: accessible 24/7, and Agile classroom 3. Future-Ready Assessment: <ol style="list-style-type: none"> a. Assessment FOR learning to <i>inform</i> where the learning b. Assessment AS learning to reflect on self or their own performance in order to <i>improve</i> the learning. c. Assessment OF learning to make an <i>impact</i>. Student's contribution or creation is assessed to showcase what they can create with content or knowledge they have learned.

8. Implementation of the innovation:

- 8.1 Schools form a committee consisting of Thai Principal, Thai Head department, Thai coordinator, and Thai teachers from all divisions to formulate an SBK Agile Learner implementation plan.
- 8.2 The committee study the Thai language and culture program management thoroughly to instill SBK Agile Learner within students.
- 8.3 The committee study school context, suitability and possibility to implement the SBK Agile Learner.
- 8.4 The committee run a pilot class starting with strategic planning, action planning, executing as planned, and evaluating for whole school implementation.

4.3.3 Suitability and feasibility of (1st draft) Management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics

(The process of management innovation development Phase 3: Develop Innovation)

The focus group consisted of nine experts and stakeholders was conducted online via Zoom Meeting to evaluate the first draft of the innovation and to brainstorm the most suitable and feasible way to develop the innovation. The result of the focus group is as follows.

Table 4-15: Demographic data of the experts and stakeholders evaluating innovation's feasibility and suitability

Group	Demographic Information	Total	
		Quantity	Percentage
1	Expert in Innovation and Management Innovation	2	22.22
2	Expert in Agile learner Characteristics	2	22.22
3	Thai Headmaster / Headmistress	2	22.22
4	Thai Teachers from grade 1 -12	3	33.34
		9	100

Table 4-16: Evaluation of the 1st draft of the innovation

Question	Description	Number of People	
		Agree	Disagree
1	Innovation title	6	3
2	Principle and Rationale of the Innovation	9	0
3	Objective of the innovation	9	0
4	Result of the Innovation	7	2
5	Innovation Features	8	1
6	Structure and infographic of Innovation	5	4
7	Essence, Practice and Benchmark	7	2
8	Implementation	9	0

The result showed in table 4-16 revealed that majority of the experts and stakeholders agreed with the feasibility and suitability of the 1st draft of the innovation. Additional comments were recorded for further adjustment as follows.

1. Innovation title needs to be short and easy to remember. Considering the use of the word “Agile” might make the name becomes easier to read and remember. Also, agile is the characteristics as a whole and it is the main focus of the research. Therefore, using it should be justified.
2. The characteristic in the affective domain with the highest PNI_{modified} should be brought into developing the innovation in order to have all domains represented in the innovation.
3. The essence, practices and benchmark section should be narrated instead of the table format.
4. The practice needs to be explicitly elaborated with clear steps of actions.

4.3.4 (2nd Draft) Management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics

(The process of management innovation development Phase 3: Develop Innovation)

All suggestions and comments from the focus group were analyzed and the innovation was adjusted into the 2nd draft of the innovation titled “SWABK”. The characteristic in affective domain of welcoming feedback and criticism with the highest PNI_{modified} was added so that characteristics from all three learning domains were covered. There was the rearrangement of each characteristic’s abbreviation in order to make the innovation title easy to call and remember. “A” standing for agile learner has been added so that the innovation title can be pronounced as a word. Details of the innovation was presented in the descriptive format instead of the table as follows.

1. Innovation title: “SWABK”

2. Principles and Rationale of Innovation:

The rapid change of the world today has created a question whether what schools teach students today, it would still be useful for students to live successful life in the future. Also, the rise of international schools in Thailand has generated another question on the effectiveness of the Thai language and culture program in international schools that would definitely affect the lives of Thailand’s future leaders. Students who study in international schools are from well to do family judging by the tuition’s fee. Therefore, it is fair to say they will become our future leader in economy, political sector or society. Thai language and culture program has an important role to craft Thai

identity for our quality-future leaders, and to serve as a tool to instill characteristics needed for students to live successful life in the future. Agile learner characteristics are believed to shape and prepare our students to be ready for the future.

“SWABK” is the management innovation for the Thai language and culture program according to the concept of agile learner characteristics. It emphasizes the academic management consisting of curriculum development, instruction, and evaluation. This innovation was developed under four phases of innovation development as follows.

1. Define needs for innovation by studying the current and the desired states
2. Discover ideas to formulate innovation by studying best practices and quantitative and qualitative content analysis
3. Develop innovation by brainstorming of experts during the focus group
4. Demonstrate feasibility of innovation

The study of current and desirable states of the Thai language and culture program management according to the concept of agile learner characteristics found that the characteristics with the highest need are Seeking challenging situation, Being a cognitive thinker, Knowing what to do when facing uncertain situations, Welcoming feedback and criticism.

The study of best practices to promote agile learner characteristics indicates that curriculum need to be interdisciplinary and meaningful. Students are parts of learning process, who need to develop deeper and critical thinking, and skills needed beyond classroom. Learning enhances cognitive thinking, communication, creativity and collaboration.

The data above including suggestions from the experts and stakeholders have been brought into the innovation development for the Thai language and culture program management according to the concept of agile learner characteristics titled “SWABK”. SWABK derives from five characteristics which are Seeking challenging situations, Welcoming feedback and criticism, Agile, Being a cognitive thinker, and Knowing what to do when facing uncertain situations. This innovation would enhance the effectiveness of the academic management of the Thai language and culture program and also promote and develop the characteristics that students need to face with the uncertain world in the future.

3. Objective of the innovation:

To develop the Thai language and culture program management comprised of the curriculum development, the instruction, and the evaluation that promote the following characteristics within students; Seeking challenging situations, Welcoming feedback and criticism, Agile learner, Being a cognitive thinker, and Knowing what to do when facing uncertain situations.

4. The result of the innovation:

SWABK aims to develop three elements which are the curriculum development, the instruction, and the evaluation that enable international schools to develop its management that leads to promoting the future-ready characteristics as follows.

S = Seeking challenging situations: Students are courageous to stepping out of their comfort zone to explore and try new experiences which lead to constantly new learning.

W = Welcoming feedback and criticism: Students practice giving constructive criticism and critically listen to other's criticism to refine their work, their ways of learning and practices to achieve their set goals.

B = Being a cognitive thinker: Students are able to think critically, connect and apply what they have already known to new knowledge to benefit their current work.

K = Knowing what to do when facing uncertain situations: Students calmly figure out ways to overcome hurdles and obstacles to finally accomplish their goals.

5. Features of the innovation:

SWABK aims to develop three elements which are the curriculum development, the instruction, and the evaluation as follows.

1. Curriculum development: Curriculum is designed to be flexible to the local and global society around students. Curriculum is meaningful and related to students. Thai subject is integrated into other subjects. Collaborative learning is promoted to develop the expected characteristics “SWABK” which are seeking challenging situations, welcoming feedback and criticism, being a cognitive thinker, and knowing what to do when facing uncertain situations. The ways of practices are as follows.

1.1 Identify learning outcomes aligning with the need of Thai and global society and promoting the characteristic of seeking challenging situations. Students are courageous to stepping out of their comfort zone to experience the un-experiences and to enjoy the challenge.

1.2 Identify learning outcomes aligning with the need of Thai and global society and promoting the characteristic of welcoming feedback and criticism to adjust and improve their work, and finally accomplishing the goal.

1.3 Identify learning outcomes aligning with the need of Thai and global society and promoting the characteristic of being a cognitive thinker who is able to connect the knowledge s/he knows to new knowledge that leads to thorough understanding and beneficial application.

1.4 Identify learning outcomes aligning with the need of Thai and global society and promoting the characteristic of knowing what to do when facing uncertain situations. Students are able to overcome hurdles and obstacles, finally solve problem and accomplish their goals.

1.5 Designing learning units by integrating Thai language and culture into global situations and promoting the characteristic of seeking challenging situations. Units of study are relative to real-world issues and meaningful to students that stimulate students to further study and offer solutions to problems using knowledge from various subjects and skills.

1.6 Designing learning units by integrating Thai language and culture into global situations and promoting the characteristic of welcoming feedback and criticism. The units of study highlight collaboration and creation of knowledge which later presented to the class for feedback and suggestions to further improve the work as expected.

1.7 Designing learning units by integrating Thai language and culture into global situations and promoting the characteristic of being a cognitive thinker who connect new knowledge to what they have already known into thorough understanding and finally create completed work.

1.8 Designing learning units by integrating Thai language and culture into global situations and promoting the characteristic of knowing what to do when facing uncertain situations. Units are designed for students to experience hurdles and obstacles so that they learn strategies to solve problems and finally reach the goals.

2. Instruction is to design learning experiences to associate students with content, teacher, peers and community at their convenient time beyond classroom setting. The ways of practices are as follows.

2.1 Constructing learning tools and materials to be accessible anytime and anywhere and promoting the characteristic of seeking challenging situations. Students are encouraged to step out of their comfort zone, to find problem surrounding them locally and globally including problems that have not yet existed but possibly to happen. Problem finding would enhance student's intellectual and visionary.

2.2 Constructing learning tools and materials to be accessible anytime and anywhere and promoting the characteristic of welcoming feedback and criticism. Students are provided with spaces to give and receive feedback or criticism in physical and virtual classroom, and in synchronous and asynchronous ways at their convenient time.

2.3 Constructing learning tools and materials to be accessible anytime and anywhere and promoting the characteristic of being a cognitive thinker. Learning activity stimulates students to identify problem, study related information, discuss

finding, evaluate finding, identify solutions, propose solutions, and evaluate the learning.

2.4 Constructing learning tools and materials to be accessible anytime and anywhere and promoting the characteristic of knowing what to do when facing uncertain situations. Learning materials structure learning activity that leads to solving problems with principles as follows; identify problems from information at hands, identify things that already know, identify what can help to solve the problems, plan the most possible ways to solve the problems, select the best way, minister as indicated in the plan selected, and promptly select another plan if the current plan is ineffective. After the accomplishment, reflection is deployed to evaluate the lesson learned and lesson to be learned.

3. Evaluation is conducted in various ways to assess student's learning according to their proficiency level in three ways. Assessment for learning to inform where the learning is. Teacher is then able to adjust learning activity to meet learner's needs. Assessment as learning to reflect on self or their own performance in order to improve the learning. Students regularly perform self-reflecting to adjust their learning plan to meet their learning goal or expected outcomes. Assessment of learning to make an impact. Student's contribution or creation is assessed to showcase what they can create with content or knowledge they have learned. The ways of practices are as follows.

3.1 Utilizing the curriculum evaluation's result to further develop learner to be ready for the future with characteristic of seeking challenging situation. Assessment happens in three ways; assessment for learning, assessment as learning, and assessment of learning. The assessment of learning focuses highly on new learning outcomes or knowledge creation that has yet been done, students place themselves out of the comfort zone.

3.2 Utilizing the curriculum evaluation's result to further develop learner to be ready for the future with characteristic of welcoming feedback and criticism. Assessment happens in three ways; assessment for learning, assessment as learning, and assessment of learning. Process of learning is examined while learning and at the end of the learning that includes continually practice of giving and receiving feedback which eventually becomes a norm in learning.

3.3 Utilizing the curriculum evaluation's result to further develop learner to be ready for the future with characteristic of being a cognitive thinker. Assessment happens in three ways; assessment for learning, assessment as learning, and assessment of learning. The assessment of learning focuses highly on knowledge creation derived from critical thinking and problem-solving skills.

3.4 Utilizing the curriculum evaluation's result to further develop learner to be ready for the future with characteristic of knowing what to do when facing uncertain situations. Learning activity promoting creative thinking, brainstorming, reflection, thinking outside the box is examined. Teachers are to provide learning activity to encourage problem-solved thinking and value solutions to problems. Teachers ask open-ended questions to stimulate critical thinking. Teacher acts as an observer while students are working collaboratively through argumentative discussions, exchanging ideas for solutions to promote learning atmosphere with freedom of thoughts. Teacher is a role model of being a problem solver to unexpected situations, and of being friended to failure as a part of learning journey.

6. Implementation of innovation

6.1 In policy level: Formulate a working committee consisting of Thai Headmaster or Headmistress, Thai Head Department or Thai Coordinator, teacher representative from each division (early year, elementary, middle school, and high school).

6.1.1 Curriculum Development:

1) Examine the current curriculum of the Thai language and culture program whether it contains the following; flexible and current to Thai and global situations, relative and meaningful to students, integrated into other subject areas, promoting collaboration, emphasizing characteristics of SWABK (seeking challenging situations, welcoming feedback and criticism, being a cognitive thinker, and knowing what to do when facing uncertain situations).

2) The committee collects weaknesses to guide crafting solutions in policy level.

3) Pilot the use of curriculum development's policy to promote the expected characteristics (SWABK).

4) Evaluate the use of curriculum development's policy for success and areas needed improvement to further implement the policy across the school.

6.1.2 Instruction:

1) Examine learning activity, learning tools and materials whether it contains the following; providing opportunities for students to interact with content, with peers, with teacher, and with community at their convenient time beyond the physical classroom, highly emphasizing on convenient access to learning anytime and anywhere.

2) The committee collects weaknesses to guide crafting policy and practices to support teachers in designing learning activity and creating learning

materials promoting expected characteristics that enable students to access learning anytime anywhere.

3) Pilot the policy of constructing learning activity and materials to be accessible to students anytime and anywhere.

4) Evaluate the use of instruction's policy for success and areas needed improvement to further implement the policy across the school.

6.1.3 Evaluation:

1) Examine the variety of assessment types, frequency of assessment, and whether it assesses the expected agile learner characteristics.

2) The committee collects weaknesses to guide crafting policy and practices to support teachers in designing assessment to serve the differences of individual learning needs and the expected characteristics.

3) Pilot the policy that highly emphasizes on the differences of individual learning needs and the expected characteristics.

4) Evaluate the use of evaluation's policy for success and areas needed improvement to further implement the policy across the school.

6.2 In operational level: The opened communication and involvement of non-committee members are crucial to the success of the implementation. Non-committee members are continually informed and able to provide inputs starting at the policy level in order to engage them in transparency of decision-making process. Therefore, the policy and the practices are acknowledged, accepted and led to full cooperation to improve student's learning with expected characteristics. The operational committee of each level is formed and included every teacher.

6.2.1 Curriculum development:

1) The committee sets the parameter and timeline for developing the curriculum that is measurable.

2) The committee outlines the plan to develop curriculum considering these guidelines; within student's interests, current and timely to Thai and global society, integration of other subjects, aligning with the learning outcomes stated in the OPEC's curriculum (Office of the Private Education Commission), and explicitly identifying the expected characteristics.

3) Examine the feasibility of the curriculum

4) Pilot the use of developed curriculum

5) Evaluate the use of the curriculum, adjust during its use, and evaluate after the use by teachers and students for further improvement that promotes the expected characteristics: seeking challenging situations, welcoming feedback and

criticism, being a cognitive thinker, and knowing what to do when facing uncertain situations.

6.2.2 Instruction:

1) Schools provide technology needed for teachers to construct learning materials and design learning activity that serve student's interaction with content, with peers, with teacher, and with community anytime and anywhere.

2) Schools provide professional development on new applications, platform or technology that would be beneficial to construct learning materials and design learning activity with 24/7 access.

3) Teachers construct learning material and design learning activity that serve the differences of individual's learning needs, align with learning outcomes, and promote the expected characteristics SWABK (seeking challenging situations, welcoming feedback and criticism, being a cognitive thinker, and knowing what to do when facing uncertain situations).

4) Teachers design learning activity that encourages student's collaboration to develop expected agile learner characteristics; seeking challenging situations, welcoming feedback and criticism, being a cognitive thinker, and knowing what to do when facing uncertain situations.

6.2.3 Evaluation

1) Teachers design various types of assessment to serve the differences of student's learning needs. The assessment is to measure individual progress.

2) Teachers create opportunities for students to self-reflect and peer-assess in order to practice giving and receiving feedback and criticism, and to use received feedback to further improve the learning or the work.

3) Teachers and students collaboratively set the criteria for assessment indicating expected characteristics: seeking challenging situations, welcoming feedback and criticism, being a cognitive thinker, and knowing what to do when facing uncertain situations.

4) Assessment happens anytime; before, during and after the learning so that the unknown will lead to further study and fulfill the knowledge gap.

5) Assessment focuses on the result of the knowledge not the knowledge itself.

6) Students have opportunities to assess teachers for further improvement to be an effective learning facilitator.

7. Structure and Infographic of the Innovation

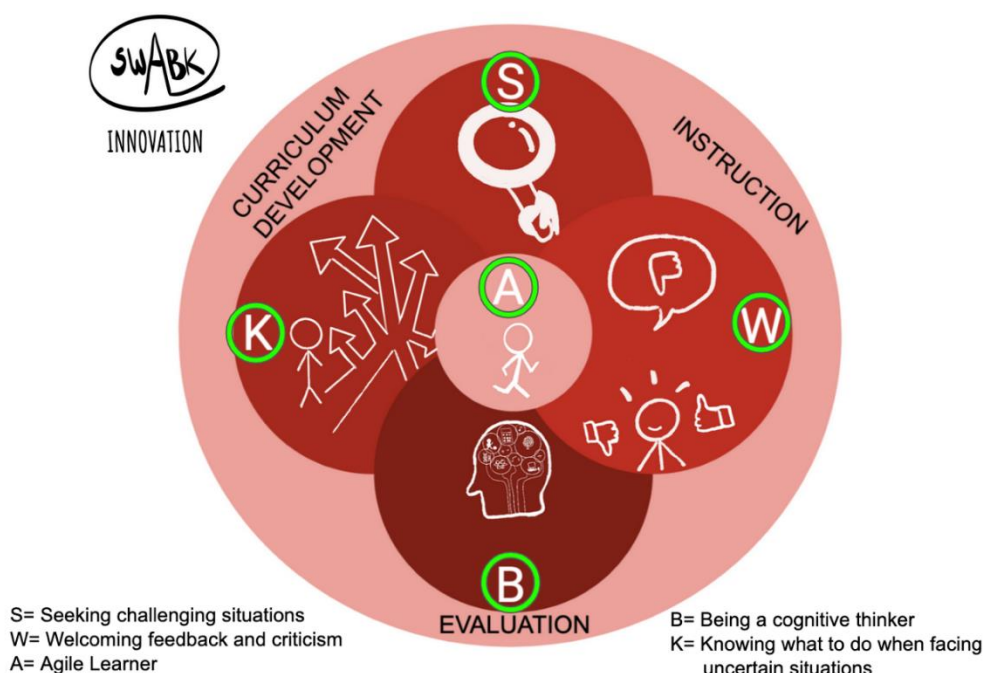


Figure 10: Structure and Infographic of Innovation “SWABK”

4.3.5 Suitability and possibility of (2nd draft) Management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics

(The process of management innovation development, Phase 4: Demonstrate feasibility)

The first draft of the innovation has been revised and adjusted according to the experts' and stakeholders' feedback and opinions, and resulted in the 2nd draft of the innovation. The 2nd draft of the innovation is later evaluated its suitability and possibility by 15 individual stakeholders.

The table 4-17 shows that the stakeholders who evaluate the suitability and possibility of the second innovation's draft are from schools that use different curriculum as follows; four people from the British curriculum schools, four people from American curriculum schools, two people from IB curriculum schools and five people from other national curriculum schools. Four people out of the fifteen are the Thai headmaster or headmistress. Three people serve as the head of Thai department whom also teach some classes as well. The rest are teachers from all grade levels.

Table 4-17: Demographic data of the stakeholders evaluating innovation's suitability and possibility

Informants		British Curriculum	American Curriculum	International Baccalaureate Curriculum	Other Curriculum (i.e., French)	Total (N=15)	
						Number	Percentage
Demographic Data							
Gender	Male	1	1	0	1	3	20
	Female	3	3	2	4	12	80
Age	Below 30	0	0	0	0	0	0
	30-40	1	1	0	1	3	20
	41-50	2	3	2	3	10	66.67
	51-60	1	0	0	1	2	13.33
	61 up	0	0	0	0	0	0
Highest level of education	Bachelor's Degree	0	0	0	1	1	6.66
	Master's Degree	2	2	2	3	10	66.67
	Doctorate Degree	2	2	0	0	4	26.67
Current position	Thai Headmaster/Headmistress	3	1	0	0	4	26.67
	Thai Head department	0	2	1	0	3	20
	Thai Teacher in early year	0	0	0	1	1	6.66
	Thai Teacher in Middle school	0	0	0	2	2	13.33
	Thai Teacher in High School	1	0	0	2	3	20
	Thai Teacher in Elementary	0	0	1	0	1	6.66
	Thai Teacher in various grade levels	0	1	0	0	1	6.66
Total number		4	4	2	5	15	
Total percentage		26.67	26.67	13.33	33.33	100	

Table 4-18: The suitability and possibility of the (2nd draft) management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics

SWABK Innovation	Suitability			Possibility		
	\bar{x}	S.D.	Result	\bar{x}	S.D.	Result
1. Innovation Title: “SWABK”	4.27	0.594	high	4.33	0.488	high
2. Principles and Rationale of the innovation	4.87	0.352	highest	4.67	0.488	highest
3. Objective of the innovation	4.93	0.258	highest	4.73	0.458	highest
4. Result of the innovation	4.73	0.458	highest	4.53	0.516	highest
5. Features of the innovation in the element of curriculum development	4.73	0.458	highest	4.67	0.488	highest
6. Features of the innovation in the element of instruction	4.87	0.352	highest	4.73	0.458	highest
7. Features of the innovation in the element of evaluation	4.73	0.458	highest	4.53	0.640	highest
8. Implementation in the policy level	4.87	0.352	highest	4.73	0.458	highest
9. Implementation in the operational level	4.80	0.414	highest	4.73	0.458	highest
10. Structure and infographic of the innovation	4.60	0.632	highest	4.60	0.507	highest

The result in table 4-18 shows that the innovation title has high suitability ($\bar{x}=4.27$) and high possibility ($\bar{x}=4.33$). The principles and rationale of the innovation has the highest suitability ($\bar{x}=4.87$) and the highest possibility ($\bar{x}=4.67$). The objective of the innovation has the highest suitability ($\bar{x}=4.93$) and the highest possibility ($\bar{x}=4.73$). The result of the innovation has the highest suitability ($\bar{x}=4.73$) and the highest possibility ($\bar{x}=4.53$). The features of the innovation in the element of curriculum development has the highest suitability ($\bar{x}=4.73$) and the highest possibility ($\bar{x}=4.67$). The features of the innovation in the element of instruction has the highest suitability ($\bar{x}=4.87$) and the highest possibility ($\bar{x}=4.73$). The features of the innovation in the element of evaluation has the highest suitability ($\bar{x}=4.73$) and the highest possibility ($\bar{x}=4.53$). The implementation in the policy level has the highest suitability ($\bar{x}=4.87$) and the highest possibility ($\bar{x}=4.73$). The implementation in the operational level has the highest suitability ($\bar{x}=4.80$) and the highest possibility ($\bar{x}=4.73$). The structure and infographic of the innovation has the highest suitability ($\bar{x}=4.60$) and the highest possibility ($\bar{x}=4.60$).

In the element of curriculum development finds that designing flexible curriculum, current to local and global situations, meaningful and relevant to students,

integrating other subjects to Thai, promoting collaboration and expected characteristics show the suitability and possibility at the highest level ($\bar{x}=4.73$ and $\bar{x}=4.67$) respectively.

In the element of instruction finds that designing learning activity that allows students' interaction with content, teacher, peers, and community at their own pace and conveniences show the suitability and possibility at the highest level ($\bar{x}=4.73$ and $\bar{x}=4.53$) respectively.

In the element of evaluation finds that providing variety of assessment to serve different learning needs, teacher using the assessment data to adjust learning activity to reach learning goals, assessment for, as, and of learning, students' self-reflection and peer assessment show the suitability and possibility at the highest level ($\bar{x}=4.87$ and $\bar{x}=4.73$) respectively.

The stakeholders have suggested for improvement as follows.

1. The title of innovation has three folds of comments; first group said the title is short and easy to remember, the second group said the title is difficult to say and hard to remember, and the third group said it sounds odd but interesting.
2. The principles and rationales of the innovation are precisely stated, suitable and aligned with the title and enable to visualize its elements. One comment was whether this innovation can be implemented in other subjects.
3. The objective of the innovation is clearly stated and aligned with the principles and rationales. One comment was on the word choice, it is slightly different between listening to feedback and accepting feedback.
4. The result of the innovation covers all three elements of the academic management; curriculum development, instruction, and evaluation.
5. The features of the innovation in the area of curriculum development is suitable to local and is flexibly adjusted to Thailand's and the world's situations. The integration to other subjects and relation to students would lead students to make connections and value the learning.
6. The features of the innovation in the area of instruction is clearly stated and stimulates students to be reflective learner in order for self-improvement.
7. The features of the innovation in the area of evaluation is suitable, some correction on word choices to limit redundancy. One point to consider is to define "the future world".
8. The implementation in the policy and operational level are clearly stated and possible for practices.
9. The structure and infographic of the innovation needs some slight adjustments; the image representing S is unclear, add the arrows among curriculum development, instruction and evaluation to address its relations, use a smoother

color instead of the green circle around each letter, and add the innovation's title in the inner circle.

4.3.6 Management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics (Completed Innovation)

The comments and suggestions for improvement from the stakeholders have been used to finalize the completed innovation for the Thai language and culture program management of international schools in Thailand based on the concept of agile learner characteristics titled "SWABK". The differences between second draft and final draft are as follows. The infographic with the innovation title "SWABK" in the central circle was replaced with "Agile Learner" using a bigger font size on "A" so that it looked as a part of the title "SWABK". The positions of each characteristic in the infographic were rearranged by having "S" at the far left so that it could be read easier as "SWABK". The green rings around each characteristic's abbreviation were removed to eliminate the contrast. The image for the characteristic of seeking challenging situations or S as the abbreviation was redrawn to better represent its meaning.

1. Innovation Title:

"SWABK"

The Management Innovation for International Schools' Thai Program

2. Principles and Rationales:

The rapid change of the world today has created a question whether what schools teach students today, it would still be useful for students to live successful life in the future. Also, the rise of international schools in Thailand has generated another question on the effectiveness of the Thai language and culture program in international schools that would definitely affect the lives of Thailand's future leaders. Students who study in international schools are from well to do family judging by the tuition's fee. Therefore, it is fair to say they will become our future leader in economic, political or society. Thai language and culture program has an important role to pave the way for stability for our students in the future, and to serve as a tool to instill characteristics needed to live life successfully in the future. Agile learner characteristics are believed to shape and prepare our students to be ready for the future.

“SWABK” is the management innovation for the Thai language and culture program based on the concept of agile learner characteristics. It emphasizes the academic management consisting of curriculum development, instruction, and evaluation. This innovation was developed under four phases of innovation development as follows.

1. Define needs for innovation by studying the current and the desired states
2. Discover ideas to formulate innovation by studying best practices and quantitative and qualitative content analysis
3. Develop innovation by brainstorming of experts during the focus group
4. Demonstrate feasibility of innovation

The study of current and desirable states of the Thai language and culture program management based on the concept of agile learner characteristics found that the characteristics with the highest need are Seeking challenging situation, Being a cognitive thinker, Knowing what to do when facing uncertain situations, Welcoming feedback and criticism.

The study of best practices to promote agile learner characteristics indicates that curriculum need to be interdisciplinary and meaningful. Students are parts of learning process, and develop deeper and critical thinking, and skills needed beyond classroom. Learning enhances cognitive thinking, communication, creativity and collaboration.

The data above including suggestions from the experts and stakeholders have brought into the innovation development for the Thai language and culture program management according to the concept of agile learner characteristics titled “SWABK”. SWABK derives from five characteristics which are Seeking challenging situations, Welcoming feedback and criticism, Being a cognitive thinker, and Knowing what to do when facing uncertain situations. This innovation would enhance the effectiveness of the academic management of the Thai language and culture program and also promote and develop the characteristics that students need to face with the uncertain world in the future.

3. Objective of the innovation:

To develop the Thai language and culture program management comprised of the curriculum development, the instruction, and the evaluation that promote the following characteristics within students; Seeking challenging situations, Welcoming feedback and criticism, Agile learner, Being a cognitive thinker, and Knowing what to do when facing uncertain situations.

