

PROPOSED GUIDELINES FOR DEVELOPING PRIMARY ENGLISH TEACHER TRAINING
PROGRAMS FOR PROVINCIAL TEACHER TRAINING COLLEGES,
KINGDOM OF CAMBODIA



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หลายประเทศโดยอิงจากกรอบแนวคิด TPACK การวิเคราะห์ข้อมูลเป็นการวิเคราะห์ทั้งในเชิง
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ผลการวิจัยจากการสำรวจความเห็นของผู้ทรงคุณวุฒิตามวิธีเดลฟายสรุปเป็น
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The purpose of this research was to propose guidelines for developing primary English teacher training programs in Cambodia. Specifically, the objective was to ascertain the aims, key competencies, and content domains for developing primary English teacher training programs for Provincial Teacher Training Colleges (PTTCs) in the Kingdom of Cambodia. The study employed three rounds of an online Delphi survey. The three rounds were used to identify, prioritize, and classify the aims with key competencies and content domains. The survey lasted for 14 weeks. A panel of English curriculum designers and English teacher trainers from the Cambodian Ministry of Education, Youth and Sports were invited to participate as the experts. The questionnaire was generated from documentary research of primary English teacher education programs in several ASEAN countries based on the TPACK framework. The data were analyzed quantitatively and qualitatively according to the responses received. Means, standard deviation, percentages and content analysis were employed in the data analysis.

The findings of the Delphi survey were used to propose the guidelines for developing primary English teacher training programs at PTTCs in Cambodia. The guidelines consist of 5 aims, 14 key competencies, and 15 content domains.

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CHAPTER I

INTRODUCTION

Education is regarded internationally as an important field in ensuring the human resource development in order to meet national needs. While the world is changing, education reform is also needed. Each country has to develop human resources continuously to respond to the changes. In order to fulfill these needs, higher education plays a prominent role in responding to the changing of the society. Additionally, the experiences from developed countries in the world demonstrate that developing human resources in higher educational institutions is essential for advancing the country (Ministry of Education Youth and Sports, 2010). Teacher education is viewed as one of the most critical processes of strengthening the education. It has been identified as a central variable in the transformation and reform of educational systems at national and local levels (Freeman, 2001). Several countries around the world have witnessed these major changes and development in teacher education (Sinlarat, 2003).

As the coming of the ASEAN Community in 2015, each ASEAN member state is preparing itself for the integration. The Educational system is expected to be changed to educate their citizens for this new community. Since the ASEAN Charter stated “The working language of ASEAN shall be English.” (ASEAN, 2008), to strengthen the integration, English is an important subject to be reformed in non-English speaking member states. Being able to communicate directly with one another, people in the ASEAN countries need to be proficient in the English language (ASEAN, 2009). Therefore, some ASEAN nations are concerned about amendments to the English curriculum since primary education level in preparation for the upcoming

integration. In Cambodia, in particular, English is not included in their primary education. Therefore, the Ministry of Education, Youth and Sports (MoEYS) has initiated the idea to update their national curricula to equip Cambodian students with English ability from the primary school level.

To put this primary English education policy into practice, English teacher education system will need to be changed. Presently, Cambodian English teacher training programs consist of two programs to prepare English teachers for only the secondary education levels: lower secondary schools and upper secondary schools.

The English teacher training for lower secondary schools is a two-year program which recruits the high school graduates who have finished their twelve years of basic education to receive another two year of pre-service teacher training. It is called the “12+2” formula and conducted by six Regional Teacher Training Centres (RTTCs) throughout the country. Graduates from this program will be employed and placed upon their academic achievements and performance by the Provincial Department of Education (PDE) according to the school needs. Teachers only obtain permanent status after one year of service.

The English teacher training for upper secondary schools is a one-year teacher training program which recruits the undergraduates who have finished their bachelor’s degree to receive another one year of pre-service teacher training. It is called the “Bachelor+1” formula and conducted by National Institute of Education (NIE), (MoEYS., 2008). After the completion of the training, newly teachers are centrally assigned and posted by MoEYS, and then by PDE, similar process to the lower secondary schools level’s.

Since the English teacher training for primary education level is not yet included in the system, the Ministry of Education is planning to assign the Provincial Teacher Training Colleges (PTTCs) to be responsible in training primary school English teachers.

On the other hand, the MoEYS had been initiated the idea to implement the English subject to the primary level and trained short-term in-service English teacher trainers in order to teach newly pre-service student teachers to be able to teach English after the completion of the primary teacher training program. Furthermore, no research study regarding English teacher training for the primary education level in Cambodia. Thus, this research study investigated the primary teacher education programs in the ASEAN countries such as Singapore, the Philippines, Malaysia, Thailand, Vietnam, Lao PDR and the current English teacher training curriculum utilized in the Kingdom of Cambodia and synthesized views from English teacher educators as well as English curriculum developers to propose guidelines for developing primary English teacher training programs for the primary English teacher education at PTTCs in Cambodia.

Research Questions

The following research questions were explored in this study:

- What should be the aims of the primary English teacher training programs at PTTCs in Cambodia?
- What should be the key competencies of the students required by the primary English teacher training programs at PTTCs in Cambodia?
- What content domains should be included in the primary English teacher training programs at PTTCs in Cambodia?

Research Objectives

The objective of this research study was to propose the guidelines for developing primary English teacher training programs for Provincial Teacher Training Colleges in Cambodia in the aspects of aims, key competencies, and content domains.

Definitions of Terms

Guidelines refer to the proposed statements for developing primary English teacher training programs at Provincial Teacher Training Colleges in Cambodia. The guidelines in this study consist of the aims, the key competencies that the students should acquire and the content domains for primary English teacher training programs.

Aim is an overall specification of the intention of the primary English teacher training programs.

Key competencies refer to the expected outcomes in terms of knowledge, skills, and attitude that the students in the primary English teacher training programs should acquire from the program.

Content domains refer to the areas of content subjects to be included in the primary English teacher training programs.

Primary English teacher training program pertains to a two-year pre-service teacher training courses that prepare primary teachers of English by the Provincial Teacher Training Colleges in Cambodia.

Provincial Teacher Training College (PTTC) pertains to a teacher education institution which produces primary school teachers. PTTCs are located in most provinces in Cambodia.

Delphi is a method that facilitates group communication among experts in the field to generate ideas and consensus about a particular issue. In this study, Delphi was employed to generate ideas and consensus among English curriculum developers and English teacher trainers about the guidelines for primary English teacher training programs in Cambodia.

Experts refer to educators who possess the knowledge and experiences necessary to give ideas in this Delphi study such as English curriculum developers and English teacher trainers in Cambodia as stated in the panel selection criteria.

Scope of the Study

1. The population of this study was English curriculum developers and English teacher trainers under the Cambodian Ministry of Education, Youth and Sports.
2. The variables in this study were aims, key competencies and content domains for developing primary English teacher training programs.
3. This study was to determine consensus on recommended guidelines that could be used to develop a two-year primary English teacher training programs at PTTCs in Cambodia.

CHAPTER II

LITERATURE REVIEW

This section provides the review of literature related to the topic of the research as follows:

1. Concepts of Teacher Trainings
2. The TPACK Framework
3. Overview of the education system and teacher education in Cambodia
4. Teacher education in other countries
5. Delphi method
6. Relevant Research Studies

Concept of Teacher Trainings

Definition.

Teacher training is a training that a student must undergo in order to be qualified as a teacher (Collins Dictionary, 2012). Moreover, TheFreeDictionary (2012) explains that teacher training is a professional preparation of teachers, usually through formal course work and practice teaching. Although the concept of teaching as a profession is fairly new, most teachers in industrialized nations today are college or university educated. The amount of preparatory training, however, varies greatly worldwide.

Woodward (1991) stated that teaching and teacher training are both complex events. They bring together an enormous number of features such as people, times, places, materials, content, processes, course types, and aims in a cluster. These features meet and jostle in a spontaneous kaleidoscope colored by the past

histories, present speculations, and future possibilities of all the features at the event.

The ideas of teacher education program.

Zeichner and Conklin (2005) stated that teacher education programs have been distinguished from one another in several different ways in the literature. The most common distinction that has been made among program has been in terms of their structure. Programs have been recognized as different according to their length, when they are offered, and by the institutions that sponsor them. Programs have also been defined in terms of their admissions requirements and curricular emphases, such as the amount of credits in arts and sciences courses versus education courses, whether they require an academic major, the amount of time spent working in schools as opposed to that spent in classes on campus, and according to when courses are offered in the program. Teacher education programs have been also distinguished from one another in terms of their conceptual orientations. Several frameworks have been proposed for describing the different conceptual orientations of programs based on their view of teaching, learning, what teachers need to know, and the process of learning to teach.

Barnes (1987) also distinguished programs according to whether they have coherent themes that tie together the various courses and field experiences. Barnes argued that organizing programs around themes strengthens their socializing power. Others have defined programs in terms of whether they have particular features such as student cohort groups or professional development school partnerships.

In a review of the literature on teacher education program structures, Arends and Winitzky (1996), as cited in Zeichner and Conklin (2005), identified five structural

types of teacher education programs other than the 4-year undergraduate model: (a) the extended and integrated 5-year program leading to a bachelor's degree, (b) the extended and integrated 5-year program leading to a bachelor's and master's degree, (c) the fifth-year program leading to a master's degree, (d) the 6-year program leading to a master's degree, and (e) alternative certification program. The literature makes further distinctions between different kinds of graduate programs as developmental theory and preparing teachers.

Kim (2011) recommended that teacher education programs should revisit its curriculum and examine very carefully if they are adequately preparing pre-service teachers for their future classrooms. Teacher educators need to help pre-service teachers overcome the fear of encountering English Language Learners (ELLs) in the classroom. To make teacher education effective, teacher educators need to continue to stimulate pre-service teachers' thinking about working with ELLs consistently and seamlessly across teacher education programs. In doing so, teacher education programs can successfully help pre-service teachers understand the issues of linguistic diversity, one of the core tasks for teacher education programs.

Similarly, Newman, Samimy, and Romstedt (2010) suggested that those who wish to encourage teacher professional development create resources to improve teachers' ability to deliver academic content to ELLs, or develop training programs, must take into account teachers' needs vis-à-vis their willingness to engage in professional development.

Consequently, it can be concluded that teacher education program around the world have been found to have both similarities and differences. The teacher education programs vary depending on its structure, contents and lengths. However,

they also share common goal in educating student teachers to be highly knowledgeable in term of academic skills, teaching skills, classroom skills and pedagogies.

EFL teacher training program.

Many Asian countries have serious responds to the growing need to foster communicative abilities in English where English is taught as a foreign language. The population aspiring to learn English as a Second or Foreign Language (ESL/EFL) has increased rapidly over the past decade. Because of the quality issue, there is rising awareness that language teachers should be appropriately trained as teachers of English. However, the majority of school teachers might not be adequately prepared to teach English; improving their English proficiency and teaching skills have thus become a matter of concern.

Nowadays, the demand for a qualified English teacher has becoming a serious problem in educational sector. Some teachers even do not know how to teach English well. That is why the English language training program for teachers is needed and worthwhile. EFL training program for the teachers will also help to build a solid working relationship with teachers.

Burns and Richards (2009) mentioned that within the field of Second Language Teacher Education (SLTE), there have traditionally been two strands – one focusing on classroom teaching skills and pedagogic issues, and the other focusing on academic underpinnings of classroom skills, namely knowledge about language and language learning. Similarly, Kamhi-Stein (2009) stated that work on NNES teachers-in-preparation has focused on two different broad themes – the first theme deals with issues of teacher language proficiency, it deals with language as a skill that needs to

be improved for a teacher to be a successful professional and the second theme has mainly focused on issues of teachers-in-preparation in countries where English is the dominant language (U.S., U.K., Canada, Australia, New Zealand). It has dealt with how NNES teachers-in-preparation socialize into their language education programs, how they perceive themselves in relation to their English-speaking peers, and how they develop a sense of professional identity.

In conclusion, teacher education is a complex task, lots of careful attentions need to be taken. It has many different structures in terms of length and contents. Several frameworks have been proposed for describing the different conceptual orientations of programs based on the view of teaching, learning, what teachers need, and the process of learning to teach in order to make the program effective, up-to-date and help teachers to be successful professional. Thus, refreshment of the program is considered necessarily.

The TPACK Framework

The Technological Pedagogical Content Knowledge (TPACK) builds on Shulman's construct of Pedagogical Content Knowledge (PCK) to include technology knowledge as situated within content and pedagogical knowledge. The TPACK framework emerges from the interaction of content, pedagogy and technology knowledge. The TPACK refers to the knowledge required by teachers for integrating technology into their teaching in any content area. Teachers have an intuitive understanding of the complex interplay between the three key sources of knowledge: technology, pedagogy, and content by teaching content using appropriate pedagogical methods and technologies (Mishra & Koehler, 2006), (see

Appendix H). The framework describes three components together as being a critical synthesis of knowledge used by the most effective teachers:

- ***Content Knowledge (CK)*** refers to the knowledge about actual subject matter that is to be learned or taught. Teachers must know about the content they are going to teach and how the nature of knowledge is different for various content areas.
- ***Pedagogical Knowledge (PK)*** refers to the processes and practices or methods of teaching and includes knowledge in classroom management, assessment, lesson plan development and student learning.
- ***Technological Knowledge (TK)*** refers to knowledge about standard technologies, such as pencil and paper, and more advanced technologies, such as the Internet and digital video. It enables teachers to understand information technology, apply it properly for optimum learning, identify useful technologies, and continually adapt to changes in technology.

In conclusion, the TPACK refers to a term used increasingly to describe what teachers need to know to effectively integrate technology into their teaching practices. TPACK framework was used in pre-service teacher education and described three components: content, pedagogical and technological knowledge. TPACK is a framework that introduces the relationships and the complexities between all the three components of knowledge. It focuses on designing and evaluating teacher knowledge that is concentrated on effective student learning in various content areas.

Overview of the Education System and Teacher Education in Cambodia

Education system in Cambodia.

In Cambodia, there are three ways of providing and receiving education: formal, non-formal and informal. The formal education structure consists of pre-school education (three-step system), six years of primary school (grades 1-6) where pupils should be enrolled at the age of six, three years of lower secondary school (grades 7-9) and three years of upper secondary school (grades 10-12). While the national economy is improving, especially in the capital of Phnom Penh, education has become a more valuable commodity and private schools were increasingly opened (UNESCO, 2010).

Recently in Cambodia, education is available for almost everyone. For those who have dropped out of school without completing the basic education level (grades 1-9), there are opportunities to attend literacy and life-skill programs as well as short-term vocational training programs offered by the MoEYS, Ministry of Women Affairs (MoWA) and NGOs. After completing lower secondary education, students can continue their education to upper secondary education or enter secondary level vocational training programs offered by the Ministry of Labour and Vocational Training (MoLVT). For those who completed upper secondary education, they can enter vocational training or tertiary education.

All higher education institutions (HEIs) host students in a wide range of undergraduate and post graduate programs. It offers both professional and academic degrees. A wide range of graduate programs are now available, but the quality of both undergraduate and graduate programs is really limited. It becomes an important

concern for the government, so the process of institutional accreditation has begun in November 2009.

For the academic year 2011-2012, the total number of students enrolled was 3,123,082 (1,491,344 females) and there are 11,046 schools with the total of 81,601 classrooms. There are 103,780 (43,624 female) educational staff in total who are working in schools and 86,404 (39,299 female) teaching staff. There are 4,032 Pre-School teachers, 56,344 Primary School teachers, 31,698 Lower Secondary School teachers and 11,706 Upper Secondary School teachers (MoEYS., 2012).

Table 1

Number of Schools, classes, students and teachers, 2011-2012

Number of schools		11,046
Number of classes		81,601
Number of Enrollment	Male	1,631,738
	Female	1,491,344
	Total	3,123,082
Number of Teachers at each level	Pre-school	4,032
	Primary school	56,344
	Lower secondary school	31,698
	Upper secondary school	11,706
Teaching staff	Male	60,156
	Female	43,624
	Total	103,780

In 2000 the Ministry of Education, Youth and Sports of Cambodia began a wholesale reform of its education system. The reform was guided by a five year

Education Strategy Plan and an Education Sector Support Program with the aim of hastening the success of the Education for All scheme. The reform process has involved the analysis of sector performance, research, and trends with the aim of dovetailing the new policies and strategies with the existing major educational policies, which are: a) making nine years of basic education available to all while developing functional literacy, b) using effective reform to improve education and bring it up to date, c) connecting education and training with the labor market and society at large, and d) rehabilitating the Youth and Sports sub-sector.