4. The result of the innovation:

SWABK aims to develop three elements which are the curriculum development, the instruction, and the evaluation that enable international schools to develop its management that leads to promoting the future-ready characteristics as follows.

S = Seeking challenging situations: Students are courageous to stepping out of their comfort zone to explore and try new experiences which lead to constantly new learning.

W = Welcoming feedback and criticism: Students practice giving constructive criticism and critically listen to other's criticism to refine their work, their ways of learning and practices to achieve their set goals.

B = Being a cognitive thinker: Students are able to think critically, connect and apply what they have already known to new knowledge to benefit their current work.

K = Knowing what to do when facing uncertain situations: Students calmly figure out ways to overcome hurdles and obstacles to finally accomplish their goals.

5. Features of the innovation:

SWABK aims to develop three elements which are the curriculum development, the instruction, and the evaluation as follows.

1. Curriculum development: Curriculum is designed to be flexible to the local and global society around students. Curriculum is meaningful and related to students. Thai subject is integrated into other subjects. Collaborative learning is promoted to develop the expected characteristics "SWABK" which are seeking challenging situations, welcoming feedback and criticism, being a cognitive thinker, and knowing what to do when facing uncertain situations. The ways of practices are as follows.

1.1 Identify learning outcomes aligning with the need of Thai and global society and promoting the characteristic of seeking challenging situations. Students are courageous to stepping out of their comfort zone to experience the un-experiences and to enjoy the challenge.

1.2 Identify learning outcomes aligning with the need of Thai and global society and promoting the characteristic of welcoming feedback and criticism to adjust and improve their work, and finally accomplishing the goal.

1.3 Identify learning outcomes aligning with the need of Thai and global society and promoting the characteristic of being a cognitive thinker who is able to connect the

knowledge s/he knows to new knowledge that leads to thorough understanding and beneficial application.

1.4 Identify learning outcomes aligning with the need of Thai and global society and promoting the characteristic of knowing what to do when facing uncertain situations. Students are able to overcome hurdles and obstacles, finally solve problem and accomplish their goals.

1.5 Designing learning units by integrating Thai language and culture into global situations and promoting the characteristic of seeking challenging situations. Units of study are relative to real-world issues and meaningful to students that stimulate students to further study and offer solutions to problems using knowledge from various subjects and skills.

1.6 Designing learning units by integrating Thai language and culture into global situations and promoting the characteristic of welcoming feedback and criticism. The units of study highlight collaboration and creation of knowledge which later presented to the class for feedback and suggestions to further improve the work as expected.

1.7 Designing learning units by integrating Thai language and culture into global situations and promoting the characteristic of being a cognitive thinker who connect new knowledge to what they have already known into thorough understanding and finally create completed work.

1.8 Designing learning units by integrating Thai language and culture into global situations and promoting the characteristic of knowing what to do when facing uncertain situations. Units are designed for students to experience hurdles and obstacles so that they learn strategies to solve problems and finally reach the goals.

2. Instruction is to design learning experiences to associate students with content, teacher, peers and community at their convenient time beyond classroom setting. The ways of practices are as follows.

2.1 Constructing learning tools and materials to be accessible anytime and anywhere and promoting the characteristic of seeking challenging situations. Students are encouraged to step out of their comfort zone, to find problem surrounding them locally and globally including problems that have not yet existed but possibly to happen. Problem finding would enhance student's intellectual and visionary.

2.2 Constructing learning tools and materials to be accessible anytime and anywhere and promoting the characteristic of welcoming feedback and criticism. Students are provided with spaces to give and receive feedback or criticism in physical and virtual classroom, and in synchronous and asynchronous ways at their convenient time.

2.3 Constructing learning tools and materials to be accessible anytime and anywhere and promoting the characteristic of being a cognitive thinker. Learning activity stimulates students to identify problem, study related information, discuss finding, evaluate finding, identify solutions, propose solutions, and evaluate the learning.

2.4 Constructing learning tools and materials to be accessible anytime and anywhere and promoting the characteristic of knowing what to do when facing uncertain situations. Learning materials structure learning activity that leads to solving problems with principles as follows; identify problems from information at hands, identify things that already know, identify what can help to solve the problems, plan the most possible ways to solve the problems, select the best way, minister as indicated in the plan selected, and promptly select another plan if the current plan is ineffective. After the accomplishment, reflection is deployed to evaluate the lesson learned and lesson to be learned.

3. Evaluation is conducted in various ways to assess student's learning according to their proficiency level in three ways. Assessment for learning to inform where the learning is. Teacher is then able to adjust learning activity to meet learner's needs. Assessment as learning to reflect on self or their own performance in order to improve the learning. Students regularly perform self-reflecting to adjust their learning plan to meet their learning goal or expected outcomes. Assessment of learning to make an impact. Student's contribution or creation is assessed to showcase what they can create with content or knowledge they have learned. The ways of practices are as follows.

3.1 Utilizing the curriculum evaluation's result to further develop learner to be ready for the future with characteristic of seeking challenging situation. Assessment happens in three ways; assessment for learning, assessment as learning, and assessment of learning. The assessment of learning focuses highly on new learning outcomes or knowledge creation that has yet been done, students place themselves out of the comfort zone.

3.2 Utilizing the curriculum evaluation's result to further develop learner to be ready for the future with characteristic of welcoming feedback and criticism. Assessment happens in three ways; assessment for learning, assessment as learning, and assessment of learning. Process of learning is examined while learning and at the end of the learning that includes continually practice of giving and receiving feedback which eventually becomes a norm in learning.

3.3 Utilizing the curriculum evaluation's result to further develop learner to be ready for the future with characteristic of being a cognitive thinker. Assessment happens

in three ways; assessment for learning, assessment as learning, and assessment of learning. The assessment of learning focuses highly on knowledge creation derived from critical thinking and problem-solving skills.

3.4 Utilizing the curriculum evaluation's result to further develop learner to be ready for the future with characteristic of knowing what to do when facing uncertain situations. Learning activity promoting creative thinking, brainstorming, reflection, thinking outside the box is examined. Teacher must provide learning activity to encourage problem-solved thinking and value solutions to problems. Teacher asks open-ended questions to stimulate critical thinking. Teacher acts as an observer while students are working collaboratively through argumentative discussions, exchanging ideas for solutions to promote learning atmosphere with freedom of thoughts. Teacher is a role model of being a problem solver to unexpected situations, and of being friendly to failure as a part of learning journey.

6. Implementation of innovation

6.1 In policy level: Formulate a working committee consists of Thai Headmaster or Headmistress, Thai Head Department or Thai Coordinator, teacher representative from each division (early year, elementary, middle school, and high school)

6.1.1 Curriculum Development:

1) Examine the current curriculum of the Thai language and culture program whether it contains the following; flexible and current to Thai and global situations, relative and meaningful to students, integrated into other subject areas, promoting collaboration, emphasizing characteristics of SWABK (seeking challenging situations, welcoming feedback and criticism, agile learner, being a cognitive thinker, and knowing what to do when facing uncertain situations).

2) The committee collects weaknesses to guide crafting solutions in policy level.

3) Pilot the use of curriculum development's policy to promote the expected characteristics (SWABK).

4) Evaluate the use of curriculum development's policy for success and areas needed improvement to further implement the policy across the school.

6.1.2 Instruction:

1) Examine learning activity, learning tools and materials whether it contains the following; providing opportunities for students to interact with content, with peers, with teacher, and with community at their convenient time beyond the physical classroom, highly emphasizing on convenient access to learning anytime and anywhere.

2) The committee collects weaknesses to guide crafting policy and practices to support teachers in designing learning activity and creating learning materials

promoting expected characteristics that enable student to access learning anytime anywhere.

3) Pilot the policy of constructing learning activity and materials to be accessible to students anytime and anywhere.

4) Evaluate the use of instruction's policy for success and areas needed improvement to further implement the policy across the school.

6.1.3 Evaluation:

1) Examine the variety of assessment types, frequency of assessment, and whether it assesses the expected agile learner characteristics.

2) The committee collects weaknesses to guide crafting policy and practices to support teachers in designing assessment to serve the differences of individual learning needs and the expected characteristics.

3) Pilot the policy that highly emphasizes on the differences of individual learning needs and the expected characteristics.

4) Evaluate the use of evaluation's policy for success and areas needed improvement to further implement the policy across the school.

6.2 In operational level: The opened communication and involvement of non-committee members are crucial to the success of the implementation. Non-committee members are continually informed and able to provide inputs starting at the policy level in order to engage them in transparency of decision-making process. Therefore, the policy and the practices are acknowledged, accepted and led to full cooperation to improve student's learning with expected characteristics. The operational committee of each level is formed and included every teacher.

6.2.1 Curriculum development:

1) The committee sets the parameter and timeline for developing the curriculum that is measurable.

2) The committee outlines the plan to develop curriculum considering these guidelines; within student's interests, current and timely to Thai and global society, integration of other subjects, aligning with the learning outcomes stated in the OPEC's curriculum (Office of the Private Education Commission), and explicitly identifying the expected characteristics.

3) Examine the feasibility and possibility of the curriculum

4) Pilot the use of developed curriculum

5) Evaluate the use of the curriculum, adjust during its use, and evaluate after the use by teachers and students to further improvement that promotes the expected characteristics.

6.2.2 Instruction

1) Schools provide technology needed for teachers to construct learning materials and design learning activity that serve student's interaction with content, with peers, with teacher, and with community anytime and anywhere.

2) Schools provide professional development on new applications, platform or technology that would be beneficial to construct learning materials and design learning activity with 24/7 access.

3) Teachers construct learning material and design learning activity that serve the differences of individual's learning needs, align with learning outcomes, and promote the expected characteristics SWABK.

4) Teachers design learning activity that encourages student's collaboration to develop expected agile learner characteristics; being a cognitive thinker, welcoming feedback and criticism, seeking challenging situations, and knowing what to do when facing uncertain situations.

6.2.3 Evaluation

1) Teachers design various types of assessment to serve the differences of student's learning needs. The assessment is to measure individual progress.

2) Teachers create opportunities for students to self-reflect and peer-assess in order to practice giving and receiving feedback and criticism, and to use received feedback to further improve the learning or the work.

3) Teachers and students collaboratively set the criteria for assessment indicating expected characteristics.

4) Assessment happens anytime; before, during and after the class so that the unknown will lead to further study and fulfill the knowledge gap.

5) Assessment focuses on the result of the knowledge not the knowledge itself.

6) Students have opportunities to assess teachers for further improvement to be an effective learning facilitator.

7. Structure and Infographic of the Innovation

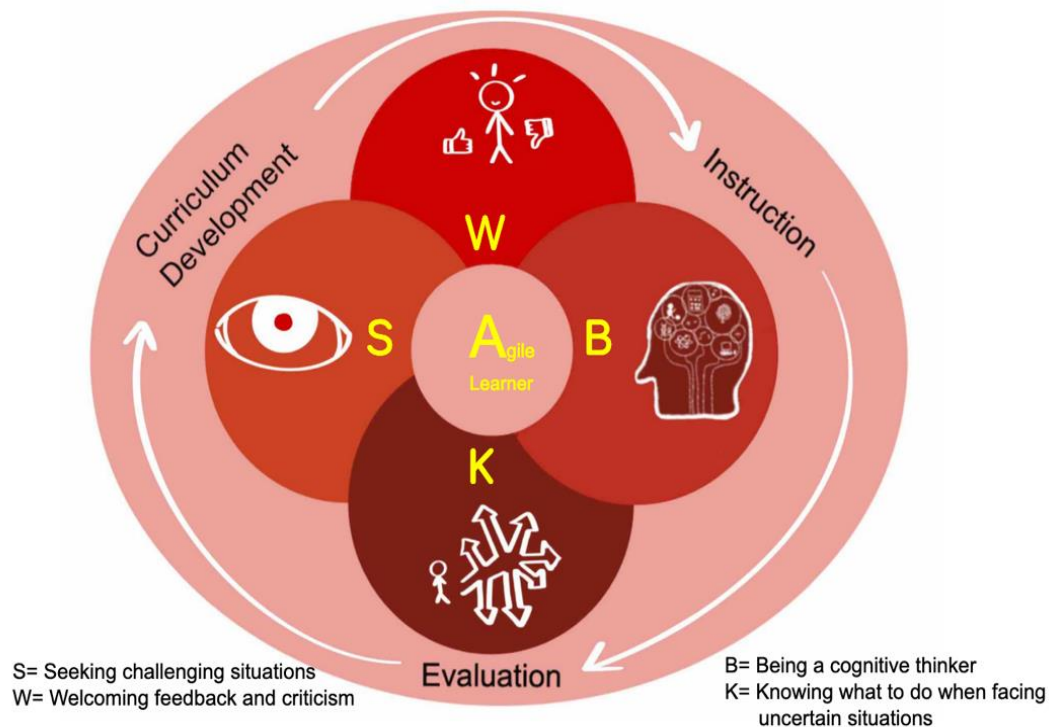


Figure 11: Structure and Infographic of Completed Innovation "SWABK"



Chapter 5

Summary of Research Findings, Discussion and Recommendations

The objectives of this research were to 1) study the conceptual framework for the Thai language and culture program management of international schools in Thailand and the agile learner characteristics, 2) examine priority need to develop innovation for the Thai language and culture program management of international schools in Thailand, and 3) develop management innovation for the Thai language and culture program management of international school in Thailand based on the concept of agile learner characteristics.

The research population of the research study included 128 international schools under the membership of the International School Association of Thailand (ISAT) and under the supervision of the Office of the Private Education Commission (OPEC) in the academic year 2019-2020. The sample population included 97 schools received an electronic mail of invitation to participate in answering the electronic survey questionnaire. The total of 71 schools (73.20%) responded to the survey, the participants include a Thai Principal, a Thai Headmaster/Headmistress, a Thai Head of Department, a Thai Coordinator, or a Thai teacher from each division, the total of informants are 71 people.

The research instruments included a survey questionnaire conducted in the google form and an evaluation form for the draft of management innovation. The quantitative data analysis of the questionnaire uses the descriptive statistics to identify frequency distribution, percentage, means and standard deviation (S.D.) and the PNI_{modified} . The qualitative data analysis uses the content analysis.

In this chapter, the summary of research findings, discussion and recommendations include the following details.

5.1 Summary of Research Findings

5.1.1 The conceptual framework of Thai language and culture program management for international schools in Thailand and agile learner characteristics

The study of literature, researches, and theories related to the Thai language and culture program management and the agile learner characteristics have gone through a group of five experts' evaluation twice. The experts agreed on the suitability of the framework and provide suggestions on grouping the characteristics based on Bloom taxonomy, and defining the operational definition of terms to be more explicit. The conceptual framework can be concluded as follows.

- 1) The conceptual framework for the Thai language and culture program consists of curriculum development, instruction, and evaluation
- 2) The conceptual framework for the agile learner characteristics consists of characteristics in three domains and eight sub-characteristics in total as following; 1) Cognitive Domain 1.1) being goal oriented, 1.2) being a cognitive thinker, 2) Affective Domain 2.1) being eager and curious to learn new ideas, 2.2) welcoming feedback and criticism, 3) Psychomotor Domain 3.1) seeking challenging situations, 3.2) knowing what to do when facing uncertain situations, 3.3) reacting promptly to change and ineffective strategies, and 3.4) having highly effective interpersonal skills.
- 3) The conceptual framework for the innovation development consists of four phases; 1) define need for innovation, 2) discover ideas to formulate innovation, 3) develop innovation, and 4) demonstrate feasibility

5.1.2 Needs to develop the Thai language and culture program management for international schools in Thailand based on the concept of agile learner characteristics

The current and desirable states were studied in order to analyze and prioritize needs to develop the Thai language and culture program management of international schools in Thailand based on the concept of agile learner characteristics. The finding showed the following.

5.1.2.1 The overall current state of the Thai language and culture program management based on the concept of agile learner characteristics is at the high level (\bar{x} = 3.63). Considering each factor finds that the evaluation has the highest mean value (\bar{x} = 3.65), following with the instruction at the high level (\bar{x} = 3.64), and the curriculum development with the lowest mean value at the high level (\bar{x} = 3.61).

The overall desirable state of the Thai language and culture program management according to the concept of agile learner characteristics is at the highest level (\bar{x} = 4.51). Considering each factor finds that the instruction has the highest mean value at the highest level (\bar{x} = 4.53), following with the curriculum development at the highest level (\bar{x} = 4.51), and the evaluation with the lowest mean value at the high level (\bar{x} = 4.49).

The need analysis indicates that the curriculum development is needed to be further developed with the highest $PNI_{\text{modified}} = 0.249$. The second highest is the instruction with the $PNI_{\text{modified}} = 0.245$, and the evaluation comes in last with the $PNI_{\text{modified}} = 0.230$.

5.1.2.2 In the element of curriculum development, the overall current state of the Thai language and culture program management based on the concept of agile learner characteristics is at high level. Considering each factor finds that designing learning units by integrating Thai language and culture into global situation has the highest mean value at the high level ($\bar{x}=3.62$). The characteristics in affective domain show the highest mean value at the high level ($\bar{x}=3.66$), following with the characteristics in psychomotor domain at the high level ($\bar{x}=3.62$), and the characteristics in the cognitive domain at the high level ($\bar{x}=3.59$).

The second order shows two factors. The first factor is identifying learning outcomes that align with the need of Thai and global society which is at the high level ($\bar{x}=3.61$). The characteristics in affective domain show the highest mean value at the high level ($\bar{x}=3.73$), following with the characteristics in the cognitive domain at the high level ($\bar{x}=3.58$), and the characteristics in the psychomotor domain at the high level ($\bar{x}=3.57$). The second factor is identifying learning standard basing on proficiency level which is also at the high level ($\bar{x}=3.61$). The characteristics in affective domain show the highest mean value at the high level ($\bar{x}=3.68$), following with the characteristics in the cognitive domain at the high level ($\bar{x}=3.61$), and the characteristics in the psychomotor domain at the high level ($\bar{x}=3.58$).

The overall desirable state of the Thai language and culture program management based on the concept of agile learner characteristics in the element of curriculum development is at the highest level ($\bar{x}=4.51$). Considering each factor finds that designing learning units by integrating Thai language and culture into global situation has the highest mean value at the highest level ($\bar{x}=4.52$). The characteristics in cognitive domain show the highest mean value at the high level ($\bar{x}=4.54$), following with the characteristics in the psychomotor domain at the high level ($\bar{x}=4.52$), and the characteristics in the affective domain at the high level ($\bar{x}=4.51$).

The second order is identifying learning outcomes that align with the need of Thai and global society at the highest level ($\bar{x}=4.51$). The characteristics in affective domain show the highest mean value at the highest level ($\bar{x}=4.53$), following with the characteristics in the psychomotor domain at the highest level ($\bar{x}=4.52$), and the characteristics in the cognitive domain at the highest level ($\bar{x}=4.48$).

The third and last order is identifying learning standard basing on proficiency level with the lowest mean value at the highest level ($\bar{x}=4.50$). The characteristics in affective domain show the highest mean value at the highest level ($\bar{x}=4.55$), following with the characteristics in the psychomotor domain at the highest level ($\bar{x}=4.51$), and the characteristics in the cognitive domain at the high level ($\bar{x}=4.46$).

The need analysis indicates that identifying learning outcomes aligning with the needs of Thai and global society of characteristics in psychomotor domain is needed to be further developed with the highest $PNI_{\text{modified}} = 0.249$. Furthermore, designing learning units by integrating Thai language and culture into global situation of characteristics in cognitive domain is also needed to be further developed with the same highest $PNI_{\text{modified}} = 0.249$. Identifying learning standard basing on proficiency shows the lowest $PNI_{\text{modified}} = 0.247$.

5.1.2.3 In the element of instruction, the overall current state of the Thai language and culture program management based on the concept of agile learner characteristics is at the high level. Considering each factor finds that identifying learning objectives aligning with learning outcomes has the highest mean value at the high level ($\bar{x} = 3.71$). The characteristics in affective domain show the highest mean value at the high level ($\bar{x} = 3.75$), following with the characteristics in the cognitive domain at the high level ($\bar{x} = 3.74$), and the characteristics in the psychomotor domain at the high level ($\bar{x} = 3.67$).

The second order is identifying assessment evidences suitably to each learner differences at the high level ($\bar{x} = 3.66$). The characteristics in cognitive and affective domains show the highest mean value at the high level ($\bar{x} = 3.69$). Lastly, the characteristics in the psychomotor domain are at the high level ($\bar{x} = 3.63$).

The third order is constructing authentic learning activities connecting to community and engaging learners at each proficiency level at the high level ($\bar{x} = 3.62$). The characteristics in affective domain show the highest mean value at the high level ($\bar{x} = 3.70$), following with the characteristics in psychomotor domain at the high level ($\bar{x} = 3.63$), and lastly the characteristics in cognitive domain at the high level ($\bar{x} = 3.53$).

The fourth and last order is constructing learning tools and materials to be accessible anytime and anywhere at the high level ($\bar{x} = 3.57$). The characteristics in affective domain show the highest mean value at the high level ($\bar{x} = 3.59$), following with the characteristics in psychomotor domain at the high level ($\bar{x} = 3.57$), and lastly the characteristics in cognitive domain at the high level ($\bar{x} = 3.55$).

The overall desirable state of the Thai language and culture program management based on the concept of agile learner characteristics in the element of instruction is from high to the highest level. Considering each factor finds that identifying learning objectives aligning with learning outcomes has the highest mean value at the highest level ($\bar{x} = 4.59$). The characteristics in the cognitive domain show the highest mean value at the highest level ($\bar{x} = 4.61$), following with the characteristics in

the affective domain at the highest level ($\bar{x}=4.60$), and the characteristics in the psychomotor domain at the highest level ($\bar{x}=4.57$).

The second order is constructing authentic learning activities connecting to community and engaging learners at each proficiency level at the highest level ($\bar{x}=4.54$). The characteristics in the affective domain show the highest mean value at the highest level ($\bar{x}=4.56$), following with the characteristics in the psychomotor domain at the highest level ($\bar{x}=4.55$), and the characteristics in the cognitive domain at the high level ($\bar{x}=4.49$).

The third order is constructing learning tools and materials to be accessible anytime and anywhere at the highest level ($\bar{x}=4.50$). The characteristics in the affective domain show the highest mean value at the highest level ($\bar{x}=4.54$), following with the characteristics in the cognitive and the psychomotor domains at the same high level ($\bar{x}=4.49$).

The fourth and last order is identifying assessment evidences suitably to each learner differences at the high level ($\bar{x}=4.49$). The characteristics in the affective domain show the highest mean value at the highest level ($\bar{x}=4.55$), following with the characteristics in the cognitive and the psychomotor domains at the same high level ($\bar{x}=4.49$, and $\bar{x}=4.49$) respectively.

The need analysis indicates that constructing learning tools and materials to be accessible anytime and anywhere with the characteristics in the cognitive and the affective domains are needed to be further developed with the same highest $PNI_{\text{modified}} = 0.265$. The characteristics in the psychomotor domain shows the lowest $PNI_{\text{modified}} = 0.258$.

The second highest $PNI_{\text{modified}} = 0.254$ is constructing authentic learning activities connecting to community and engaging learners at each proficiency level with the characteristics in the cognitive domain at the highest $PNI_{\text{modified}} = 0.272$. The characteristics in the psychomotor domain with the $PNI_{\text{modified}} = 0.253$, and the characteristics in the affective domain with the $PNI_{\text{modified}} = 0.232$ come second and last.

The third highest $PNI_{\text{modified}} = 0.237$ is identifying learning objectives aligning with learning outcomes with the characteristics in the psychomotor domain with the highest $PNI_{\text{modified}} = 0.245$. The characteristics in the cognitive domain with the $PNI_{\text{modified}} = 0.233$, and the characteristics in the affective domain with the $PNI_{\text{modified}} = 0.227$ come second and last.

The lowest $PNI_{\text{modified}} = 0.227$ is identifying assessment evidences suitably to each learner differences with the characteristics in the psychomotor domain with the highest $PNI_{\text{modified}} = 0.234$. The characteristics in the affective domain with the PNI_{modified}

=0.233, and the characteristics in the cognitive domain with the $PNI_{\text{modified}}=0.214$ come second and last.

5.1.2.4 In the element of evaluation, the overall current state of the Thai language and culture program management based on the concept of agile learner characteristics is at the high level. Considering each factor finds that examining learner's quality according to indicated learning outcomes has the highest mean value at the high level ($\bar{x}=3.69$). The characteristics in the cognitive domain show the highest mean value at the high level ($\bar{x}=3.73$), following with the characteristics in the cognitive and the psychomotor domain at the same high level ($\bar{x}=3.69$).

The second order is examining curriculum's suitability to Thai and global societies at the high level ($\bar{x}=3.66$). The characteristics in the cognitive domains show the highest mean value at the high level ($\bar{x}=3.74$), following with the characteristics in the affective domain at the high level ($\bar{x}=3.73$), and the characteristics in the psychomotor domain at the high level ($\bar{x}=3.63$).

The third order is examining the instructions reflecting on differences of each learner at the high level ($\bar{x}=3.64$). The characteristics in the affective domain show the highest mean value at the high level ($\bar{x}=3.70$), following with the characteristics in the cognitive domain at the high level ($\bar{x}=3.65$), and lastly the characteristics in the psychomotor domain at the high level ($\bar{x}=3.61$).

The fourth and last order is utilizing the curriculum evaluation's result to further develop learners to be ready for the future at the high level ($\bar{x}=3.59$). The characteristics in the affective domain show the highest mean value at the high level ($\bar{x}=3.61$), following with the characteristics in the psychomotor domain at the high level ($\bar{x}=3.60$), and lastly the characteristics in the cognitive domain at the high level ($\bar{x}=3.56$).

The overall desirable state of the Thai language and culture program management based on the concept of agile learner characteristics in the element of evaluation is from high to the highest level. Considering each factor finds that examining learner's quality according to indicated learning outcomes has the highest mean value at the highest level ($\bar{x}=4.52$). The characteristics in the affective domain show the highest mean value at the highest level ($\bar{x}=4.57$), following with the characteristics in the psychomotor domain at the highest level ($\bar{x}=4.53$), and the characteristics in the cognitive domain at the high level ($\bar{x}=4.46$).

The second order is examining the instructions reflecting on differences of each learner at the high level ($\bar{x}=4.49$). The characteristics in the affective domain show the highest mean value at the highest level ($\bar{x}=4.53$), following with the characteristics in

the cognitive domain at the high level ($\bar{x} = 4.49$), and the characteristics in the psychomotor domain at the high level ($\bar{x} = 4.48$).

The third order is examining curriculum's suitability to Thai and global societies at the high level ($\bar{x} = 4.48$). The characteristics in the affective domain show the highest mean value at the highest level ($\bar{x} = 4.50$), following with the characteristics in the cognitive domains at the high level ($\bar{x} = 4.49$), and lastly the characteristics in the psychomotor domain at the high level ($\bar{x} = 4.47$).

The fourth and last order is utilizing the curriculum evaluation's result to further develop learners to be ready for the future at the high level ($\bar{x} = 4.46$). The characteristics in the affective domain show the highest mean value at the high level ($\bar{x} = 4.49$), following with the characteristics in the cognitive domain at the high level ($\bar{x} = 4.46$), and the characteristics in the psychomotor domain at the high level ($\bar{x} = 4.44$).

The need analysis indicates the highest $PNI_{\text{modified}} = 0.242$ of utilizing the curriculum evaluation's result to further develop learners to be ready for the future with the characteristics in the cognitive domain ($PNI_{\text{modified}} = 0.253$) that is needed to be further developed. The characteristics in the affective domain with the $PNI_{\text{modified}} = 0.244$, and the characteristics in psychomotor domain with the $PNI_{\text{modified}} = 0.233$ come second and last order.

The second highest $PNI_{\text{modified}} = 0.234$ is examining the instructions reflecting on differences of each learner with the characteristics in the psychomotor domain at the highest $PNI_{\text{modified}} = 0.241$. The characteristics in the cognitive domain with the $PNI_{\text{modified}} = 0.230$, and the characteristics in the affective domain with the $PNI_{\text{modified}} = 0.224$ come second and last order.