23	ឧត្តមសិក្សា Higher Education សាកលវិទ្យាល័យ និងវិទ្យាស្ថាន Universities & Institutes	<ul style="list-style-type: none"> - University of Health Sciences - Royal University of Fine Arts - Institute of Technology of Cambodia - Royal University of Law and Eco. Sciences - Royal University of Agriculture - Royal University of Phnom Penh - National University of Management - Institute of Economics and Finance - Mahanishi Vedic University - National Institute of Education 	<i>ប្រឡងនិងប្រើសេវាសិក្សាជ្រើសរើស Select & Entrance Exam</i>		អប់រំបច្ចេកទេស និងវិជ្ជាជីវៈ Technical Vocational Education Training	អប់រំក្រៅប្រព័ន្ធធម្មតា NON-FORMAL EDUCATION
22						
21						
20						
19						
18						
17	មធ្យមសិក្សា ទុតិយភូមិ Upper Secondary	ថ្នាក់ទី ១២ Grade 12 <i>ប្រឡង</i> <i>Exam</i>	ថ្នាក់ទី ១១ Grade 11	ថ្នាក់ទី ១០ Grade 10	អប់រំបច្ចេកទេស និងវិជ្ជាជីវៈ Technical Vocational Education Training	
16						
15						
14	ការអប់រំមូលដ្ឋានរយៈពេល ៩ឆ្នាំ 9-year basic education	មធ្យមសិក្សាបឋមភូមិ Lower Secondary	ថ្នាក់ទី ៩ Grade 9 <i>ប្រឡង</i> <i>Exam</i>	ថ្នាក់ទី ៨ Grade 8	អប់រំបច្ចេកទេស និងវិជ្ជាជីវៈ Technical Vocational Education Training	
13						
12						
11						
10						
9						
8						
7						
6						
5	មត្តេយ្យសិក្សា Pre-school	បឋមសិក្សា Primary	ថ្នាក់ទី ៦ Grade 6	ថ្នាក់ទី ៥ Grade 5	អប់រំបច្ចេកទេស និងវិជ្ជាជីវៈ Technical Vocational Education Training	
11						
10						
9						
8	មត្តេយ្យសិក្សា Pre-school	បឋមសិក្សា Primary	ថ្នាក់ទី ៤ Grade 4	ថ្នាក់ទី ៣ Grade 3	អប់រំបច្ចេកទេស និងវិជ្ជាជីវៈ Technical Vocational Education Training	
7						
6						
5	មត្តេយ្យសិក្សា Pre-school	បឋមសិក្សា Primary	ថ្នាក់ទី ២ Grade 2	ថ្នាក់ទី ១ Grade 1	អប់រំបច្ចេកទេស និងវិជ្ជាជីវៈ Technical Vocational Education Training	
4						
3						
អាយុ Age	មត្តេយ្យសិក្សា Pre-school	បឋមសិក្សា Primary	ថ្នាក់កម្រិតខ្ពស់ High Step	ថ្នាក់កម្រិតមធ្យម Medium Step	អប់រំបច្ចេកទេស និងវិជ្ជាជីវៈ Technical Vocational Education Training	
4						
3						
3	មត្តេយ្យសិក្សា Pre-school	បឋមសិក្សា Primary	ថ្នាក់កម្រិតទាប Lower Step	ថ្នាក់កម្រិតទាប Lower Step	អប់រំបច្ចេកទេស និងវិជ្ជាជីវៈ Technical Vocational Education Training	
4						
5						

(Source: UNESS 2010-2013, UNESCO Phnom Penh Office, 2010)

Figure 1. Education System in Cambodia

Teacher education in Cambodia.

The teacher education and training system was almost entirely destroyed during years of civil conflict in the 1970's, and about 80% of the teaching staff was lost during the civil conflict (UNESCO, 2010). After recovering from the trauma of the 1975-1979 period under the Khmer Rouge, Cambodia has made tremendous achievements in rebuilding the entire teacher education and training system. Teacher training programs varied in length and intensity from 1979 to 1985. These courses focused on upgrading general knowledge rather than teaching skills or pedagogy methodology (UNICEF, 1989). Schooling was basic, often conducted under the trees and aimed at little more than basic literacy. UNESCO (1991) explained that

“In the course of the last ten years of educational reconstruction, teachers, virtually picked up from city streets and village pathways, were provided a highly variable range of short term training (3 weeks, 1 month or ½ months). By 1982/83 there were some 32,000 teachers with an enormously wide range of competencies, or lack of them, nevertheless maintaining the education system. These 32,000 teachers ranged in subject competence from primary level to university.” (p. 47)

Teacher education and training institutes are now being gradually re-established at the national, regional and provincial levels. The National Institute of Education (NIE) trains more than 500 upper secondary school teachers annually. The six Regional Teacher Training Colleges (RTTC) train about 1,450 lower secondary school teachers, and the 18 Provincial Teacher Training Colleges (PTTC) train about 2,200 primary school teachers. In addition, the Pre-school Teacher Training Center

(PsTTC) trains about 200 pre-school teachers. Moreover, the MoEYS also runs 15 resource centres to ensure capacity building for education officials in the provinces where PTTC's and RTTC's do not exist (UNESCO, 2010).

Table 2

Teacher Training in Cambodia

Type of Institution	Number of Institution	Level of Teacher trained	Training Formula	English Teacher Training	Approximate number of graduation/program
NIE	1	Upper Secondary	Bachelor+1	Available	500
RTTC	6	Low Secondary	12+2	Available	1,450
PTTC	18	Primary	12+2	N/A	2,200
PsTTC	1	Pre-school	12+2	N/A	200
Total	26				4,350

Due to the shortage of teachers and the demands of qualified teachers, the Cambodian Ministry of Education, Youth and Sports has formulated teacher training programs as Formula (12 + 2), 12 years of schooling plus 2-year program of pedagogic training, and Formula (Bachelor + 1), Bachelor degree plus 1-year program of pedagogic training (MoEYS., 2008). Note that at primary level teachers are trained to be qualified to teach multiple subjects while at secondary level teachers are trained to be qualified to teach a single-subject. Thus English teacher training programs are only available at the secondary level and not yet the primary level.

UNESCO (2010) also stated that huge challenges still remain in rebuilding the entire teacher education and training system in Cambodia as follows:

First of all, there is still a lack of comprehensive teacher education and training system both at the pre-service and in-service programs, and also, there

are missing linkages between the two levels. The national teacher education and training policies are yet to be in place, and the teacher education and training Master Plan is under development.

Second, there are not enough teachers at all levels – particularly in the remote and rural areas. 5,000 new teachers was planned to train annually by the MoEYS to meet the growing demands, and this target is yet to be reached.

Third, the quality of teachers and the quality of teacher education and training programs need to be urgently improved. Currently, teachers in remote areas and in rural areas have not studied beyond the primary level. One concern is the highly academic nature of the teacher training curriculum. A large proportion of the time is spent on academic upgrading as opposed to teaching methodology and in-school teaching practices.

Fourth, teachers' social and financial statuses still need to be further upgraded so as to promote teaching and learning quality. Also, the teacher training programs among many stakeholders, government and development partners need to be coordinated by the MoEYS in order to ensure systematic effectiveness and efficiency of such programs.

In conclusion, the new historical era of Cambodian teacher education started after the fall of Khmer Rouge regime. Since then the re-establishment of teacher education has gradually been improving. This can be evidently seen through the construction and operation of teacher training institutions at all levels all over the country. However, the constraint in rebuilding teacher education regarding the quantity and quality of teachers still remains highly concerned.

Lower secondary school English teacher training program.

Students interested in becoming lower secondary English teachers should take required English courses in addition to general courses and also required to complete a 6-week for the first year and an 8-week for the second year of student teaching in secondary schools.

Two-year program of pre-service lower secondary English teacher training curriculum:

Aims of the training program.

- To enable the trainee teachers to have a basic knowledge of and competency in English so that they are able to gradually improve their own standard of English in the future.
- To enable the trainee teachers to teach English effectively to students at Lower Secondary Schools.
- To enable the trainee teachers to understand the importance of maintaining high professional standards of behaviour and continuous professional development.

Key competencies.

By the end of the training course, Cambodian Lower Secondary teachers of English should:

- Be able to learn English language written in EfC from Book 1 to Book 6.
- Be able to communicate effectively in English.
- Be able to plan lessons and teach English communication effectively to students at Lower Secondary Schools using learner-centred approach.

- Know about the English language and understand how it is used internationally.
- Understand the importance of motivation and how children aged 12-15 learn.
- Be able to create new learning and teaching techniques and activities from any training and teaching material.
- Understand the importance of making students have fun in class and having a good rapport with students.
- Know how to organize their time and self-access effectively so that they can maintain their continuous professional development.
- Be able to reflect on their own teaching in order to develop their own professional skill
- Be able to observe lessons taught by other teachers and give constructive feedback to them.
- Understand the difference between English and Khmer pronunciation aspects; sound of alphabets, consonants and diphthongs.
- Be able to teach pronunciation lessons effectively.
- Understand the importance of motivation for teaching and learning.
- Understand the good relationship between teachers, learners, community, organization and government to help enhance Cambodian education.
- Know how to control the class effectively.

Content domains.

The content domains were categorized based on the TPACK framework as follows (see Appendix M):

- Content knowledge
 - Culture
 - Language skills
- Pedagogical knowledge
 - Theories, approaches, methods and techniques of teaching
 - Psychology for teachers
 - Instructional material development
 - Educational measurement and evaluation
- Technological knowledge
 - Educational innovation and information technology
- General education
 - Teacher Characteristics Development
 - Health education
 - Physical education
- Field experience
 - Practicum

Based on the curriculum structure (see Appendix M), the two-year lower secondary school English teacher training program aims at providing student teachers to equip themselves with both general English language improvement and teaching skills.

Teacher Education in other Countries

The countries to be considered selected in this review studies are based on successful countries (Singapore, the Philippines and Malaysia) and countries have similar characteristic as Cambodia (Thailand, Vietnam and Laos).

Each country consists of the following information:

Overview

- School system
- Role of English
- Goal of English language teaching and learning
- Teaching approach/curriculum
- Teacher/English teacher training and licensing

Teacher/English Teacher Education

- Aims
- Key competencies
- Content domains

Teacher education in Singapore.

School system.

Singapore's education system aims to nurture every child and help all students discover their talents, realize their full potential, and develop a passion for life-long learning. National Education aims to foster strong bonds among students and develop in them a deep sense of belonging and commitment to family, community and country (MOE Singapore, 2012).

Every Singaporean child undergoes at least ten years of general education. The school system features a national curriculum, with national

examinations at the end of the 6-year primary, 4-year secondary and junior college years. In recent years, Singapore has moved towards a more flexible and diverse education system, aimed at providing students with greater flexibility and choice. Upon completion of their primary education, students can choose from a range of education institutions and programs that cater to different strengths and interests. To allow a greater range of student achievements and talents to be recognized, selected secondary schools, junior colleges, polytechnics and universities have the flexibility to admit a percentage of their intake using school-based criteria in the direct or discretionary admission exercises (MOE Singapore, 2012).

At the primary level, students go through a six-year course (ages 7-12) aimed at giving students a good grasp of English, Mother Tongue and Mathematics. In addition, students will learn Science, Social Studies, Civics and Moral Education, Music, Art and Crafts, Health Education and Physical Education. They are also encouraged to participate in Co-Curricular Activities (CCAs) and Community Involvement Programme (CIP). At the end of Primary 6, students take the Primary School Leaving Examination (PSLE), which assesses their suitability for secondary education and places them in the appropriate secondary school course that will match their learning pace, ability and inclinations (MOE Singapore, 2012).

Role of English.

Singapore has four official languages: English, Mandarin, Malay, and Tamil; other languages and dialects also abound on the island. English is used officially and it has become the medium of instruction in schools as well as a subject of study for all primary and secondary school pupils. According to MOE Singapore (2010) “Bilingualism is a cornerstone of Singaporean education system.” Pupils learn

both English and their own Mother Tongue language in school. English operates at many levels and plays many roles in Singapore. At the local level, it is the common language that facilitates bonding among the different ethnic and cultural groups. At the global level, English allows Singaporeans to participate in a knowledge-based economy where English is the lingua franca of the Internet, of science and technology and of world trade. Therefore, the ability to speak and write English effectively has become an essential skill in the workplace, and a mastery of English is vital to Singaporean pupils.

Goal of English language teaching and learning at primary and secondary level.

The goal of English language teaching and learning in Singapore schools is to raise the language competency of all primary and secondary pupils achieve the best international standards. The following are the desired outcomes for Singaporean primary and secondary pupils (MOE Singapore, 2010):

- All the pupils will be able to use English to express themselves. All should attain foundational skills, particularly in grammar, spelling and basic pronunciation. They should be able to use English in everyday situations and for functional purposes, such as giving directions, information or instructions and making requests.
- The majority of the pupils will attain a good level of competence in English, in both speech and writing. Some in this group who have a flair for the language will find this an advantage in frontline positions and various service industries.

- At least 20% will attain a high degree of proficiency in English.

They will help Singapore keep its edge in a range of professions, and play an important role in teaching and the media. Further, within this group, they can expect a smaller group of Singaporeans to achieve mastery in their command of the language that is no different from the best in English-speaking countries.

Teaching approach/curriculum.

MOE Singapore (2012) stated that Singapore adopted Thinking Schools, Learning Nation (TSLN) in 1997 as their vision in education. TSLN describes a nation of thinking and committed citizens, and an education system capable of meeting the challenges of the 21st century. Since 2003, they have also focused on nurturing a spirit of Innovation and Enterprise (I&E) among their students and staff. In 2004, Teach Less, Learn More (TLLM) was a call by PM Lee Hsien Loong for all schools and teachers to teach better, improve the quality of interaction between teachers and students, and equip students with the knowledge, skills and values that prepare them for life. Teaching will focus on developing understanding, critical thinking and the ability to ask questions and seek solutions.

To achieve the aim of effective language use, teachers are guided by the six Principles of English Language Teaching and Learning (CLLIPS) and will take into account the Teaching Processes (ACoLADE) when developing their instructional programs and lessons. The six Principles of English Language Teaching and Learning (CLLIPS) stated by MOE Singapore (2010) are as follow:

Contextualisation: Learning tasks and activities will be designed for pupils to learn the language in authentic and meaningful contexts of use.

Learner-centredness: Learners are at the center of the teaching-learning process. Teaching will be differentiated according to pupils' needs, abilities and interests.

Learning-focused Interaction: The teacher will provide a rich environment for communication that will explicitly foster listening and speaking skills and focus on the achievement of the learning outcomes. At the same time, the teacher will actively engage pupils by encouraging participation in their learning, boosting their confidence in the use of language, and promoting collaboration among learners from different socio-cultural backgrounds.

Integration: The receptive skills, the productive skills, and grammar and vocabulary which are the areas of language learning will be taught in an integrated way, together with the use of relevant print and non-print resources, to provide multiple perspectives and meaningful connections.

Process Orientation: The development of language skills and knowledge about language involves the teaching of processes. The teacher will model and scaffold such processes for pupils, while guiding them to put together their final spoken, written and/or multimodal products.

Spiral Progression: Skills, grammatical items, structures and various types of texts will be taught, revised and revisited at increasing levels of difficulty and sophistication. This will allow pupils to progress from the foundational level to higher levels of language use.

When planning and delivering English language lessons, teachers will employ the following teaching processes (ACoLADE) during the delivery of the pre, main and post phases of their English language lessons:

Raising Awareness: Motivate learning and help pupils pay attention to what is to be learned. Help them make connections with what they already know.

Structuring Consolidation: Revisit and reinforce what has been learned.

Facilitating Assessment for Learning: Diagnose pupils' needs, abilities and interests. Identify learning gaps, monitor their learning and provide timely and useful feedback for improving learning and self-assessment.

Enabling Application: Teach language in authentic contexts of use and model its use. Let pupils learn through working collaboratively with the teacher and other pupils.

Guiding Discovery: Facilitate discovery by prompting, posing questions and supporting the process by which pupils can learn about a skill, strategy, process or rule without prior or explicit instruction.

Instructing Explicitly: Explain and clarify a skill, strategy or process directly and systematically, in addition to teaching it in contexts of meaningful use.

The English language Syllabus 2010 outlines the following areas of language learning (MOE Singapore, 2010):

- Listening and Viewing
- Reading and Viewing
- Speaking and Representing
- Writing and Representing
- Grammar
- Vocabulary

To develop these areas of language learning in pupils, teachers will be guided by the six Principles of English language teaching and learning CLLIPS and will take into account the teaching processes ACoLADE when planning the English language instructional program. Teachers will also employ ACoLADE at any phase of their English language lessons.

MOE Singapore (2010) also states that pupils' effective language use will be achieved through the following approach: "A Strong Foundation and Rich Language for All".

- a greater focus on oral communication (listening and speaking skills) using show-and-tell, debates, speech and drama, and oral presentations for all levels and courses.
- a focus at the Lower and Middle Primary levels on the enjoyment of language before pupils formally learn the metalanguage and grammatical items associated with texts. There will be systematic and explicit instruction of grammar, with a focus on word, phrase and sentence level grammar before a gradual incorporation of text level grammar at the Upper Primary and Secondary levels.
- attention to phonemic awareness, phonics and early literacy skills at the start of Primary 1 to lay the foundation for acquiring reading fluency, comprehension and viewing skills and strategies at all levels.
- the development of word study skills to build and use vocabulary knowledge at all levels.
- the development of writing skills and learner strategies for idea generation, selection, development, organisation and revision.

Teacher/English teacher training and licensing.

According to Sclafani (2008) Singapore chooses a selected number of students to enter teacher preparation and invests the necessary funds to prepare students well. The ministry guarantees quality by providing only one teacher preparation institution in the nation for Singapore's public schools. Each year the Ministry opens only as many places in teacher education as needed to meet future vacancies anticipated by trends in teacher retirement. Students who want to fill those slots must first show that they are in the top third of their graduating class based on grades, national examinations and the teacher entrance proficiency exam. There are many steps in the application process focus on the personal qualities that make for a good teacher and their contributions to their school and community.