The third highest $PNI_{\text{modified}} = 0.225$ is examining learner's quality according to indicated learning outcomes with the characteristics in the affective domain with the highest $PNI_{\text{modified}} = 0.238$. The characteristics in the psychomotor domain with the $PNI_{\text{modified}} = 0.228$, and the characteristics in the cognitive domain with the $PNI_{\text{modified}} = 0.196$ come second and last order.

The lowest $PNI_{\text{modified}} = 0.227$ is examine curriculum's suitability to Thai and global societies with the characteristics in the psychomotor domain with the highest $PNI_{\text{modified}} = 0.231$. The characteristics in the affective domain with the $PNI_{\text{modified}} = 0.206$, and the characteristics in the cognitive domain with the $PNI_{\text{modified}} = 0.201$ come second and last order.

5.1.3 Innovation development for the Thai language and culture program management of international school in Thailand based on the concept of agile learner characteristics.

This research has developed the management innovation for the Thai language and culture program management of international school in Thailand based on the concept of agile learner characteristics titled “SWABK” the innovation for Thai program management of international schools. The innovation derives from the study of the current and desirable state of the Thai program management for international schools in Thailand based on the concept agile learner characteristics and the study of best practices. Then entering the process of innovation development consists of four phases which are to define needs, discover new ideas to formulate innovation, develop innovation, and demonstrate feasibility of the innovation. Details are the following.

Principles and Rationale of the Innovation: The rapid change of the world today has created a question whether what schools teach students today, it would still be useful for students to live successful life in the future. Also, the rise of international schools in Thailand has generated another question on the effectiveness of the Thai language and culture program in international schools that would definitely affect the lives of Thailand's future leaders. Students who study in international schools are from well to do family judging by the tuition's fee. Therefore, it is fair to say they will become our future leader in economic, political or society. Thai language and culture program has an important role to pave the way for stability for our students in the future, and to serve as a tool to instill characteristics needed to live life successfully in the future. Agile learner characteristics are believed to shape and prepare our students to be ready for the future.

“SWABK” innovation emphasizes the academic management consisting of curriculum development, instruction, and evaluation. The study of current and desirable states of the Thai language and culture program management based on the concept of agile learners' characteristics found that the characteristics with the highest need are Seeking challenging situation, Being a cognitive thinker, Knowing what to do when facing uncertain situations, Welcoming feedback and criticism.

The study of best practice and related literature to promote agile learner characteristics indicates that curriculum need to be interdisciplinary and meaningful. Students are parts of learning process, and develop deeper and critical thinking, and skills needed beyond classroom. Learning enhances cognitive thinking, communication, creativity and collaboration.

The data above including suggestions from the experts and stakeholders have brought into the innovation development for the Thai language and culture program management based on the concept of agile learner characteristics titled “SWABK”.

SWABK derives from four characteristics which are Seeking challenging situations, Welcoming feedback and criticism, Being a cognitive thinker, and Knowing what to do when facing uncertain situations. This innovation would enhance the effectiveness of the academic management of the Thai language and culture program and also promote and develop the characteristics that students need to face with the uncertain world in the future.

The result of the innovation: SWABK aims to develop three elements which are the curriculum development, the instruction, and the evaluation that enable international schools to develop its management that leads to promoting the future-ready characteristics as follows.

S = Seeking challenging situations: Students are courageous to stepping out of their comfort zone to explore and try new experiences which lead to constantly new learning.

W = Welcoming feedback and criticism: Students practice giving constructive criticism and critically listen to other's criticism to refine their work, their ways of learning and practices to achieve their set goals.

B = Being a cognitive thinker: Students are able to think critically, connect and apply what they have already known to new knowledge to benefit their current work.

K = Knowing what to do when facing uncertain situations: Students calmly figure out ways to overcome hurdles and obstacles to finally accomplish their goals.

Features of the innovation: SWABK aims to develop three elements which are the curriculum development, the instruction, and the evaluation as follows.

1. Curriculum development: Curriculum is designed to be flexible to the local and global society around students. Curriculum is meaningful and related to students. Thai subject is integrated into other subjects. Collaborative learning is promoted to develop the expected characteristics "SWABK" which are seeking challenging situations, welcoming feedback and criticism, being a cognitive thinker, and knowing what to do when facing uncertain situations.

2. Instruction is to design learning experiences to associate students with content, teacher, peers and community at their convenient time beyond classroom setting.

3. Evaluation is conducted in various ways to assess student's learning according to their proficiency level in three ways. Assessment for learning to inform where the learning is. Teacher is then able to adjust learning activity to meet learner's needs. Assessment as learning to reflect on self or their own performance in order to improve the learning. Students regularly perform self-reflecting to adjust their learning plan to

meet their learning goal or expected outcomes. Assessment of learning to make an impact. Student's contribution or creation is assessed to showcase what they can create with content or knowledge they have learned.

Implementation of the innovation

1. In policy level: Formulate a working committee consists of Thai Headmaster /Headmistress, Thai Head Department or Thai Coordinator, teacher representative from each division (early year, elementary, middle school, and high school) to examine the current curriculum of the Thai language and culture program whether it contains the following; flexible and current to Thai and global situations, relative and meaningful to students, integrated into other subject areas, promoting collaboration, emphasizing characteristics of SWABK (seeking challenging situations, welcoming feedback and criticism, being a cognitive thinker, and knowing what to do when facing uncertain situations). The committee collects weaknesses to guide crafting solutions in policy level, then piloting the curriculum and evaluating the piloting curriculum for further improvement and implementation across school.

Instruction: Examine learning activity, learning tools and materials whether it contains the following; providing opportunities for students to interact with content, with peers, with teacher, and with community at their convenient time beyond the physical classroom, highly emphasizing on convenient access to learning anytime and anywhere. The committee collects weaknesses to guide crafting policy and practices to support teachers in designing learning activity and creating learning materials promoting expected characteristics that enable student to access learning anytime anywhere, then pilot the policy and evaluate its use.

Evaluation: Examine the variety of assessment types, frequency of assessment, and whether it assesses the expected agile learner characteristics. The committee collects weaknesses to guide crafting policy and practices to support teachers in designing assessment to serve the differences of individual learning needs and the expected characteristics, then pilots the policy and evaluates its use.

2. In operational level: The opened communication and involvement of non-committee members are crucial to the success of the implementation. Non-committee members are continually informed and able to provide inputs starting at the policy level in order to engage them in transparency of decision-making process. Therefore, the policy and the practices are acknowledged, accepted and led to full cooperation to improve student's learning with expected characteristics. The operational committee of each level is formed and included every teacher.

Curriculum development: The committee sets the parameter and timeline for developing the curriculum that is measurable. The committee outlines the plan to

develop curriculum considering these guidelines; within student's interests, current and timely to Thai and global society, integration of other subjects, aligning with the learning outcomes stated in the OPEC's curriculum (Office of the Private Education Commission), and explicitly identifying the expected characteristics, then examines the suitability and possibility of the curriculum, pilots the curriculum, evaluates its use by adjusting during the use, and evaluation after the use by teachers and students to further improvement that promotes the expected characteristics.

Instruction: Schools provide technology needed for teachers to construct learning materials and design learning activity that serve student's interaction with content, with peers, with teacher, and with community anytime and anywhere. Schools should also provide professional development on new applications, platform or technology that would be beneficial to construct learning materials and design learning activity with 24/7 access. Teachers construct learning material and design learning activity that serve the differences of individual's learning needs, align with learning outcomes, and promote the expected characteristics SWABK. Teachers design learning activity that encourages student's collaboration to develop expected agile learner characteristics; being a cognitive thinker, welcoming feedback and criticism, seeking challenging situations, and knowing what to do when facing uncertain situations.

Evaluation: Teachers design various types of assessment to serve the differences of student's learning needs. The assessment is to measure individual progress. Teachers create opportunities for students to self-reflect and peer-assess in order to practice giving and receiving feedback and criticism, and to use received feedback to further improve the learning or the work. Teachers and students collaboratively set the criteria for assessment indicating expected characteristics. Assessment happens anytime; before, during and after the class so that the unknown will lead to further study and fulfill the knowledge gap. Assessment focuses on the result of the knowledge not the knowledge itself. Students have opportunities to assess teachers for further improvement to be an effective learning facilitator.

5.2 Discussion

5.2.1 Conceptual framework for Thai language and culture program management of international schools in Thailand and agile learner characteristics

5.2.1.1 The conceptual framework for Thai language and culture program management of international schools in Thailand consists of 1) curriculum development comprised of identifying learning outcomes that align with the need of Thai and global society, identifying learning standard basing on proficiency level, designing learning

units by integrating Thai language and culture into global situations, 2) instruction comprised of identifying learning objectives aligning with learning outcomes, constructing authentic learning activities connecting to community and engaging learners at each proficiency level, constructing learning tools and materials to be accessible anytime and anywhere, identifying assessment evidences suitably to each learner differences, and 3) evaluation comprised of examining learner's quality according to indicated learning outcomes, examining curriculum's suitability to Thai and global societies, examining the instructions reflecting on differences of each learner, and utilizing the curriculum evaluation's result to further develop learners to be ready for the future. This conceptual framework is aligned with the accreditation criteria of four international organizations (WASC, NEASC, CIS, EDT) that international schools work closely with to obtain their accreditation.

School's curriculum has clear statements of learning principles, a definition of learning and objectives. A curriculum articulating learning outcomes, expected teaching practices, and principles of assessment exists (NEASC).

School's curriculum promotes global and digital citizenship, aligns with school's mission, and adjustable to meet student's needs. Teaching is authentic and engages learners with different learning needs. Assessment is varied responding to various learning needs and shows students' knowledge, skills, understanding and behavior (CIS).

School's curriculum caters student's interest and needs. Students are engaged in challenging learning activities through effective teaching strategies. Assessment is ongoing to assess where students are and to help guiding them to reach their learning goals (EDT). School's curriculum is challenging, coherent and relevant to international context to fulfill its purpose and result in student achievement. Learning activities are variety and engaged students. Assessment is ongoing and as of learning and teaching process to measure student's learning and teaching approaches (WASC, 2016).

5.2.1.2 The conceptual framework of agile learner characteristics consists of characteristics in three domains and eight characteristics in all 1) characteristic in cognitive domain (1.1) being goal-oriented, (1.2) being a cognitive thinker, 2) characteristics in affective domain (2.1) being eager to learn new ideas, (2.2) welcoming feedback and criticism, and 3) characteristics in psychomotor domain (3.1) seeking challenging situations, (3.2) knowing what to do when facing uncertain situations, (3.3) reacting promptly to change and ineffective strategies, (3.4) having highly effective interpersonal skills. The term "agile" has been originated from software industry and

later has been brought into the education. Even at the present, employers still look to employ agile employees. Agile learners promptly develop new effective behavior based on new experiences or knowledge. They are comfortable with uncertainty and excited with new learning or experiences. Learning agility as defined by Dr. W. Warner Burker cited in Eleni (Eleni, 2019) are flexibility (open to new ideas and solutions), speed (acting quickly), experimenting (trying new behaviors), performance risk-taking (taking on novel challenges), interpersonal risk-taking (discussing differences in opinions), collaborating, information gathering, feedback seeking and reflecting. Agile characteristics are credible to prepare students to be ready for the future. We do not know what the future will be like, but agile learners can handle the unknown.

5.2.2 Needs to develop the Thai language and culture program management for international schools in Thailand and agile learner characteristics

5.2.2.1 The research findings reveal that the overall current state of the Thai language and culture program management based on the concept of agile learner characteristics is at the high level ($\bar{x}=3.63$). The aspect that has the highest mean value is the evaluation ($\bar{x}=3.65$).

This finding can be discussed that international schools depend highly on learning data. The data driven decision making determines teaching and learning activities that teacher needs to design or adjust so that students achieve the learning goals and outcomes. Assessment informs practices. As Clash mentioned that assessment data provides various kinds of information that has many different implications for different stakeholders (Clash, 2018). Assessment for learning is very crucial part of the learning process to improve student's performance and increase student's involvement in their learning via questioning, teacher's feedback, understanding what successful work looks like, peer assessment, and self-assessment (Cambridge).

5.2.2.2 The research findings reveal that the overall desirable state of the Thai language and culture program management based on the concept of agile learner characteristics is at the highest level ($\bar{x}=4.51$). The aspect that has the highest mean value is the instruction ($\bar{x}=4.53$).

This might be that the instruction has the direct impact on student's learning progress and outcomes. Research confirms that teachers have the most impact on student success (Babu & Mendro, 2003). Therefore, it requires teacher's effectiveness for having effective students. The effective learning starts with how teachers deliver the instruction. A dynamic classroom where teachers offer control over content and pace of

instruction to students seem to cause better learning happened (Hattie, 2009). Teachers employ explicit approach of instruction to ensure student's comprehension until master in new concept and later apply knowledge into future situations. The following are features of an explicit approach for teachers (Archer & Hughes, 2010).

1. Teacher selects the learning area to be taught.
2. Teacher sets criteria for success.
3. Teacher informs students of criteria ahead of the lesson.
4. Teacher demonstrates to the successful use of the knowledge/skills through modelling.
5. Teacher evaluate student acquisition.
6. Teacher provides remedial opportunities for acquiring the knowledge/skills, if necessary.
7. Teacher provides closure at the end of the lesson.

Classroom management is another important element that affects student achievement. Teachers should create a classroom atmosphere that maximizes learning with a positive mood and tone. Effective ongoing assessment is required to have effective teacher and students. Feedback or formative assessment is claimed to be an vital tool for improving student performance (Hattie, 2009). Last vital element is teacher's soft skills. Teachers must be enthusiastic and excited for the subject they teach and enable to stimulate student's interest in learning. Teachers create the learning setting comfortable and safe. Better teacher-student relations support elevated student academic performance and positive classroom atmosphere by reducing disruptive student behavior (Cornelius-White, 2007).

5.2.2.3 The research finding shows the highest need that is the curriculum development with two sub elements of the highest need. First is to identify learning outcomes that align with the need of Thai and global societies promoting characteristics in psychomotor domain of seeking challenging situations. Second is to design learning units by integrating Thai language and culture into global situations promoting characteristics in cognitive domain of being a cognitive thinker.

The finding can be discussed ways to identify learning outcomes that align with the need of Thai and global societies promoting characteristics of seeking challenging situations. The quality curriculum enables students to obtain and develop the knowledge, skills and values, and the associated capability and competencies, to lead meaningful and productive lives (Stabback, 2016). The nature of Thai students in international schools who view Thai class is too difficult. Especially students who begin

their early year in international schools, international context are evolving resistance to learning Thai. Majority of their day use English as their medium of communication, Thai becomes less proficient language of communication. Therefore, they look for simple or less challenging assignments.

The finding can be discussed ways to design learning units by integrating Thai language and culture into global situations promoting characteristics of being a cognitive thinker. Thai language and culture program in many international schools operates as Thai subject in Thai schools meaning those schools use and follow text books that Thai schools are using. The content covered in Thai text book is alienated to Thai students in international schools. Students are unable to make connections with what they are learning and why they are learning which leads to boredom. However, international schools' Thai program can definitely follow the language section so that students are prepared to be literate in Thai. Units of study therefore are designed by integrating other subjects, including current events in both Thai and global context emphasizing the characteristics of being a cognitive thinker. Thai students in international schools expose to little Thai inputs which is inadequate for them to develop cognitive thinking skills. Language and language development are cognitive processes that involve the ability to understand and express thoughts through spoken and written words. It helps us to communicate with others and plays a vital role in thought. Perception is also a cognitive process that allows students to take in information through their senses and then use the information to react with the world (Cherry, 2020). Without a thorough understanding of what they are learning, developing cognitive thinking skills can be a challenge.

5.2.2.4 The research finding shows the second highest need is the instruction with the element of constructing learning tools and materials to be accessible anytime and anywhere and promoting characteristics in cognitive domain of being goal oriented and characteristics in affective domain of welcoming feedback and criticism.

The finding can be discussed ways to construct learning tools and materials to be accessible anytime and anywhere and promoting characteristics in cognitive domain of being goal oriented. Lewis (B. Lewis, 2019) defines TLM or teaching/learning materials as a spectrum of educational materials that teachers use in the classroom to support specific learning objectives, as set out in lesson plan. Learning tools and materials are important to provide effective learning activities. This metaphor can be used to paint the picture, "a carpenter cannot build a house without the necessary tools and material". Likewise, an effective teacher cannot develop academic and social skills for his/her students without the necessary tools and materials. Effective learning tools

and materials would keep and maintain student's engagement and lead to learning achievement. Today technology has become a common practice in our daily life and it can also be commonly used as a regular learning tool. As Shukla mentioned (Shukla, 2018) that some conceptual knowledge requires examples and familiarity with the concept's engagement and experience. It draws attention and sticks longer. Learning unnecessary happens within the four-wall of classroom nor students need to be physically right in front of the teacher to learn. Learning is happening around us all the time either in or out of the classroom. Within our today digital world, teachers who are technology users themselves need to improvise ICT into learning tools and materials that students are able to access from anywhere at any time they prefer.

To be engaged in learning anytime and anywhere, students need to practice goal setting. Goal setting can motivate student's learning, when they set a small and manageable goal and reach it, they feel encouraged to keep going which positively impacts their self-confidence. Goal setting can also be used to measure student's progress. Locke and Latham (Locke & Latham, 2006) stated that goal is a focus of action that needs to be reached. It includes various level of goal difficulty, levels of performance, and amount of efforts have been putting in to obtain the expected outcomes.

5.2.2.5 The research finding shows the lowest need is the evaluation with the element of examining curriculum's suitability to Thai and global societies and promoting the characteristics in cognitive domain of being goal oriented.

This finding can be discussed ways that international schools have been doing well in examining curriculum's suitability to Thai and global societies and promoting the characteristics in cognitive domain of being goal oriented. The finding reflects that curriculum revision regularly occurs annually. International schools have the academic department that manages all academic matters; professional development, sharing new research or pedagogy, curriculum development and revision to meet the new practices which lead to maximize student's learning.

5.2.3 Management innovation for the Thai language and culture program of international schools in Thailand based on the concept of agile learner characteristics

“SWABK” the management innovation of the Thai language and culture program developed from this research study is suitable to promote expected characteristics: seeking challenging situations, being a cognitive thinker, welcoming feedback and criticism, and knowing what to do when facing uncertain situations.

5.2.3.1 The curriculum development with SWABK innovation would craft curriculum that is flexible and adjustable to change, current to local and global society, relevant to students, interdisciplinary, collaborative, and promoting the expected characteristics; seeking challenging situations, welcoming feedback and criticism, being a cognitive thinker, and knowing what to do when facing uncertain situations. Schools must transform curriculum for the 21st century in order to have impact on wellbeing and fulfillment of today's students and future generations. According to the International Bureau of Education (IBE) document, curriculum needs to be reconceptualized as follows (Marope, Griffin, & Gallagher, 2017).

1. The first operational tool for ensuring the sustained development-relevance of education and learning systems
2. A catalyst for innovation, disruption, and social transformation
3. A force for social equity, justice, cohesion, stability, and peace
4. An integrative core of education systems
5. An enabler of lifelong learning
6. A determinant of the quality of education and learning
7. A determinant of key cost drivers of education and learning system
8. A lifelong learning system in its own right

SWABK innovation flows along with the future competences mentioned in IBE document; lifelong learning, self-agency, interactively using diverse tools and resources, interacting with others, interacting with the world, multi-literateness, and trans-disciplinary (Marope et al., 2017). Lifelong learners seek new knowledge, explore the unknown and challenging situations, they basically know how to learn. Self-agency is a drive to empower you to figure out the unknown situations and lead to success and fulfilled life. Trans-disciplinary curriculum requires cognitive thinking to integrate knowledge from various disciplines into new application. Learning should no longer be isolated by subjects.

5.2.3.2 The instruction with SWABK innovation would design learning units that provide interactions between students and content, peers, teacher or community anytime anywhere. The instruction should be sensitive to the differences of each student of individual strengths and needs, and provide interaction that is prompt and responsive. Variety of learning activities and embedded technology are clearly witnessed. With today's technology, teaching and learning can happen anytime anywhere, the learning can begin even before students enter the classroom. Providing real-time feedback can easily happen. When it comes time to assign work, differentiation can be handled at ease.

5.2.3.3. The evaluation with SWABK innovation would provide various type of assessments to serve different learning needs which contain three phases of assessment; for, as, of learning. Schools have been practicing the assessment of knowledge for as long as we could remember. This ineffective assessment must be reformed nimbly because it obstructs cognitive thinking. Assessment needs to inform the learning and should involve students during planning the success criteria and even selecting assessment tasks. Student's self-, or peer assessment during learning process to improve learning should be conducted. Finally, assessment of learning to showcase performance as product or result of the learning should be evidenced. All three phases of assessment evolve expected characteristics; seeking challenging situations, welcoming feedback and criticism, being a cognitive thinker, and knowing what to do when facing uncertain situations.

5.3 Recommendations

5.3.1 Recommendations for implementing the research findings

5.3.1.1 International schools in Thailand utilize the SWABK innovation for the Thai language and culture program management by highlighting the element of curriculum development promoting the characteristics of SWABK which is considered as a roadmap to students' success.

The research findings show that the process of curriculum development needs to identify learning outcomes that align with the need of Thai and global society promoting characteristic of seeking challenging situations, and to design learning units by integrating Thai language and culture into global situations promoting characteristic of being goal oriented. What students learn is essential to determine how students learn. Thai teachers in international schools need to include not only Thai but global context when developing curriculum. Curriculum needs to be current and relevant to students. Schools that still use Thai subject text books as used in Thai school need to urgently consider revising the curriculum. It is not mandatory for international schools to use the text as used in Thai schools as long as schools develop its Thai curriculum following within the OPEC's Thai language and culture curriculum standards. It might seem justified using the same text books as used in Thai subject in Thai schools, Thai national students in international schools could be Thai literate just like Thai students in Thai schools. We could only wish for this thinking to work. Thai class in international schools need to integrate other subjects into it as well. For instance, when learning Thai history, other country's history can be learned by comparing or contrasting and debating good or bad lesson learned from each nation's history. Schools that already use their own developed curriculum should revisit whether it is current to Thai and global society and

relevant to students. Performance rubric to assess expected characteristics should be created.

Based on the research finding, identifying learning standard basing on proficiency level is currently being handled in the satisfactory level. Stage not age is the key word here. International schools value the differences among students and believe that each and every student is unique in his/her own way. One size does not fit all. With suitable learning activity, students would progress accordingly on his/her proficiency level.

5.3.1.2 International schools in Thailand utilize the SWABK innovation for the Thai language and culture program management by providing instruction anytime anywhere and promoting the characteristics of SWABK.

The research findings show that teachers need to construct learning tools and materials to be accessible anytime and anywhere promoting characteristics of being goal oriented and welcoming feedback and criticism. Learning is unnecessary happening only in the physical classroom with students physically in front of teacher. Technology can be utilized as a learning and teaching tool that students can interact with the learning at their own pace beyond the classroom setting. Now a day, there are many technological platform and apps that teachers can use as asynchronous lessons for students to revisit after the physical class for better understand the learned concept or pre-study before coming to the physical class with questions or some background knowledge to further explore collaboratively in the class. The used platform should be interactive that students can either post responses, ideas or ask questions, and generate interactions not only between teacher to students but students to students which provide opportunity to practice on both feedback giving and receiving. Students should also practice to be goal oriented to manage their learning effectively. Autonomy of their learning needs to be structured by students in order to reach expected learning goals.

Based on the research findings, the following areas are currently being handled in the satisfactory level; identifying learning objectives aligning with learning outcomes, constructing learning activities connecting to community and engaging learners at each proficiency level, and identifying assessment evidences suitably to each learner differences. These practices align with the best practice under the curriculum development that student's different learning needs are highly valued. Also learning activity connecting to community is commonly witnessed in international schools. Students annually engage in at least one project related to community such as fund raising for orphanages, for smile operation, or for book donation to local Thai schools. Students learn to be a caring citizen to the community they live in.

5.3.1.3 International schools in Thailand utilize the SWABK innovation for the Thai language and culture program management by utilizing the curriculum evaluation's result to further develop learners to be ready for the future with the expected characteristics of SWABK.

The research findings show that teachers need to utilize the curriculum evaluation's result to further develop learners to be ready for the future promoting characteristic of being goal oriented. Teachers need to examine starting from the curriculum, instruction and evaluation whether it is future-ready and serves student's different learning needs. Assessment should occur before, during and after the learning. Especially during the learning is frequent in nature to inform where students are at so that teachers can adjust learning activity to meet the student's needs. Students also need to set their learning goal each class. Self- and peer assessment should be common practices during the learning to see whether the set goal has been met or areas needed improvement. At the completion of learning, student's knowledge should be assessed as how students apply the learned knowledge into creation for an artefact.

Based on the research findings, the following areas are currently being handled in the satisfactory level; examining learner's quality according to indicated learning outcomes, examining curriculum's suitability to Thai and global societies, and examining the instructions reflection on differences of each learner. This reflects the management cycle that there is assessment at the end in each element starting from the quality of learners that need to be aligned with the outcomes, the suitability of what students learn, any adjustment needed, and student's engagement suitable for each student's learning needs.

5.3.2 Recommendations for the Future Research studies

5.3.2.1 A study measuring the effectiveness of the curriculum development that promotes characteristics of seeking challenging situations and being a cognitive thinker should be conducted in the elements of identifying learning outcomes that align with the need of Thai and global society and designing learning units by integrating Thai language and culture into global situations.

5.3.2.2 Based on the research design, the agile learner characteristics were studied, analyzed and synthesized in the overall picture for all international school under the ISAT membership and the OPEC in order that they become the framework for developing the management innovation to promote the agile learner characteristics for all international schools regardless of sizes or curriculum of each school is using. However, the school size, the demographic of student body, and the type of national

curriculum that each school is using may have the effect on student's characteristics. Some schools have majority of Thai national students which may have an impact on the learning environment and outcomes. This goes the same way as schools that their majority of student body are expatriates. Therefore, the future research study on the management innovation to promote agile learner characteristics should be conducted for international schools of a particular size of student demography and of a particular type of curriculum. Based on the school's main curriculum, the differences in its mission, values, practices, and culture will require consideration. The research may be conducted to study on different innovation that may be suitable for the needs of each type of curriculum to enable schools to promote the agile learner characteristics within students.

5.3.2.3 The SWABK innovation can be extended and studied further to develop the user handbook to be used as the framework and the guideline for any international schools to develop the Thai language and culture program to promote the agile learner characteristics. Also, a rubric to assess expected characteristics can be developed.

5.3.2.4 After the implementation of the management innovation to promote the agile learner characteristics of students in international schools, the future research may be conducted on the impact of the innovation on student learning and achievement.

5.3.2.5 The agile learner characteristics were studied, analyzed and synthesized in an overall picture for the Thai language and culture program of international schools in Thailand. There might be a further study to extend this research findings in the other program management within international schools.

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Appendix A

Research Instruments

1. Conceptual framework evaluation form (1st Evaluation)
2. Conceptual framework evaluation form (2nd Evaluation)
3. Questionnaire
4. Feasibility and Possibility of the Innovation evaluation form



Evaluation Form of Conceptual Framework for the research titled
*Management Innovation for the Thai Language and Culture Program for
International Schools in Thailand According to the Concept of
Agile Learner Characteristics*

The objective of this evaluation form is to receive your opinions and inputs regarding to the suitability of the elements in the conceptual framework that have been analyzed and synthesized from related literature, theories and researches.

As you are an experienced and professional educator, the researcher greatly values and respects your expert thoughts and opinions provided by you in this evaluation form and would be a fundamental part towards the development of research instruments to collect data, and of management innovation development for the Thai language and culture program for international schools in Thailand according to the concept of agile learner characteristics.

Thank you for your kind assistance.

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Explanation

Three major concepts of the research have been studied, analyzed, synthesized and applied to develop a conceptual framework.

- 1) The concept of Program Management
- 2) The concept of Agile Learner Characteristics
- 3) The concept of Management Innovation Development

This research has three objectives.