Accepted applicants who have already completed a bachelor's degree in the subject they are going to teach before entering a teacher education program must complete one of the teacher education programs at NIE (Teacher and Principal Quality, 2012). There are different programs for different teaching candidates, depending on the candidate's level of education when entering the program:

- Post Graduate Diploma in Education (PGDE): 1-year training program
- Diploma in Education (DipEd): 2-year training program
- Bachelor of Education (B Ed): 4-year training program
- Bachelor of Arts in Education (BA)/Bachelor of Science in Education (BSc): 4-year training program

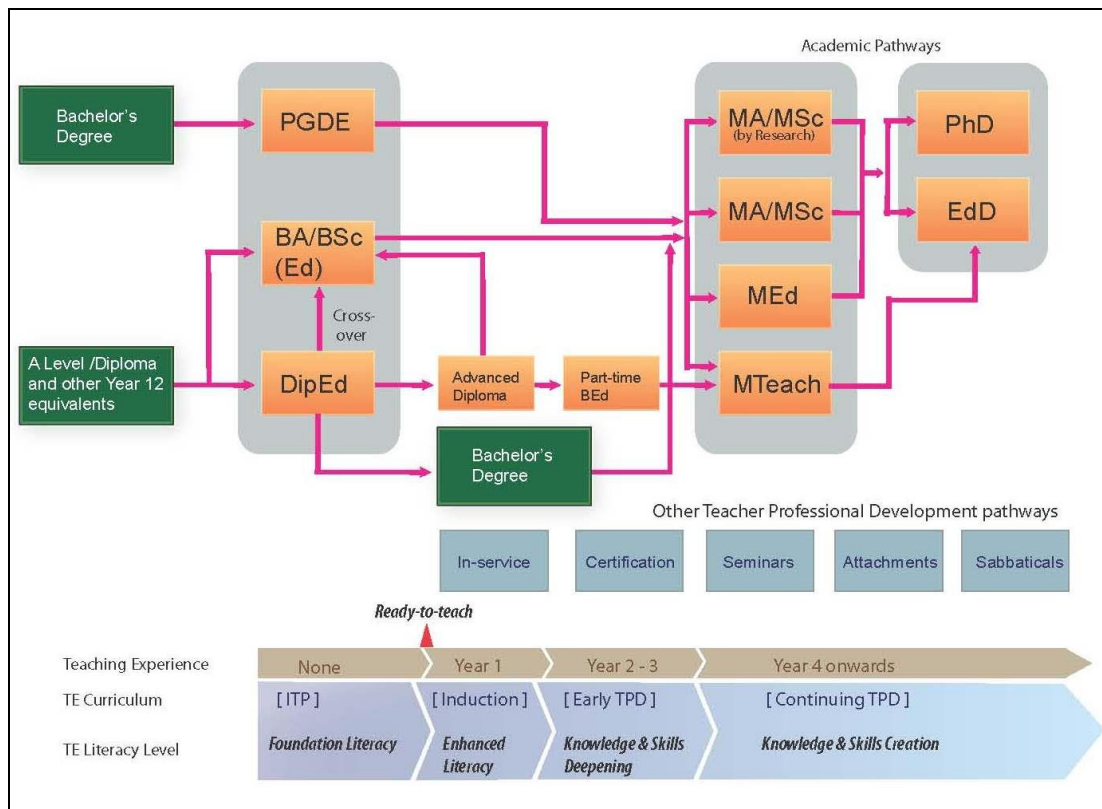
Table 3

Teacher Training Programs in Singapore

Program	Level of Teaching	Duration	No. of Academic Units (AUs)
BA (Ed)	Primary &	4 yrs	126/128
BSc (Ed)	Secondary		
B Ed	Primary	4 yrs	138
Dip Ed	Mainly for Primary	2 yrs	69
PGDE	Primary, Secondary & Junior College	1 yr (2 yrs for PE)	44 66/67 for PE

(Source: National Institute of Education Handbook, 2010 and 2012)

Teachers with other credentials, such as A-levels (upper secondary leaving exams) or polytechnical degrees, also must complete an NIE degree program. The programs at NIE are focused on pedagogy and connections between educational subjects, rather than on advanced academic training within a specific subject. This is to say that one cannot become a teacher in Singapore without mastery of the subject one is going to teach at a high level, as well as at least a year of challenging instruction in the craft of teaching.



(Source: National Institute of Education, Singapore, 2009)

Figure 2. Teacher Education Pathways in Singapore

Aims of teacher training program.

NIE is the only teacher training institution in Singapore and it has its aims of teacher training as follows (Seng, 2010):

- To prepare student teachers with strong educational foundation, pedagogies for effective teaching and specialized subject knowledge in at least one discipline.
- To cultivate knowledge of student teachers with diverse backgrounds.
- To better understand personal motivation for wanting to become a teacher.

- To better know and understand the fundamental values & competencies that teachers hold/practice in the attempt to be the best teacher that they can be.

Key competencies.

According to Seng (2010) the competence expected of graduating teachers are specified in two focus levels:

- Capacity building (CB) – demonstrate achievement of the defined competence.
- Awareness raising (AR) – aware of what the competence means but not yet able to fully demonstrate.

Table 4

Graduand Teacher Competencies Framework

Performance Dimensions	Core Competencies	Level of Competence	
		CB	AR
Professional Practice	1. Nurturing the child	x	
	2. Providing quality learning of child	x	
	3. Providing quality learning of child in CCA	x	
	4. Cultivating knowledge:		
	i. with subject mastery	x	
	ii. with reflective thinking	x	
	iii. with analytic thinking	x	
	iv. with initiative		x
	v. with creative teaching		x
	vi. with a future focus		x
Leadership & Management	1. Winning hearts & minds		
	i. Understanding the environment		x
	ii. Developing others		x
	2. Working with others		
	i. Partnering parents		x
	ii. Working in teams	x	

Performance Dimensions	Core Competencies	Level of Competence	
		CB	AR
Personal Effectiveness	1. Knowing self and others		
	i. Tuning into self	x	
	ii. Exercising personal integrity		x
	iii. Understanding and respecting others	x	
	iv. Resilience and adaptability	x	

(Source: 21st Century Teacher Education: A Singapore Case, Seng, 2010, June)

Content domains.

According to NIE (2012) there are three categories of subject courses in the degree programs of teacher education: core courses, prescribed electives, and general electives. Student teacher in general primary teacher education program will take: 4 years of 126 Academic Units (AUs) for Bachelor of Arts in Education (BA Ed) and Bachelor of Science in Education (BSc Ed) and of 138 AUs for Bachelor of Education (B Ed); 2 years of 69 AUs for Diploma in Education (Dip Ed); and 1 year of 44 AUs for Post Graduate Diploma in Education (PGDE).

Student teacher at each course requires taking 5 main areas of study as follows (Seng, 2010):

- Content Knowledge
- Language/communication
- Pedagogy, theories and skills
- Character Development
- Field Experience: (Practicum)

1. Content Knowledge:

- *Academic Subjects*: It covers knowledge of content and

fundamental concepts and principles of the subject area.

- *Art- based subjects: Art, Chinese Language, Chinese Literature, Drama, English Language, English Literature, Geography, History, Malay Language, Malay Literature, Music*

- *Science-based subjects: Biology, Chemistry, Family and Consumer Science, Mathematics, Physics, Physical Education and Sports Science*

- *Subject Knowledge:* It is to equip student teachers with sufficient knowledge of subjects related to local syllabi.

2. Pedagogy, theories and Skills:

- *Education Studies:* It is to develop key concepts and principles in education for effective instruction and reflective practice. There are 4 core courses:

- Social context of education
- Psychology for teaching and learning
- Pupil development/Classroom management
- Use of ICT

- *Curriculum Studies:* This area of study is to equip student teachers with methods and approaches to deliver the curriculum of specific subjects.

It is the “Art” of teaching.

- Secondary school teachers: 2 subjects
- Primary school teachers: 3 subjects (in general)

3. Language/communication:

- *Language Enhancement & Academic Discourse Skills (LEADS):*

This component is aimed at improving student teachers use of oral and written language in teaching. BA/BSc (Ed) student teachers will have to offer 2 compulsory

courses, Communication Skills for Teachers (CST) and Academic Discourse Skills (ADS).

4. Character Development:

- *Group Endeavours in Service Learning (GESL):*

- GESL connects student teachers with the community and provides the background knowledge and skills in service learning, community involvement projects (CIP) and project work (PW).

- GESL is a local service-learning community outreach program for all student teachers.

- Student teachers carry out service-learning projects with academic facilitators as mentors in groups of 20+/-

- GESL uses the experiential learning cycle as a pedagogy

- *The Meranti Project:* Personal and professional development program specially tailored for student teachers in the ITP program.

Objectives: Helping the student teachers to develop better self-awareness (better turning into self); providing a clearer idea of what National Education is all about and one's diversity in the classroom, strategies for coping with being a teacher; and an affirmation of choosing teaching as a career.

Goals and outcomes:

- To better understand personal motivation for wanting to become a teacher.

- To better know and understand the fundamental values & competencies that teachers hold/practice in the attempt to be the best teacher that they can be.

Program Highlights

- Conversations with veteran teachers and students
- Exploring desired student outcomes
- Facilitating National Education in schools
- Life Journey

Key takeaways from participants

- The importance of a creating a culture of care, trust, and friendliness
- Teachers' Vision and how to apply this in school
- Knowledge about the V³SK model and GTCs and how they can use these to chart their personal and professional development

5. Field Experience:

- *Practicum:*

- Teaching competencies are develop on site in schools
- Mentoring by Cooperating teacher together with NIE professors/lecturers

- Developmental Approach

School Experience 2 weeks

Teaching Assistantship 5 weeks

Teaching Practice 1 5 weeks

Teaching Practice 2 10 weeks

The content domains were categorized based on the TPACK framework as follows:

- Content knowledge

- Literature
- Language skills
- Pedagogical knowledge
 - Theories, approaches, methods and techniques of teaching
 - Psychology for teachers
 - Curriculum development
 - Educational leadership and management
- Technological knowledge
 - Educational innovation and information technology
- General education
 - Teacher Characteristics Development
 - Home economics
 - Music and arts
 - Physical education
- Field experience
 - Practicum

In conclusion, teacher profession in Singapore is very competitive and requires high quality applicants. Student teachers will cultivate with strong educational foundation, pedagogies for effective teaching and better know and understand the fundamental values and competencies that teachers hold to achieve to be the best teacher that they can be.

Teacher education in the Philippines.

School system.

In the Philippines preschool education is for children aged 3-5 and kindergarten education is for children aged 5 and is not compulsory. A basic education consists of 10 years: 6 years of elementary education and 4 years of secondary education. Elementary education is compulsory for pupils aged 6-11 and is divided into two levels: primary covers grades 1-4 and intermediate covers grades 5 and 6 (or 7). Secondary education lasts 4 years covers grades 7-10 and divides into general education and vocational education. Students who successfully complete secondary education receive high school diplomas. The average Filipino child starts school at the age of six, entering directly into Grade 1, and graduates from high school at the age of 16. According to DepEd (2010b) the Department of Education (DepEd) planned to introduce an enhanced K+12 basic education program by 2012/13 which consists of 6 years of elementary education, 4 years of junior high school (grades 7-10) and 2 years of senior high school (grades 11 and 12).

Role of English.

According to IQAS (2007) the languages of instruction in elementary schools vary by grade and by subject. In Grades 1 and 2, in addition to teaching Filipino and English as second languages, the vernacular language is used as an auxiliary medium of instruction. From Grade 3 on, Filipino is the medium of instruction for Filipino and Makabayan, while mathematics, science and English are taught using English.

However, according to Dumanig, David, and Symaco (2012) the Philippine government has promoted the vernacular in schools when the

Department of Education institutionalised the Multilingual Education (MLE) initiative in 2009 which aims to promote the use of mother tongue over the second language, supposedly to promote better learning among the students. The MLE, which is featured as medium of instruction and a learning subject/school course, was fully implemented in 2012 in all public schools with emphasis given to kindergarten and grades 1 to 3 which is also in line with the DepEd's policy of "Every child a reader and a writer by grade 1". On the other hand, there's mismatch between policy and practice. Instead of enhancing the Filipino language in schools, English appears to dominate. English in the Philippines is used as a social tool that enables economic advancement, and the feature of English-competent society where political-economic elites usually emerge (cited in Tupas, 2003).

Goal of English language teaching and learning.

DepEd (2010a) stated that English as a subject is concerned with developing competence in listening, speaking, reading and writing. The overall goal of English language teaching and learning is to:

- Access varied information and creatively use them in spoken and written forms; and
- Communicate fluently and accurately orally and in writing, for a variety of purposes and different social and academic contexts at their level while carrying out activities in everyday life.

The expectations of English language teaching and learning are described separately by grade level as follow:

- At the end of *Grade 1*, the learner is expected to recognize differences in speech sounds, word stress, intonation patterns in sentences heard;

speak clearly and use appropriate expressions in talking about oneself and the immediate environment; read with ease and understanding beginners' books in English; and write legibly information about oneself, common words and simple sentences in manuscript form.

- At the end of *Grade 2*, the learner is expected to listen critically to 1-2 paragraphs; use appropriate expressions in varied situations and about places and topics of interest; read critically and fluently in correct thought units, texts for information and entertainment and respond properly to environmental prints like signs, posters, commands and requests; and write legibly simple sentences and messages in cursive form.

- At the end of *Grade 3*, the learner is expected to listen critically to get information from text heard; demonstrate independence in using the basic language structure in oral and written communication; and read with comprehension.

- At the end of *Grade 4*, the learner is expected to listen critically to news reports, radio broadcasts and express ideas accurately in oral and in written form; demonstrate more independence in the use of language to meet everyday needs; and read independently for pleasure and get information from various text types.

- At the end of *Grade 5*, the learner is expected to listen critically to different text types; express ideas logically in oral and written forms; and demonstrate interest in reading to meet one's various needs.

- At the end of *Grade 6*, the learner is expected to listen critically; communicate one's feeling and ideas orally and in writing with a high level

of proficiency; and read various text types materials to serve one's own learning needs in meeting a wide range of life's purposes.

Teaching approach/curriculum.

IQAS (2007) reported that the basic curriculum is developed at the national level and the guidelines are issued by the national government. Teachers are the ones who determine which resources will be used, as well as how teaching and assessments will be conducted. Schools are encouraged to innovate and enrich the curriculum as long as basic requirements are met. They may also adapt the national curriculum to local needs by modifying the content, sequence or teaching strategies.

IQAS (2007) also reported that the 2002 Elementary Basic Education Curriculum focuses on five subjects: English, science and health, mathematics, Filipino, and Makabayan. Some subjects are integrated into others at certain levels. For example, science and health concepts are used as content in English for Grades 1 and 2 and values education, one of the components of Makabayan, is integrated into all learning areas. At the elementary level, Makabayan serves as practice environment for holistic learning to develop a healthy personal and national self-identity. Ideally, Makabayan entails the adoption of modes of integrative teaching, enabling the learner to personally process and synthesize a wide range of skills and values (cultural, aesthetic, athletic, vocational, politico-economic and ethical).

Teacher/English teacher training and licensing.

According to IQAS (2007) teacher education has been expanding at a dramatic rate in the past two decades in the Philippines. Teacher education courses are being offered by both public and private higher education institutions located in

various regions. Public higher education institutions offering teacher education outside the main campus are classified as *Satellite Campus of a State College (CA)*. The other types of institutions are: CHED (Commission on Higher Education) Supervised Institutions (CS), Local College or Community College (CL), Local University (LU), State University (SU), and other government schools. Since 1994, only higher education institutions authorized by CHED can offer teacher education programs.

According to IQAS (2007) a four-year bachelor's degree is the minimum academic requirement for teachers at the preschool, elementary or secondary school level in the Philippines. Students wanting to teach at preschool level may complete a Bachelor of Early Childhood Education (BECEd), but are only required to have a bachelor's degree with six units of courses related to preschool education. Elementary teachers usually complete the Bachelor of Elementary Education (BEEd) and secondary teachers the Bachelor of Secondary Education (BSEd). Specialist programs are also available in agriculture, business, industrial and physical education. Two alternate routes to access the profession include completion of an equivalent four-year bachelor's degree that contains a sufficient number of professional education units within that program or completion of any bachelor's degree plus an additional 18 units in professional education.

Graduates from a teacher education program must pass the Licensure Examination for Teachers (LET) organized on an annual basis (UNESCO Philippines, 2011). Teachers are recruited at the school level, which is considered the lowest administrative level of the Department of Education. All public schools are

mandated to serve as authorized offices to receive applications for all available teaching positions in their school division.

Aims of teacher training program.

The main objective of teacher education is to provide quality education by strengthening the education and training of teachers nationwide through a national system of excellence for teacher education (Valisno, 2002). More specifically, the aims of teacher education in the Philippines include:

- Raising the level of professional skills of would-be teachers;
- Growing emphasis on the competencies necessary for effective teaching practice;
- Considering the importance of training closely linked to its practical application;
- Preparing teachers who respond effectively to the diversity of student learning needs, students different socio-economic background as well as interests generally; and
- Educating and training would-be teachers of unquestionable integrity and competence who would be able to help tier students grow as responsible individuals and citizens of the Philippines and of the world.

Key competencies.

DepEd (2006) stated that the National Competency- Based Teacher Standards (NCBTS) is the key element of the Teacher Education and Development Program (TEDP). The competency-based teacher standards in the Philippines are organized hierarchically. The “basic” level categories of the standards are seven domains which are the core values of Filipino teachers and on effective teaching and

learning. Each domain is defined in terms of a principle of ideal teaching associated with enhanced student learning.

(1) social regard for learning

This domain focuses on the ideal that teachers serve as positive and powerful role models of the values of the pursuit of learning and of the effort to learn, and that the teacher's actions, statements, and different types of social interactions with students exemplify this ideal.

Key Question for the Teacher: "Can my students appreciate and model the value of learning through my interactions with them?"

(2) learning environment

This domain focuses on the importance of providing for a social and physical environment within which all students, regardless of their individual differences in learning, can engage the different learning activities and work towards attaining high standards of learning.

Key Question for the Teacher: "Do I create a physical and social environment in class that allows my students to attain maximum learning?"

(3) diversity of learners มหาวิทยาลัย

This domain emphasizes the ideal that teachers can facilitate the learning process in diverse types of learners, by first recognizing and respecting individual differences, then using knowledge about students' differences to design diverse sets of learning activities to ensure that all students can attain appropriate learning goals.

Key Question for the Teacher: “Can I help my students learn whatever their capabilities, learning styles, cultural heritage, socio-economic backgrounds, and other differences are?”

(4) curriculum

The domain of Curriculum refers to all elements of the teaching-learning process that work in convergence to help students attain high standards of learning and understanding of the curricular goals and objectives. These elements include the teacher’s knowledge of subject matter, teaching- learning approaches and activities, instructional materials and learning resources.

Key Question for the Teacher: “Can my students understand and attain the goals of the curriculum through the various learning resources and activities I prepared? Have I made use of ICT appropriately?”

(5) planning, assessing, and reporting

This domain refers to the aligned use of assessment and planning activities to ensure that the teaching-learning activities are maximally appropriate to the students’ current knowledge and learning levels. In particular, the domain focuses on the use of assessment data to plan and revise teaching-learning plans, as well as the integration of formative assessment procedures in the plan and implementation of teaching-learning activities.

Key Question for the Teacher: “Do I assess my students’ learning and knowledge using appropriate educational assessment procedures, and do I use the information from these assessment procedures in planning my teaching-learning activities for the students?”

(6) community linkages

The domain of Community Linkages focuses on the ideal that school activities are meaningfully linked to the experiences and aspirations of the students in their homes and communities. Thus the domain focuses on teachers' efforts directed at strengthening the links between school and community activities, particularly as these links help in the attainment of the curricular objectives.

Key Question for the Teacher: "Are the goals and characteristics of the teaching-learning activities I implement relevant to the experiences, values and aspirations in my students' communities?"

(7) personal growth and professional development

This domain emphasizes the ideal that teachers value having a high personal regard, concern for professional development, and continuous improvement as teachers.

Key Question for the Teacher: "Do my actions and statements indicate a high regard for the teaching profession and for my continuous development as a professional teacher?"

Content domains.

According to UNESCO Philippines (2011), programs include a core of general education, at least one year of professional education and studies in the major teaching area. Curricula for each program are approved by CHED and institutions have flexibility to vary these models. Non-education graduates may complete an 18-unit Certificate of Professional Education in order to qualify as primary or secondary teachers.

The most basic and common degree awarded at the undergraduate level is the four-year bachelor's degree:

- The first two years consist of General Education Curriculum (GEC) mandated by CHED
- The last two years consist of student's major courses

Most four-year bachelor's degrees require between 120 and 185 units for graduation; five-year degrees require up to 200 units. Generally included are military training (usually non-credit; mandatory for men, optional for women) and physical education (mandatory for men and for women who don't enroll in military training), as well as religion and philosophy courses in sectarian schools (IQAS, 2007).

The content domains were categorized based on the TPACK framework as follows (see Appendix N):

- Content knowledge
 - Literature
 - Language skills
- Pedagogical knowledge
 - Theories, approaches, methods and techniques of teaching
 - Educational measurement and evaluation
 - Educational research studies
- Technological knowledge
 - Educational innovation and information technology
- General education
 - Health education
 - Home economics

- Music and arts
- Physical education
- Field experience
 - Practicum

In conclusion, teachers in the Philippines must hold at least a bachelor's degree. It is the minimum academic requirement for teacher at preschool, elementary or secondary school level. They are also required to have a teacher license to be qualified to teach in schools. The government aims to provide quality education by strengthening the teacher education through the national system of excellence for teacher education.

Teacher education in Malaysia.

School system.

The Malaysian education system continuously strives to ensure every child receives the right set of educational opportunities at the right time: from cradle to career. Under the Malaysian education system, pre-tertiary education (preschool to secondary education) is under the jurisdiction of the Ministry of Education (MOE) while tertiary or higher education is the under the responsibility of the Ministry of Higher Education (MOHE). Preschool education starts with children aged 4-6 years and is provided by several government agencies registered with the Ministry of Education. Primary education covers a period of six years and the admission age is 7. It is mandatory for all children between the ages of 7 and 12. Secondary education covers a period of 5 years which encompasses 3 years of lower secondary and two years of upper secondary. They make up 11 years of free education. At the end of

primary, lower secondary and upper secondary levels, students sit for common public examination (MOHE., 2013).

Role of English.

Malaysia is a multicultural and multiethnic society consisting of Bumiputera (Malays and other Bumiputera), Chinese, Indians and other ethnic groups. Although Malay is the official language, English is widely spoken especially when it comes to business and English is a compulsory subject in the schools. In 2002, Malaysia had changed its language policy from Bahasa Malaysia to English for the teaching of science and mathematics (Jamil, Razak, Raju, & Mohamed, n.d.). The policy clearly states that English language is a strong second language in Malaysia (Ali, 2003).

Goal of English language teaching and learning.

English language has a dominant role to play in the broader education scenario in Malaysia. ELT in primary education aims at equipping pupils with the basic English language skills (listening, speaking, reading and writing) and knowledge of grammar to enable them to communicate (orally and in writing) in and out of school for different purposes, and different situations. It further outlines:

By the end of the primary school, pupils should be able to:

1. listen to and understand simple spoken English in certain given contexts;
2. speak and respond clearly and appropriately in familiar situations using simple language;
3. read and understand different kinds of texts for enjoyment and information; and

4. write for different purposes and in different forms using simple language. (ibid, 1995, p.2), as cited in Ali (2003).

Teaching approach/curriculum.

Since the independence in 1957, education has figured prominently as the integral part of the government's developmental policy. Education has undergone tremendous change and development over the years. Malaysia has been keen in nation-building and busy enhancing its national unity through a unified educational system. Subsequent curriculum reforms in 1983, 1995, 1999 and 2003 increased use of educational technology have enhanced quality education. The national curriculum is developed centrally and within the Ministry of Education. Recent curricular revision has combined the use of the content-based and outcomes-based approaches to curriculum design (UNESCO Malaysia, 2011). More specifically it has focused on the introduction of new subjects, outcomes-based learning, student-centred pedagogical changes, and the introduction of new elements into the existing set of subjects. It also promotes the use of ICTs at the primary and secondary levels. The underlying principle in the Malaysian National Curriculum is that of a general education using an integrated approach in curriculum planning for knowledge, skills and positive attitudes.

Teacher/English teacher training and licensing.

In Malaysia, both teacher training colleges and universities offer pre-service teacher training programs. The universities offer two types of programs: a one-year postgraduate diploma in education, and a four-year integrated bachelor's degree. Similarly, teacher training colleges offer a three-year (six semesters) diploma in teaching program, and a one-year (two semesters) postgraduate diploma in

teaching for university graduates who wish to enter the field of education. The three-year diploma program attempts to provide quality education to student teachers. The program emphasizes on upgrading with quality of training includes professionalism in teaching and ICT literacy, and emphasizes school-based training, focusing on the integrated concept, usage of various media and reflective thinking to bridge the theoretical and practical aspects of teaching and learning in the classroom.

The government has raised education in Malaysia to world standards and made the effort to equip their primary school teachers with degrees. The MOE has systematically planned over the years to upgrade the professional competence of teachers through in-service training. The Ministry of Education has raised the minimum pre-service training qualification from a diploma to a bachelor's degree for primary teachers. As of 2010, at least 31% of primary school teachers hold a bachelor's degree (MOE Malaysia, 2012).

The major types of pre-service programs include:

- Bachelor Degree in Education/Integrated Bachelor Degree with Education (ISMP): Four-year program conducted at public universities supplies teachers for secondary schools. There are also bachelor degrees offered by the teacher training colleges/institutes that supply teacher for primary schools.
- Postgraduate Diploma (DPLI): One-year program prepares trainees with a degree in specialized areas to teach in primary or secondary schools.
- LPBS (school-based on the job training): A special apprenticeship involves graduates in specialized areas who are temporarily employed to fill vacant posts in schools and given on the job training by the teacher training

colleges/institutes in cooperation with the schools. Trainees are employed to teach as permanent certified teachers upon completion of the program. The program gives priority to temporary uncertified teachers teaching in their hometowns, especially in remote and rural areas to overcome the shortage of qualified teachers in these areas.

After completion of a training program, all graduates will be employed and placed upon the candidates' academic achievements and their performance in the interviews conducted by the Education Service Commission.

Aims of teacher training program.

The Philosophy of Teacher Education, formulated in 1982, has determined the direction of teacher education. This document emphasized the desire to educate and produce teachers who are noble and caring, knowledgeable and skillful, creative and innovative, resilient and competent, scientific in outlook, committed to uphold the aspirations of the nation, proud of their heritage and dedicated to the development of the individual and the preservation of a united, progressive, and disciplined society (UNESCO Malaysia, 2011).

The main concern of the Ministry of Education is to provide basic pre-service as well as in-service teacher training to meet the requirements of all schools. The Ministry, through the Teacher Education Division (TED) states that the objectives of the teacher education program are as follow, cited in (UNESCO Malaysia, 2011):

1. To train teachers of high calibre in sufficient numbers to meet the requirements of all preschool, primary, secondary, vocational and technical education within the national education system. Teacher of high calibre are those who are highly motivated (Mohamad Taib, 2002):

- To be active agents in efforts to build a united Malaysian nation dedicated to a democratic way of life;
 - To inculcate in their pupils the spirits of Rukun Negara (National Ideology);
 - To be responsive to the challenge of meeting the country's manpower needs through the development of human potential among the youths of the country;
 - To foster aesthetic, moral, physical and spiritual development among their pupils so that they can lead full and meaningful lives.
2. To improve the skills and efficiency, and to update the knowledge, of trained teachers and lectures in academic and professional areas.
 3. To develop teacher training colleges (TTCs) as centres of excellence.

Key competencies.

The key competencies of Malaysian student teachers are as follow (Mohamad Taib, 2002):

- be noble in character
- has deep moral and religious convictions
 - be human, yet progressive and scientific in outlook
 - uphold the aspirations of the nation
 - cherish the national culture heritage
 - has a positive attitude towards learning, the school and society, and, being endowed with these attributes
- promote all-round development of the child

- be loyal to his profession, and ensure the preservation of a united, democratic progressive and disciplined society

Content domains.

According to Mohamad Taib (2002) the components of the Malaysian pre-service teacher education program are divided into two: curriculum and extra curricula activities. In term of curriculum, there are three basic components:

- The Core Subject component: includes Educational Psychology, Pedagogy, Education Technology, Islamic Religious Education/Moral Education, Islamic Civilization, Historical Development of Malaysia and General Education Service matters.
- The School Subject component: primary school student teachers are required to take a pedagogical course in Mathematics, Man and His Environment, Moral Education, Physical Education, Music and Art. Secondary school student teachers are required to take Moral Education, Physical Education, Health Education and a course in the New Primary School Curriculum.
- The Self-Enrichment component: enables student teachers for primary and secondary schools to take a course in Home Economics. In addition, student teachers for secondary schools also follow courses in Music and Art.

Student teachers are also required to undergo 19 weeks of school teaching practice, 9 weeks in Semester III and 10 weeks in Semester V.

The content domains were categorized based on the TPACK framework as follows (see Appendix O):

- Content knowledge
 - Culture

- Pedagogical knowledge
 - Theories, approaches, methods and techniques of teaching
 - Psychology for teachers
- Technological knowledge
 - Educational innovation and information technology
- General education
 - Teacher characteristics development
 - Health education
 - Home economics
 - Music and arts
 - Physical education
- Field experience
 - Practicum

In conclusion, teacher training program in Malaysia aims at providing their student teachers to equip themselves with content knowledge, pedagogical knowledge and technological knowledge.

Teacher education in Thailand.

School system.

According to the National Education Act 1999 and amended in 2002, Thai people have equal right to receive free basic education for the duration of at least twelve years and according to the Compulsory Education Act, all children aged 6-15 years require to be enrolled in basic education institutions exception of those who have already completed grade 9. The 12-year free basic education scheme covering six years of primary and six years of secondary education was extended to

fourteen years in 2004, including two years of pre-primary schooling (UNESCO Thailand, 2011). There are three types of pre-primary education available for children aged 3-5 years depending on the local conditions: preschool classes, kindergartens and childcare centers. Primary education is compulsory, lasts six years (grades 1-6) and the entry age is 6. Lower secondary education lasts 3 years (grades 7-9) and upper secondary education lasts 3 years (grades 10-12).

Role of English.

English is a compulsory foreign language subject starting from grade 1 in primary education and it is one of the eight compulsory strands that students have to take in the core and elective course. It is divided into four levels: Level 1 (preparatory level) and Level 2 (beginning level) for primary education, Level 3 (expanding level) for lower secondary and Level 4 (expanding level) for upper secondary education (Wiriyachitra Arunee, n.d.).

Goal of English teaching and learning.

According to the 2008 Basic Education Core Curriculum the learning area of foreign languages is aimed at enabling learners to acquire a favorable attitude towards foreign languages, the ability to use foreign languages for communicating in various situations, seeking knowledge, engaging in a livelihood and pursuing further education at higher levels. Learners will thus have knowledge and understanding of diversified matters and events of the world community, and will be able to creatively convey the conceptions and cultures of Thainess to the global society. The main contents include:

- **Language for Communication:** use of foreign languages in listening, speaking, reading and writing, exchanging data and information, expressing

feelings and opinions, interpreting, presenting data, concepts and views on various matters, and creating interpersonal relationships appropriately

- **Language and Culture:** use of foreign languages in accordance with the culture of native speakers; relationships, similarities and differences between languages and cultures of native speakers; languages and cultures of native speakers and Thai culture; and appropriate application
- **Language and Relationship with Other Learning Areas:** use of foreign languages to link knowledge with other learning areas, to seek knowledge and to broaden learners' world views
- **Language and Relationship with Community and the World:** use of foreign languages in various situations in the classroom, in community and in the global society, forming a basic tool for further education, livelihood and exchange of knowledge with the global society

Teaching approach/curriculum.

UNESCO Thailand (2011) reported that the 2008 curriculum focuses on learners' development for attainment of the following desirable characteristics, enabling learners to enjoy a life of harmony among others as Thai citizens and global citizen: love of nation, religion and the monarchy; honesty and integrity; self-discipline; avidity for learning; applying principles of Sufficiency Economy Philosophy in one's way of life; dedication and commitment to work; cherishing Thai-ness; and public-mindedness. The learner-centred approach is strongly advocated, based on the conviction that all are capable of learning and self-development to their highest potentiality.

Teacher/English teacher training and licensing.

According to Pitiyanuwat, Charupan, and Kovin (2002), the first teacher training school in Thailand was established in 1892 during the reign of King Rama V. It was called “Rongrean Feukhad Ajarn” and aimed to prepare teachers for the public schools throughout the country. Thai government retained role control and responsibility in the development of teacher education. The private educational services were not allowed to offer the area of teacher education. This has been because of the fear that improper social values and unfavorable ideology might be instilled in students and for security purposes. However, certain few private institutions are granted permission to provide programs in education.

Currently, teacher training in Thailand offers at least Bachelor’s degree in universities and the programs are commonly influenced by child-centred learning methods and several universities operate a demonstration school (Satit).

According Teachers Council of Thailand (TCT) anyone who wishes to apply for teacher license there are three routes:

Route 1: Persons who have had teaching experience with not less than 1 year and

- Hold a degree in education or
- Hold other degrees and a teaching license from abroad or
- Hold other degrees and a graduate diploma in Education with 1 year course of study.

In addition, they are required to successfully complete a professional training course and pass assessment of knowledge as follows:

1. Thai language and culture

2. Professional ethics

In case they have experience of teaching less than 1 year, they are required to have a teaching practice certificate issued by the TCT to attend the training course.

Route 2: Persons who have had teaching experience with not less than 1 year and hold other degrees without a teaching license from abroad; or those who do not hold a graduate diploma in Education with a study course of not less than 1 year, must pass the test, training and assessment as follows:

1. Thai language and culture
2. Professional ethics
3. Professional knowledge

Route 3: Persons who have had experience of teaching with not less than 1 year, and hold a teaching license from abroad, but to not hold a degree must show a certification letter with a document pertaining to recognition and reliability of teaching experience issued by an educational institution.

To certify professional knowledge and experience must be done in accordance with the resolution of the TCT Board whereby applicants must successfully complete a training course and pass the assessment of knowledge as follows:

1. Thai language and culture
2. Professional ethics

Aims of teacher training program.

UNESCO Thailand (2011) reported that teacher education aims to train and develop prospective as well as practicing teachers regarding morality,

knowledge, ability and skills in teaching and motivating students to learn. Mindful of professionalism and the responsibility of teachers to serve as a role model for learners. Pitiyanuwat et al. (2002) stated that teacher education programs have their primary aims as follows:

1. Preparation program for student teachers to be able to teach in general subjects, such as science, Thai, mathematics, and English, etc.
2. Production of technical teachers to be able to teach subjects such as industrial technology, physical education, and dramatic arts.
3. Specialist teachers for providing special educational programs for disadvantaged students.

Key competencies.

According to the 2005 Professional Standards for Teachers, the standards of teachers' knowledge having minimum qualifications with Bachelor's degree in education or the equivalent or other degrees as accredited by the Teachers Council of Thailand, with the knowledge in the following areas:

1. Language and technology for teachers
 - Able to apply the skills of listening, speaking, reading and writing in Thai to communicate correctly.
 - Able to apply the skills of listening, speaking, reading and writing in English or other foreign languages to communicate effectively.
 - Able to use basic computing programs.
2. Curriculum development
 - Able to analyze curriculum.
 - Able to improve and develop diverse curricula.

- Able to evaluate curriculum both before and after implementation.
 - Able to establish curriculum.
3. Learning management
- Able to compile courses to formulate a learning plan for each term and the entire semester.
 - Able to design a learning model appropriate to the learners' ages.
 - Able to select, develop and produce media and instrument that promote learning.
 - Able to organize activities that promote learning and classify the learners' levels based on evaluation.
4. Psychology for teachers
- Understand the nature of learners.
 - Able to assist the learners to learn and develop according to their potentiality.
 - Able to provide learners with guidelines and assistance to have improved quality of life.
 - Able to promote learners' aptitude and interest.
5. Educational measurement and evaluation
- Able to perform the authentic assessment and measurement.
 - Able to use the evaluation results to improve the learning and curriculum management.
6. Classroom management

- Possess leadership.
- Able to manage classroom.
- Able to communicate effectively.
- Able to ensure value congruence.
- Able to implement innovation in the management.

7. Educational research

- Able to apply research results to the instructional management.
- Able to conduct research for instructional development and improvement of learners.

8. Educational innovation and information technology

- Able to select, design, create and improve innovation for learners to achieve good learning.
- Able to develop technology and information for learners to achieve good learning.
- Able to locate a variety of learning sources to promote the learning by learners.

9. Teachership

- Care for, be merciful and kind to learners.
- Be patient and responsible.
- Be learning persons and academic leaders.
- Be visionary.
- Have faiths in the teaching profession.
- Comply with the teaching professional ethics.