- 1) To study the conceptual framework of the Thai language and culture program management for international schools in Thailand and the agile learner characteristics.
- 2) To study the needs to develop the management innovation for the Thai language and culture program of international schools in Thailand according to the concept of agile learner characteristics.
- 3) To develop the management innovation for the Thai language and culture program of international schools in Thailand according to the concept of agile learner characteristics.

There are two parts to this conceptual framework evaluation form.

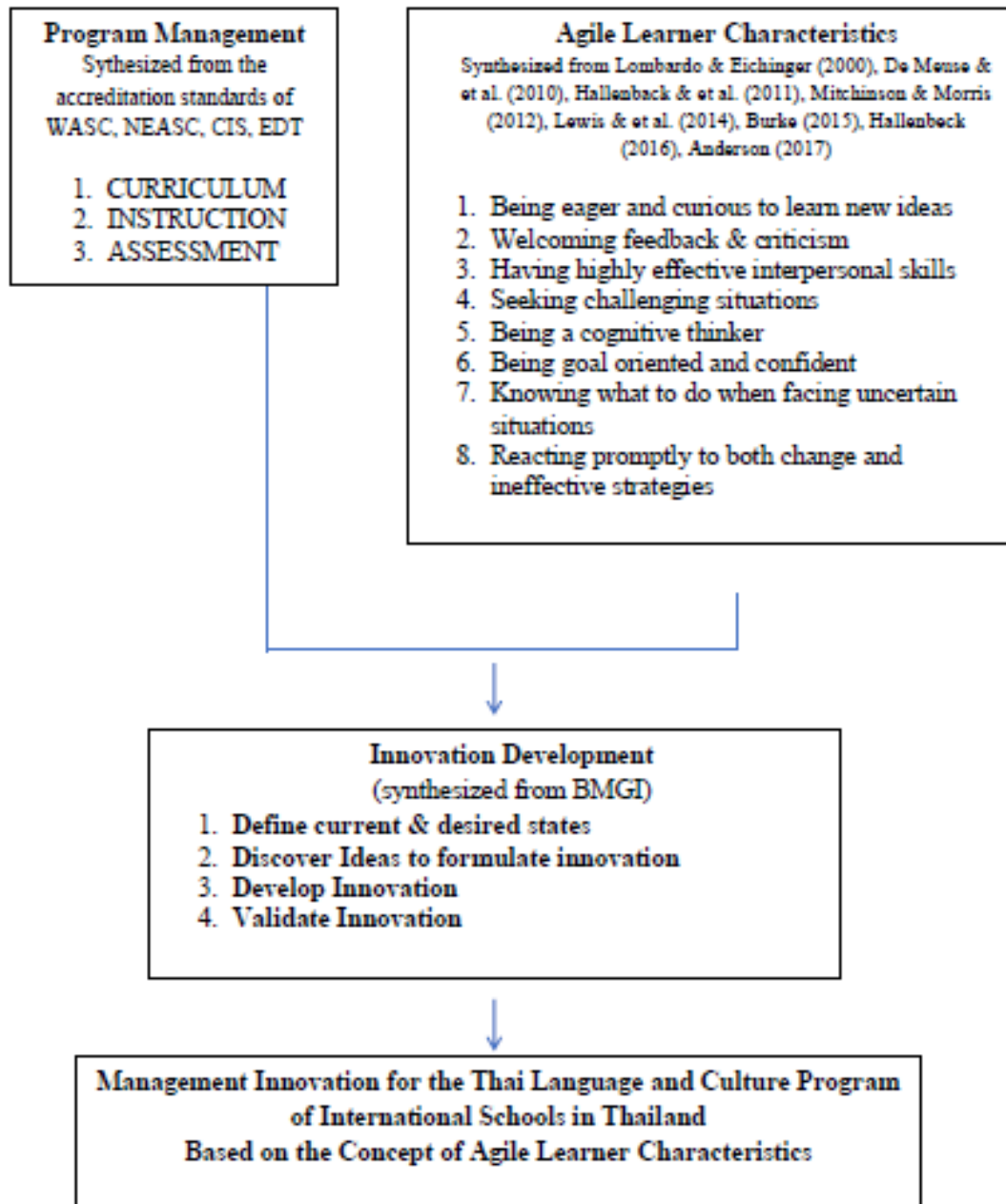
Part 1 Evaluation for the suitability of the elements in the conceptual framework

Part 2 Additional comments/suggestions

Evaluation Criteria

- | | |
|----------|--|
| +1 means | agree that the elements are suitable for the research |
| 0 means | not sure if the elements are suitable for the research |
| -1 means | disagree that the elements are suitable for the research |

CONCEPTUAL FRAMEWORK



Part 1: Evaluation for the suitability of the elements in the conceptual framework

In your opinion, are the research title and its objectives suitable?

1.1 The Concept of Program Management

Program Management means the process of working in the areas of curriculum, instruction, and assessment; curriculum is what students are expected to learn, instruction is how the curriculum is delivered, and assessment is to know what the students learned.

Thai Language and Culture Program means a series of instructions in the areas of Thai language, Thai culture and Thai history that are taught in international schools in Thailand to students of Thai nationality and students of other nationalities.

International Schools in Thailand mean schools located in Thailand that provide basic education utilizing its national curriculum such as American, British, Australian, Singaporean, and etc., or international curriculum such as International Baccalaureate or self-developed curriculum, and use foreign language as the medium of instruction. Therefore, international schools do not use the curriculum from the Thailand Ministry of Education

Concept of Program Management	Not suitable (-1)	Not sure (0)	Suitable (+1)
1. Curriculum			
2. Instruction			
3. Assessment			

The concept derived from synthesizing accreditation criteria, standards or domains of WASC, NEASC, CIS & EDT in relation to program management

1.2 The concept of agile learner characteristics

Agile Learner Characteristics means noticeable qualities that students in international schools in Thailand use to navigate successfully through unfamiliar situations. There are eight characteristics as follows. 1) Being eager and curious to learn new ideas that lead to new solutions, 2) Welcoming feedback and criticism, and taking corrective action for improvement, 3) Having highly effective interpersonal skills, and inspiring others to strive for success, 4) Seeking challenging situations that provide opportunities for learning, development, and growth, 5) Being a cognitive thinker who strives to refine viable solutions for improvement, 6) Being goal oriented and confident, having clear path and strategies for moving forward, 7) Knowing what to do when facing uncertain situations, and 8) Reacting promptly to both change and ineffective strategies.

1. Being eager and curious to learn new ideas that lead to new opportunities means a student who enjoys the opportunity to learn and strives to figure out unknown answers.

2. Welcoming feedback and criticism, and taking corrective action for improvement means a student who views both positive and negative comments from others as elements for growth.

3. Having highly effective interpersonal skills, and inspiring others to strive for success means a student who uses clear communication and empathy to collaboratively work through situations.

4. Seeking challenging situations that provide opportunities for learning, development, and growth means a student who is comfortable to put himself/herself in unfamiliar and uncertain situations as ways to progress his/her learning.

5. Being a cognitive thinker who strives to refine viable solutions for improvement means a student who thinks critically and strategically from all high-level viewpoints to come up with a viable solution.

6. Being goal oriented and confident, having clear path and strategies for moving forward means a student who has a clear understanding of which direction is needed in order for him/her to reach his/her goals.

7. Knowing what to do when facing uncertain situations means a student who finds ways to maneuver around and/or handle difficulties.

8. Reacting promptly to both change and ineffective strategies means a student who responds quickly to change and discards unworkable methods without hesitation.

Concept of Agile Learner Characteristics	Not suitable (-1)	Not sure (0)	Suitable (1)
1. Being eager & curious to learn new ideas that lead to new solutions			
2. Welcoming feedback & criticism, and taking corrective action for improvement			
3. Having highly effective interpersonal skills, & inspiring others to strive for success			
4. Seeking challenging situations that provide opportunities for learning, development, and growth			
5. Being a cognitive thinker who strives to refine viable solutions for improvement			
6. Being goal oriented and confident, having clear path and strategies for moving forward			
7. Knowing what to do when facing uncertain situations			
8. Reacting promptly to both change and ineffective strategies			

The concept derived from synthesizing conceptual framework of Lombardo & Eichinger (2000), De Meuse & et al. (2010), Hallenback & et al. (2011), Mitchinson & Morris (2012), Lewis & et al. (2014), Burke (2015), Hallenbeck (2016), Anderson (2017)

1.3 The concept of management innovation development

Program Management Innovation means the new process of effectively working in the areas of curriculum, instruction, and assessment in respond to agile learner characteristics by following four steps of innovation development; 1) define current and desired states, 2) discover ideas to formulate innovation, 3) develop innovation, and 4) validate innovation.

Concept of Management Innovation Development	Not suitable (-1)	Not sure (0)	Suitable (1)
1. Define current & desired states			
2. Discover ideas to formulate innovation			
3. Develop innovation			
4. Validate innovation			

The concept derived from synthesizing of D4 Innovation Method by BMGI

Part 2: Any Additional comments/suggestions related to the better development of this conceptual framework to be added.

1. The Concept of Program Management

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2. The Concept of Agile Learner Characteristics

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.....

3. The Concept of Management Innovation Development

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.....



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(.....)

The Expert



แบบประเมินกรอบแนวคิดการวิจัย
เรื่อง นวัตกรรมการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติใน
ประเทศไทย
ตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว

แบบประเมินกรอบแนวคิดการวิจัยฉบับนี้มีวัตถุประสงค์เพื่อสอบถามความคิดเห็นของท่านเกี่ยวกับ ความเหมาะสมขององค์ประกอบของกรอบแนวคิดในการวิจัยที่ได้จากการสังเคราะห์เอกสาร ทฤษฎี และงาน วิจัยที่เกี่ยวข้อง ซึ่งผู้วิจัยใช้จะนำไปใช้เป็นกรอบในการวิจัย

ผู้วิจัยใคร่ขอความอนุเคราะห์จากท่านในการตอบแบบประเมินที่ตรงกับความคิดเห็นของท่านมากที่สุด เพื่อผู้วิจัยจะได้นำข้อมูลที่ได้รับไปใช้ในการพัฒนาเครื่องมือที่จะใช้เก็บข้อมูล และพัฒนา นวัตกรรม การบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทย ตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่วต่อไป

ขอขอบพระคุณในความอนุเคราะห์ของท่านมา ณ โอกาสนี้

CHULALONGKORN UNIVERSITY

นางจรรุวรรณ ไบรัมย์

นิสิตดุขฎฐิบัณฑิต สาขาวิชาบริหารการศึกษา

คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

โทร. 081-4597874 Email: charuwab@isb.ac.th

คำอธิบาย

กรอบแนวคิดของการวิจัยที่สังเคราะห์จากทฤษฎีและงานวิจัยที่เกี่ยวข้องกับนวัตกรรมการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว มีกรอบแนวคิดที่เกี่ยวข้อง ดังนี้

1. แนวคิดการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทย
2. แนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว
3. แนวคิดการพัฒนานวัตกรรมการบริหาร

วัตถุประสงค์ของการวิจัยมีดังนี้

- 1) เพื่อศึกษากรอบแนวคิดการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทย และคุณลักษณะผู้เรียน ที่มีความคล่องแคล่ว
- 2) เพื่อศึกษาความต้องการจำเป็นในการพัฒนาการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทย ตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว
- 3) เพื่อพัฒนานวัตกรรมการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติ ในประเทศไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว

คำชี้แจง

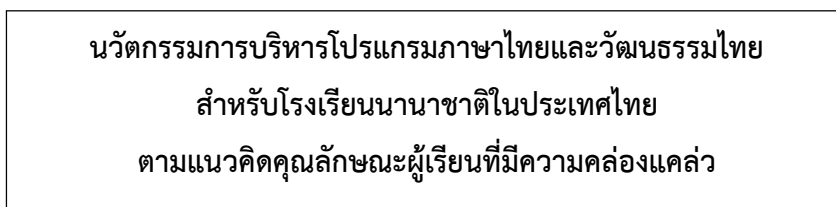
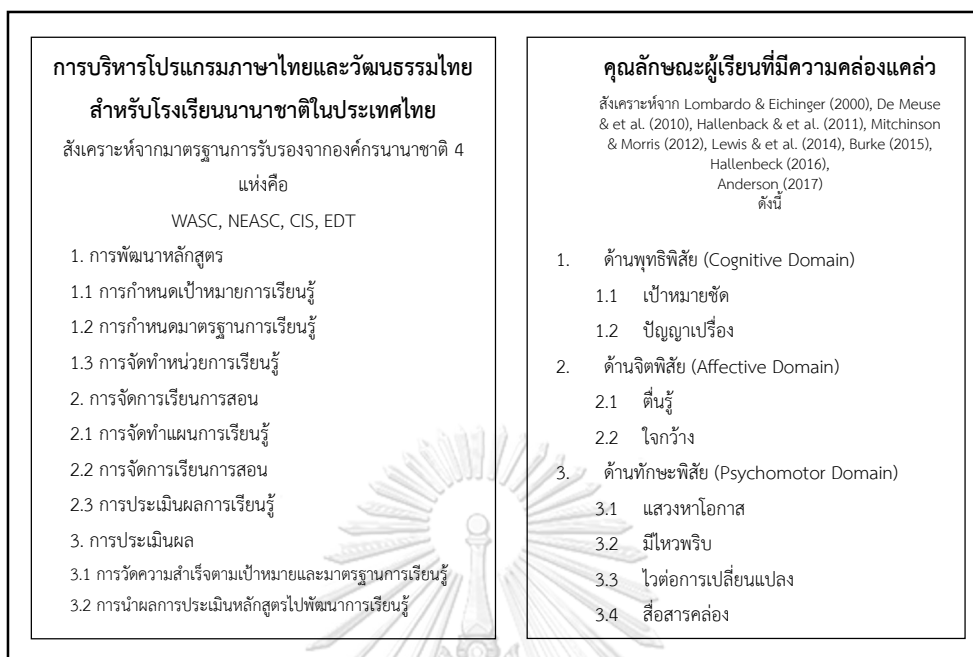
แบบประเมินกรอบแนวคิดการวิจัยฉบับนี้มีวัตถุประสงค์เพื่อสอบถามความคิดเห็นของท่านเกี่ยวกับ ความเหมาะสมขององค์ประกอบของกรอบแนวคิดในการวิจัยที่ได้จากการสังเคราะห์เอกสารทฤษฎี และงานวิจัยที่เกี่ยวข้อง ซึ่งแบบประเมินกรอบแนวคิดการวิจัยประกอบด้วย 2 ตอน ดังนี้

- | | |
|----------|---|
| ตอนที่ 1 | การประเมินความเหมาะสมขององค์ประกอบของกรอบแนวคิดการวิจัย |
| ตอนที่ 2 | ความคิดเห็นและข้อเสนอแนะเพิ่มเติม |

เกณฑ์การพิจารณาความสอดคล้อง

- | | |
|------------|--|
| +1 หมายถึง | เห็นด้วยว่าองค์ประกอบมีความเหมาะสมกับงานวิจัย |
| 0 หมายถึง | ไม่แน่ใจว่าองค์ประกอบมีความเหมาะสมกับงานวิจัย |
| -1 หมายถึง | ไม่เห็นด้วยว่าองค์ประกอบมีความเหมาะสมกับงานวิจัย |

แผนภาพกรอบแนวคิด



ตอนที่ 1 การประเมินความเหมาะสมขององค์ประกอบของกรอบแนวคิดการวิจัย

1. 1 แนวคิดการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทย

การบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทย หมายถึง การพัฒนาหลักสูตรวิชาภาษาไทยและวัฒนธรรมไทยสำหรับนักเรียนสัญชาติไทยในโรงเรียนนานาชาติในประเทศไทย การจัดการเรียนการสอนและการประเมินผล

1. การพัฒนาหลักสูตร หมายถึง การกำหนดเป้าหมายการเรียนรู้ที่สอดคล้องกับปรัชญาของโรงเรียนโดยครูและฝ่ายวิชาการ การกำหนดมาตรฐานการเรียนรู้ที่สอดคล้องกับเป้าหมายการเรียนรู้ตาม ระดับความสามารถทางภาษาไทย และการจัดทำหน่วยการเรียนรู้ที่บูรณาการ วิชาภาษาไทย สังคมศึกษา ประวัติศาสตร์และวัฒนธรรมไทย

2. การจัดการเรียนการสอน หมายถึง การจัดทำแผนจัดการเรียนรู้ที่กำหนดจุดประสงค์การเรียนรู้ ผลการเรียนรู้ที่คาดหวังและประสบการณ์การเรียนรู้ด้วยกระบวนการจัดการเรียนรู้ที่หลากหลาย การจัด กิจกรรมการเรียนการสอนตามแผนจัดการเรียนรู้ การประเมินผลการเรียนรู้ตามจุดประสงค์การเรียนรู้และ ผลการเรียนรู้ที่คาดหวังด้วยวิธีการที่หลากหลาย

3.การประเมินหลักสูตร หมายถึง การวัดความสำเร็จตามเป้าหมายการเรียนรู้และมาตรฐานการเรียน รู้ที่กำหนดและการนำผลการประเมินหลักสูตรไปพัฒนาการเรียนรู้นักเรียน

โปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทย หมายถึง หลักสูตรวิชาภาษาไทยและวัฒนธรรมไทยสำหรับนักเรียนสัญชาติไทยที่เรียนในโรงเรียนนานาชาติในประเทศไทย

แนวคิดการบริหาร	ไม่เหมาะสม	ไม่แน่ใจ	เหมาะสม
โปรแกรมภาษาไทยและวัฒนธรรมไทย	(-1)	(0)	(1)
1. การพัฒนาหลักสูตร			
2. การจัดการเรียนการสอน			
3. การประเมินหลักสูตร			

ที่มาของแนวคิด : สืบเคราะห์จากมาตรฐานการรับรองคุณภาพสำหรับโรงเรียนนานาชาติขององค์กรสากลทั้งสี่คือ WASC, NEASC, CIS, EDT และการจัดการบริหารหลักสูตรภาษาไทยวัฒนธรรมไทยและประวัติศาสตร์ไทยของ สช.

1.2 แนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว

คุณลักษณะผู้เรียนที่มีความคล่องแคล่ว หมายถึง ลักษณะเฉพาะของนักเรียนสัญชาติไทยที่เรียน โปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทยที่สามารถประยุกต์ใช้การเรียนรู้ และประสบการณ์ในสถานการณ์ใหม่ๆ ได้อย่างรวดเร็ว มีคุณธรรม จริยธรรม และความเป็นไทย ประกอบด้วย คุณลักษณะด้านพุทธิพิสัย คุณลักษณะด้านจิตพิสัย และคุณลักษณะด้านทักษะพิสัย

1. **คุณลักษณะด้านพุทธิพิสัย (Cognitive)** หมายถึง ลักษณะเฉพาะด้านสติปัญญาของผู้เรียน ประกอบด้วย ความมุ่งมั่นในเป้าหมายและการคิดวิเคราะห์

1.1 **ความมุ่งมั่นในเป้าหมาย (Being goal oriented)** หมายถึง ผู้เรียนที่มีเป้าหมาย มีการปฏิบัติที่ชัดเจนเพื่อให้บรรลุเป้าหมายนั้นอย่างมีคุณธรรมจริยธรรมและความเป็นไทย

1.2 **การคิดวิเคราะห์ (Being a cognitive thinker)** หมายถึง ผู้เรียนที่มีความสามารถในการพิจารณาข้อมูลอย่างถ่องแท้และเป็นระบบเพื่อให้ได้มาซึ่งแนวทางที่เหมาะสม

2. **คุณลักษณะด้านจิตพิสัย (Affective)** หมายถึง ลักษณะเฉพาะด้านจิตใจของผู้เรียน ประกอบด้วย ความใฝ่รู้ใคร่เรียนเรื่องใหม่ๆ และการยอมรับฟังคำวิจารณ์

2.1 **ความใฝ่รู้ใคร่เรียนเรื่องใหม่ๆ (Being eager and curious to learn new ideas)** หมายถึง ผู้เรียนมีความกระตือรือร้นกับการเรียนและการหาคำตอบในสิ่งที่ยังไม่รู้

2.2 **การยอมรับฟังคำวิจารณ์ (Welcoming feedback and criticism)** หมายถึง ผู้เรียนที่นำความคิดเห็นของผู้อื่นมาเป็นส่วนหนึ่งในการพัฒนาตนเอง

3. **คุณลักษณะด้านทักษะพิสัย (Psychomotor)** หมายถึง ลักษณะเฉพาะด้านการปฏิบัติงานได้อย่างชำนาญของผู้เรียน ประกอบด้วย การมองหาโอกาสที่ท้าทาย ความมีไหวพริบ ความไวและพร้อมต่อการเปลี่ยนแปลง และ การสื่อสารคล่อง

3.1 **การมองหาโอกาสที่ท้าทาย (Seeking challenging situations)** หมายถึง ผู้เรียนที่แสวงหาสถานการณ์ต่างๆ เพื่อใช้เป็นแนวทางในการเรียนรู้และการพัฒนาตนเอง

3.2 **ความมีไหวพริบ (Knowing what to do when facing uncertain situations)** หมายถึง ผู้เรียนที่สามารถระบุปัญหาอุปสรรค และแสดงออกถึงแนวทางการแก้ไขได้อย่างเหมาะสมกับ สถานการณ์ที่ท้าทายได้

3.3 ความไวและพร้อมต่อการเปลี่ยนแปลง (Reacting promptly to change & ineffective strategies) หมายถึง ผู้เรียนที่ตระหนักถึงการเปลี่ยนแปลงที่เกิดขึ้นอยู่เสมอ และพร้อมปรับวิธีการทำงานให้ทันต่อการเปลี่ยนแปลง

3.4 การสื่อสารคล่อง (Having highly effective interpersonal skills) หมายถึง ผู้เรียนที่สามารถ รับสารและส่งสารด้วยทักษะการฟัง การพูด การอ่าน การเขียนภาษาไทย ได้อย่าง ชัดเจนและตรงประเด็น

ที่มาของแนวคิด : สืบเคราะห์จาก Lombardo & Eichinger (2000), De Meuse & et al. (2010), Hallenback & et al. (2011), Mitchinson & Morris (2012), Lewis & et al. (2014), Burke (2015), Hallenbeck (2016), Anderson (2017), Bloom, et al. (1956)

คุณลักษณะผู้เรียนที่มีความคล่องแคล่ว	ไม่เหมาะสม (-1)	ไม่แน่ใจ (0)	เหมาะสม (1)
1. คุณลักษณะด้านพุทธิพิสัย ประกอบด้วย			
1.1 ความมุ่งมั่นในเป้าหมาย			
1.2 การคิดวิเคราะห์			
2. คุณลักษณะด้านจิตพิสัย ประกอบด้วย			
2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ๆ			
2.2 การยอมรับฟังคำวิจารณ์			
3. คุณลักษณะด้านทักษะพิสัย ประกอบด้วย			
3.1 การมองหาโอกาสที่ท้าทาย			
3.2 ความมีไหวพริบ			
3.3 ความไวและพร้อมต่อการเปลี่ยนแปลง			
3.4 การสื่อสารคล่อง			

ที่มาของแนวคิด : สืบเคราะห์จาก Lombardo & Eichinger (2000), De Meuse & et al. (2010), Hallenback & et al. (2011), Mitchinson & Morris (2012), Lewis & et al. (2014), Burke (2015), Hallenbeck (2016), Anderson (2017), Bloom, et al. (1956)

1.3 แนวคิดการพัฒนานวัตกรรมการบริหาร

นวัตกรรมการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทย หมายถึง ขั้นตอนการพัฒนาการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติ ในประเทศไทย ประกอบด้วย การสำรวจสภาพและความต้องการ การออกแบบนวัตกรรม การสร้างนวัตกรรมและการประเมินนวัตกรรม

1. **การสำรวจสภาพความต้องการ** หมายถึง ขั้นตอนในการตรวจสอบภาวะที่พึงประสงค์ของการพัฒนา หลักสูตร การจัดการเรียนการสอน และการประเมินหลักสูตรของโปรแกรมภาษาไทยและวัฒนธรรมไทย สำหรับโรงเรียนนานาชาติในประเทศไทย และวิเคราะห์ความต้องการจำเป็นในการพัฒนาการบริหาร โปรแกรมภาษาไทยและวัฒนธรรมไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว
2. **การออกแบบนวัตกรรม** หมายถึง ขั้นตอนการจัดลำดับความต้องการจำเป็นโดยนำผลการวิเคราะห์ด้านการพัฒนาหลักสูตร การจัดการเรียนการสอนและการประเมินหลักสูตร ผลการสังเคราะห์ วิธีการบริหารและแนวปฏิบัติที่ดี มาใช้ในการร่างแนวคิดนวัตกรรมการบริหาร โปรแกรมภาษาไทยและ วัฒนธรรมไทยสำหรับโรงเรียนนานาชาติตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว
3. **การสร้างนวัตกรรม** หมายถึง ขั้นตอนการนำแนวคิดมาพัฒนาเป็นนวัตกรรมการบริหาร โปรแกรม ภาษาไทยและวัฒนธรรมไทยด้านการพัฒนาหลักสูตร การจัดการเรียนการสอน และการประเมิน หลักสูตรตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว
4. **การประเมินนวัตกรรม** หมายถึง ขั้นตอนการตรวจสอบความเหมาะสมและความเป็นไปได้ของ นวัตกรรมด้านการพัฒนาหลักสูตร การจัดการเรียนการสอน และการประเมินหลักสูตร ตามแนวคิด คุณลักษณะผู้เรียนที่มีความคล่องแคล่วโดยผู้ทรงคุณวุฒิและผู้มีส่วนได้ส่วนเสีย

การพัฒนานวัตกรรม	ไม่เหมาะสม (-1)	ไม่แน่ใจ (0)	เหมาะสม (1)
1. การสำรวจสภาพความต้องการ			
2. การออกแบบนวัตกรรม			
3. การสร้างนวัตกรรม			
4. การประเมินนวัตกรรม			

ที่มาของแนวคิด : สังเคราะห์แนวคิดการพัฒนานวัตกรรมของ O'Sullivan & Dooley (2009), Hengsberger (2018), GROUP และ Ng (2014)

ตอนที่ 2 ความคิดเห็นและข้อเสนอแนะเพิ่มเติม

การให้ข้อมูลที่เป็นความคิดเห็นเพิ่มเติมเพื่อการพัฒนากรอบแนวคิดการวิจัย ให้มีความ
สอดคล้องและครอบคลุมมากยิ่งขึ้น

1. แนวคิดการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทย

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2. แนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว

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3. แนวคิดการพัฒนาวัตกรรมการบริหาร

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(.....)