Content domains.

According to the 2005 Professional Standards for Teachers in Thailand the essence of knowledge for teachers are in the following areas:

1. Language and technology for teachers
 - Thai language for teachers.
 - English or other foreign language for teachers.
 - Information technology for teachers.
2. Curriculum development
 - Philosophy, concept and theory of education.
 - Background and educational administration system in Thailand.
 - Vision and development plan for education in Thailand.
 - Curriculum theory.
 - Curriculum development.
 - Curriculum standards and intended levels.
 - Curriculum development for educational institutions.
 - Problems and trend of curriculum development.
3. Learning management
 - Learning and teaching theories.
 - Learning models and instructional model development.
 - Design and management of learning experiences.
 - Integration of contents for learning groups.
 - Integration for group learning.
 - Techniques and know-how in learning management.

- Media implementation and production and innovative development for learning.

- Learner-oriented learning management.
- Learning evaluation.

4. Psychology for teachers

- Basic psychology relating to human development.
- Educational psychology.
- Guidance and counseling psychologies.

5. Educational measurement and evaluation

- Principles and techniques of educational measurement and evaluation.

- Creation and implementation of educational measurement and evaluation tools.

- Authentic assessment.
- Portfolio assessment.
- Performance assessment.
- Formative and summative evaluations.

6. Classroom management

- Management theory and principles.
- Educational leadership.
- Systematic thinking.
- Learning of organizational culture.
- Organizational human relations.
- Organizational communication.

- Classroom management.
- Educational quality assurance.
- Teamwork.
- Academic program preparation.
- Occupational training program.
- Development programs and activities.
- Information system for management.
- Community development education.

7. Educational research

- Research theory.
- Research model.
- Research design.
- Research process.
- Statistics for research.
- Classroom action research.
- Research training.
- Research presentations.

• Search and study on research for development of learning management process.

- Use of research process for problem solving.
- Project proposals for research.

8. Educational innovation and information technology

• Educational concept, theory, technology and innovation that promote the learning quality development.

- Technology and information.
- Analysis of problems arising from use of technology and

information innovation.

- Learning sources and network.
- Innovation design, creation, implementation, evaluation and

improvement.

9. Teachership

• Importance of the teaching profession and teachers' roles, duties and workload.

- Development of the teaching profession.
- Characteristics of good teachers.
- Building positive attitude towards the teaching profession.
- Strengthening teachers' potentiality and capabilities.
- Being learning persons and academic leaders.
- Criteria and standards for the teaching profession.
- Teaching professional ethics.
- Laws governing education.

The content domains were categorized based on the TPACK framework as follows:

- Content knowledge
 - Language skills
- Pedagogical knowledge
 - Theories, approaches, methods and techniques of teaching
 - Psychology for teachers

- Curriculum development
- Instructional material development
- Educational measurement and evaluation
- Educational leadership and management
- Educational research studies
- Technological knowledge
 - Educational innovation and information technology
- General education
 - Teacher characteristics development
- Field experience
 - Practicum

In conclusion, teacher training program in Thailand aims at providing their student teachers to equip themselves with content knowledge, pedagogical knowledge and technological knowledge.

Teacher education in Vietnam.

School system.

According to 2005 Education Law, early childhood education (ECE) provides to children from 3 months to 6 years of age. It is not compulsory, and is offered by both public and private sectors. ECE institutions include crèches for children from 3 months to 3 years of age; kindergarten schools for children from 3 years to 6 years of age. Primary education lasts for 5 years from grades 1-5; it is compulsory and tuition-free to all children aged from 6-14. The schooling age is 6 years old. Secondary education divides into two levels: basic secondary education lasts for 4 years from grades 6-9, those in grade 6 must be 11 years old and have

primary education diplomas; and high school education lasts for 3 years from grades 10-12, those in grade 10 must be 15 years old and have basic secondary education diplomas (MOET., 2013).

Role of English.

Nguyen (2011) stated that since the 1990s, English for primary pupils has been taught in a pilot program at language centers and also at some primary schools in the larger cities in Vietnam, such as Hanoi and Ho Chi Minh City. In response to societal demands, in 1996, the Ministry of Education and Training (MOET) issued a Decision which provided guidance on foreign language teaching in primary schools. English was introduced as an elective subject nationwide starting from the second semester of Grade 3, with two 40-minute periods per week in schools where teaching conditions permitted and where there was sufficient demand from parents. Some private schools in the larger cities offer English from Grade 1. The practice of English language primary education varies across different regions of the country. In 2010, a pilot English (as a compulsory subject) primary program was implemented with four 40-minute periods per week starting from Grade 3.

Goal of English teaching and learning.

According to English Teaching (n.d.) in order to develop English teachers' profession and to enhance young Vietnamese to use English more effectively, Vietnam Government has decided to carry out a big project entitled "Teaching and Learning Foreign Languages in the National Education System, Period 2008-2020" until 2020. The aim of the project is:

"... by 2020 most Vietnamese students graduating from secondary, vocational schools, colleges and universities will be able to use a foreign language

confidently in their daily communication, their study and work in an integrated, multi-cultural and multi-lingual environment, making foreign languages a comparative advantage of development for Vietnamese people in the cause of industrialization and modernization for the country”.

In addition, Nguyen (2011) also stated that teaching English as an elective subject in primary schools was meant to serve the following purposes:

- Inculcating basic English communicative skills in listening, speaking, reading, and writing to enable students to communicate in English at school, at home, and in familiar social environments.
- Providing students with a fundamental knowledge of English to enable them to gain primary understanding of the country, the people, and the culture of some English-speaking countries.
- Building positive attitudes towards English and a better understanding and love for Vietnamese through learning English.

Teaching approach/curriculum.

According to Article 3 of the 2005 Education Law as cited in UNESCO Vietnam (2011) states that “The Vietnamese education is a socialist education with popular, national, scientific, and modern characteristics, based on Marxism-Leninism and Ho Chi Minh’s thoughts. Educational activities must be conducted on the principles of learning coupled with practice, education linked to production, theories connected to practicability, and education at school combined with education in the family and in the society.” The contents of education must ensure the basic, comprehensive, practical, modern, and systematic characters; with importance attached to ideological and civic conscious education; preserving and developing the

good traditions and the national cultural identity, absorbing the essence of the mankind culture; and conforming to the psycho-physiology development of various age of group of learners. Methods of education must bring into full play the activeness, the consciousness, the self-motivation, and the creative thinking of learners; foster the self-study ability, the practical ability, the learning eagerness and the will to advance forward.

Teacher/English teacher training and licensing.

Takashi (2008) explained that in general, Teacher Training Institutes (TTIs) train teachers for pre-school, primary, and secondary school levels. A TTI is established in every province, and the enrolment limit for each TTI is determined at the provincial level, and authorized by Ministry of Education and Training (MOET). The Education Law of Vietnam stipulates 12 years of general education plus two years of teacher training education (12+2) as the minimum academic requirement for teachers. In this regard, however, it is only a minimum requirement and there are higher qualifications. In addition, a three-year course (12+3) and four-year course (12+4) are also available. There is also a teacher's qualification for those with bachelor degrees. In Vietnam today, 12+2 is deemed the state norm. The MOET is making efforts to raise the levels to 12+3 or 12+4, or even to the university bachelor level. TTIs are gradually shifting toward the university level. In some provinces with difficult conditions adopt 9+3 or 5+3 systems, and there is now an effort to eliminate such systems.

UNESCO Vietnam (2011) stated that the standardized educational qualifications of teachers are as follows:

(a) preschool and primary education teachers must possess an upper secondary pedagogical diploma;

(b) lower secondary education teachers must possess a pedagogical college diploma or a college diploma and a certificate of pedagogy training;

(c) upper secondary education teachers must possess a pedagogical university degree and a certificate of pedagogy training.

Table 5

Teacher Training System in Vietnam

<i>Level \ Training System</i>	<i>Under standard</i>	<i>Standard</i>	<i>Above Standard</i>
Preprimary		12+2 & 9+3	12+3 & 12+4
Primary	12+2 & 9+3 (for difficult areas)	12+3 (college education)	12+4 (higher education)
Lower Secondary		12+3 (college education)	12+3+1 (higher education)
Upper Secondary		12+4 (higher education)	12+4+2 (Post-graduate education)

(Source: Primary English Language Education Policy in Vietnam: insights from implementation,

Nguyen, 2011)

According to Nguyen (2011) the rapidly increasing demand for English in Vietnam led to unbalanced foreign language education in Vietnamese schools. This has resulted in a shortage of teachers capable of teaching English. To meet this need, many short-time training courses were set up to train English teachers and retrain Russian teachers to teach English. At the primary level, the shortage of primary English teachers is an even worse. Few teachers have been formally trained to teach English at the primary level. Thus, the demand outpaces the availability of

well-trained and competent teachers. The shortage of English teachers at the primary level forces the continued recruitment of teachers with inadequate linguistic and teaching competencies. In addition, most primary schools hire English teachers on contract.

Nguyen (2011) also indicated that there was no legislative policy governing credentialing for primary English foreign language teachers (PEFLT) until the recent requirements set out in the Directive on Primary English Education, issued in August 2010. The new National Primary English Curriculum in Vietnam specifies that PEFLT should have a degree from a university or college for training EFL teachers, their language proficiency should be equivalent to Level B2 on the Common European Framework of Reference for Languages (CEF), and PEFLT must have opportunities to attend professional activities in their school or school clusters. Teachers were trained to teach English at secondary schools. There was no subject on teaching primary English in their undergraduate programmes. They had studied related subjects such as psychology for primary students or methodology for teaching children that these subjects were general and not specific to the teaching of English. They had learned how to teach English to primary students by themselves and from their colleagues.

Aims of teacher training program.

According to Lam (2011) the goals of English Teacher Training Program are as follows:

1. General goals: “The EFL teacher training program provides sufficient knowledge, professional skills, and political quality of student teachers to

teach the subject of English in secondary education in order to meet the need of social development, and regional and international integration.”

2. Specific goals: “The EFL teacher training program focuses on developing communicative competence and professional competence.”

Communicative competence included English, linguistics, British and American literatures, cross-cultural competence (in English speaking countries and Vietnam), and learning skills in computer, Internet, and material sources. Professional competence comprises teaching skills and professional development.

Key competencies.

After the training program students obtain the following:

- Wide teaching knowledge and skills
- Education methods, science research creativity and skills
- Ability to understand students well
- Well-developed communication skills
- Well-equipped ICT skills
- Ability to adapt to different teaching environments
- Community relationship skills
- Global knowledge and culture
 - Living values and skills
 - Life-long learning skills

Content domains.

The content domains were categorized based on the TPACK framework as follows (see Appendix P):

- Content knowledge

- Culture
- Literature
- Language skills
- Linguistics
- Pedagogical knowledge
 - Theories, approaches, methods and techniques of teaching

In conclusion, the English teacher training program in Vietnam aims at providing their student teachers to equip themselves with content knowledge and pedagogical knowledge.

Teacher education in Lao PDR.

School system.

The formal education system in Lao PDR consists of general education, vocational and technical education, and higher education. Pre-school, crèches and kindergarten, for children aged 3 months to 6 years old. Primary education is free and compulsory for children aged 6-10 years old and lasts 5 years. Secondary education comprises of lower secondary education lasts 4 years and upper secondary education lasts 3 years. This 12-year (5+3+4) basic education was reformed from its previous 11-year (5+3+3) system in 2011.

Role of English.

According to Souvannasy, Masashi, and Yukiko (2008) Laos adopted the “Chintanakan Mai” (new way of thinking) policy in 1986, representing a change from a centrally planned economy and an Eastern bloc-oriented foreign policy toward a market economy and an omni-directional foreign policy. Since then, the inflow of people and capital from the West has raised the importance of and the

demand for English language learning. As a result, English language education was introduced into the Lao secondary curriculum in 1986. Since Lao has joined the ASEAN in 1997, English language has been introduced in Lao school curriculum as a compulsory course from lower secondary school level (John & Ehow, 2011), as cited in (Souriyavongsa, Rany, Abidin, & Mei, 2013).

Goal of teaching and learning.

MOE & TDC, 1994 as cited in Chounlamany and Kounphilaphanh (2011) stated that the important points considered for Lao students to learn are:

- Love of homeland
- Love and appreciation for the natural world
- Gratitude and respect for leaders, parents and teachers
- Respect for elders, workers, and those who sacrificed and died for the nation.
- Respect for rules and regulations
- Avoidance of extravagances and selfishness
- Responsibility and initiative in assigned work
- Unity with all ethnic groups
- The willingness to sacrifice personal interest for the sake of the collective good.

Teaching approach/curriculum.

Chounlamany and Kounphilaphanh (2011) stated that after the Jomtien-conference where the objectives of education for all were established and through the urgings of the World Bank, Lao PDR has developed the policy concepts on new methods of teaching and student-centred education alongside the concept

of education for all. The five-pointed star, a new teaching method, was introduced by the Teacher Development Centre (TDC) in 1994 targeting primary and lower secondary education:

- Activities-based learning
- Improving questioning
- Using illustration effectively
- Group discussion, and
- Application to daily life

According to UNESCO Lao PDR (2011) the concept of integration was adopted in order to overcome the problems related to curriculum overload. The curriculum has been designed with a combination of content and competency-based approach. The curriculum was set up in terms of cognitive, psychomotor and affective domains covering five educational pillars: moral, intellectual, labour, physical and aesthetic. The corresponding topics and contents were determined according to the learning objectives.

Teacher/English teacher training and licensing.

Teacher education in Lao PDR is under the shared-responsibility of the Ministry of Education and the Provincial Education Authority. The Ministry has responsibility for managing upper and lower secondary teacher education, while the Provincial Education Authority has responsibility for managing primary and preschool teacher education (Thepphasoulithone, 2009). There are 8 Teacher Education Institutions (TEI) offer 11 different pre-service programs leading to different teaching certificates. Each program has various minimum requirements in terms of length of schooling students must have before admission as well as the type of certification

sought. Eleven year-schooling which is now becoming 12 year-schooling, is required for the three-year English teacher training programs and the student teachers are qualified to teach English in lower secondary schools (The World Bank & MOE Lao PDR, n.d.).

Table 6

Teacher Training System in Lao PDR

Type of Training	Schooling Required on Entry	Years Required on Training
Preschool teacher	8 years in school	+3 years in TTC
Primary teacher	8 years in school	+4 years in TTC
Lower secondary teacher	11 years in school	+3 years in TTC
Upper secondary teacher	11 years in school	+4-6 years in university

(Source: Reforming Teacher Education in Lao PDR, Thepphasoulithone, 2009)

The World Bank & MOE Lao PDR (n.d.) reported that students can enter the teacher training programs in Lao PDR through four different channels:

- Quota students: they have to take an extensive application process which they will obtain free tuition and a stipend.
- Exam students: they are selected based on their scores on the TEI entrance exam. They will receive similar benefits to Quota students.
- Nangobay students: they must submit an application letter to be considered for this category. This pathway is reserved for children of teachers, national heroes, leaders, and retirees. Their financial benefits are those of Exam students, minus the living stipend.

- Non-Quota students: these students did not pass the TEI exam, but were admitted into the TEI as fee-paying students. In some TEIs, Non-Quota students are taught separately from other students in regular courses.

The current trend in TEI enrollments in Lao PDR is most new teachers have at least 11 years of pre-teacher education schooling. In addition, to upgrade the unqualified or low level of teachers, there is an In-service Teacher Training Center (ISTUC) in every province for primary school level that are under the supervision of the in-Service Teacher Training Division in the Department of Teacher Training.

After the completion of teacher training, newly teachers are centrally assigned and posted by MOE according to the school needs. Teachers only obtain permanent status after three to five years of service.

Aims of teacher training program.

According to Ministry of Education and Sports (2011) the overall goals of teacher education in Lao PDR are:

- To provide a good quality of education that meets the needs of socioeconomic development in each period.
- To enable teachers to become ethical, enthusiastic, fair, and patient professionals; to have knowledge and capacity in professionals; to be sufficient based on each period needs and to ensure that the teacher education is processed based on three characteristics and five principles of education in Lao PDR.

Key competencies.

According to MOE Lao PDR (2009), a National Charter of Teacher Competencies (NTC) has been developed to guide teachers over the career-long process of professional development. Through the development of the NTC, the

MOE set out to determine the standard skill set required for its teachers. Lao teacher competencies define the key abilities, qualities and pedagogical skill areas in which each teacher should be competent. These competencies are classified into three categories contain ten equally important competencies in each set. The NTC summarized under its three categories of abilities, qualities and skills:

(i) Teachers' characteristics and professional ethics: focuses on policy at national and local levels, professional values and ethics, personal development and community relations.

1. Have a good understanding of and put into correct practice the policy platform of the party and the state law and regulations, and be self-disciplined in their application.

2. Respect Lao cultures and traditions and offer consistent and fair treatment to students irrespective of their gender, or of their social, cultural, linguistic, religious or ethnic background.

3. Acknowledge diversity and encourage students to respect each other and accept differences.

4. Be socialistic, living by the same personal values that they expect from their students.

5. Having high expectations of their students and support them in their development as learners who are striving to achieve their potential through learning.

6. Improve their teaching through self-evaluation and through reflection on the observations, comments and advice of colleagues and others.

7. Take responsibility for continuous personal professional development in order to keep up to date with changing academic knowledge and to maximize the learning outcomes for their students.

8. Work collaboratively with colleagues and the community.

9. Form and develop partnerships with parents and guardians of their students and promote the rights and responsibilities that parents and guardians have for raising their own children.

10. Be role models of morality and integrity within society, contributing to the development and guidance of the community by promoting local arts, cultures and traditions.

(ii) Knowledge of children: emphasizes the establishment of a good learning environment, understanding child development, teacher-student relationship, and responding to students' learning needs.

11. Understand child development, and the thinking, feelings and rights of children.

12. Be aware of the effects of the environment and health on children's learning.

13. Accept that children learn in different ways, and accordingly use teaching and learning approaches that are appropriate to each child.

14. Develop good interpersonal relationships with students.

15. Encourage interaction among students in the classroom.

16. Ensure students have a significant degree of control over their own learning and should support learning through group work and investigation.

17. Support children with special educational needs.

18. Encourage children and pay special attention to their creativity.
 19. Create a positive classroom environment which stimulates student's learning.
 20. Learn the culture and language of the children in the area where they are teaching.
- (iii) Subject knowledge and practical teaching wisdom: focuses on the teacher's knowledge of national and local curriculum, the teaching plan, student assessment, recording students' achievement, and classroom management.
21. Implement the National Curriculum and know how to design local curricula and activities.
 22. Employ modern teaching methodologies, techniques, and subject knowledge in teaching and learning.
 23. Set learning objectives and outcomes that match the real-life situations of the students.
 24. Select appropriate teaching materials to maximize student learning.
 25. Teach lessons sequentially and attractively while taking account of student learning.
 26. Use different modes of assessing children's work and integrate assessment into planning.
 27. Assess student progress in relation to the basic learning competencies identified in the National Curriculum.
 28. Record student achievement systematically.
 29. Organize and manage classrooms effectively.

30. Provide children with learning opportunities both within and outside school hours.

Content domains.

The curriculum determines that learning and teaching will focus on both theory and practice. Curricula are based on broad areas of study, divided into sub-units, and allocated equivalent class hours and credit points. For lower secondary foreign language teacher training program requires:

- Pedagogy
 - General pedagogy
 - Teaching method
 - Teaching practice
- and Academic content
 - Foreign language

The content domains were categorized based on the TPACK framework as follows (see Appendix Q):

- Content knowledge
 - Language skills
- Pedagogical knowledge
 - Theories, approaches, methods and techniques of teaching
- Field experience
 - Practicum

In conclusion, the English teacher training program in Lao PDR aims at providing their student teachers to equip themselves with content knowledge and pedagogical knowledge.

Delphi Method

The Delphi method mainly developed by Dalkey and his associates at the Rand Corporation in the 1950s for a top secret military project and named it after the ancient Greek temple where the oracle could be found. Dalkey and Helmer first published their work in 1963, describing the Delphi method which had not been previously shared as a result of the confidential, classified quality of the United States military studies involved.

Rationale of the Method

The Delphi method was chosen as the most suitable approach for four reasons:

First, it is designed as an “iterative process to collect and distill the anonymous judgments of experts using a series of data collection and analysis techniques interspersed with feedback” (Skulmoski, Hartman, & Krahn, 2007).

Second, this is a popular method of study when there is little known about a phenomenon or problem (Delbecq, Van de Ven, & Gustafson, 1975; Murry & Hammons, 1995; Skulmoski et al., 2007); thus, the resulting goal of the study is to improve understanding of “problems, opportunities, solutions” (Skulmoski et al., 2007).

Third, there is flexibility in the number of rounds and the number of participants. Typically, three rounds of consensus building are conducted in a Delphi study with the target population of as few as four experts to approximately 171 experts (Skulmoski et al., 2007).

Fourth, the Delphi method is well known and accepted widely in the education and information technology fields among others.

In the literature, Delphi has been applied in various fields such as program planning, needs assessment, policy determination, and resource utilization. (Delbecq et al., 1975) indicated the Delphi technique can be used for achieving the following objectives:

1. To determine or develop a range of possible program alternatives;
2. To explore or expose underlying assumptions or information leading to different judgments;
3. To seek out information which may generate a consensus on the part of the respondent group;
4. To correlate informed judgments on a topic spanning a wide range of disciplines, and;
5. To educate the respondent group as to the diverse and interrelated aspects of the topic.

Characteristics of the Delphi method

Delphi method is an appropriate method for consensus-building by using a series of questionnaires to collect data from a panel of selected subjects. It employs multiple iterations designed to develop a consensus of opinion concerning a specific topic. Rowe and Wright (1999), as quoted in Sjostrom (2009), described the four main characteristics of the Delphi method as follows:

1. *Anonymity of Delphi participants.* Participants freely express their opinions without pressure to conform from others in the group. Decisions are evaluated on their merit, rather than who has proposed the idea.
2. *Iteration.* Participants refine their views from round to round as a result of the group's progress.

3. *Controlled feedback.* Participants are informed of the other participant's perspectives, and *provide* the opportunity to clarify and/or change their views.

4. *Statistical aggregation of group response.* Allows for a quantitative analysis and interpretation of data.”

The Delphi method primarily consists of three types— classical, decision, and policy (Franklin & Hart, 2007; Stewart, 2001). The classical Delphi focuses on establishing facts; decision Delphi encourages collaborative decision-making; and policy Delphi is used for generating alternative ideas.

According to Linstone and Turoff (2002), the Delphi process exists in two distinct forms: one is the conventional Delphi and the other is Real-Time (computer-based) Delphi. The Conventional Delphi uses paper and pencil survey technique as the original Delphi conducted by the Rand Corporation in the 1950s. Technological advancement has brought Real-Time Delphi to researchers through computer access providing a quick or instant response.

The Delphi method involves both quantitative and qualitative analyses at the end of each round so that feedback may be provided to the panel and a questionnaire for the next round may be prepared (Loo, 2002). Franklin and Hart (2007) stated that in a Delphi study “coupling panelists with strong feelings about a phenomenon with a broad and complex topic results in layers of data both quantitative and qualitative” (p. 243).

The Delphi method is based on a structured process for collecting and distilling knowledge from a group of experts and aims to achieve the most reliable consensus of opinion by conducting two or more rounds of intensive surveys to the

same group of experts utilizing controlled opinion feedback (Clayton, 1997; Gordon, 2003; Toohey, 1999). The Delphi technique uses panel experts to examine a particular subject. The panel is brought together by written communication only. There are no face-to-face meetings, and no panel member knows the identities of other panel members. Participants will remain anonymous to each other, avoiding influences of reputation, authority or affiliation, and it will enable panel members to change their options without losing face (Martino, 1993). Loo (2002) mentioned that “the Delphi method structures and facilitates group communication that focus, upon a complex problem so that, over a series of iterations, a group consensus can be achieved about some future direction” (p. 763). Lang (1998) described the Delphi method as the best known qualitative, structured, and indirect interaction research method to study the future.

The Delphi method is likely to be useful when there is a change in the occupational structure and new trends are emerging (Toohey, 1999). The Delphi is also appropriate when there is little or no history about the research issue and collective opinions of geographically spread experts are required (Murry & Hammons, 1995). Franklin and Hart (2007) agree that “the very value of the Delphi method is to generate ideas that are more recent than the literature and the experiences of the researchers” (p. 245). Additionally, the Delphi provides a controlled interaction of experts, which is an appropriate solution to avoid disadvantages of interviews such as scheduling face-to-face meetings with experts from a variety of geographic locations or interviewing a panel with different philosophical beliefs. Geographical distance does not allow for face-to-face communication by experts. Individual schedules of the experts and travel cost involved for multiple face-to-face meetings would be

difficult and unrealistic. An advantage to a Delphi study is that it avoids direct confrontation of experts with one another and encourages experts to provide exclusive analysis, helping each expert form an independent opinion of the problem (Sjostrom, 2009). The bias of dominant views within group discussions are avoided (Lang, 1998). Woudenberg (1991) states, “The best known structure, indirect interaction method is the Delphi technique” (p. 132).

With the advancement of computer mediated communication technology, Delphi has also moved from the traditional paper and pencil based format to the online Internet based Delphi surveys (Wong, 2003). Franklin and Hart (2007) indicated that the online Delphi method has significant advantages of quick turnaround time, low cost and availability of data in usable format as compared to the traditional paper mail based Delphi. Likewise, the first round of the modified Delphi method has as a structured questionnaire instead of a conventional open-ended questionnaire in traditional Delphi (Murry & Hammons, 1995). Round 1 structured questionnaire is developed based on the literature review or other secondary analysis and helps participants in organizing their thoughts (Eskandari et al., 2007; Franklin & Hart, 2007).

Delphi Validity

Trustworthiness of a qualitative study is associated more with the relevancy of the cases selected rather than the sample size (Patton, 2002). In support of the small sample size of the Delphi method, Loo (2002) asserts that a careful selection of a small and relevant panel for a particular study can still yield valuable answers for the research questions. The Delphi method is appropriate for exploratory study where little research is available. The Delphi study is based on the assumption that

validity is enhanced by the group based decisions and reasoned communication process between the experts (Hasson, Keeney, & McKenna, 2000).

Participants and Panel Size, and Rounds

Several researchers have highlighted that selection of the participants is very important for the relevancy and success of the Delphi study (Clayton, 1997; Franklin & Hart, 2007; Gordon, 2003; Skulmoski et al., 2007). An expert for the Delphi panel is defined as “someone who possesses the knowledge and experience necessary to participate in a Delphi” (Clayton, 1997). The Delphi method is suitable for addressing questions that have high uncertainty and speculation and require a purposefully selected panel of experts (Okoli & Pawlowski, 2004). The purposeful sampling allows for selecting information-rich cases that allow in-depth understanding of the issues relevant to the study (Patton, 2002). Thus, the participants for the study will purposefully select so that they will present expertise and interest in the fields and be committed towards the participation in various rounds of the Delphi study.

The literature reports varying range of numbers for the optimum size of panels. However, the size can range between 4 and 171 experts (Skulmoski et al., 2007). Clayton (1997) states that 15-30 participants for a homogeneous population of experts from a single discipline and 5-10 participants for a heterogeneous group of experts from different professional backgrounds is sufficient. Ludwig (1997) recommended between 12 and 15 participants, while Linstone and Turoff (2002) recommended between 7 and 50. Murry and Hammons (1995) note that final panel of experts should not be less than ten, as long as a representative sample is selected.

The number of rounds depended upon reaching consensus among panel members and most Delphi studies find that more than three or four rounds do not add significant value (Clayton, 1997). Murry and Hammons (1995) stated that the modified Delphi method requires between two to four rounds to achieve desired consensus or stability in the results.

Among the recent studies that used the Delphi method for curriculum planning and identification of competencies, employed varying number of rounds and expert panelists. For example, Kantz (2004) started with 24 participants in round 1 and ended with 13 participants in round 5; Clark (2005) received responses from 16 participants in round 1 and 12 participants in round 3; and Senyshyn (2002) conducted a two-round Delphi and received responses from 17 participants in round 1 and 15 participants in round 2.

The Delphi process

Theoretically, the iterations of Delphi process can be continued until a consensus is achieved. However, many researchers have pointed out that three iterations are often sufficient to collect the needed information and to reach a consensus in most cases. However, the following discussion provides guidelines for up to four iterations in case those additional iterations beyond three are needed or valuable, quoted in (Hsu & Sandford, 2007).

Round 1: In the first round, the Delphi process traditionally begins with an open-ended questionnaire. The open-ended questionnaire serves as the cornerstone of soliciting specific information about a content area from the Delphi subjects. After receiving subjects' responses, investigators need to convert the collected information into a well-structured questionnaire. This questionnaire is used

as the survey instrument for the second round of data collection. It should be noted that it is both an acceptable and a common modification of the Delphi process format to use a structured questionnaire in Round 1 that is based upon an extensive review of the literature or other secondary analysis instead of a conventional open-ended questionnaire in traditional Delphi. Kerlinger (1973) noted that the use of a modified Delphi process is appropriate if basic information concerning the target issue is available and usable.

Round 2: In the second round, each Delphi participant receives a second questionnaire and is asked to review the items summarized by the investigators based on the information provided in the first round. Accordingly, Delphi panelists may be required to rate or rank-order items to establish preliminary priorities among items. As a result of round two, areas of disagreement and agreement are identified. In some cases, Delphi panelists are asked to state the rationale concerning rating priorities among items. In this round, consensus begins forming and the actual outcomes can be presented among the participants' responses.

Round 3: In the third round, each Delphi panelist receives a questionnaire that includes the items and ratings summarized by the investigators in the previous round and are asked to revise his/her judgments or to specify the reasons for remaining outside the consensus. This round gives Delphi panelists an opportunity to make further clarifications of both the information and their judgments of the relative importance of the items. However, compared to the previous round, only a slight increase in the degree of consensus can be expected.

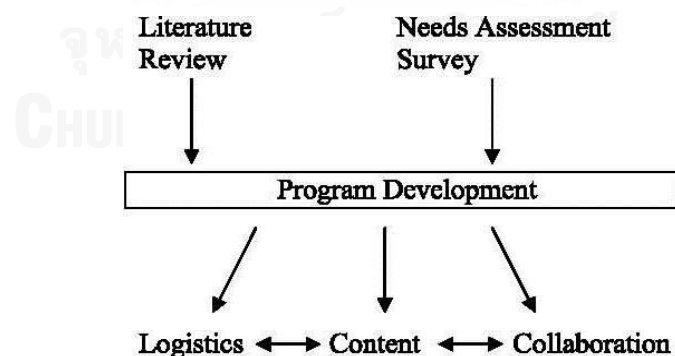
Round 4: In the fourth and often final round, the list of remaining items, their ratings, minority opinions, and items achieving consensus are distributed to the panelists. This round provides a final opportunity for participants to revise their judgments. It should be remembered that the number of Delphi iterations depends largely on the degree of consensus sought by the investigators and can vary from three to five”.

In conclusion, over the years the Delphi method has found significant acceptance from the researchers in various disciplines including the social sciences (Nielsen & Thangadurai, 2007); education (Clayton, 1997); healthcare, medicine and the nursing field (Mullen, 2003) and; technology and policy forecasting (Skulmoski et al., 2007). The Delphi method has been used extensively as an educational tool. Two of the earliest findings of the Delphi method in education was the Adelson study in the 1960s (Hasson et al., 2000) and in the early 1970s (Cyphert, Frederick, & Gant, 1970). Some of the more recent studies of the Delphi method were found in the review of the current literature. This method is particularly useful for (a) developing goals, objectives, and criteria, (b) assisting with strategic planning of educational institutions, and (c) improving educational curricula (Judd, 1972; Linstone & Turoff, 2002). Kantz (2004) recommends that the Delphi method may provide support for new program development by getting responses from the experts in determining the needs of an educational program. Several recent studies have used Delphi method for curriculum planning and identification of competencies (Clark, 2005; Eskandari et al., 2007; Kantz, 2004; Senyshyn, 2002).

Relevant Research Studies

Newman et al. (2010) developed a training program for in-service secondary-level teachers in the United States. They created a needs assessment survey to conduct empirical research on teachers' actual needs with six public school districts in Ohio. Thirty-item web-based survey was developed and sent via e-mail invitation to approximately 1,672 secondary content and ESL teachers across the six districts to investigate such topics as: numbers of ELLs in teachers' classes; status of services and existing infrastructure; opportunities for professional development; collaboration between content area and ESL personnel; and interest in participating in professional development. They received a response rate of 144 teachers (9%) and data were analyzed quantitatively for the fixed-response items, and qualitatively for the open-ended responses, which were grouped together according to similar themes to yield emergent categories.

The program development came out of their findings from a review of the literature and a needs assessment survey that they developed, which informed the reciprocal interaction of logistics, program content, and collaboration.



(Source: *Developing a Training Program for Secondary Teachers of English Language Learners in Ohio*. Newman et al., 2010)

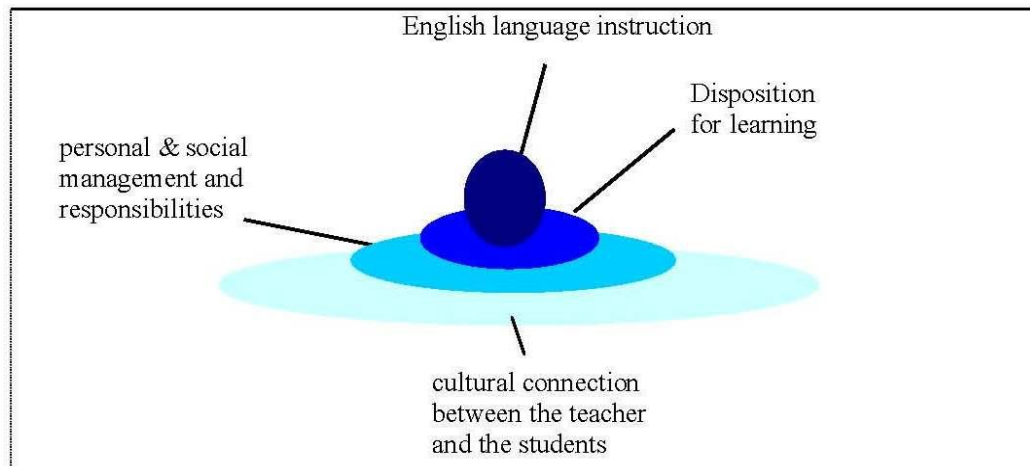
Figure 3. Application of finding to creation of training program

The study suggested that those who wish to encourage teacher professional development, create resources to improve teachers' ability to deliver academic content to ELLs, or develop training programs, must take into account teachers' needs vis-à-vis their willingness to engage in professional development. For stakeholders who wish to enhance job-embedded professional development for teachers, they recommended four parts:

1. Learn the basics of Second Language Acquisition
2. Be aware of Practical Methods of Teaching English
3. Learn how to look for best practice and guide fellow teachers
4. Be aware of how culture influences the classroom and parents involvement in education

Kim (2011) conducted a study based on three years of classroom observation as a part of ongoing study on portfolio assessment for ESL students. During the study, Kim formed an overall impression of the instructional practice of Mrs May, a teacher of ELLs at Spring Valley Elementary school, which is located in a mid-western university town. The school housed approximately 225 students ranging from kindergarten through fifth grade. The students were mostly children of university graduate students from around the world, and they represented approximately 35 countries and 30 languages. There was high proportion of ELLs in the school because a large number of new students come with native languages other than English. There was an ESL program in the school, and Mrs May, Kim's focus teacher, was one of the teachers in the ESL pullout program.

Kim found that a model of effective teaching of English language learners for pre-service teachers incorporates four different layers which each one is like a water drop to suggest that it blends once it is dropped.