ผู้ทรงคุณวุฒิ



แบบสอบถามเพื่อการวิจัย

เรื่อง สภาพปัจจุบันและสภาพที่พึงประสงค์ของการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทย
สำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว
คำชี้แจง

- 1) การสอบถามครั้งนี้เป็นส่วนหนึ่งของการวิจัยเรื่อง นวัตกรรมการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทย สำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่วตามหลักสูตร ครุศาสตร์ดุสิตบัณฑิต ภาควิชานโยบายการจัดการและความเป็นผู้นำทางการศึกษา สาขาวิชาบริหาร การศึกษา คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย โดยมีวัตถุประสงค์เพื่อศึกษาสภาพปัจจุบันและสภาพที่พึง ประสงค์ของการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยเพื่อให้ผู้เรียนมีคุณลักษณะคล่องแคล่ว (Agile Learner's Characteristics)
- 2) แบบสอบถามแบ่งออกเป็น 3 ตอน ได้แก่
 - ตอนที่ 1 สถานภาพผู้ตอบแบบสอบถาม
 - ตอนที่ 2 สภาพปัจจุบันและสภาพที่พึงประสงค์ของการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทย สำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว
 - ตอนที่ 3 ข้อเสนอแนะทางการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติใน ประเทศไทยเพื่อให้ผู้เรียนมีคุณลักษณะคล่องแคล่ว
- 3) ข้อมูลจากแบบสอบถามจะนำไปวิเคราะห์สภาพการบริหารในภาพรวมเท่านั้น ไม่มีผลกระทบต่อผู้ตอบ แบบสอบถามเป็นรายบุคคลทั้งสิ้น ดังนั้นการได้มาซึ่งข้อมูลที่ครบถ้วนตรงตามสภาพความเป็นจริง ส่งผลให้ งานวิจัยพบความจริง มีความน่าเชื่อถือ สามารถนำไปใช้อ้างอิงและการสร้างนวัตกรรมการบริหารโปรแกรม ภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความ คล่องแคล่ว

ผู้วิจัยหวังเป็นอย่างยิ่งว่าจะได้รับความร่วมมือจากท่านเป็นอย่างดี และขอขอบคุณในความอนุเคราะห์ ของท่าน เป็นอย่างสูงมา ณ โอกาสนี้ ทั้งนี้ขอความอนุเคราะห์จากท่านส่งกลับคืนผู้วิจัยตามที่อยู่ที่อยู่ในซองที่แนบมา พร้อมนี้ หรือ ท่านสามารถตอบแบบสอบถามออนไลน์โดยแสกน QR Code ที่แนบมานี้ **ภายในวันที่ 30 มีนาคม 2563** จักเป็นพระคุณยิ่ง



SCAN ME

นางจรรุวรรณ ไบรัมย์
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นิยามศัพท์เฉพาะ

1. **คุณลักษณะผู้เรียนที่มีความคล่องแคล่ว** หมายถึง พฤติกรรมการเรียนภาษาไทยและวัฒนธรรมไทยที่ฉับไวต่อสถานการณ์ใหม่ๆ ไปสู่ความสำเร็จตามที่หลักสูตรกำหนด ประกอบด้วย คุณลักษณะด้านพุทธิพิสัย คุณลักษณะด้านจิตพิสัย และคุณลักษณะด้านทักษะพิสัย
2. **คุณลักษณะด้านพุทธิพิสัย (Cognitive)** หมายถึง พฤติกรรมด้านสติปัญญาของผู้เรียน ประกอบด้วย ความมุ่งมั่นในเป้าหมายและการคิดวิเคราะห์
3. **ความมุ่งมั่นในเป้าหมาย (Being goal-oriented)** หมายถึง ผู้เรียนมีการกำหนดสิ่งที่ต้องการไปให้ถึง และมีการปฏิบัติที่ชัดเจนเพื่อให้ไปถึงสิ่งนั้นอย่างมีคุณธรรมจริยธรรมและความเป็นไทย
4. **การคิดวิเคราะห์ (Being a cognitive thinker)** หมายถึง ผู้เรียนมีความสามารถในการพิจารณาข้อมูลอย่างถ่องแท้และเป็นระบบเพื่อให้ได้มาซึ่งแนวทางที่เหมาะสม
5. **คุณลักษณะด้านจิตพิสัย (Affective)** หมายถึง พฤติกรรมด้านจิตใจของผู้เรียน ประกอบด้วย ความใฝ่รู้ใคร่เรียนเรื่องใหม่ๆ และการยอมรับฟังคำวิจารณ์
6. **ความใฝ่รู้ใคร่เรียนเรื่องใหม่ๆ (Being eager and curious to learn new ideas)** หมายถึง ผู้เรียนมีความกระตือรือร้นกับการเรียนและการหาคำตอบในสิ่งที่ยังไม่รู้
7. **การยอมรับฟังคำวิจารณ์ (Welcoming feedback and criticism)** หมายถึง ผู้เรียนที่นำความคิดเห็นของผู้อื่นมาเป็นส่วนหนึ่งในการพัฒนาตนเอง
8. **คุณลักษณะด้านทักษะพิสัย (Psychomotor)** หมายถึง พฤติกรรมด้านการปฏิบัติงานได้อย่างชำนาญของผู้เรียน ประกอบด้วย การมองหาโอกาสที่ท้าทาย ความมีไหวพริบ ความไวและพร้อมต่อการเปลี่ยนแปลง และการสื่อสารคล่อง
9. **การมองหาโอกาสที่ท้าทาย (Seeking challenging situations)** หมายถึง ผู้เรียนที่แสวงหาสถานการณ์ต่างๆ เพื่อใช้เป็นแนวทางในการเรียนรู้และการพัฒนาตนเอง
10. **ความมีไหวพริบ (Knowing what to do when facing uncertain situations)** หมายถึง ผู้เรียนที่สามารถระบุปัญหาอุปสรรคและแสดงออกถึงแนวทางการแก้ไขได้อย่างเหมาะสมกับสถานการณ์ที่ท้าทายได้
11. **ความไวและพร้อมต่อการเปลี่ยนแปลง (Reacting promptly to change & ineffective strategies)** หมายถึง ผู้เรียนที่ตระหนักถึงการเปลี่ยนแปลงที่เกิดขึ้นอยู่เสมอและพร้อมปรับวิธีการทำงานให้ทันต่อการเปลี่ยนแปลง
12. **การสื่อสารคล่อง (Having highly effective interpersonal skills)** หมายถึง ผู้เรียนที่สามารถรับสารและส่งสารด้วยทักษะการฟัง การพูด การอ่าน การเขียนภาษาไทย ได้อย่างชัดเจนและตรงประเด็น

13. **การบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทย**
หมายถึง การพัฒนาหลักสูตร การจัดการเรียนการสอน และการประเมินผล ที่ส่งเสริมให้นักเรียน มีคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว
14. **การพัฒนาหลักสูตร** หมายถึง การกำหนดผลลัพธ์การเรียนรู้ที่สอดคล้องกับความต้องการของ สังคมไทยและสังคมโลก การกำหนดมาตรฐานการเรียนรู้ตามระดับความสามารถทางภาษาไทย ไม่ใช่ตามระดับชั้นเรียน (stage not age) การจัดทำหน่วยการเรียนรู้ที่บูรณาการวิชาภาษาไทย และวัฒนธรรมไทยกับสภาวะการณ์โลก
15. **การจัดการเรียนการสอน** หมายถึง การกำหนดจุดประสงค์การเรียนรู้ที่สอดคล้องกับผลลัพธ์การ เรียนรู้ การจัดกิจกรรมการเรียนรู้ที่สมจริงเชื่อมโยงชุมชนและดึงดูความสนใจของผู้เรียนในแต่ ละระดับความสามารถทางภาษาไทย การจัดทำสื่อการเรียนที่สามารถเรียนรู้ได้ทุกที่ทุกเวลา การกำหนดหลักฐานการประเมินผลการเรียนรู้ตามจุดประสงค์ที่เหมาะสมกับความแตกต่างของ ผู้เรียน
16. **การประเมินผล** หมายถึง การตรวจสอบคุณภาพผู้เรียนตามผลลัพธ์การเรียนรู้ที่กำหนด การ ตรวจสอบความเหมาะสมของหลักสูตรต่อสังคมไทยและสังคมโลก การตรวจสอบการจัดการ เรียนการสอนที่คำนึงถึงความแตกต่างของผู้เรียน การนำผลการประเมินหลักสูตรไปพัฒนาการ เรียนรู้ของนักเรียนให้มีความพร้อมต่อโลกอนาคต

ตอนที่ 1 สถานภาพผู้ตอบแบบสอบถาม

ทำเครื่องหมาย ลงในช่อง หน้าข้อความที่ตรงกับสถานภาพของท่าน

1) เพศ

ชาย หญิง

2) อายุ

น้อยกว่า 30 ปี 30 – 40 ปี

41 – 50 ปี 51 – 60 ปี

60 ปีขึ้นไป

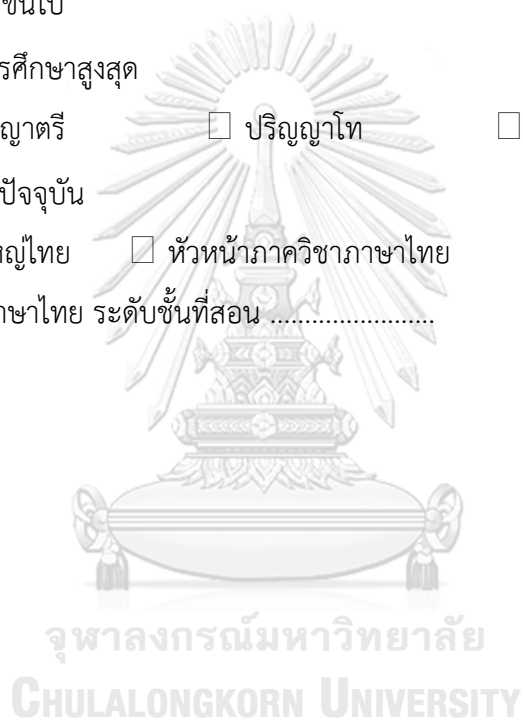
3) ระดับการศึกษาสูงสุด

ปริญญาตรี ปริญญาโท ปริญญาเอก

4) ตำแหน่งปัจจุบัน

ครูใหญ่ไทย หัวหน้าภาควิชาภาษาไทย

ครูภาษาไทย ระดับชั้นที่สอน



ตอนที่ 2 สภาพปัจจุบันและสภาพที่พึงประสงค์ของการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว

คำชี้แจง โปรดทำเครื่องหมาย ลงในช่อง หน้าข้อความที่ตรงกับความคิดเห็นของท่าน โดยแต่ละช่องแสดงระดับความคิดเห็น ดังนี้

ข้อ ที่	การบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทย สำหรับโรงเรียนนานาชาติในประเทศไทย ตามแนวคิดคุณลักษณะผู้เรียน ที่มีความคล่องแคล่ว	สภาพที่เป็นจริง					สภาพที่พึงประสงค์				
		5	4	3	2	1	5	4	3	2	1
การพัฒนาหลักสูตร											
1	โปรแกรมภาษาไทยและวัฒนธรรมไทยมี การกำหนดผลลัพธ์การเรียนรู้ที่สอดคล้องกับความต้องการของสังคมไทยและสังคมโลก ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะความคล่องแคล่ว ในด้านต่อไปนี้มากน้อยเพียงใด										
	1.1 ด้านพุทธิพิสัย (Cognitive)										
	1.1.1 ความมุ่งมั่นในเป้าหมาย (Being goal oriented)	5	4	<input type="checkbox"/>	2	1	<input type="checkbox"/>	4	3	2	1
	1.1.2 การคิดวิเคราะห์ (Being a cognitive thinker)	5	<input type="checkbox"/>	3	2	1	<input type="checkbox"/>	4	3	2	1

เกณฑ์ค่าระดับคะแนนในช่อง “สภาพปัจจุบันของการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว”

- 5 หมายถึง สภาพปัจจุบันที่ตรงกับความเป็นจริงในระดับ มากที่สุด
- 4 หมายถึง สภาพปัจจุบันที่ตรงกับความเป็นจริงในระดับ มาก
- 3 หมายถึง สภาพปัจจุบันที่ตรงกับความเป็นจริงในระดับ ปานกลาง
- 2 หมายถึง สภาพปัจจุบันที่ตรงกับความเป็นจริงในระดับ น้อย
- 1 หมายถึง สภาพปัจจุบันที่ตรงกับความเป็นจริงในระดับ น้อยที่สุด

เกณฑ์ค่าระดับคะแนนในช่อง “สภาพที่พึงประสงค์ของการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว”

- 5 หมายถึง สภาพที่ควรจะเป็นในระดับ มากที่สุด
- 4 หมายถึง สภาพที่ควรจะเป็นในระดับ มาก
- 3 หมายถึง สภาพที่ควรจะเป็นในระดับ ปานกลาง
- 2 หมายถึง สภาพที่ควรจะเป็นในระดับ น้อย
- 1 หมายถึง สภาพที่ควรจะเป็นในระดับ น้อยที่สุด

ข้อ ที่	การบริหารโปรแกรมภาษาไทยและ วัฒนธรรมไทยสำหรับโรงเรียนนานาชาติใน ประเทศไทย ตามแนวคิดคุณลักษณะผู้เรียน ที่มีความคล่องแคล่ว	สภาพที่เป็นจริง					สภาพที่พึงประสงค์					
		5	4	3	2	1	5	4	3	2	1	
การพัฒนาหลักสูตร												
1	โปรแกรมภาษาไทยและวัฒนธรรมไทยมี การกำหนดผลลัพธ์การเรียนรู้ที่สอดคล้องกับ ความต้องการของสังคมไทยและสังคมโลก ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะความ คล่องแคล่ว ในด้านต่อไปนี้มากน้อยเพียงใด											
	1.1 ด้านพุทธิพิสัย (Cognitive)											
	1.1.1 ความมุ่งมั่นในเป้าหมาย (Being goal-oriented)	5	4	3	2	1	5	4	3	2	1	
	1.1.2 การคิดวิเคราะห์ (Being a cognitive thinker)	5	4	3	2	1	5	4	3	2	1	
	1.2 ด้านจิตพิสัย (Affective)											
	1.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ๆ (Being eager & curious to learn new ideas)	5	4	3	2	1	5	4	3	2	1	
	1.2.2 การยอมรับฟังคำวิจารณ์ (Welcoming feedback & criticism)	5	4	3	2	1	5	4	3	2	1	
	1.3 ด้านทักษะพิสัย (Psychomotor)											
	1.3.1 การมองหาโอกาสที่ท้าทาย (Seeking challenging situations)	5	4	3	2	1	5	4	3	2	1	
	1.3.2 ความมีไหวพริบ (Knowing what to do when facing uncertain situations)	5	4	3	2	1	5	4	3	2	1	
	1.3.3 ความไวและพร้อมต่อการ เปลี่ยนแปลง (Reacting promptly to change & ineffective strategies)	5	4	3	2	1	5	4	3	2	1	

ข้อ ที่	การบริหารโปรแกรมภาษาไทยและ วัฒนธรรมไทยสำหรับโรงเรียนนานาชาติใน ประเทศไทย ตามแนวคิดคุณลักษณะผู้เรียน ที่มีความคล่องแคล่ว	สภาพที่เป็นจริง					สภาพที่พึงประสงค์				
		5	4	3	2	1	5	4	3	2	1
	1.3.4 การสื่อสารคล่อง (Having highly effective interpersonal skills)	5	4	3	2	1	5	4	3	2	1
2	โปรแกรมภาษาไทยและวัฒนธรรมไทยมี การกำหนดมาตรฐานการเรียนรู้ตามระดับความสามารถทางภาษาไทย (Stage not Age) ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะความคล่องแคล่ว ในด้านต่อไปนี้มาน้อยเพียงใด										
	2.1 ด้านพุทธิพิสัย (Cognitive)										
	2.1.1 ความมุ่งมั่นในเป้าหมาย (Being goal-oriented)	5	4	3	2	1	5	4	3	2	1
	2.1.2 การคิดวิเคราะห์ (Being a cognitive thinker)	5	4	3	2	1	5	4	3	2	1
	2.2 ด้านจิตพิสัย (Affective)										
	2.2.1 ความใฝ่รู้ใคร่เรียนรู้อะไรใหม่ๆ (Being eager & curious to learn new ideas)	5	4	3	2	1	5	4	3	2	1
	2.2.2 การยอมรับฟังคำวิจารณ์ (Welcoming feedback & criticism)	5	4	3	2	1	5	4	3	2	1
	2.3 ด้านทักษะพิสัย (Psychomotor)										
	2.3.1 การมองหาโอกาสที่ท้าทาย (Seeking challenging situations)	5	4	3	2	1	5	4	3	2	1
	2.3.2 ความมีไหวพริบ (Knowing what to do when facing uncertain situations)	5	4	3	2	1	5	4	3	2	1
	2.3.3 ความไวและพร้อมต่อการเปลี่ยนแปลง (Reacting promptly to change & ineffective strategies)	5	4	3	2	1	5	4	3	2	1

ข้อ ที่	การบริหารโปรแกรมภาษาไทยและ วัฒนธรรมไทยสำหรับโรงเรียนนานาชาติใน ประเทศไทย ตามแนวคิดคุณลักษณะผู้เรียน ที่มีความคล่องแคล่ว	สภาพที่เป็นจริง					สภาพที่พึงประสงค์				
		5	4	3	2	1	5	4	3	2	1
	2.3.4 การสื่อสารคล่อง (Having highly effective interpersonal skills)	5	4	3	2	1	5	4	3	2	1
3	โปรแกรมภาษาไทยและวัฒนธรรมไทยมีการจัดทำหน่วยการเรียนรู้ที่บูรณาการวิชา ภาษาไทยและวัฒนธรรมไทยกับสภาวะการณ์โลก ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะความ คล่องแคล่ว ในด้านต่อไปนี้มาน้อยเพียงใด										
	3.1 ด้านพุทธิพิสัย (Cognitive)										
	3.1.1 ความมุ่งมั่นในเป้าหมาย (Being goal-oriented)	5	4	3	2	1	5	4	3	2	1
	3.1.2 การคิดวิเคราะห์ (Being a cognitive thinker)	5	4	3	2	1	5	4	3	2	1
	3.2 ด้านจิตพิสัย (Affective)										
	3.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ๆ (Being eager & curious to learn new ideas)	5	4	3	2	1	5	4	3	2	1
	3.2.2 การยอมรับฟังคำวิจารณ์ (Welcoming feedback & criticism)	5	4	3	2	1	5	4	3	2	1
	3.3 ด้านทักษะพิสัย (Psychomotor)										
	3.3.1 การมองหาโอกาสที่ท้าทาย (Seeking challenging situations)	5	4	3	2	1	5	4	3	2	1
	3.3.2 ความมีไหวพริบ (Knowing what to do when facing uncertain situations)	5	4	3	2	1	5	4	3	2	1
3.3.3 ความไวและพร้อมต่อการ เปลี่ยนแปลง (Reacting promptly to change & ineffective strategies)	5	4	3	2	1	5	4	3	2	1	

ข้อ ที่	การบริหารโปรแกรมภาษาไทยและ วัฒนธรรมไทยสำหรับโรงเรียนนานาชาติใน ประเทศไทย ตามแนวคิดคุณลักษณะผู้เรียน ที่มีความคล่องแคล่ว	สภาพที่เป็นจริง					สภาพที่พึงประสงค์				
		5	4	3	2	1	5	4	3	2	1
	3.3.4 การสื่อสารคล่อง (Having highly effective interpersonal skills)	5	4	3	2	1	5	4	3	2	1
การจัดการเรียนการสอน											
4	โปรแกรมภาษาไทยและวัฒนธรรมไทยมีการกำหนดจุดประสงค์การเรียนรู้ที่สอดคล้องกับ ผลลัพธ์การเรียนรู้ ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะความคล่องแคล่ว ในด้านต่อไปนี้มาก น้อยเพียงใด										
	4.1 ด้านพุทธิพิสัย (Cognitive)										
	4.1.1 ความมุ่งมั่นในเป้าหมาย (Being goal-oriented)	5	4	3	2	1	5	4	3	2	1
	4.1.2 การคิดวิเคราะห์ (Being a cognitive thinker)	5	4	3	2	1	5	4	3	2	1
	4.2 ด้านจิตพิสัย (Affective)										
	4.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ๆ (Being eager & curious to learn new ideas)	5	4	3	2	1	5	4	3	2	1
	4.2.2 การยอมรับฟังคำวิจารณ์ (Welcoming feedback & criticism)	5	4	3	2	1	5	4	3	2	1
	4.3 ด้านทักษะพิสัย (Psychomotor)										
	4.3.1 การมองหาโอกาสที่ท้าทาย (Seeking challenging situations)	5	4	3	2	1	5	4	3	2	1
	4.3.2 ความมีไหวพริบ (Knowing what to do when facing uncertain situations)	5	4	3	2	1	5	4	3	2	1

ข้อ ที่	การบริหารโปรแกรมภาษาไทยและ วัฒนธรรมไทยสำหรับโรงเรียนนานาชาติใน ประเทศไทย ตามแนวคิดคุณลักษณะผู้เรียน ที่มีความคล่องแคล่ว	สภาพที่เป็นจริง					สภาพที่พึงประสงค์				
		5	4	3	2	1	5	4	3	2	1
	4.3.3 ความไวและพร้อมต่อการ เปลี่ยนแปลง (Reacting promptly to change & ineffective strategies)	5	4	3	2	1	5	4	3	2	1
	4.3.4 การสื่อสารคล่อง (Having highly effective interpersonal skills)	5	4	3	2	1	5	4	3	2	1
5	โปรแกรมภาษาไทยและวัฒนธรรมไทยมีการจัดกิจกรรมการเรียนรู้ที่สมจริงเชื่อมโยงชุมชน และดึงดูดความสนใจของผู้เรียนในแต่ละระดับความสามารถทางภาษาไทย ที่ส่งเสริมให้ ผู้เรียนมีคุณลักษณะความคล่องแคล่ว ในด้านต่อไปนี้มากน้อยเพียงใด										
	5.1 ด้านพุทธิพิสัย (Cognitive)										
	5.1.1 ความมุ่งมั่นในเป้าหมาย (Being goal-oriented)	5	4	3	2	1	5	4	3	2	1
	5.1.2 การคิดวิเคราะห์ (Being a cognitive thinker)	5	4	3	2	1	5	4	3	2	1
	5.2 ด้านจิตพิสัย (Affective)										
	5.1.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ๆ (Being eager & curious to learn new ideas)	5	4	3	2	1	5	4	3	2	1
	5.1.2 การยอมรับฟังคำวิจารณ์ (Welcoming feedback & criticism)	5	4	3	2	1	5	4	3	2	1
	5.3 ด้านทักษะพิสัย (Psychomotor)										
	5.3.1 การมองหาโอกาสที่ท้าทาย (Seeking challenging situations)	5	4	3	2	1	5	4	3	2	1
	5.3.2 ความมีไหวพริบ (Knowing what to do when facing uncertain situations)	5	4	3	2	1	5	4	3	2	1

ข้อ ที่	การบริหารโปรแกรมภาษาไทยและ วัฒนธรรมไทยสำหรับโรงเรียนนานาชาติใน ประเทศไทย ตามแนวคิดคุณลักษณะผู้เรียน ที่มีความคล่องแคล่ว	สภาพที่เป็นจริง					สภาพที่พึงประสงค์				
		5	4	3	2	1	5	4	3	2	1
	5.3.3 ความไวและพร้อมต่อการ เปลี่ยนแปลง (Reacting promptly to change & ineffective strategies)	5	4	3	2	1	5	4	3	2	1
	5.3.4 การสื่อสารคล่อง (Having highly effective interpersonal skills)	5	4	3	2	1	5	4	3	2	1
6	โปรแกรมภาษาไทยและวัฒนธรรมไทยมีการจัดทำสื่อการเรียนรู้ที่สามารถเรียนรู้ได้ทุกที่ทุก เวลา ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะความคล่องแคล่ว ในด้านต่อไปนี้มากน้อยเพียงใด										
	6.1 ด้านพุทธิพิสัย (Cognitive)										
	6.1.1 ความมุ่งมั่นในเป้าหมาย (Being goal-oriented)	5	4	3	2	1	5	4	3	2	1
	6.1.2 การคิดวิเคราะห์ (Being a cognitive thinker)	5	4	3	2	1	5	4	3	2	1
	6.2 ด้านจิตพิสัย (Affective)										
	6.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ๆ (Being eager & curious to learn new ideas)	5	4	3	2	1	5	4	3	2	1
	6.2.2 การยอมรับฟังคำวิจารณ์ (Welcoming feedback & criticism)	5	4	3	2	1	5	4	3	2	1
	6.3 ด้านทักษะพิสัย (Psychomotor)										
	6.3.1 การมองหาโอกาสที่ท้าทาย (Seeking challenging situations)	5	4	3	2	1	5	4	3	2	1
	6.3.2 ความมีไหวพริบ (Knowing what to do when facing uncertain situations)	5	4	3	2	1	5	4	3	2	1

ข้อ ที่	การบริหารโปรแกรมภาษาไทยและ วัฒนธรรมไทยสำหรับโรงเรียนนานาชาติใน ประเทศไทย ตามแนวคิดคุณลักษณะผู้เรียน ที่มีความคล่องแคล่ว	สภาพที่เป็นจริง					สภาพที่พึงประสงค์				
		5	4	3	2	1	5	4	3	2	1
	6.3.3 ความไวและพร้อมต่อการ เปลี่ยนแปลง (Reacting promptly to change & ineffective strategies)	5	4	3	2	1	5	4	3	2	1
	6.3.4 การสื่อสารคล่อง (Having highly effective interpersonal skills)	5	4	3	2	1	5	4	3	2	1
7	โปรแกรมภาษาไทยและวัฒนธรรมไทยมีการกำหนดหลักฐานการประเมินผลการเรียนรู้ ตามจุดประสงค์ที่เหมาะสมกับความแตกต่างของผู้เรียน ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะ ความคล่องแคล่ว ในด้านต่อไปนี้มากน้อยเพียงใด										
	7.1 ด้านพุทธิพิสัย (Cognitive)										
	7.1.1 ความมุ่งมั่นในเป้าหมาย (Being goal-oriented)	5	4	3	2	1	5	4	3	2	1
	7.1.2 การคิดวิเคราะห์ (Being a cognitive thinker)	5	4	3	2	1	5	4	3	2	1
	7.2 ด้านจิตพิสัย (Affective)										
	7.2.1 ความใฝ่รู้ใคร่เรียนรู้อะไรใหม่ๆ (Being eager & curious to learn new ideas)	5	4	3	2	1	5	4	3	2	1
	7.2.2 การยอมรับฟังคำวิจารณ์ (Welcoming feedback & criticism)	5	4	3	2	1	5	4	3	2	1
	7.3 ด้านทักษะพิสัย (Psychomotor)										
	7.3.1 การมองหาโอกาสที่ท้าทาย (Seeking challenging situations)	5	4	3	2	1	5	4	3	2	1
	7.3.2 ความมีไหวพริบ (Knowing what to do when facing uncertain situations)	5	4	3	2	1	5	4	3	2	1

ข้อ ที่	การบริหารโปรแกรมภาษาไทยและ วัฒนธรรมไทยสำหรับโรงเรียนนานาชาติใน ประเทศไทย ตามแนวคิดคุณลักษณะผู้เรียน ที่มีความคล่องแคล่ว	สภาพที่เป็นจริง					สภาพที่พึงประสงค์				
		5	4	3	2	1	5	4	3	2	1
	7.3.3 ความไวและพร้อมต่อการ เปลี่ยนแปลง (Reacting promptly to change & ineffective strategies)	5	4	3	2	1	5	4	3	2	1
	7.3.4 การสื่อสารคล่อง (Having highly effective interpersonal skills)	5	4	3	2	1	5	4	3	2	1
การประเมินผล											
8	โปรแกรมภาษาไทยและวัฒนธรรมไทยมีการตรวจสอบคุณภาพผู้เรียนตามผลลัพธ์การ เรียนรู้ที่กำหนด ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะความคล่องแคล่ว ในด้านต่อไปนี้มากที่สุด เพียงใด										
	8.1 ด้านพุทธิพิสัย (Cognitive)										
	8.1.1 ความมุ่งมั่นในเป้าหมาย (Being goal-oriented)	5	4	3	2	1	5	4	3	2	1
	8.1.2 การคิดวิเคราะห์ (Being a cognitive thinker)	5	4	3	2	1	5	4	3	2	1
	8.2 ด้านจิตพิสัย (Affective)										
	8.2.1 ความใฝ่รู้ใคร่เรียนรู้อะไรใหม่ๆ (Being eager & curious to learn new ideas)	5	4	3	2	1	5	4	3	2	1
	8.2.2 การยอมรับฟังคำวิจารณ์ (Welcoming feedback & criticism)	5	4	3	2	1	5	4	3	2	1
	8.3 ด้านทักษะพิสัย (Psychomotor)										
	8.3.1 การมองหาโอกาสที่ท้าทาย (Seeking challenging situations)	5	4	3	2	1	5	4	3	2	1