(Source: *Developing a Model of Effective English Teaching for Pre-Service Teacher Education*. Kim, 2011)

Figure 4. Four layers of teaching practice

Cultural connection between the teacher and the students refers to the customized classroom setting teacher created and his/her efforts in trying to make connections with his/her students at the beginning of the school year.

Personal and social management and responsibilities is teacher's rendition of classroom management, but with specific emphasis on helping students learn to accept some of their responsibilities.

Dispositions for learning entail teacher's effort to instill the love of learning in his/her students.

When these three elements of teacher's practice shape classroom activities and conversations, teacher engages the students in *English language instruction*; first implicitly as the need arises for a particular linguistic or structural form, and later explicitly when teacher thinks students are ready to tackle the forms

as “objects” of instruction. In so doing, teacher helped the students expand their English knowledge and develop metalinguistic awareness.

Kim believed that it is very important to help pre-service teachers understand how the task of teaching ELLs is relevant to them. Equally importantly, teacher educators need to help pre-service teachers overcome the fear of encountering ELLs in the classroom because they do not feel they are competent to teach them. In such case, Kim suggested that teacher educators can use a model of effective teaching of ELLs to point out some of the similarities between good teaching in their subject area and effective ELL teaching, and help them see how they can be helpful to ELLs. Kim also added that to make teacher education effective, teacher educators need to continue to stimulate pre-service teachers’ thinking about working with ELLs consistently and seamlessly across teacher education programs. Teacher educators also need to revisit course content for pre-service teachers and continue to examine their usefulness across teacher education courses through professional conversations among teacher educators. In doing so, teacher education programs can successfully help pre-service teachers understand the issues of linguistic diversity, one of the core tasks for teacher education programs.

Surwill (1980) found that teachers need a great deal of educational and academic preparation. He conducted his study with 62 student teachers, 8 principals, and 9 superintendents. The result of his study has shown all participants agreed that the following factors should be considered in preparing future teachers:

1. High academic performance for teachers
2. High ability to teach in different levels
3. Good cultural background

4. More than one field of specialization
5. Good background of methods of teaching
6. Participation in planning and designing the curriculum

Surwill (1980) also believes that the visits of student teachers to their colleagues, give them the opportunity to evaluate their colleagues and identify points of strengths and weaknesses. Moreover, they will not feel embarrassed to talk to their colleagues about problems, which is different from them talking to their supervisors.

Summary

In conclusion, English teacher education programs have been distinguished from one another in several different forms. The most common distinction of the programs center around their structure, length, requirement, curricular emphases, and conceptual orientations. English teacher education in Cambodia falls into five main categories, namely content knowledge, pedagogical knowledge, technical knowledge, general education, and field experience while that of other ASEAN countries is categorized differently. They mostly focus on abilities to exercise a number of issues: transfer knowledge to students, understand students, use effective communication skill, do self-development, conduct research, and use of ITC. Likewise, the content mostly emphasis on curriculum develop, language management, education psychology, literature, language skills, culture, linguistics, and field experience.

Literature review also suggests three rounds of the Delphi should be utilized to collect sufficient needed information and to reach a consensus of the proposed teacher education program.

CHAPTER III

METHODOLOGY

This section describes the methodology employed in the present study to answer the research questions. The following topics are discussed: research design, population and participants, research instruments, data collection procedures and data analysis.

Research Design

This study used the Delphi method to determine the most important key competencies required for primary English student teachers and ascertain sets of aims and content domains to develop guidelines for primary English teacher training programs at PTTCs in Cambodia. This study employed the policy Delphi (Franklin & Hart, 2007; Stewart, 2001) because the objective was to arrive at a consensus for proposing the foundations of guidelines for developing programs. The Delphi process is illustrated as in Figure 5.

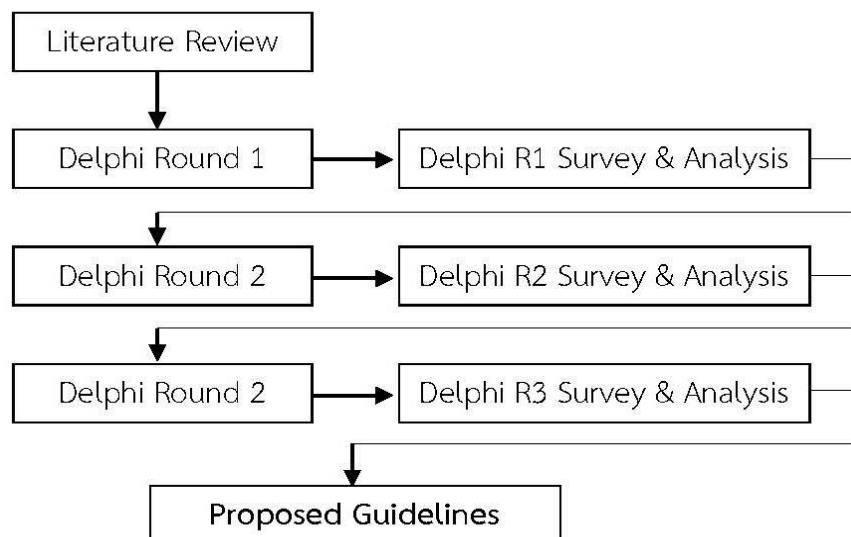


Figure 5. The Delphi process

To develop the questionnaire for the Delphi survey, literature related to the primary or primary English teacher education in six countries in ASEAN was reviewed. The review was used to construct the first round questionnaire items.

Delphi Round 1

The objective of Round 1 of the Delphi was to generate a set of aims, key competencies, and content domains for the primary English teacher training programs at PTTCs. The participants were asked to rate the importance of aims, key competencies, and content domains on a four-point Likert scale ranging from Very Important (4), Important (3), Somewhat Important (2) to Not Important (1) as in Appendix B.

Delphi Round 2

The objective of Round 2 was to encourage overall consensus among the participants and to prioritize the aims, key competencies, and content domains of primary English teacher training programs. The participants were asked to re-rate the importance of the aims, key competencies, and content domains as in Appendix D. The researcher defined the criteria for consensus in this study as the agreement on a particular item by 75% of the participants as in Murry and Hammons (1995). Comments and suggestions of new aims, key competencies, and content domains accepted only if at least 3 respondents recommended. The descriptive statistics of the first round responses including mean, standard deviation and percentages for each aim, key competency and content domain were reported. This allowed the participants to reconsider their previous responses in Round 1 considering the opinions of the panel.

Delphi Round 3

The objective of Round 3 was to classify the aims with key competencies and content domains that received the most scores from the respondents from the previous round. In this round, the participants were asked to rate their agreement with the classification of the top prioritized aims, key competencies, and content domains, and to provide suggestions for making them more relevant and inclusive (see Appendix F). This round, a different set of four-point Likert scale indicating the degree of agreement ranging from Strongly Agree (4), Agree (3), Disagree (2) to Strongly Disagree (1) was employed.

Population and Participants

Panel selection is critical when using the Delphi technique. The success of a Delphi study rests upon selecting appropriate experts qualified in the subject area. The effective selection of the panel not only maximizes the quality of responses but also gives the results of the study credibility (Lang, 1998); therefore, in this study the list of prospective panelists was purposively selected from two primary sources in Cambodia.

The first group was the educators who were working as English curriculum designers/developers in related offices and organizations such as the Department of Curriculum Development and the Department of Teacher Training of the Cambodian Ministry of Education, Youth and Sports.

The second group included English teacher trainers from National Institute of Education (NIE), Regional Teacher Training Colleges (RTTCs) and Provincial Teacher Training Colleges (PTTCs).

To be considered as a panelist in this study, each expert needed to have at least two of the following three qualifications:

1. Had a minimum of five-year experiences working as an English teacher educator.
2. Had a minimum of five-year experiences in English curriculum or course development.
3. Had a minimum of five-year experiences working as an English teacher trainer at NIE, or RTTC, or PTTC.

The final list generated from the first group was 8 participants and the second group was 19 participants, resulted in a total of 27 potential participants.

Delphi Panel Profile

This section presents the profile of the Delphi panel. Round 1 of this study included a section soliciting participants' profiles in terms of primary disciplinary expertise, years of professional experience, highest educational degree, and profession. These profile questions were included to understand the expertise of the panel and also explore any subgroup differences in the responses.

A total of 27 participants completed responses in Round 1. For Round 2, all 27 respondents of Round 1 survey were invited to participate and 20 completed responses were received, resulting in a response rate of 74%. For Round 3, all 20 respondents of Round 2 survey were invited to participate and 17 completed responses were received, resulting in a response rate of 85%.

It is natural in a Delphi study that some participants will drop out in later rounds for several reasons (Franklin & Hart, 2007). In this study, there was a notice of a drop out of participants across the three rounds, 26% (7 participants) from Round 1

to Round 2 and 15% (3 participants) from Round 2 to Round 3, resulting in an overall drop out of 37% (10 participants) from Round 1 to Round 3. However, the overall number of respondents remained acceptable and in line with other research studies such as Clark (2005), Kantz (2004), and Senyshyn (2002).

Table 7 presents the profile of the participants across the three Delphi rounds. In terms of professional experience, at least 53% of the respondents in Round 3 had 10 or more years of professional experiences. Likewise, more than half of the respondents (59%) had a master's or doctorate degree. There was slightly more representation of English teacher trainer professionals (59%) in the last round. Remarkably, only 29% of respondents were from curriculum development disciplines which 41% of respondents were curriculum developer professionals.

Table 7

Profile of Participants in each Delphi round

	<u>Round 1</u>		<u>Round 2</u>		<u>Round 3</u>	
	f	%	f	%	f	%
Professional experience (years)						
5-9	14	52%	11	55%	8	47%
10-14	8	30%	4	20%	4	23%
15-20	3	11%	3	15%	3	18%
20+	2	7%	2	10%	2	12%
Highest educational degree						
Bachelor's	12	44%	6	35%	7	41%
Master's	14	52%	12	60%	9	53%
Doctorate	1	4%	1	5%	1	6%
Profession						
Curriculum Developer	8	30%	7	35%	7	41%

	<u>Round 1</u>		<u>Round 2</u>		<u>Round 3</u>	
	f	%	f	%	f	%
English Teacher Trainer	19	70%	13	65%	10	59%
Disciplinary expertise						
Curriculum Development	6	22%	5	25%	5	29%
TEFL	21	78%	15	75%	12	71%
Total	27	100%	20	100%	17	100%

Overall, respondents had advanced educational credentials in TEFL field with 71% of the disciplinary expertise. They also possessed considerable professional and academic experiences in teacher education. This indicates that respondents had adequate disciplinary expertise, considerable experience, and diversity of viewpoints for contributing to the trustworthiness of this study.

Research Instruments

The instruments in this study included three questionnaires, Round 1 Questionnaire (see Appendix B), Round 2 Questionnaire (see Appendix D) and Round 3 Questionnaire (see Appendix F). Round 1 questionnaire was designed based on the review of related literature. Round 2 and 3 questionnaires were designed based on the responses received from its previous round.

The questionnaire was in electronic format (Ms Excel) and sent to participants via emails. The questionnaire for Round 1 consisted of 4 parts, Round 2 consisted of 3 parts and Round 3 consisted of the classification of aims with key competencies and content domains.

Round 1 Questionnaire

In this round, the questionnaire addressing the initial set of aims, key competencies, and content domains was generated from the review of the primary

or primary English teacher education in Singapore, the Philippines, Malaysia, Thailand, Vietnam, Lao PDR and lower secondary English teacher education in Cambodia. Once the ideas were found from each country, the researcher kept them all and grouped the similar ideas into three main categories, aims, key competencies and content domains. For the content domain part, TPACK framework was used in this idea grouping (see Table 8). After that, the ideas were synthesized and extracted final keywords and phrases into a set of 5 initial aims, 16 initial key competencies, and 18 initial content domains serving as the first round questionnaire (see Appendix B).

Table 8

The reviews grouped by countries

Categories	Countries						
	Singapore	Philippines	Malaysia	Thailand	Vietnam	Lao PDR	Cambodia
1. Aims							
1.1. Academic Knowledge	x	x	x	x	x	x	x
1.2. Professional skills	x	x	x	x	x	x	x
1.3. Ability to deal with learners	x	x	n/a	n/a	n/a	x	n/a
1.4. Teacher's values	x	x	x	n/a	n/a	x	x
1.5. Learning enthusiasm/professional development	x	n/a	n/a	n/a	n/a	x	x
2. Key competencies							
2.1. Provide quality teaching	x	n/a	x	n/a	n/a	x	n/a
2.2. Professional skills	x	x	n/a	x	x	x	x
2.3. Academic knowledge	x	x	x	x	x	x	x
2.4. Knowledge of Curriculum Development	n/a	x	n/a	x	n/a	x	n/a
2.5. Pedagogy	x	x	n/a	x	x	x	x
2.6. Management	x	n/a	n/a	x	n/a	x	x
2.7. Materials development	x	x	n/a	x	n/a	x	n/a
2.8. Environment and teamwork	x	x	n/a	x	x	x	x
2.9. Measurement and evaluation	n/a	x	n/a	x	n/a	x	n/a

Categories	Countries						
	Singapore	Philippines	Malaysia	Thailand	Vietnam	Lao PDR	Cambodia
2.10. Teacher's values	x	x	x	x	x	x	n/a
2.11. Professional development/learning enthusiasm	x	x	x	x	n/a	n/a	x
2.12. Culture	x	x	x	x	x	x	n/a
2.13. Nationalism	n/a	x	x	x	n/a	n/a	n/a
3. Content Domains							
3.1. Content Knowledge							
- Culture	n/a	n/a	x	n/a	x	n/a	x
- Literature	x	x	n/a	n/a	x	n/a	n/a
- Language skills	x	x	n/a	x	x	x	x
- Linguistics	n/a	n/a	n/a	n/a	x	n/a	n/a
3.2. Pedagogical Knowledge							
- Theories, approaches, methods and techniques of teaching	x	x	x	x	x	x	x
- Psychology for teachers	x	n/a	x	x	n/a	n/a	x
- Curriculum development	x	n/a	n/a	x	n/a	n/a	n/a
- Instructional material development	n/a	n/a	n/a	x	n/a	n/a	x
- Educational measurement and evaluation	n/a	x	n/a	x	n/a	n/a	x
- Educational leadership and management	x	n/a	n/a	x	n/a	n/a	n/a
- Educational research studies	n/a	x	n/a	x	n/a	n/a	n/a
3.3. Technological Knowledge							
- Educational innovation and information technology	x	x	x	x	n/a	n/a	x
3.4. General Education							
- Teacher Characteristics Development	x	n/a	x	x	n/a	n/a	x
- Health education	n/a	x	x	n/a	n/a	n/a	x
- Home economics	x	x	x	n/a	n/a	n/a	n/a

Categories	Countries						
	Singapore	Philippines	Malaysia	Thailand	Vietnam	Lao PDR	Cambodia
- Music and art	x	x	x	n/a	n/a	n/a	n/a
- Physical education	x	x	x	n/a	n/a	n/a	x
3.5. Field experience							
- Practicum	x	x	x	x	x	x	x

Note. n/a represents the item that did not appear exclusively in the categorical lists of existing program but they may be found embedded as sub-categories of any particular aspects and they emerged in real practice.

This first round questionnaire comprised of 4 parts as the following:

Part 1: Participant profile: name, title, organization, email address, profession, years of professional experience, primary expertise and degree of education (8 items)

Part 2: List of initial aims (5 items)

Part 3: List of initial key competencies (16 items)

Part 4: List of initial content domains (18 items)

Participants were asked to fill out their profiles in Part 1 and rate the importance of the aims in Part 2, key competencies in Part 3 and content domains in Part 4 on a four-point Likert scale ranging from Very Important (4), Important (3), Somewhat Important (2) to Not Important (1). The participants were encouraged to add comments or reasons for assigning the particular score to the given aim, key competency and content domain. There was no restriction of word limit. The participants could also suggest additional aims, key competencies and content domains.

Validation

The first round questionnaire was sent to 3 experts in the fields to check its quality before administering it (see Appendix G). There were some changes suggested by experts in the questionnaire, for example, the format and the items. i.e. “Learning enthusiasm and loyalty to the profession” were broken out into two separate items “Learning enthusiasm” and “Loyalty to the profession”.

Round 2 Questionnaire

The questionnaire for the second round was developed based on the responses received from the first round. It was comprised of an exhaustive list of the aims, key competencies, and content domains available in the first round with an addition of the new aims, key competencies, and content domains proposed by the participants.

This second round questionnaire comprised of 3 parts: aims (Part 1), key competencies (Part 2), and content domains (Part 3). The lists of aims, key competencies and content domains were sorted by the percentages of the responses from the largest to the smallest including one suggestion added from Round 1.

Part 1: List of revised aims (5 items)

Part 2: List of revised key competencies (16 items)

Part 3: List of revised content domains (19 items)

The questionnaire also presented the participant’ own rating and the statistical summary of the responses of the panel from the previous round (See Appendix D). Participants were asked to re-rate the importance of the aims, key competencies and content domains under the column “Your R2 Rating”. The

participants were asked to revise or retain their responses from their previous round and were requested to add comments or reasons for assigning each particular rating to the aim, key competency and content domain without restriction of word limit.

Round 3 Questionnaire

This third round questionnaire was designed based on the responses from Round 2. The responses were analyzed to find mean, standard deviation and percentage. The lists of aims, key competencies and content domains that were identified as Very Important (4) or Important (3) by at least 75% of respondents were sorted by top priorities. The list of aims were classified with the list of key competencies and content domains to develop Round 3 questionnaire (see Appendix F). In this final round, the participants were asked to respond on two primary aspects:

- 1) Indicate the degree of agreement with the classification of the aims with the key competencies and content domains on a scale of 1-4 (1-Strongly Disagree, 2-Disagree, 3-Agree, and 4-Strongly Agree).
- 2) Provide suggestions and comments for improving the relevancy and inclusiveness of each item.