ข้อ ที่	การบริหารโปรแกรมภาษาไทยและ วัฒนธรรมไทยสำหรับโรงเรียนนานาชาติใน ประเทศไทย ตามแนวคิดคุณลักษณะผู้เรียน ที่มีความคล่องแคล่ว	สภาพที่เป็นจริง					สภาพที่พึงประสงค์				
		5	4	3	2	1	5	4	3	2	1
	8.3.2 ความมีไหวพริบ (Knowing what to do when facing uncertain situations)	5	4	3	2	1	5	4	3	2	1
	8.3.3 ความไวและพร้อมต่อการ เปลี่ยนแปลง (Reacting promptly to change & ineffective strategies)	5	4	3	2	1	5	4	3	2	1
	8.3.4 การสื่อสารคล่อง (Having highly effective interpersonal skills)	5	4	3	2	1	5	4	3	2	1
9	โปรแกรมภาษาไทยและวัฒนธรรมไทยมีการตรวจสอบความเหมาะสมของหลักสูตรต่อ สังคมไทยและสังคมโลก ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะความคล่องแคล่ว ในด้านต่อไปนี้ อย่างน้อยเพียงใด										
	9.1 ด้านพุทธิพิสัย (Cognitive)										
	9.1.1 ความมุ่งมั่นในเป้าหมาย (Being goal-oriented)	5	4	3	2	1	5	4	3	2	1
	9.1.2 การคิดวิเคราะห์ (Being a cognitive thinker)	5	4	3	2	1	5	4	3	2	1
	9.2 ด้านจิตพิสัย (Affective)										
	9.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ๆ (Being eager & curious to learn new ideas)	5	4	3	2	1	5	4	3	2	1
	9.2.2 การยอมรับฟังคำวิจารณ์ (Welcoming feedback & criticism)	5	4	3	2	1	5	4	3	2	1
	9.3 ด้านทักษะพิสัย (Psychomotor)										
	9.3.1 การมองหาโอกาสที่ท้าทาย (Seeking challenging situations)	5	4	3	2	1	5	4	3	2	1

ข้อ ที่	การบริหารโปรแกรมภาษาไทยและ วัฒนธรรมไทยสำหรับโรงเรียนนานาชาติใน ประเทศไทย ตามแนวคิดคุณลักษณะผู้เรียน ที่มีความคล่องแคล่ว	สภาพที่เป็นจริง					สภาพที่พึงประสงค์				
		5	4	3	2	1	5	4	3	2	1
	9.3.2 ความมีไหวพริบ (Knowing what to do when facing uncertain situations)	5	4	3	2	1	5	4	3	2	1
	9.3.3 ความไวและพร้อมต่อการ เปลี่ยนแปลง (Reacting promptly to change & ineffective strategies)	5	4	3	2	1	5	4	3	2	1
	9.3.4 การสื่อสารคล่อง (Having highly effective interpersonal skills)	5	4	3	2	1	5	4	3	2	1
10	โปรแกรมภาษาไทยและวัฒนธรรมไทยมีการตรวจสอบความเหมาะสมของการจัดการเรียน การสอนที่คำนึงถึงความแตกต่างของผู้เรียน ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะความ คล่องแคล่ว ในด้านต่อไปนี้มาน้อยเพียงใด										
	10.1 ด้านพุทธิพิสัย (Cognitive)										
	10.1.1 ความมุ่งมั่นในเป้าหมาย (Being goal-oriented)	5	4	3	2	1	5	4	3	2	1
	10.1.2 การคิดวิเคราะห์ (Being a cognitive thinker)	5	4	3	2	1	5	4	3	2	1
	10.2 ด้านจิตพิสัย (Affective)										
	10.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ๆ (Being eager & curious to learn new ideas)	5	4	3	2	1	5	4	3	2	1
	10.2.2 การยอมรับฟังคำวิจารณ์ (Welcoming feedback & criticism)	5	4	3	2	1	5	4	3	2	1
	10.3 ด้านทักษะพิสัย (Psychomotor)										
	10.3.1 การมองหาโอกาสที่ท้าทาย (Seeking challenging situations)	5	4	3	2	1	5	4	3	2	1

ข้อ ที่	การบริหารโปรแกรมภาษาไทยและ วัฒนธรรมไทยสำหรับโรงเรียนนานาชาติใน ประเทศไทย ตามแนวคิดคุณลักษณะผู้เรียน ที่มีความคล่องแคล่ว	สภาพที่เป็นจริง					สภาพที่พึงประสงค์				
		5	4	3	2	1	5	4	3	2	1
	10.3.2 ความมีไหวพริบ (Knowing what to do when facing uncertain situations)	5	4	3	2	1	5	4	3	2	1
	10.3.3 ความไวและพร้อมต่อการ เปลี่ยนแปลง (Reacting promptly to change & ineffective strategies)	5	4	3	2	1	5	4	3	2	1
	10.3.4 การสื่อสารคล่อง (Having highly effective interpersonal skills)	5	4	3	2	1	5	4	3	2	1
11	โปรแกรมภาษาไทยและวัฒนธรรมไทยมีการนำผลการประเมินหลักสูตรไปพัฒนาการ เรียนรู้ของนักเรียนให้มีความพร้อมต่อโลกอนาคต ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะความ คล่องแคล่ว ในด้านต่อไปนี้มาน้อยเพียงใด										
	11.1 ด้านพุทธิพิสัย (Cognitive)										
	11.1.1 ความมุ่งมั่นในเป้าหมาย (Being goal-oriented)	5	4	3	2	1	5	4	3	2	1
	11.1.2 การคิดวิเคราะห์ (Being a cognitive thinker)	5	4	3	2	1	5	4	3	2	1
	11.2 ด้านจิตพิสัย (Affective)										
	11.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ๆ (Being eager & curious to learn new ideas)	5	4	3	2	1	5	4	3	2	1
	11.2.2 การยอมรับฟังคำวิจารณ์ (Welcoming feedback & criticism)	5	4	3	2	1	5	4	3	2	1
	11.3 ด้านทักษะพิสัย (Psychomotor)										
	11.3.1 การมองหาโอกาสที่ท้าทาย (Seeking challenging situations)	5	4	3	2	1	5	4	3	2	1

ข้อ ที่	การบริหารโปรแกรมภาษาไทยและ วัฒนธรรมไทยสำหรับโรงเรียนนานาชาติใน ประเทศไทย ตามแนวคิดคุณลักษณะผู้เรียน ที่มีความคล่องแคล่ว	สภาพที่เป็นจริง					สภาพที่พึงประสงค์				
		5	4	3	2	1	5	4	3	2	1
	11.3.2 ความมีไหวพริบ (Knowing what to do when facing uncertain situations)	5	4	3	2	1	5	4	3	2	1
	11.3.3 ความไวและพร้อมต่อการ เปลี่ยนแปลง (Reacting promptly to change & ineffective strategies)	5	4	3	2	1	5	4	3	2	1
	11.3.4 การสื่อสารคล่อง (Having highly effective interpersonal skills)	5	4	3	2	1	5	4	3	2	1

ตอนที่ 3 ข้อเสนอแนะทางการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติ
ในประเทศไทยเพื่อให้ผู้เรียนมีคุณลักษณะคล่องแคล่ว

1. แนวทางการพัฒนาหลักสูตรแบบใหม่ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะคล่องแคล่ว

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2. แนวทางการจัดการเรียนการสอนแบบใหม่ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะคล่องแคล่ว

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3. แนวทางการวัดประเมินผลแบบใหม่ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะคล่องแคล่ว

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4. แนวทางการบริหารแบบใหม่ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะคล่องแคล่ว

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ขอขอบพระคุณในความอนุเคราะห์ของท่านเป็นอย่างสูงมา ณ โอกาสนี้



แบบประเมินความเหมาะสมและความเป็นไปได้ของนวัตกรรม
เรื่อง นวัตกรรมการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทย ด้วย “SWABK”

คำชี้แจง

- 1) การประเมินร่างนวัตกรรมครั้งนี้เป็นส่วนหนึ่งของงานวิจัยเรื่อง นวัตกรรมการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว ตามหลักสูตรครุศาสตร์บัณฑิต ภาคศึกษานโยบายการจัดการและความเป็นผู้นำทางการศึกษา สาขาวิชาบริหารการศึกษา คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย โดยมีวัตถุประสงค์เพื่อตรวจสอบความเหมาะสมและความเป็นไปได้ของร่างนวัตกรรมฉบับที่ 2 หลังจากมีการปรับเปลี่ยนตามคำแนะนำของผู้ทรงคุณวุฒิและผู้เชี่ยวชาญในร่างฯ ฉบับที่ 1

- 2) แบบประเมินนี้แบ่งออกเป็น 2 ตอน คือ

ตอนที่ 1 สถานภาพผู้ตอบแบบสอบถาม

ตอนที่ 2 ความเป็นไปได้และความเหมาะสมของร่างนวัตกรรมฯ โดยมีข้อประเมิน

ทั้งหมด 7

ข้อใหญ่ ในแต่ละข้อคำถามจะมี 2 ส่วน คือ

ส่วนที่ 1 ประเมินความเหมาะสมและความเป็นไปได้ของร่างนวัตกรรมฯ

ตาม rating

CHULALONGKORN UNIVERSITY scale ดังนี้

5 มีความเหมาะสมและมีความเป็นไปได้มากที่สุด

4 มีความเหมาะสมและมีความเป็นไปได้มาก

3 มีความเหมาะสมและมีความเป็นไปได้ปานกลาง

2 มีความเหมาะสมและมีความเป็นไปได้น้อย

1 มีความเหมาะสมและมีความเป็นไปได้น้อยที่สุด

ส่วนที่ 2 ความคิดเห็นเพิ่มเติมของผู้ประเมิน (หากมี)

ขอความกรุณาอนุเคราะห์ส่งแบบประเมินกลับคืนผู้วิจัย ภายในวันที่ 17 มิถุนายน 2563

นางจรรุวรรณ ไบรัมย์

นิสิตปริญญาตรีบัณฑิต สาขาวิชาบริหารการศึกษา

คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

ตอนที่ 1 สถานภาพผู้ตอบแบบสอบถาม

ทำเครื่องหมาย ลงในช่อง หน้าข้อความที่ตรงกับสถานภาพของท่าน

1) เพศ

ชาย หญิง

2) อายุ

น้อยกว่า 30 ปี

30 – 40 ปี

41 – 50 ปี

51 – 60 ปี

61 ปีขึ้นไป

3) ระดับการศึกษาสูงสุด

ปริญญาตรี

ปริญญาโท

ปริญญาเอก

4) ตำแหน่งปัจจุบัน

ครูใหญ่ไทย

หัวหน้าภาคภาษาไทย

ครูภาษาไทยระดับอนุบาล

ครูภาษาไทยระดับประถมศึกษา

ครูภาษาไทยระดับมัธยมศึกษาตอนต้น

ครูภาษาไทยระดับมัธยมศึกษาตอนปลาย

ตอนที่ 2 การประเมินความเหมาะสมและความเป็นไปได้ของร่างนวัตกรรม ฉบับที่ 2

คำชี้แจง โปรดทำเครื่องหมาย ลงในช่อง หน้าข้อความที่ตรงกับความเห็นของท่าน โดยแต่ละช่อง แสดงระดับความคิดเห็นดังนี้

ความเหมาะสม

5 มีความเหมาะสมและระดับการนำไปปฏิบัติมากที่สุด

4 มีความเหมาะสมและระดับการนำไปปฏิบัติมาก

3 มีความเหมาะสมและระดับการนำไปปฏิบัติปานกลาง

2 มีความเหมาะสมและมีระดับการนำไปปฏิบัติน้อย

1 มีความเหมาะสมและระดับการนำไปปฏิบัติน้อยที่สุด

ความเป็นไปได้

5 มีความเป็นไปได้มากที่สุด

4 มีความเป็นไปได้มาก

3 มีความเป็นไปได้ปานกลาง

2 มีความเป็นไปได้น้อย

1 มีความเป็นไปได้น้อยที่สุด

ข้อที่ 1 ชื่อนวัตกรรม “SWABK” (อ่าน สวีอบด์)

ความเหมาะสม มากที่สุด มาก ปานกลาง น้อย น้อยที่สุดความเป็นไปได้ มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ความคิดเห็นเพิ่มเติม:

ข้อที่ 2 หลักการและเหตุผลของนวัตกรรม

การเปลี่ยนแปลงที่เกิดขึ้นอย่างรวดเร็วต่อโลกของเราในปัจจุบันทำให้เกิดคำถามว่า สิ่งที่เราเรียนสอนนักเรียนอยู่ขณะนี้ จะมีประโยชน์ในอนาคตการทำงานหรือการดำรงชีวิตของพวกเขาได้บ้างหรือไม่ อีกทั้งจำนวนโรงเรียนนานาชาติที่เปิดเพิ่มขึ้นอย่างรวดเร็ว ทำให้เกิดคำถามถึงประสิทธิภาพของโปรแกรมภาษาไทยและวัฒนธรรมไทยในโรงเรียนนานาชาติที่จะส่งผลต่ออนาคตผู้นำของชาติ จึงปฏิเสธไม่ได้เลยว่า โปรแกรมภาษาไทยและวัฒนธรรมไทยถือว่าเป็นเส้นทางที่จะนำพานักเรียนสัญชาติไทยไปสู่อนาคตและเป็นเครื่องมือที่จะช่วยปลูกฝังคุณลักษณะที่จำเป็นต่อการดำรงชีพในอนาคต และคุณลักษณะผู้เรียนที่มีความคล่องแคล่วถูกเชื่อว่าจะสามารถนำพานักเรียนให้มีความพร้อมไปสู่โลกอนาคตได้

นวัตกรรม SWABK เป็นนวัตกรรมการบริหาร โปรแกรมภาษาไทยและวัฒนธรรมไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่วซึ่งให้ความสำคัญกับการบริหารวิชาการ อันประกอบไปด้วย การพัฒนาหลักสูตร การจัดการเรียนการสอน และการประเมินผล โดยนวัตกรรมนี้ถูกสร้างขึ้นตามขั้นตอนการพัฒนานวัตกรรมที่มาจากการสังเคราะห์ มี 4 ขั้นตอนคือ

1. ศึกษาความต้องการจำเป็นในการพัฒนานวัตกรรมจากการศึกษาสภาพปัจจุบันและพึงประสงค์
2. ออกแบบนวัตกรรมจากการศึกษาหลักการใหม่แนวปฏิบัติที่ดีและผลวิเคราะห์ข้อมูลเชิงคุณภาพและเชิงปริมาณ
3. สร้างนวัตกรรมจากการระดมความคิดเห็นของผู้ทรงคุณวุฒิและผู้เชี่ยวชาญจากการสนทนากลุ่ม
4. ประเมินความเหมาะสมและความเป็นไปได้ของนวัตกรรมโดยผู้มีส่วนได้ส่วนเสียเป็นรายบุคคล

การศึกษาสภาพปัจจุบันและพึงประสงค์ของการบริหาร โปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว พบว่า คุณลักษณะที่มีความต้องการจำเป็นในการพัฒนาสูงสุดคือ S (seeking challenging situations) B (being a cognitive thinker) K (knowing what to do when facing uncertain situations) W (welcoming feedback and criticism)

การศึกษาหลักการใหม่และแนวปฏิบัติที่ดีเพื่อส่งเสริมคุณลักษณะผู้เรียนที่มีความคล่องแคล่วพบว่า หลักสูตรต้องมีความเชื่อมโยงกับวิชาอื่น ๆ และมีความหมายต่อผู้เรียน นักเรียนต้องเป็นส่วนหนึ่งของกระบวนการเรียนรู้ มีการพัฒนาความเข้าใจในเนื้อหาที่เรียนเชิงลึกและทักษะที่จำเป็นนอกเหนือจากในห้องเรียน การเรียนต้องช่วยสร้างความสามารถในการคิดวิเคราะห์ การสื่อสาร การทำงานร่วมกัน และการคิดสร้างสรรค์

ข้อมูลในข้างต้นรวมทั้งข้อเสนอแนะจากผู้ทรงคุณวุฒิและผู้เชี่ยวชาญถูกนำมาสร้างเป็นนวัตกรรมการบริหาร โปรแกรมภาษาไทยและวัฒนธรรมไทย เรียกว่า SWABK ซึ่งมาจาก S คือคุณลักษณะที่แสวงหาโอกาสที่ท้าทาย (seeking challenging situations) W คือคุณลักษณะที่ยอมรับฟังความคิดเห็นและคำวิพากษ์วิจารณ์จากผู้อื่น (welcoming feedback and criticism) A คือคุณลักษณะผู้เรียนที่มีความคล่องแคล่วในภาพรวม (agile learner) B คือคุณลักษณะการคิดวิเคราะห์ (being a cognitive thinker) นวัตกรรมนี้จะส่งเสริมให้การบริหารวิชาการของโปรแกรมภาษาไทยและวัฒนธรรมไทยมีประสิทธิภาพมากขึ้นและช่วยพัฒนาผู้เรียนให้มีคุณลักษณะติดตัวที่พร้อมเผชิญกับโลกอนาคต

ข้อ 2 ความเหมาะสม มากที่สุด มาก ปานกลาง น้อย น้อยที่สุดความเป็นไปได้ มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ความคิดเห็นเพิ่มเติม:

ข้อที่ 3 จุดประสงค์ของนวัตกรรม:

เพื่อพัฒนาการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยให้มีหลักสูตร การจัดการเรียนการสอน และการประเมินผลที่ส่งเสริมการพัฒนาผู้เรียนให้มีคุณลักษณะคล่องแคล่วดังนี้ S (Seeking challenging situations) แสวงหาโอกาสที่ท้าทาย, W (Welcoming feedback and criticism) การยอมรับฟังคำวิจารณ์, A (Agile learner) เป็นผู้เรียนที่มีความคล่องแคล่ว, B (Being a cognitive thinker) การคิดวิเคราะห์ และ K (Knowing what to do when facing uncertain situations) มีไหวพริบ

ข้อ3. ความเหมาะสม มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
ความเป็นไปได้ มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ความคิดเห็นเพิ่มเติม:

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ข้อที่ 4 ผลลัพธ์ของนวัตกรรม:



นวัตกรรมการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทย SWABK มุ่งพัฒนาใน 3 ส่วนคือ การพัฒนาหลักสูตร การจัดการเรียนการสอน และการประเมินผล ที่จะส่งเสริมให้เรียนนานาชาติสามารถพัฒนาระบบการบริหารและนำไปประยุกต์ใช้กับรูปแบบการบริหารที่มีอยู่เพื่อส่งเสริมให้ผู้เรียนมีคุณลักษณะที่พร้อมต่อโลกอนาคตดังนี้

1. S = Seeking challenging situation คุณลักษณะที่แสวงหาโอกาสที่ท้าทาย นักเรียนมีความกล้าที่จะออกจาก Comfort Zone เพื่อเรียนรู้ประสบการณ์ใหม่ ๆ ทดลองปฏิบัติและนำไปสู่การเรียนรู้เรื่องใหม่ ๆ อยู่ตลอดเวลา
2. W = Welcoming feedback and criticism คุณลักษณะที่ยอมรับฟังคำวิจารณ์จากผู้อื่น นักเรียนฝึกการเป็นผู้ให้คำวิจารณ์อย่างสร้างสรรค์ และฝึกการรับฟังคำวิจารณ์อย่างถ่อมแท้เพื่อนำ ไปปรับเปลี่ยนวิธีการทำงานหรืองานตนเอง วิธีการเรียนรู้ หรือวิธีปฏิบัติเพื่อให้ได้ผลลัพธ์ออกมาตามที่ได้วางแผนไว้
3. A = Agile learner คุณลักษณะคล่องแคล่วในภาพรวม นักเรียนมีเป้าหมายชัดเจนในการเรียน เป็นผู้คิดวิเคราะห์ ใฝ่รู้ใครเรียนเรื่องใหม่ ๆ รับฟังคำวิจารณ์ แสวงหาโอกาสที่ท้าทาย พร้อมรับมือต่อการเปลี่ยนแปลง มีทักษะการสื่อสารคล่อง
4. B = Being a cognitive thinker นักเรียนมีทักษะการคิดวิเคราะห์ สามารถนำความรู้ที่มีเชื่อมโยงกับความรู้อื่นเกิดเป็นความเข้าใจที่สามารถประยุกต์ใช้ให้เกิดประโยชน์ต่องานของตนเอง
5. K = Knowing what to do when facing uncertain situations นักเรียนมีไหวพริบแก้ไขปัญหาเฉพาะหน้าได้ ในการเรียนการทำงานอาจพบอุปสรรคบ้าง นักเรียนสามารถคิดหาทางข้ามอุปสรรคปัญหาเพื่อให้งานของตนสำเร็จลุล่วงตามเป้าหมายได้

4. ความเหมาะสม มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
ความเป็นไปได้ มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ความคิดเห็นเพิ่มเติม:

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ข้อที่ 5 ลักษณะสำคัญของนวัตกรรม:

นวัตกรรมการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทย “SWABK” มุ่งพัฒนาใน 3 ส่วน คือ การพัฒนาหลักสูตร การจัดการเรียนการสอน และการประเมินผล ดังนี้

5.1 ด้านการพัฒนาหลักสูตร

1. การพัฒนาหลักสูตร คือการออกแบบหลักสูตรให้มีความยืดหยุ่นทันสมัยต่อสังคมรอบตัวผู้เรียนทั้งในระดับท้องถิ่นและระดับโลก มีความหมายหรือสัมพันธ์ต่อนักเรียน บุคลากรวิชาภาษาไทยเข้ากับวิชาอื่น ๆ ส่งเสริมการทำงานร่วมกัน เน้นพัฒนาคุณลักษณะ SWABK คือ การแสวงหาโอกาสที่ท้าทาย การรับฟังคำวิจารณ์ เป็นผู้เรียนที่คล่องแคล่ว เป็นนักคิดวิเคราะห์ และมีไหวพริบ โดยมีแนวปฏิบัติดังนี้
 - 1.1 กำหนดผลลัพธ์การเรียนรู้ที่สอดคล้องกับความต้องการของสังคมไทยและสังคมโลกที่ส่งเสริมให้ผู้เรียนแสวงหาโอกาสที่ท้าทาย มีความกล้าที่จะลงมือทำสิ่ง ๆ ที่ไม่เคยทำ ชอบความยากท้าทาย
 - 1.2 กำหนดผลลัพธ์การเรียนรู้ที่สอดคล้องกับความต้องการของสังคมไทยและสังคมโลกที่ส่งเสริมให้ผู้เรียนยอมรับฟังคำวิจารณ์จากผู้อื่น เพื่อนำมาปรับปรุงเปลี่ยนแปลงให้เกิดผลสัมฤทธิ์ตามเป้าหมายที่ตั้งไว้
 - 1.3 กำหนดผลลัพธ์การเรียนรู้ที่สอดคล้องกับความต้องการของสังคมไทยและสังคมโลกที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะคล่องแคล่ว คือมีเป้าหมายในการเรียนที่ชัดเจน เป็นนักคิดวิเคราะห์ ใฝ่รู้ใคร่เรียนเรื่องใหม่ ๆ รับฟังคำวิจารณ์แสวงหาโอกาสที่ท้าทาย พร้อมรับมือต่อการเปลี่ยนแปลง และสามารถสื่อสารทั้งการพูด การอ่าน และการเขียนได้คล่อง
 - 1.4 กำหนดผลลัพธ์การเรียนรู้ที่สอดคล้องกับความต้องการของสังคมไทยและสังคมโลกที่ส่งเสริมให้ผู้เรียนเป็นนักคิดวิเคราะห์ สามารถนำความรู้ที่มีเชื่อมโยงกับความรู้ใหม่เกิดเป็นความเข้าใจที่สามารถประยุกต์ใช้ให้เกิดประโยชน์ต่องานของตนเอง
 - 1.5 กำหนดผลลัพธ์การเรียนรู้ที่สอดคล้องกับความต้องการของสังคมไทยและสังคมโลกที่ส่งเสริมให้ผู้เรียนมีไหวพริบแก้ไขปัญหาเฉพาะหน้าได้ ในการเรียนการทำงานอาจพบอุปสรรคบ้าง นักเรียนสามารถคิดหาทางข้ามอุปสรรคปัญหาเพื่อให้งานของตนสำเร็จลุล่วงตามเป้าหมายได้
 - 1.6 จัดทำหน่วยการเรียนรู้ที่บูรณาการวิชาภาษาไทยและวัฒนธรรมไทยกับสภาวะการโลกที่ส่งเสริมให้ผู้เรียนแสวงหาโอกาสที่ท้าทาย หน่วยการเรียนรู้ที่เกี่ยวข้องกับสถานการณ์จริงทั้งในระดับท้องถิ่นและในระดับโลกที่เกี่ยวข้องหรือมีความหมายต่อนักเรียนเพื่อกระตุ้นให้ศึกษาค้นคว้า เพื่อเสนอแนวทางแก้ไขจากความไม่รู้และทักษะจากหลาย ๆ วิชา
 - 1.7 จัดทำหน่วยการเรียนรู้ที่บูรณาการวิชาภาษาไทยและวัฒนธรรมไทยกับสภาวะการโลกที่ส่งเสริมให้ผู้เรียนยอมรับฟังคำวิจารณ์จากผู้อื่น หน่วยการเรียนรู้ที่เน้นการทำงานร่วมกันเพื่อพัฒนาชิ้นงานออกมาและนำเสนอต่อชั้นเรียนเพื่อรับฟังข้อดี ข้อควรปรับปรุง มาพัฒนางานของตนให้สำเร็จตามเป้าหมายที่ตั้งไว้
 - 1.8 จัดทำหน่วยการเรียนรู้ที่บูรณาการวิชาภาษาไทยและวัฒนธรรมไทยกับสภาวะการโลกที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะคล่องแคล่ว ตั้งเป้าหมายในการเรียนแต่ละครั้งอย่างชัดเจน เชื่อมโยงสิ่งที่รู้แล้วกับความรู้ใหม่ให้เกิดเป็นความเข้าใจเพื่อพัฒนาชิ้นงานออกมา ศึกษาค้นคว้าหาความรู้ใหม่ ๆ รับฟังคำวิจารณ์จากเพื่อนและครูและนำมาปรับแก้ไขให้เกิดประโยชน์ต่อการเรียนของตน แสวงหาโอกาสที่ท้าทาย พร้อมรับมือต่อการเปลี่ยนแปลง และสามารถนำเสนอผลงานผ่านการสื่อสารทั้งการพูด การอ่าน และการเขียนได้คล่อง
 - 1.9 จัดทำหน่วยการเรียนรู้ที่บูรณาการวิชาภาษาไทยและวัฒนธรรมไทยกับสภาวะการโลกที่ส่งเสริมให้ผู้เรียนเป็นนักคิดวิเคราะห์ สามารถนำความรู้ที่มีเชื่อมโยงกับความรู้ใหม่เกิดเป็นความเข้าใจที่สามารถประยุกต์ใช้ให้เกิดเป็นชิ้นงานใหม่ของตนได้
 - 1.10 จัดทำหน่วยการเรียนรู้ที่บูรณาการวิชาภาษาไทยและวัฒนธรรมไทยกับสภาวะการโลกที่ส่งเสริมให้ผู้เรียนเป็นมีไหวพริบแก้ไขปัญหาเฉพาะหน้าได้ ในการเรียนการทำงานอาจพบอุปสรรคบ้าง นักเรียนสามารถคิดหาทางข้ามอุปสรรคปัญหาเพื่อให้งานของตนสำเร็จลุล่วงตามเป้าหมายได้

5.1 ความเหมาะสม มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ความเป็นไปได้ มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ความคิดเห็นเพิ่มเติม:

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5.2 ด้านการจัดการเรียนการสอน

- 2 การจัดการเรียนการสอน คือการออกแบบการจัดการเรียนรู้ที่ให้ผู้เรียนมีปฏิสัมพันธ์กับเนื้อหาที่เรียน กับเพื่อนร่วมชั้นเรียน กับครู และกับชุมชนได้ตามความสะดวกของผู้เรียนนอกเหนือจากการเรียนในห้องเรียน เน้นการเข้าถึงการเรียนรู้ของผู้เรียนได้ทุกที่ทุกเวลา โดยมีแนวปฏิบัติดังนี้
- 2.1 จัดทำสื่อการเรียนรู้ที่สามารถเรียนรู้ได้ทุกที่ทุกเวลาที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะแสวงหาโอกาสที่ท้าทาย กระตุ้นให้นักเรียนออกจาก comfort zone มองหาปัญหารอบตัวในระดับชุมชนไปจนถึงระดับโลกเพื่อคิดหาทางแก้ปัญหา รวมถึงการมองปัญหาที่ยังไม่เกิดแต่อาจจะเกิดขึ้นได้จึงต้องคิดหาทางป้องกันเพื่อกระตุ้นความคิดให้นักเรียนเป็นผู้ที่มีวิสัยทัศน์
 - 2.2 จัดทำสื่อการเรียนรู้ที่สามารถเรียนรู้ได้ทุกที่ทุกเวลาที่ส่งเสริมคุณลักษณะให้ผู้เรียนยอมรับฟังคำวิจารณ์จากผู้อื่น รวมทั้งฝึกการวิพากษ์วิจารณ์ผลงานผู้อื่นอย่างสร้างสรรค์ นักเรียนมีพื้นที่แสดงความคิดเห็น แลกเปลี่ยนความคิด ทั้งในห้องเรียน และใน online platform ในแบบ synchronous และ asynchronous ตามเวลาที่นักเรียนสะดวก
 - 2.3 จัดทำสื่อการเรียนรู้ที่สามารถเรียนรู้ได้ทุกที่ทุกเวลาที่ส่งเสริมคุณลักษณะให้ผู้เรียนมีความคล่องแคล่ว นักเรียนมีเป้าหมายพัฒนาการเรียนของตนเองอย่างชัดเจนโดยสามารถเข้าถึงเนื้อหาที่เรียนได้ตลอดเวลา เลือกสิ่งที่ต้องการเรียนรู้ตามความสนใจตนเองหรือตามความจำเป็นต้องพัฒนาความรู้ด้านนั้น ๆ ฝึกทักษะการสื่อสารทั้งการอ่าน การฟัง การพูด การเขียน ได้ตลอด 24 ชั่วโมง
 - 2.4 จัดทำสื่อการเรียนรู้ที่สามารถเรียนรู้ได้ทุกที่ทุกเวลาที่ส่งเสริมคุณลักษณะให้ผู้เรียนมีการคิดวิเคราะห์ สื่อการเรียนรู้ของกิจกรรมการเรียนต้องกระตุ้นให้นักเรียนระบุปัญหา ค้นคว้าหาข้อมูลที่เกี่ยวข้อง อภิปรายข้อค้นพบ ประเมินข้อค้นพบ กำหนดหนทางแก้ไข นำเสนอหนทางแก้ไขและประเมินเป้าหมายการเรียนรู้
 - 2.5 จัดทำสื่อการเรียนรู้ที่สามารถเรียนรู้ได้ทุกที่ทุกเวลาที่ส่งเสริมคุณลักษณะให้ผู้เรียนมีไหวพริบ สื่อการเรียนรู้ของกิจกรรมการเรียนต้องเน้นการแก้ปัญหาเฉพาะหน้าอย่างมีหลักการคือ ระบุปัญหาจากข้อมูลที่มี ระบุสิ่งที่รู้เกี่ยวกับปัญหา ระบุสิ่งที่จะช่วยในการแก้ปัญหา วางแผนการแก้ปัญหาที่มีความเป็นไปได้ เลือกแผนที่ดีที่สุด ปฏิบัติตามแผนอย่างสุขุม และเลือกแผนใหม่หากแผนแรกไม่ประสบความสำเร็จ เมื่อสำเร็จ นักเรียนทบทวนสิ่งที่ทำเพื่อประเมินว่าตัวเองได้เรียนรู้อะไรจากการแก้ปัญหานั้น ๆ

- 5.2 ความเหมาะสม มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
- ความเป็นไปได้ มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ความคิดเห็นเพิ่มเติม:

5.3 ด้านการประเมินผล

3. การประเมินผล มีหลากหลายรูปแบบเพื่อรองรับความแตกต่างของนักเรียน มี 3 ระยะคือ การประเมินการเรียนรู้เพื่อการเรียนรู้ โดยครูจะนำผลการประเมินนั้นมาปรับกิจกรรมการเรียนการสอนให้เหมาะสมกับนักเรียนเพื่อพัฒนาการเรียนรู้ให้ได้ตามเป้าหมาย การประเมินการเรียนรู้ขณะเรียน นักเรียนจะต้องมีการประเมินตนเองขณะเรียนเพื่อนำผลการประเมินมาพัฒนาปรับปรุงการเรียนของตนเพื่อให้ได้ผลลัพธ์ตามที่ตั้งเป้าหมายไว้ และการประเมินการเรียนรู้ของการเรียนรู้ เป็นการประเมินเพื่อคุณลักษณะที่ถูกสร้างสรรค์มาจากการเรียนรู้ โดยมีแนวปฏิบัติดังนี้
- 3.1 การนำผลการประเมินหลักสูตรไปพัฒนาการเรียนรู้ของนักเรียนให้มีความพร้อมต่อโลกอนาคต และส่งเสริมคุณลักษณะให้ผู้เรียนแสวงหาโอกาสที่ท้าทาย ประเมินใน 3 ระยะคือ ประเมินเพื่อเรียน ประเมินขณะเรียน และประเมินการเรียนโดยส่งเสริมผลลัพธ์การเรียนรู้ที่เป็นประสบการณ์ใหม่ของนักเรียน เป็นสิ่งที่ไม่เคยทำมาก่อน เอาตัวเองออกจาก comfort zone เช่น แต่งนิทานให้น้องอนุบาลอ่าน ระดมทุนเพื่อช่วยเหลือเด็กกำพร้าโดยการแต่งเรื่องสั้นแล้วนำไปจำหน่าย เป็นต้น
- 3.2 การนำผลการประเมินหลักสูตรไปพัฒนาการเรียนรู้ของนักเรียนให้มีความพร้อมต่อโลกอนาคต และส่งเสริมคุณลักษณะให้ผู้เรียนยอมรับฟังคำวิจารณ์ ประเมินใน 3 ระยะคือ ประเมินเพื่อเรียน ประเมินขณะเรียน และประเมินการเรียน โดยตรวจสอบกระบวนการเรียนทั้งในขณะเรียนและช่วงสุดท้ายของการเรียนถึงกิจกรรมในส่วนที่นักเรียนได้ฝึกการให้คำวิจารณ์และการรับฟังคำวิจารณ์ที่ต้องมีอย่างต่อเนื่อง เป็นวิถีปฏิบัติของกิจกรรมการเรียนการสอน
- 3.3 การนำผลการประเมินหลักสูตรไปพัฒนาการเรียนรู้ของนักเรียนให้มีความพร้อมต่อโลกอนาคต และส่งเสริมคุณลักษณะให้ผู้เรียนมีความคล่องแคล่ว โดยตรวจสอบประเภทของการประเมินที่เหมาะสมต่อการประเมินพัฒนาการด้านการเรียนรู้ของนักเรียนในส่วนเนื้อหาและคุณลักษณะคล่องแคล่วที่พึงประสงค์ พร้อมตัวชี้วัดและเครื่องมือในการประเมินโดยอาจนำเทคโนโลยีเข้ามาช่วยให้การประเมินมีประสิทธิภาพมากขึ้น โดยตรวจสอบการประเมินการเรียนรู้ทั้ง 3 ระยะคือครูประเมินการเรียนของนักเรียนเพื่อกำหนดแนวทางการเรียนในครั้งต่อไป นักเรียนประเมินตัวเองเพื่อสำรวจสิ่งที่ทำได้ดี และที่ควรปรับปรุงเพื่อให้ไปสู่เป้าหมายการเรียนที่กำหนด และประเมินสิ่งที่ได้จากการเรียนรู้พร้อมคุณลักษณะที่พึงประสงค์
- 3.4 การนำผลการประเมินหลักสูตรไปพัฒนาการเรียนรู้ของนักเรียนให้มีความพร้อมต่อโลกอนาคต และส่งเสริมคุณลักษณะให้ผู้เรียนมีทักษะการคิดวิเคราะห์ ประเมินใน 3 ระยะคือ ประเมินเพื่อเรียน ประเมินขณะเรียน และประเมินการเรียนโดยดูการสร้างผลงานการเรียนที่มาจาก การแก้ปัญหาและการคิดวิเคราะห์
- 3.5 การนำผลการประเมินหลักสูตรไปพัฒนาการเรียนรู้ของนักเรียนให้มีความพร้อมต่อโลกอนาคต และส่งเสริมคุณลักษณะให้ผู้เรียนมีไหวพริบ โดยตรวจสอบกิจกรรมการเรียนที่ส่งเสริมการคิดอย่างสร้างสรรค์ การระดมความคิด การสะท้อนคิด การท้าทายความคิดหรือคิดนอกกรอบ ครูต้องสร้างโอกาสในกิจกรรมการเรียนให้นักเรียนต้องใช้ความคิดแก้ปัญหาและเห็นคุณค่าในการแก้ปัญหานั้น ๆ ของนักเรียน ครูตั้งคำถามปลายเปิดเพื่อกระตุ้นให้คิด ครูเป็นผู้สังเกตการณ์ขณะที่นักเรียนทำงานกลุ่มผ่านการถกเถียง แลกเปลี่ยนความเห็นเพื่อแก้ปัญหาในขณะทำงาน ส่งเสริมบรรยากาศการเรียนที่ให้อิสระในการแสดงความคิดเห็น ครูเป็นตัวอย่างของการแก้ปัญหาเฉพาะหน้าและการยอมรับข้อผิดพลาดว่าเป็นส่วนหนึ่งของการเรียนรู้

- 5.3 ความเหมาะสม มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
- ความเป็นไปได้ มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ความคิดเห็นเพิ่มเติม:

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6. การนำนโยบายไปใช้: ผลการวิจัยที่พบว่า นวัตกรรมการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว ควรเป็นนวัตกรรมการบริหารโปรแกรมภาษาไทย “SWABK” เพื่อให้การบริหารวิชาการบรรลุเป้าหมายที่ตั้งไว้ โรงเรียนควรดำเนินการดังนี้

6.1 ระดับนโยบาย ตั้งคณะกรรมการที่ประกอบไปด้วย ครูใหญ่ไทยหรือหัวหน้าแผนกภาษาไทย ตัวแทนครูจากทุกระดับคือ ระดับปฐมวัย ระดับประถมศึกษา ระดับมัธยมศึกษาตอนต้นและตอนปลาย

1.1. ด้านการพัฒนาหลักสูตร

1.1.1. ตรวจสอบหลักสูตรภาษาไทยและวัฒนธรรมไทยของโรงเรียนที่ใช้ อยู่ ถึงความยืดหยุ่นทันสมัยต่อสังคมรอบตัวนักเรียนทั้งในระดับท้องถิ่นและระดับโลก มีความหมายหรือสัมพันธ์ต่อนักเรียน บูรณาการวิชาภาษาไทยเข้ากับวิชาอื่น ๆ ส่งเสริมการทำงานร่วมกัน เน้นพัฒนาคุณลักษณะ SWABK คือ การแสวงหาโอกาสที่ท้าทาย การรับฟังคำวิจารณ์ เป็นผู้เรียนที่คล่องแคล่ว เป็นนักคิดวิเคราะห์ และมีไหวพริบ มากน้อยเพียงใด

1.1.2. คณะทำงานรวบรวมจุดอ่อนที่ได้จากการตรวจสอบหลักสูตรฯ มาศึกษาเพื่อร่างแนวทางในการแก้ปัญหาในเชิงนโยบาย

1.1.3. นำนโยบายการพัฒนาหลักสูตรที่ส่งเสริมคุณลักษณะพึงประสงค์ตามที่กำหนดทดลองใช้

1.1.4. ประเมินนโยบายการพัฒนาหลักสูตรที่ส่งเสริมคุณลักษณะพึงประสงค์เพื่อหาข้อดี ข้อควรปรับปรุง

1.2. ด้านการจัดการเรียนการสอน

1.2.1. ตรวจสอบการจัดทำสื่อการเรียนการสอนและการออกแบบการจัดการเรียนรู้ว่าเปิดโอกาสให้นักเรียนมีปฏิสัมพันธ์กับเนื้อหาที่เรียน กับเพื่อนร่วมชั้นเรียน กับครู และกับชุมชนได้ตามความสะดวกของผู้เรียนนอกเหนือจากการเรียนในห้องเรียน เน้นการเข้าถึงการเรียนรู้ของผู้เรียนได้ทุกที่ทุกเวลาหรือไม่

1.2.2. คณะทำงานรวบรวมจุดอ่อนที่ได้จากการตรวจสอบการจัดการเรียนการสอน เพื่อกำหนดนโยบายและแนวทางปฏิบัติให้ครูสามารถจัดทำสื่อและออกแบบการเรียนรู้ที่นักเรียนสามารถเข้าถึงได้ทุกที่ทุกเวลาและส่งเสริมคุณลักษณะคล่องแคล่วที่พึงประสงค์

1.2.3. นำนโยบายการจัดทำสื่อการเรียนการสอนและการออกแบบการเรียนรู้ที่ส่งเสริมคุณลักษณะคล่องแคล่วที่พึงประสงค์ไปทดลองใช้

1.2.4. ประเมินนโยบายการจัดการเรียนการสอนที่นักเรียนสามารถเข้าถึงการเรียนรู้ได้ทุกที่ทุกเวลาและส่งเสริมคุณลักษณะพึงประสงค์เพื่อหาข้อดี ข้อควรปรับปรุง

1.3. ด้านการประเมินผล

1.3.1. ตรวจสอบความหลากหลายของวิธีการประเมินการเรียนรู้ และความถี่ในการประเมินการเรียนรู้ว่าสะท้อนคุณลักษณะคล่องแคล่วที่พึงประสงค์หรือไม่

1.3.2. คณะทำงานรวบรวมจุดอ่อนที่ได้จากการตรวจสอบการประเมินการเรียนรู้ เพื่อกำหนดนโยบายและแนวทางปฏิบัติให้ครูสามารถออกแบบการประเมินให้ตรงกับความต้องการของนักเรียนแต่ละคน และส่งเสริมคุณลักษณะคล่องแคล่วที่พึงประสงค์

1.3.3. นำนโยบายการประเมินการเรียนรู้ที่คำนึงถึงความแตกต่างระหว่างบุคคลและส่งเสริมคุณลักษณะ
 คล่องแคล่วที่พึงประสงค์ไปทดลองใช้

1.3.4. ประเมินนโยบายการประเมินการเรียนรู้ที่คำนึงถึงความแตกต่างระหว่างบุคคลและส่งเสริม
 คุณลักษณะที่พึงประสงค์เพื่อหาข้อดี ข้อควรปรับปรุง

- 6.1 ความเหมาะสม มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
 ความเป็นไปได้ มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ความคิดเห็นเพิ่มเติม:

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6.2 ระดับปฏิบัติ การสื่อสารที่เปิดเผยและการมีส่วนร่วมมีความจำเป็นและสำคัญเพื่อให้ครูที่ไม่ได้อยู่ใน
 คณะทำงานรับรู้ข่าวสารและมีส่วนในการแสดงความคิดเห็นในทุกขั้นตอนตั้งแต่ระดับนโยบาย เพื่อให้เกิดความ
 ร่วมมือร่วมใจที่พร้อมจะปรับและเปลี่ยนเพื่อพัฒนาการเรียนรู้ของนักเรียนให้มีคุณลักษณะที่พึงประสงค์ จัดตั้ง
 คณะทำงานตามระดับชั้นที่มีครูทุกคนเป็นสมาชิก

1.ด้านการพัฒนาหลักสูตร

- 1.1 คณะทำงานกำหนดขอบเขต ระยะเวลา เป้าหมายการพัฒนาหลักสูตรที่สามารถวัดความสำเร็จได้
 1.2 คณะทำงานวางแผนการพัฒนาหลักสูตร โดยคำนึงถึงความสนใจของนักเรียน มีความทันสมัยทัน
 เหตุการณ์ทั้งในสังคมไทยและสังคมโลก มีการบูรณาการวิชาภาษาไทยเข้ากับวิชาอื่น ๆ สอดคล้องกับ
 เป้าหมายการเรียนรู้ที่ สำนักงานคณะกรรมการส่งเสริมการศึกษาเอกชน (สช.) กำหนด กำหนด
 คุณลักษณะคล่องแคล่วที่พึงประสงค์ในหลักสูตร
 1.3 ตรวจสอบความเหมาะสมของหลักสูตรโดยสมาชิกในคณะทำงาน
 1.4 นำหลักสูตรที่พัฒนาไปทดลองใช้
 1.5 ประเมินการใช้หลักสูตร ทั้งในขณะที่ใช้หลักสูตรควบคู่ไปกับการปรับปรุงและพัฒนาหลักสูตรที่
 เหมาะสมต่อไป และประเมินหลังการใช้หลักสูตรโดยครูและนักเรียน และนำผลการประเมินมา
 ปรับปรุงหลักสูตรเพื่อให้นักเรียนมีคุณลักษณะคล่องแคล่วที่พึงประสงค์

2. ด้านการจัดการเรียนการสอน

- 2.1 โรงเรียนจัดหาเทคโนโลยีเพื่อรองรับให้ครูสามารถจัดทำสื่อและออกแบบกิจกรรมการเรียนรู้ที่
 นักเรียนสามารถมีปฏิสัมพันธ์กับเนื้อหาที่เรียน กับเพื่อน กับครู และกับชุมชนได้ทุกที่ตลอดเวลา
 2.2 โรงเรียนจัดอบรมการใช้ platform หรือ application ต่าง ๆ ที่เป็นประโยชน์ต่อการจัดทำสื่อและการ
 ออกแบบกิจกรรมการเรียนรู้ที่นักเรียนสามารถเข้าถึงได้ทุกที่ตลอดเวลา
 2.3 ครูออกแบบและจัดกิจกรรมการเรียนการสอนที่คำนึงถึงความแตกต่างระหว่างบุคคล สอดคล้องกับ
 เป้าหมายการเรียนรู้ในหลักสูตรที่ส่งเสริมคุณลักษณะคล่องแคล่วที่พึงประสงค์

2.4 ครูออกแบบและจัดกิจกรรมการเรียนการสอนที่ฝึกการทำงานร่วมกันเพื่อพัฒนาคุณลักษณะ
 คล่องแคล่วที่พึงประสงค์คือ การกำหนดเป้าหมาย ความใฝ่รู้ใคร่เรียนเรื่องใหม่ ๆ การคิดวิเคราะห์
 การยอมรับฟังความเห็นผู้อื่น การแสดงความคิดเห็นต่อผู้อื่น การสื่อสาร การแก้ไขปัญหาเฉพาะหน้า
 การปรับเปลี่ยนวิธีการทำงานเพื่อให้ไปสู่เป้าหมายที่กำหนด

3. ด้านการประเมินผล

3.1 ครูจัดการประเมินผลการเรียนรู้ด้วยวิธีที่หลากหลาย รองรับความแตกต่างของนักเรียนแต่ละคน และ
 ประเมินที่พัฒนาการความก้าวหน้าเป็นรายบุคคล

3.2 ครูเปิดและสร้างโอกาสให้นักเรียนฝึกการประเมินตนเองและการประเมินเพื่อนตามหลักฐานการ
 เรียนรู้ เพื่อพัฒนาคุณลักษณะการยอมรับฟังคำวิจารณ์ของผู้อื่น และนำมาพัฒนาการเรียนของตนให้
 ดีขึ้น

3.3 ครูและนักเรียนกำหนดเกณฑ์การประเมินการเรียนรู้และพฤติกรรมที่พึงประสงค์ร่วมกันที่ส่งเสริม
 คุณลักษณะคล่องแคล่ว

3.4 การประเมินการเรียนรู้ต้องเกิดขึ้นตลอดเวลา ทั้งก่อนเรียน ขณะที่ยังเรียน และหลังเรียน เพื่อให้รู้ในสิ่งที่
 ยังไม่รู้และนำไปสู่การค้นคว้าหาความรู้เพื่อเติมเต็มส่วนที่หายไป

3.5 การประเมินต้องเน้นประเมินที่ผลของการเรียนรู้ ไม่ใช่ประเมินความรู้

3.6 นักเรียนประเมินครูเพื่อเป็นแนวทางให้ครูไปปรับการเป็น learning facilitator ที่มีประสิทธิภาพ

6.2 ความเหมาะสม มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

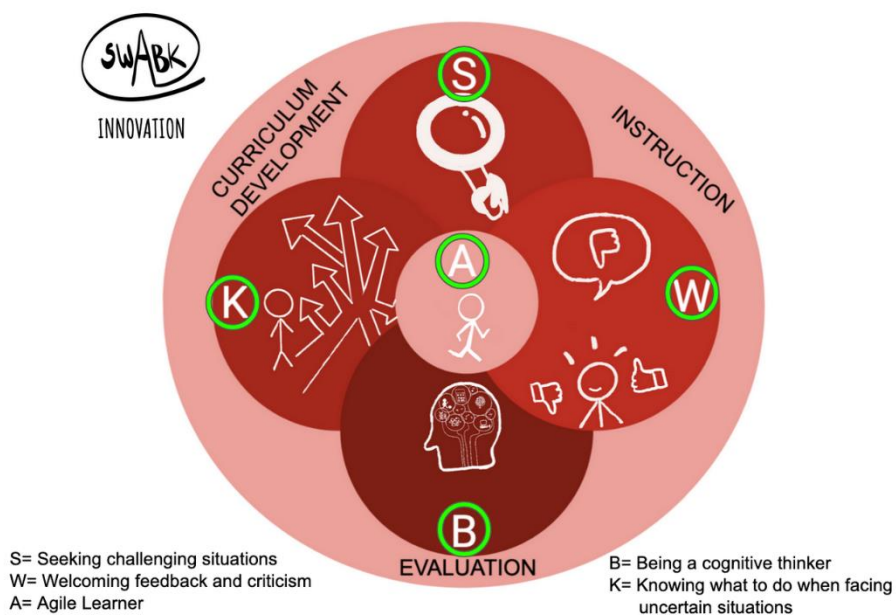
ความเป็นไปได้ มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ความคิดเห็นเพิ่มเติม:

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7. โครงสร้างและภาพรวมของนวัตกรรม



1. ความเหมาะสม มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด
- ความเป็นไปได้ มากที่สุด มาก ปานกลาง น้อย น้อยที่สุด

ความคิดเห็นเพิ่มเติม:

ขอขอบพระคุณในความอนุเคราะห์ของท่าน

จุฬาลงกรณ์มหาวิทยาลัย

CHULALONGKORN UNIVERSITY

Appendix B

Name List of Experts and Stakeholders

1. Name list of experts for evaluation of the 1st conceptual framework
2. Name list of experts for evaluation of the 2nd conceptual framework
3. Name list of experts for evaluation of the research instrument
4. Name list of experts and stakeholders for the focus group
5. Name list of stakeholders for evaluation of the innovation's feasibility and possibility

Name list of experts for evaluation of the 2nd conceptual framework

Expert in the area of agile learner characteristics

1. Dr. Angela Charumilinda School Director
Tubtong School

Expert in the area of research

2. Dr. Sasithorn Kiewkor Science Teacher
Phayathai School

Expert in the area of Thai language and culture program management

3. Dr. Kaanwarin Polanunt School Director
St. Andrews International School
Bangkok

Expert in the area of program management

4. Dr. Huruethai Anussornrajakit Associate Dean for Academic
Faculty of Education,
Rambhai Barni Rajabhat University

Expert in the area of management innovation

5. Dr. Sirima Monmai Expert in Educational Research
Office of the Basic Education
Commission (OBEC)

Name list of experts for evaluation of the research instrument

Expert in the area of agile learner characteristics

1. Dr. Angela Charumilinda School Director
Tubtong School

Expert in the area of research

2. Dr. Sasithorn Kiewkor Science Teacher
Phayathai School

Expert in the area of Thai language and culture program management

3. Dr. Kaanwarin Polanunt School Director
St. Andrews International School
Bangkok

Expert in the area of program management

4. Dr. Huruethai Anussornrajakit Associate Dean for Academic
Faculty of Education,
Rambhai Barni Rajabhat University

Expert in the area of management innovation

5. Dr. Sirima Monmai Expert in Educational Research
Office of the Basic Education
Commission (OBEC)

Name list of experts and stakeholders for the focus group

Expert in the area of agile learner characteristics

1. Dr. Angela Charumilinda School Director
Tubtong School
2. Dr. Pimolpun Burapharat School Director
Wanaluk kindergarten

Expert in the area of management and innovation development

3. Dr. Huruethai Anussornrajakit Associate Dean for Academic
Faculty of Education,
Rambhai Barni Rajabhat University
4. Dr. Sirima Monmai Expert in Educational Research
Office of the Basic Education
Commission (OBEC)

Expert in the area of Thai language and culture program management

5. Ajarn Suwinai Viponchai School Director
British International School, Phuket
6. Ajarn Pannapat Wongtaweep Thai Principal and Leader of Thai
Teacher
Wellington International School, Bangkok

Stakeholders of Thai language and culture program

7. Dr. Rattana Chanruam Head of Thai department and
Thai Teacher
Berkeley International School
American Curriculum
8. Dr. Nudtavadee Sapaprot Thai Teacher
Harrow International School, Bangkok
British Curriculum
9. Ajarn Sanicha Thai Teacher
KIS International School Bangkok
IB Curriculum

Name list of stakeholders for evaluation of the innovation's suitability and possibility

Thai Administrator, Co-Ordinator or Head Department

- | | |
|---------------------------------|---|
| 1. Dr. Sangwilai Charuwatee | Thai Director
Berkeley International School |
| 2. Ajarn Suwinai Viponchai | School Director
British International School, Phuket |
| 3. Ajarn Pannapat Wongtaweewsup | Thai Principal and Leader of Thai Teacher
Wellington International School, Bangkok |
| 4. Dr. Rattana Chanruam | Head of Thai department & Middle School Teacher
Berkeley International School |
| 5. Ajarn Kanlayanana Omera | Thai Co-Ordinator & High School Teacher
NIST |
| 6. Ajarn Nichapa Srisuk | Thai Co-Ordinator & High School Teacher
RIS |

Thai Teachers in Elementary School

- | | |
|------------------------------|------------------------------|
| 1. Ajarn Kittapong Aryuyo | RIS Ratchapruek Campus |
| 2. Ajarn Supornpen Punmanee | International School Bangkok |
| 3. Ajarn Sanicha Intharasema | KIS International School |

Thai Teachers in Middle School

- | | |
|----------------------------------|------------------------------|
| 1. Ajarn Pongsatorn Kaewgam | International School Bangkok |
| 2. Ajarn Piyanuch Soontornwipart | International School Bangkok |

Thai Teachers in High School

- | | |
|-----------------------------------|--------------------------------------|
| 1. Ajarn Sucheera Ruangtrakool | International School Bangkok |
| 2. Ajarn Passamon Moolasart | International School Bangkok |
| 3. Dr. Nudtavadee Sapaprot | Harrow International School, Bangkok |
| 4. Ajarn Manitsara Supakit Kolius | KIS International School |



Appendix C
Results of Data Analysis

1. IOC Analysis of the experts
2. The validity of the questionnaire
3. Data analysis of the questionnaire by individual question

IOC Analysis of the Experts

ตอนที่ 1 ข้อมูลพื้นฐานของผู้ตอบแบบสอบถาม

ข้อ	รายการประเมิน	ผู้เชี่ยวชาญคนที่					IOC
		1	2	3	4	5	
1	เพศ <input type="checkbox"/> ชาย <input type="checkbox"/> หญิง	+1	+1	+1	+1	+1	
2	อายุ <input type="checkbox"/> 30 ปีและน้อยกว่า <input type="checkbox"/> 31 – 40 ปี <input type="checkbox"/> 41 – 50 ปี <input type="checkbox"/> 51 – 60 ปี <input type="checkbox"/> 60 ปีขึ้นไป	+1	+1	+1	+1	+1	
3	ระดับการศึกษาสูงสุด <input type="checkbox"/> ปริญญาตรี <input type="checkbox"/> ปริญญาโท <input type="checkbox"/> ปริญญาเอก	+1	+1	+1	+1	+1	
4	ตำแหน่งปัจจุบัน <input type="checkbox"/> ครูใหญ่ไทย <input type="checkbox"/> หัวหน้าภาควิชาภาษาไทย <input type="checkbox"/> ครูภาษาไทย ระดับชั้นที่ สอน	+1	+1	+1	+1	+1	

ตอนที่ 2 ความคิดเห็นเกี่ยวกับสภาพที่เป็นจริงและสภาพที่พึงประสงค์ของการบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิดคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว

รายการประเมิน	ผู้เชี่ยวชาญคนที่					IOC
	1	2	3	4	5	
ด้านการพัฒนาหลักสูตร						
1)โปรแกรมภาษาไทยและวัฒนธรรมไทยในโรงเรียนนานาชาติมีการกำหนดเป้าหมายการเรียนรู้ที่สอดคล้องกับปรัชญาของโรงเรียน โดยครูและฝ่ายวิชาการที่ส่งเสริมให้นักเรียนมีคุณลักษณะผู้เรียนที่มีความคล่องแคล่วในข้อต่อไปนี้มากที่สุดเพียงใด						
1.1 ด้านพุทธิพิสัย						
1.1.1 ความมุ่งมั่นในเป้าหมาย	+1	0	+1	+1	+1	0.8
1.1.2 การคิดวิเคราะห์	+1	0	+1	+1	+1	0.8
2.1ด้านจิตพิสัย						
1.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ ๆ	+1	0	+1	+1	+1	0.8
1.2.2 การยอมรับฟังคำวิจารณ์	+1	0	+1	+1	+1	
3.1ด้านทักษะพิสัย						
1.3.1 การมองหาโอกาสที่ท้าทาย	+1	+1	+1	+1	+1	1
1.3.2 ความมีไหวพริบ	+1	+1	+1	+1	+1	1
1.3.3 ความไวและพร้อมต่อการเปลี่ยนแปลง	+1	+1	+1	+1	+1	1
1.3.4 การสื่อสารคล่อง	+1	+1	+1	+1	+1	1
2)โปรแกรมภาษาไทยและวัฒนธรรมไทยในโรงเรียนนานาชาติมีการกำหนดมาตรฐานการเรียนรู้ที่สอดคล้องกับเป้าหมายการเรียนรู้ ตามระดับความสามารถทางภาษาไทยที่ส่งเสริมให้นักเรียนมีคุณลักษณะผู้เรียนที่มีความคล่องแคล่วในข้อต่อไปนี้มากที่สุดเพียงใด						
1.2ด้านพุทธิพิสัย						
2.1.1 ความมุ่งมั่นในเป้าหมาย	+1	0	+1	+1	+1	0.8
2.1.2 การคิดวิเคราะห์	+1	0	+1	+1	+1	0.8
2.2ด้านจิตพิสัย						
2.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ ๆ	+1	0	+1	+1	+1	0.8
2.2.2 การยอมรับฟังคำวิจารณ์	+1	0	+1	+1	+1	0.8
3.2ด้านทักษะพิสัย						
2.3.1 การมองหาโอกาสที่ท้าทาย	+1	+1	+1	+1	+1	1
2.3.2 ความมีไหวพริบ	+1	+1	+1	+1	+1	1
2.3.3 ความไวและพร้อมต่อการเปลี่ยนแปลง	+1	+1	+1	+1	+1	1
2.3.4 การสื่อสารคล่อง	+1	+1	+1	+1	+1	1
3)โปรแกรมภาษาไทยและวัฒนธรรมไทยในโรงเรียนนานาชาติมีการจัดทำหน่วยการเรียนรู้ที่บูรณาการวิชาภาษาไทย สังคมศึกษา ประวัติศาสตร์และวัฒนธรรมไทยที่ส่งเสริมให้นักเรียน มีคุณลักษณะผู้เรียนที่มีความคล่องแคล่วในข้อต่อไปนี้มากที่สุดเพียงใด						
1.3ด้านพุทธิพิสัย						
3.1.1 ความมุ่งมั่นในเป้าหมาย	+1	+1	+1	+1	+1	1
3.1.2 การคิดวิเคราะห์	+1	+1	+1	+1	+1	1
3.2 ด้านจิตพิสัย						

3.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ ๆ	+1	+1	+1	+1	+1	1
3.2.2 การยอมรับฟังคำวิจารณ์	+1	+1	+1	+1	+1	1
3.3 ด้านทักษะพิสัย						
3.3.1 การมองหาโอกาสที่ท้าทาย	+1	+1	+1	+1	+1	1
3.3.2 ความมีไหวพริบ	+1	+1	+1	+1	+1	1
3.3.3 ความไวและพร้อมต่อการเปลี่ยนแปลง	+1	+1	+1	+1	+1	1
3.3.4 การสื่อสารคล่อง	+1	+1	+1	+1	+1	1
ด้านการจัดการเรียนการสอน						
4) โปรแกรมภาษาไทยและวัฒนธรรมไทยมีการกำหนดจุดประสงค์การเรียนรู้ที่สอดคล้องกับผลลัพธ์การเรียนรู้ ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะความคล่องแคล่ว ในด้านต่อไปนี้มาน้อยเพียงใด						
4.1 ด้านพุทธิพิสัย						
4.1.1 ความมุ่งมั่นในเป้าหมาย	+1	+1	+1	+1	+1	1
4.1.2 การคิดวิเคราะห์	+1	+1	+1	+1	+1	1
4.2 ด้านจิตพิสัย 1						
4.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ ๆ	+1	+1	+1	+1	+1	1
4.2.2 การยอมรับฟังคำวิจารณ์	+1	+1	+1	+1	+1	1
4.3 ด้านทักษะพิสัย						
4.3.1 การมองหาโอกาสที่ท้าทาย	+1	+1	+1	+1	+1	1
4.3.2 ความมีไหวพริบ	+1	+1	+1	+1	+1	1
4.3.3 ความไวและพร้อมต่อการเปลี่ยนแปลง	+1	+1	+1	+1	+1	1
4.3.4 การสื่อสารคล่อง	+1	+1	+1	+1	+1	1
5) โปรแกรมภาษาไทยและวัฒนธรรมไทยในโรงเรียนนานาชาติมีการจัดกิจกรรมการเรียนรู้ตามแผนจัดการเรียนรู้ที่ส่งเสริมให้นักเรียนมีคุณลักษณะผู้เรียนที่มีความคล่องแคล่วในข้อต่อไปนี้มาน้อยเพียงใด						
5.1 ด้านพุทธิพิสัย						
5.1.1 ความมุ่งมั่นในเป้าหมาย	+1	+1	+1	+1	+1	1
5.1.2 การคิดวิเคราะห์	+1	+1	+1	+1	+1	1
5.2 ด้านจิตพิสัย						
5.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ ๆ	+1	+1	+1	+1	+1	1
5.2.2 การยอมรับฟังคำวิจารณ์	+1	+1	+1	+1	+1	1
5.3 ด้านทักษะพิสัย						
5.3.1 การมองหาโอกาสที่ท้าทาย	+1	+1	+1	+1	+1	1
5.3.2 ความมีไหวพริบ	+1	+1	+1	+1	+1	1
5.3.3 ความไวและพร้อมต่อการเปลี่ยนแปลง	+1	+1	+1	+1	+1	1
5.3.4 การสื่อสารคล่อง	+1	+1	+1	+1	+1	1
6) โปรแกรมภาษาไทยและวัฒนธรรมไทยมีการจัดทำสื่อการเรียนที่สามารถเรียนรู้ได้ทุกที่ทุกเวลา ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะความคล่องแคล่ว ในด้านต่อไปนี้มาน้อยเพียงใด						
6.1 ด้านพุทธิพิสัย						

6.1.1 ความมุ่งมั่นในเป้าหมาย	+1	+1	+1	+1	+1	1
6.1.2 การคิดวิเคราะห์	+1	+1	+1	+1	+1	1
6.2 ด้านจิตพิสัย						
6.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ๆ	+1	+1	+1	+1	+1	1
6.2.2 การยอมรับฟังคำวิจารณ์	+1	+1	+1	+1	+1	1
6.3 ด้านทักษะพิสัย						
6.3.1 การมองหาโอกาสที่ท้าทาย	+1	+1	+1	+1	+1	1
6.3.2 ความมีไหวพริบ	+1	+1	+1	+1	+1	1
6.3.3 ความไวและพร้อมต่อการเปลี่ยนแปลง	+1	+1	+1	+1	+1	1
6.3.4 การสื่อสารคล่อง	+1	+1	+1	+1	+1	1
7) โปรแกรมภาษาไทยและวัฒนธรรมไทยมีการกำหนดหลักฐานการประเมินผลการเรียนรู้ตามจุดประสงค์ที่เหมาะสมกับความแตกต่างของผู้เรียน ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะความคล่องแคล่ว ในด้านต่อไปนี้มาน้อยเพียงใด						
7.1 ด้านพุทธิพิสัย						
7.1.1 ความมุ่งมั่นในเป้าหมาย	+1	0	+1	+1	+1	0.8
7.1.2 การคิดวิเคราะห์	+1	0	+1	+1	+1	0.8
7.2 ด้านจิตพิสัย						
7.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ๆ	+1	0	+1	+1	+1	0.8
7.2.2 การยอมรับฟังคำวิจารณ์	+1	0	+1	+1	+1	0.8
7.3 ด้านทักษะพิสัย						
7.3.1 การมองหาโอกาสที่ท้าทาย	+1	0	+1	+1	+1	0.8
7.3.2 ความมีไหวพริบ	+1	0	+1	+1	+1	0.8
7.3.3 ความไวและพร้อมต่อการเปลี่ยนแปลง	+1	0	+1	+1	+1	0.8
7.3.4 การสื่อสารคล่อง	+1	0	+1	+1	+1	0.8
ด้านการประเมินผล						
8) โปรแกรมภาษาไทยและวัฒนธรรมไทยในโรงเรียนนานาชาติมีการวัดคุณภาพผู้เรียนตามมาตรฐานการเรียนรู้ที่กำหนด ที่ส่งเสริมให้นักเรียนมีคุณลักษณะผู้เรียนที่มีความคล่องแคล่ว ในข้อต่อไปนี้มาน้อยเพียงใด						
8.1 ด้านพุทธิพิสัย						
8.1.1 ความมุ่งมั่นในเป้าหมาย	+1	0	+1	+1	+1	0.8
8.1.2 การคิดวิเคราะห์	+1	0	+1	+1	+1	0.8
8.2 ด้านจิตพิสัย						
8.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ๆ	+1	0	+1	+1	+1	0.8
8.2.2 การยอมรับฟังคำวิจารณ์	+1	0	+1	+1	+1	0.8
8.3 ด้านทักษะพิสัย						
8.3.1 การมองหาโอกาสที่ท้าทาย	+1	0	+1	+1	+1	0.8
8.3.2 ความมีไหวพริบ	+1	0	+1	+1	+1	0.8
8.3.3 ความไวและพร้อมต่อการเปลี่ยนแปลง	+1	0	+1	+1	+1	0.8
8.3.4 การสื่อสารคล่อง	+1	0	+1	+1	+1	0.8
9) โปรแกรมภาษาไทยและวัฒนธรรมไทยมีการตรวจสอบความเหมาะสมของหลักสูตรต่อสังคมไทยและสังคมโลก ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะความคล่องแคล่ว ในด้านต่อไปนี้มาน้อยเพียงใด						

9.1 ด้านพุทธิพิสัย						
9.1.1 ความมุ่งมั่นในเป้าหมาย	+1	0	+1	+1	+1	0.8
9.1.2 การคิดวิเคราะห์	+1	0	+1	+1	+1	0.8
9.2 ด้านจิตพิสัย						
9.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ ๆ	+1	0	+1	+1	+1	0.8
9.2.2 การยอมรับฟังคำวิจารณ์	+1	0	+1	+1	+1	0.8
9.3 ด้านทักษะพิสัย						
9.3.1 การมองหาโอกาสที่ท้าทาย	+1	0	+1	+1	+1	0.8
9.3.2 ความมีไหวพริบ	+1	0	+1	+1	+1	0.8
9.3.3 ความไวและพร้อมต่อการเปลี่ยนแปลง	+1	0	+1	+1	+1	0.8
9.3.4 การสื่อสารคล่อง	+1	0	+1	+1	+1	0.8
10) โปรแกรมภาษาไทยและวัฒนธรรมไทยมีการตรวจสอบความเหมาะสมของการจัดการเรียนการสอนที่คำนึงถึงความแตกต่างของผู้เรียน ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะความคล่องแคล่ว ในด้านต่อไปนี้มาน้อยเพียงใด						
10.1 ด้านพุทธิพิสัย						
10.1.1 ความมุ่งมั่นในเป้าหมาย	+1	0	+1	+1	+1	0.8
10.1.2 การคิดวิเคราะห์	+1	0	+1	+1	+1	0.8
10.2 ด้านจิตพิสัย						
10.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ ๆ	+1	0	+1	+1	+1	0.8
10.2.2 การยอมรับฟังคำวิจารณ์	+1	0	+1	+1	+1	0.8
10.3 ด้านทักษะพิสัย						
10.3.1 การมองหาโอกาสที่ท้าทาย	+1	0	+1	+1	+1	0.8
10.3.2 ความมีไหวพริบ	+1	0	+1	+1	+1	0.8
10.3.3 ความไวและพร้อมต่อการเปลี่ยนแปลง	+1	0	+1	+1	+1	0.8
10.3.4 การสื่อสารคล่อง	+1	0	+1	+1	+1	0.8
11) โปรแกรมภาษาไทยและวัฒนธรรมไทยมีการนำผลการประเมินหลักสูตรไปพัฒนาการเรียนรู้อของนักเรียนให้มีความพร้อมต่อโลกอนาคต ที่ส่งเสริมให้ผู้เรียนมีคุณลักษณะความคล่องแคล่ว ในด้านต่อไปนี้มาน้อยเพียงใด						
11.1 ด้านพุทธิพิสัย						
11.1.1 ความมุ่งมั่นในเป้าหมาย	+1	0	+1	+1	+1	0.8
11.1.2 การคิดวิเคราะห์	+1	0	+1	+1	+1	0.8
11.2 ด้านจิตพิสัย						
11.2.1 ความใฝ่รู้ใคร่เรียนเรื่องใหม่ ๆ	+1	0	+1	+1	+1	0.8
11.2.2 การยอมรับฟังคำวิจารณ์	+1	0	+1	+1	+1	0.8
11.3 ด้านทักษะพิสัย						
11.3.1 การมองหาโอกาสที่ท้าทาย	+1	0	+1	+1	+1	0.8
11.3.2 ความมีไหวพริบ	+1	0	+1	+1	+1	0.8
11.3.3 ความไวและพร้อมต่อการเปลี่ยนแปลง	+1	0	+1	+1	+1	0.8
11.3.4 การสื่อสารคล่อง	+1	0	+1	+1	+1	0.8

Reliability Analysis of the questionnaire using Cronbach's Alpha Coefficient

The alpha reliability coefficients are 0.983 for the question inquiring about the current and desired states.

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded ^a	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

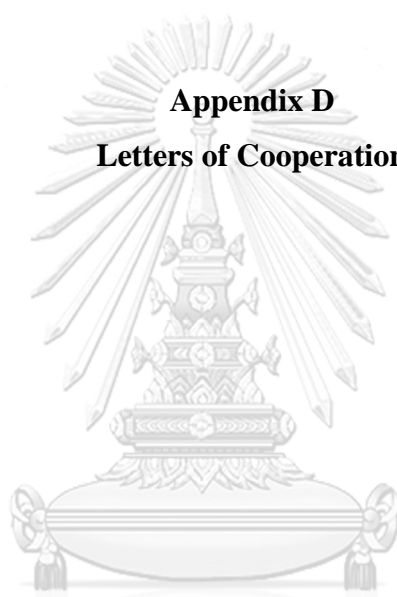
Reliability Statistics

Cronbach's Alpha	N of Items
.983	176

The alpha reliability coefficients are 0.979 for the question inquiring about the current states, number of items are 88.

The alpha reliability coefficients are 0.993 for the question inquiring about the desired states, number of items are 88.

Appendix D
Letters of Cooperation



จุฬาลงกรณ์มหาวิทยาลัย
CHULALONGKORN UNIVERSITY



No. 0512.6(2791.01)/61-1040

Faculty of Education,
Chulalongkorn University
Phayathai Road, Bangkok 10330

Subject Request for Cooperation in Conceptual Framework and Instrument Validation

To Dr. Andrew Davies

As Charuwan Byrum, a doctoral student in Educational Management Department of Education Policy Management and Leadership, Faculty of Education, Chulalongkorn University is proceeding thesis research on "Management Innovation for Thai Language and Culture Program for International Schools in Thailand According to the Concept of Agile Learner Characteristics" under the supervision of Assistant Professor Dr.Chayapim Usaho and Professor Dr. Pruet Siribanpitak would like to request for you cooperation in conceptual framework and instrument validation. The student researcher will further inform you the details.

Please kindly consider to provide your opinions and inputs for academic advantages. Thank you for your cooperation.

Regards,

A handwritten signature in blue ink, appearing to read "Dr. Siridej Sujiva".

(Assistant Professor Dr.Siridej Sujiva)

Dean

The student researcher's contact information: 081-459-7874 email: charuwab@isb.ac.th



No. 0512.6(2791.01)/61-4041

Faculty of Education,
Chulalongkorn University
Phayathai Road, Bangkok 10330

Subject Request for Cooperation in Conceptual Framework and Instrument Validation

To Dr. Elizabeth Rossini

As Charuwan Byrum, a doctoral student in Educational Management Department of Education Policy Management and Leadership, Faculty of Education, Chulalongkorn University is proceeding thesis research on "Management Innovation for Thai Language and Culture Program for International Schools in Thailand According to the Concept of Agile Learner Characteristics" under the supervision of Assistant Professor Dr.Chayapim Usaho and Professor Dr. Pruet Siribanpitak would like to request for you cooperation in conceptual framework and instrument validation. The student researcher will further inform you the details.

Please kindly consider to provide your opinions and inputs for academic advantages. Thank you for your cooperation.

Regards,

(Assistant Professor Dr.Siridej Sujiva)

Dean

The student researcher's contact information: 081-459-7874 email: charuwab@isb.ac.th

ที่ ศบ 0512.6(2791.01)ว61-๑๐๐๕

คณะกรรมการ จุฬาลงกรณ์มหาวิทยาลัย
ถนนพญาไท กรุงเทพมหานคร 10330

๒๐ ธันวาคม 2561

เรื่อง ขอเชิญเป็นผู้ทรงคุณวุฒิประเมินกรอบแนวคิดและตรวจเครื่องมือวิจัย

เรียน ดร. กาญจน์วรินทร์ ผลอนันต์

ด้วย นางจรรุวรรณ ไบรัมย์ นิสิตหลักสูตรครุศาสตรดุษฎีบัณฑิต สาขาวิชาบริหารการศึกษา ภาควิชา นโยบายการจัดการและความเป็นผู้นำทางการศึกษา อยู่ระหว่างการดำเนินงานวิจัยวิทยานิพนธ์เรื่อง “นวัตกรรม การบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิด คุณลักษณะผู้เรียนที่มีความคล่องแคล่ว” โดยมี ผู้ช่วยศาสตราจารย์ ดร. ชญาทิมา อูสาโท และ ศาสตราจารย์ ดร. พฤทธิ ศรีบรรณพิทักษ์ เป็นอาจารย์ที่ปรึกษา ในการนี้จึงขอเชิญท่านเป็นผู้ทรงคุณวุฒิ ประเมินกรอบแนวคิดและตรวจเครื่องมือวิจัย ทั้งนี้ นิสิตผู้วิจัยจะได้ประสานงานในรายละเอียดต่อไป

จึงเรียนมาเพื่อขอความอนุเคราะห์จากท่านโปรดเป็นผู้ทรงคุณวุฒิดังกล่าวเพื่อประโยชน์ทางวิชาการต่อไป และขอขอบคุณมาในโอกาสนี้

ขอแสดงความนับถือ

(รองศาสตราจารย์ ดร.ศิริเดช สุชีวะ)

คณบดี

กลุ่มภารกิจบริการการศึกษา ฝ่ายสนับสนุนวิชาการ
โทร. 0-2218-2565-97 ต่อ 6732
เบอร์โทรศัพท์ผู้วิจัย: 081-459-7874 email: charuwab@isb.ac.th



บันทึกข้อความ

ส่วนงาน กลุ่มภารกิจบริการการศึกษา ฝ่ายสนับสนุนวิชาการ คณะครุศาสตร์ จุฬาฯ โทร. 0-22182565 ต่อ 6732
 ที่ ศธ 0512.6(2791.01)/61- 1000 วันที่ 24 ธันวาคม 2561
 เรื่อง ขอเชิญเป็นผู้ทรงคุณวุฒิประเมินกรอบแนวคิดและตรวจเครื่องมือวิจัย

เรียน ผู้ช่วยศาสตราจารย์ ดร.วิชัย เสวกงาม

ด้วย นางจรรุวรรณ ไบรัมย์ นิสิตหลักสูตรครุศาสตรดุษฎีบัณฑิต สาขาวิชาบริหารการศึกษา ภาควิชา
 นโยบายการจัดการและความเป็นผู้นำทางการศึกษา อยู่ระหว่างการดำเนินงานวิจัยวิทยานิพนธ์เรื่อง “นวัตกรรม
 การบริหารโปรแกรมภาษาไทยและวัฒนธรรมไทยสำหรับโรงเรียนนานาชาติในประเทศไทยตามแนวคิด
 คุณลักษณะผู้เรียนที่มีความคล่องแคล่ว” โดยมี ผู้ช่วยศาสตราจารย์ ดร. ชญาพิมพ์ อุสาโท และ
 ศาสตราจารย์ ดร. พฤทธิ ศิริบรรณพิทักษ์ เป็นอาจารย์ที่ปรึกษา ในการนี้จึงขอเชิญท่านเป็นผู้ทรงคุณวุฒิ
 ประเมินกรอบแนวคิดและตรวจเครื่องมือวิจัย ทั้งนี้สิดผู้วิจัยจะได้ประสานงานในรายละเอียดต่อไป

จึงเรียนมาเพื่อขอความอนุเคราะห์จากท่านโปรดเป็นผู้ทรงคุณวุฒิดังกล่าวเพื่อประโยชน์ทางวิชาการ
 ต่อไป และขอขอบคุณมาในโอกาสนี้

(รองศาสตราจารย์ ดร.ศิริเดช สุขิวะ)
 คณบดี



ที่ อว 64.62791.04/63-0258

คณะกรรมการฯ พิจารณาเรื่องมหาวิทยาลัย
ระบบคุณวุฒิ กรุงเทพมหานคร 10330

๒๔ มกราคม ๒๕๖๓

เรื่อง ขอความร่วมมือในการเก็บข้อมูลวิจัย

เรียน คุณหญิงอุทัย

ถึงที่ส่งมาด้วย เครื่องมือที่ใช้ในการวิจัย

ด้วย นางจตุรพรอม ไบรัมย์ ศึกษานิเทศก์ศูนย์ทดสอบคุณวุฒิบัณฑิต สาขาวิชาบริหารการศึกษา สาขาวิชา
นวัตกรรมการจัดการและความเป็นผู้นำทางการศึกษา อยู่ระหว่างการทำงานด้านงานวิจัยวิทยานิพนธ์เรื่อง "นวัตกรรมการ
บริหารโปรแกรมภาษาไทยและวัฒนธรรมมีผลต่อบัณฑิตไทยในต่างประเทศโดยตามแนวคิดคุณวุฒิทางวัฒนธรรม
ที่มีความสอดคล้อง" โดยมี ผู้ช่วยศาสตราจารย์ ดร.ชูชาติ ชื่นใจ และศาสตราจารย์ ดร.พดุงศักดิ์
ศิริบรรณพิทักษ์ เป็นอาจารย์ที่ปรึกษา ในการนี้มีความจำเป็นต้องเก็บข้อมูลด้วยแบบสอบถาม กับผู้บริหาร
โปรแกรมภาษาไทยและวัฒนธรรมไทยที่ศูนย์คุณวุฒิไทย หรือสำนักงานคณะกรรมการการอุดมศึกษาไทย
วัฒนธรรมไทยของโรงเรียนนานาชาติในประเทศไทย ทั้งนี้มีข้อมูลวิจัยที่ได้ประสานงานในรายละเอียดต่อไปนี้

จึงเรียนมาเพื่อขอความอนุเคราะห์จากท่านโปรดอนุญาตให้ติดต่อได้ทำการเก็บข้อมูลวิจัยดังกล่าว เพื่อ
ประโยชน์ทางวิชาการต่อไป และขอขอบคุณเป็นอย่างสูง

ขอแสดงความนับถือ

(รองศาสตราจารย์ ดร.ชูชาติ ชื่นใจ)

รองคณบดี

ปฏิบัติการแทนคณบดี

ศูนย์บริการวิชาการเพื่อพัฒนาศักยภาพและวิจัยเชิง นวัตกรรม

โทร. 0-2218-2565-97 ต่อ 6734

เวบไซต์ศูนย์วิจัย: 081-459-7874 email: charuwat@nchi.ac.th





Mrs. Charuwan Byrum

Education

- Ph.D. Candidate, Educational Leadership and Policy, Educational Management, Faculty of Education, Chulalongkorn University, 2019
- MBA - City University, USA 1994
- B.Ed., (Elementary) - Chulalongkorn University, 1992

Educational Work Experiences

2004 - Present	International School Bangkok Elementary School Thai teacher
2001 - 2004	Concordian International School PYP Thai teacher
1997 - 2001	Thai-Chinese International School K12 Thai teacher

Workshops and Trainings

- Agile Learners by James Anderson (2017)
- Engaging Boy Writers
- What do our kids need now to be successful & happy-and how we can help?
- Teaching with stories
- Learning Environment
- TPRS (Teaching Proficiency through Reading and Storytelling)
- Integrating Performance Assessment in the Foreign Language Classroom with Paul Sandrock at HKIS (September 8-9, 2012)
- Effective Assessment by Paul Sandrock (October 2011)
- Multiple Intelligences by Dr. Howard Gardner (2011)
- NTPRS Conference, Chicago (July 2010)
- The Power of Reading in Second Language Acquisition by Dr. Stephen Krashen
- Understanding by Design by Dr. Grant Wiggin

Other Related Work Experiences

- 2010 -Present: Trainer of the Thai Language, Culture and Professional Ethics Course for Expatriate Teachers at ISB
- 2012-2014: Trainer for the volunteer teachers to teach Thai language and culture in the United States of America, topic "*How to teach Thai to non-Thai students*" at Faculty of Education, Chulalongkorn University
- 2008 Committee member to develop standards and benchmarks for Thai language and culture course for international students in Thailand

VITA

NAME Mrs. Charuwan Byrum

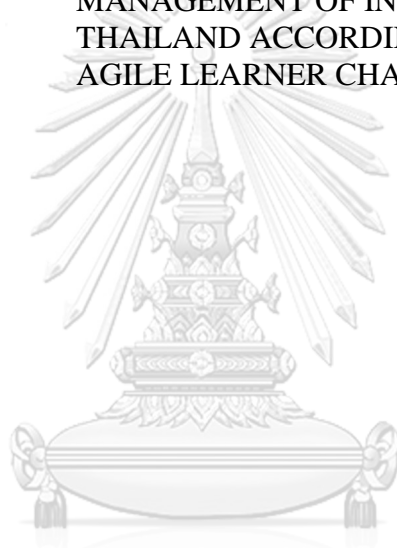
DATE OF BIRTH 10 September 1971

PLACE OF BIRTH Bangkok

**INSTITUTIONS
ATTENDED** B.Ed Chulalongkorn University
MBA City University, USA

HOME ADDRESS 98/148 Bangpleeyai Bangplee Samutprakarn 10540

PUBLICATION THAI LANGUAGE AND CULTURE PROGRAM
MANAGEMENT OF INTERNATIONAL SCHOOLS IN
THAILAND ACCORDING TO THE CONCEPT OF
AGILE LEARNER CHARACTERISTICS



จุฬาลงกรณ์มหาวิทยาลัย
CHULALONGKORN UNIVERSITY