Data Collection Procedures

The data were collected in October – December 2013. The Delphi survey lasted for 14 weeks. The procedures of the data collection were the following:

1. The researcher asked for permission from Cambodian Ministry of Education, Youth and Sports to conduct the study from the prospective participants in Cambodia.

2. After getting the approval, the researcher contacted the prospective participants in the Department of Curriculum Development, Department of Teacher Training, NIE, RTTCs and PTTCs, and invited them to participate in the study by meeting in persons, phone calls or emails. The invitation included the informed consent (see Appendix A) and Round 1 questionnaire (see Appendix B). This Round 1 package was sent out to the panel members as mail and e-mail attachments. The identities of the panel members were kept confidential throughout the study. Each panel was not aware of who the other panelist were.

3. In each round, the panelists were provided 10-day time for completing the questionnaire and returning it. An email and SMS reminders were sent to the non-respondent after 5 days and on the last day of the deadline. Each round took approximately one month (see Table 9).

4. The data were analyzed based on the responses received and the subsequent rounds were conducted.

Table 9

Timeline of the Delphi Study

Activities	Duration
Contacting and Sending invitation	2 weeks
Conducting Round 1 survey	3 weeks
Analyzing Data Round 1	1 week
Conducting Round 2 survey	3 weeks
Analyzing Data Round 2	1 week
Conducting Round 3 survey	3 weeks
Analyzing Data Round 3	1 week
Total:	14 weeks

Data Analysis

The data analysis for the study was conducted after each of the three rounds. Both quantitative and qualitative data analysis were employed to analyze the data.

Quantitative data analysis was conducted in the form of statistical aggregation of group responses. Descriptive statistics like percentages were employed to describe the participants' views about the importance of aims, key competencies and content domains on a four-point Likert scale from Very Important (4), Important (3), Somewhat Important (2) to Not Important (1). The percentages of rating (3) and (4) were reported in Round 2 and Round 3 to help the participants in their decision making.

Qualitative data analysis was conducted with the open-ended comments that were suggested by respondents. Content analysis technique was used as a data reduction process for identifying patterns or themes from the respondents' open-ended comments (Patton, 2002). For this study, the content analysis was used for: first, to gain a deeper understanding of the participants' rationale for assigning the rating of aims, key competencies and content domains, and second, to modify or add aims, key competencies and content domains in the following round. The open-ended responses were analyzed for emergent themes for each round. Open-ended comments from Round 1 data were analyzed by keywords and phrases line-by-line, then coded and grouped together based on the similarity of keywords and phrases, and developed Round 2 questionnaire. Round 2 data were used to create descriptions for most important aims, key competencies, and content domains for

Round 3. Finally, Round 3 data were used to classify the aims with key competencies and content domains of the guidelines.

Based on the data analysis of this Delphi study, guidelines for developing primary English teacher training programs for Provincial Teacher Training Colleges were developed. The data analysis is summarized in Table 10.

Table 10

Summary of Data Analysis

Delphi Round	Data Type	Description of Data Analysis
1	Quantitative	- Consolidate preliminary set of top priorities through statistical consensus
	Qualitative	- Analyze keywords and phrases line-by-line - Extract final keywords and phrases into a set of themes
2	Quantitative	- Consolidate preliminary set of top priorities through statistical consensus
	Qualitative	- Analyze keywords and phrases line-by-line - Extract final keywords and phrases into a set of themes
3	Quantitative	- Consolidate final set of classification through statistical consensus.
	Qualitative	- Analyze keywords and phrases line-by-line - Extract final keywords and phrases into a set of themes

CHAPTER IV

RESULTS

The overarching purpose of this research was to provide theoretical and conceptual foundations for developing primary English teacher training programs. Specifically, the objective was to produce the guidelines for developing primary English teacher training programs for Provincial Teacher Training Colleges in Cambodia. A three round online Delphi survey was administered with the experts from the Cambodian Ministry of Education, Youth and Sports. The purpose of Round 1 was to identify aims, key competencies and content domains that were considered important to be included in primary English teacher training programs. Based on the results of Round 1 survey and descriptive responses to the open-ended comments, Round 2 survey was developed. The purpose of Round 2 survey was to prioritize and achieve consensus on the aims, key competencies and content domains. Respondents were asked to retained or revise their Round 1 rating in the context of the overall panel responses. Respondents were provided with their Round 1 individual rating and overall panel rating (3) and (4) scale for each aim, key competency and content domain to facilitate their rating decision for Round 2.

Aims, key competencies and content domains that achieved consensus, rated Very Important (4) or Important (3) by at least 75% of the respondents in Round 2, used to develop Round 3 survey. The purpose of Round 3 was to provide depth and details to the top aims, key competencies and content domains identified and prioritized in the previous two rounds. The respondents were asked to rate their degree of agreement of classification of the aims with key competencies and content

domains. They were also asked to add suggestions for improving and clarifying the classification.

The first section of this chapter presents the profile of the Delphi panel. The second section discusses the results of the Delphi survey for each round and finally, the third section summarizes the results of this study.

Delphi Survey Results

This section presents the results of each round of the Delphi survey and also explores differences by disciplinary expertise and profession of the respondents. The three rounds of the Delphi were respectively used to identify, prioritize, and classify aims, key competencies, and content domains for primary English teacher training programs at PTTCs.

Round 1 Results

This round of the study asked participants to rate the importance of aims, key competencies and content domains on a four-point Likert scale ranging from Very Important (4), Important (3), Somewhat Important (2) to Not Important (1). They were encouraged to provide comments and rationale for their rating of each aim, key competency, and content domain (see Appendix B). In addition, they were provided space to suggest new aims, key competencies, and content domains, and also add any overall comments. Twenty-seven respondents completed Round 1 survey.

Aims

Table 11 summarizes the panel ratings of the aims using percentage of respondents rating aim items as Important (3) or Very Important (4). The aims “To promote professional conscience and integrity in which they will become ethical and enthusiastic in the professional career” and “To promote high professional standards

of behaviors and maintain continuous professional development” received the lowest ratings while the aim “To develop English professional teaching skills and teaching methodology consist of teaching techniques, methods and approaches” received the highest rating.

Table 11

Panel Rating of Aims in Round 1

Aims	% of 3&4 Rating
1 To develop English professional teaching skills and teaching methodology consist of teaching techniques, methods and approaches.	93
2 To enhance the ability to effectively deal with the diversity of student learning needs, students’ different socio-economic background as well as interests.	93
3 To provide integrated academic knowledge, strong general educational foundation, multiple specializations, universal communicative languages, current ICT, and educational management.	89
4 To promote high professional standards of behaviors and maintain continuous professional development.	89
5 To promote professional conscience and integrity in which they will become ethical and enthusiastic in the professional career.	81

Note. N = 27. % of 3&4 Rating represents the frequency of respondents rating Important (3) or Very Important (4) on a four-point Likert scale.

Based on the content analysis of the open-ended comments, no titles of the aims were modified and no new aims were added.

Key Competencies

Table 12 summarizes the panel ratings of the key competencies using percentage of respondents rating key competency items as Important (3) or Very Important (4). Here, the key competency “Ability to produce instructional materials and learning resources” received the highest rating (100%) while the key competency “Knowledge of resilience and adaptability” received the lowest rating (63%).

Table 12

Panel Rating of Key Competencies in Round 1

Key Competencies	% of 3&4 Rating
1 Ability to produce instructional materials and learning resources.	100
2 Ability to nurture the child and provide quality learning of the child.	96
3 Knowledge of Communicative skills.	96
4 Ability to cultivate knowledge regarding educational psychology, educational research, teaching-learning approaches and classroom management.	93
5 Knowledge of turning into self and professional conscience/ethic and ability to develop others.	93
6 Knowledge of World knowledge and life-long learning skills.	93
7 Talents in cultivating knowledge with subject mastery, initiative, critical thinking, creative teaching and future focus.	89
8 Ability to provide sufficient knowledge of subjects related to local syllabi and curriculum development.	89
9 Understanding the environment and teamwork, partnering community/society.	89
10 Knowledge of planning, monitoring, assessing and reporting.	81
11 Learning enthusiasm.	81
12 Knowledge of how to cherish the national cultural heritage and ability to uphold the aspiration of the nation/national identity.	81
13 Loyalty to the profession.	78
14 Knowledge of how to exercise personal integrity, morality, and religion.	70
15 Knowledge of ICT skills.	70
16 Knowledge of resilience and adaptability.	63

Note. N = 27. % of 3&4 Rating represents the frequency of respondents rating Important (3) or Very Important (4) on a four-point Likert scale.

Based on the content analysis of open-ended comments, two key competencies were modified on wording (see Table 14). These changes were included in Round 2 survey.

Content Domains

Table 13 summarizes the panel ratings of the content domains using percentage of respondents rating aim items as Important (3) or Very Important (4). Some of the content domains like Music and Art, and Home Economics received the lowest ratings while content domains like Language Skills, Practicum and Theories, approaches, methods, and techniques of teaching received the highest ratings.

Table 13

Panel Rating of Content Domains in Round 1

Content Domains	% of 3&4 Rating
1 Language Skills	100
2 Literature	96
3 Practicum	96
4 Theories, approaches, methods, and techniques of teaching	93
5 Psychology for teachers	93
6 Educational Measurement and Evaluation	93
7 Teacher Characteristics Development	93
8 Culture	89
9 Linguistics	89
10 Instructional Material Development	89
11 Educational Research Studies	85
12 Health Education	78
13 Educational Innovation and Information Technology	74
14 Educational Leadership Management	70
15 Physical Education	67
16 Curriculum Development	63
17 Music and Art	52
18 Home Economics	48

Note. N = 27. % of 3&4 Rating represents the frequency of respondents rating Important (3) or Very Important (4) on a four-point Likert scale.

Based on the content analysis of the open-ended comments, one content domain was added which was suggested by three respondents (see Table 14). This change was included in Round 2 survey.

Table 14

Changes made based on Round 1 Responses

Round 1	Round 2
<i>Key Competencies Modified</i>	
- Ability to produce instructional materials and learning resources.	- Ability to produce effective instructional materials and learning resources.
- Understanding the environment and teamwork, partnering community/society.	- Being confident and understanding the work environment and teamwork, partnering community/society.
<i>Content Domain Added</i>	
	- Khmer Studies

Round 2 Results

The purpose of Round 2 survey was to prioritize the aims, key competencies and content domains identified in Round 1 and achieved consensus. All 27 respondents of Round 1 were invited to participate in Round 2 and a total of 20 participants responded (74% response rate). Round 2 survey consisted of 5 aims, 16 key competencies and 19 content domains. Respondents received their individual rating from Round 1 along with the summary of panel responses in the form of mean, standard deviation and the percentage of respondents rating each item as Important (3) or Very Important (4). This allowed the participants to reconsider their previous responses of Round 1 in light of the overall opinion of the panel. They were

encouraged to retain or revise their rating and also provide a rationale for any changes in the rating.

Aims

Table 15 shows the summary of participants' responses for the aims. All of 5 aims achieved overall consensus by at least 85% of respondents rated as Very Important (4) or Important (3).

Table 15
Panel Rating of Aims in Round 2

Aims	% of 3&4 Rating
1 To develop English professional teaching skills and teaching methodology consist of teaching techniques, methods and approaches.	100
2 To enhance the ability to effectively deal with the diversity of student learning needs, students' different socio-economic background as well as interests.	95
3 To promote high professional standards of behaviors and maintain continuous professional development.	90
4 To provide integrated academic knowledge, strong general educational foundation, multiple specializations, universal communicative languages, current ICT, and educational management.	85
5 To promote professional conscience and integrity in which they will become ethical and enthusiastic in the professional career.	85

Note. N = 20. % of 3&4 Rating represents the frequency of respondents rating Important (3) or Very Important (4) on a four-point Likert scale.

Table 16 compares the aims that achieved consensus in Round 2 with their corresponding percentage of respondents rating 3 or 4 in Round 1. In order words, it indicates the changes in the ratings of the panelists and shift towards consensus. Aim noticing highest shift was "To develop English professional teaching skills and teaching methodology consists of teaching techniques, methods and

approaches” (7%), while “To promote high professional standards of behaviors and maintain continuous professional development” noticed minimal shift of 1%.

Table 16

Changes in Panel Ratings of Aims in Round 2

Aims	R 1	R 2	% Change
1 To develop English professional teaching skills and teaching methodology consist of teaching techniques, methods and approaches.	93%	100%	7%
2 To enhance the ability to effectively deal with the diversity of student learning needs, students’ different socio-economic background as well as interests.	93%	95%	2%
3 To promote high professional standards of behaviors and maintain continuous professional development.	89%	90%	1%
4 To provide integrated academic knowledge, strong general educational foundation, multiple specializations, universal communicative languages, current ICT, and educational management.	89%	85%	-4%
5 To promote professional conscience and integrity in which they will become ethical and enthusiastic in the professional career.	81%	85%	4%

Note. Percentage of respondents rating an item 3 or 4 on a four-point scale. R1: Round 1 and R2: Round 2.

Based on data analysis of open-ended comments, no titles of aims were modified. This resulted in the final list of 5 aims used to design Round 3 survey.

Key Competencies

Table 17 shows the summary of panel rating of the key competencies.

A total of 15 key competencies achieved overall consensus by at least 75% of respondents rated as Very Important (4) or Important (3). Interestingly, the key competency “Knowledge of ICT skills” did not achieved consensus and were rated 3 or 4 on a scale of four by only 70% of the total respondents.

Table 17

Panel Rating of Key Competencies in Round 2

Key Competency	% of 3&4 Rating
1 Ability to produce effective instructional materials and learning resources.	100
2 Knowledge of Communicative skills.	100
3 Being confident and understanding the work environment and teamwork, partnering community/society.	100
4 Ability to nurture the child and provide quality learning of the child.	95
5 Ability to cultivate knowledge regarding educational psychology, educational research, teaching-learning approaches and classroom management.	95
6 Knowledge of turning into self and professional conscience/ethic and ability to develop others.	95
7 Talents in cultivating knowledge with subject mastery, initiative, critical thinking, creative teaching and future focus.	95
8 Learning enthusiasm.	95
9 Knowledge of World knowledge and life-long learning skills.	90
10 Ability to provide sufficient knowledge of subjects related to local syllabi and curriculum development.	90
11 Knowledge of planning, monitoring, assessing and reporting.	90
12 Loyalty to the profession.	90
13 Knowledge of how to cherish the national cultural heritage and ability to uphold the aspiration of the nation/national identity.	85
14 Knowledge of how to exercise personal integrity, morality, and religion.	75
15 Knowledge of resilience and adaptability.	75
16 Knowledge of ICT skills.	70

Note. N = 20. % of 3&4 Rating represents the frequency of respondents rating Important (3) or Very Important (4) on a four-point Likert scale.

Table 18 compares the key competencies that achieved consensus in Round 2 with their responding percentage of respondents rating 3 or 4 in Round 1. In other words, it indicates the changes in the ratings of the panelists and shift towards consensus. Key competencies noticing the highest shift were “Learning enthusiasm”

(14%), “Loyalty to the profession” (12%), “Knowledge of resilience and adaptability” (12%), and “Being confident and understanding the work environment and teamwork, partnering community/society” (11%).

Table 18

Changes in Panel Ratings of Key Competencies in Round 2

Key Competencies	R 1	R 2	% Change
1 Ability to produce effective instructional materials and learning resources.	100%	100%	0%
2 Knowledge of Communicative skills.	96%	100%	4%
3 Being confident and understanding the work environment and teamwork, partnering community/society.	89%	100%	11%
4 Ability to nurture the child and provide quality learning of the child.	96%	95%	-1%
5 Ability to cultivate knowledge regarding educational psychology, educational research, teaching-learning approaches and classroom management.	93%	95%	2%
6 Knowledge of turning into self and professional conscience/ethic and ability to develop others.	93%	95%	2%
7 Talents in cultivating knowledge with subject mastery, initiative, critical thinking, creative teaching and future focus.	89%	95%	6%
8 Learning enthusiasm.	81%	95%	14%
9 Knowledge of World knowledge and life-long learning skills.	93%	90%	-3%
10 Ability to provide sufficient knowledge of subjects related to local syllabi and curriculum development.	89%	90%	1%
11 Knowledge of planning, monitoring, assessing and reporting.	81%	90%	9%
12 Loyalty to the profession.	78%	90%	12%
13 Knowledge of how to cherish the national cultural heritage and ability to uphold the aspiration of the nation/national identity.	81%	85%	4%
14 Knowledge of how to exercise personal integrity, morality, and religion.	70%	75%	5%
15 Knowledge of resilience and adaptability.	63%	75%	12%

Note. Percentage of respondents rating an item 3 or 4 on a four-point scale. R1: Round 1 and R2: Round 2.

Based on the data analysis of open-ended comments, “Knowledge of turning into self and professional conscience/ethic and ability to develop others” and “Knowledge of how to exercise personal integrity, morality, and religion” were merged to form one key competency entitled “Knowledge of how to develop personal and professional integrity.” This resulted in reduction of key competencies that achieved overall consensus, from 15 to the final list of 14 key competencies used to create Round 3 survey.

Content Domains

Table 19 shows the summary of panel ratings of the content domains. A total of 15 content domains achieved overall consensus by at least 75% of respondents rated as Very Important (4) or Important (3). Interestingly, the new content domain which was added achieved consensus by 80% of the total respondents. This content domain was “Khmer studies”.

Table 19

Panel Rating of Content Domains in Round 2

Content Domains	% of 3&4 Rating
1 Language Skills	100
2 Practicum	100
3 Educational Measurement and Evaluation	100
4 Instructional Material Development	100
5 Psychology for teachers	95
6 Literature	90
7 Theories, approaches, methods, and techniques of teaching	90
8 Culture	90
9 Linguistics	90
10 Teacher Characteristics Development	85
11 Educational Research Studies	85
12 Educational Innovation and Information Technology	85

Content Domains	% of 3&4 Rating
13 Health Education	80
14 Khmer Studies	80
15 Educational Leadership Management	75
16 Curriculum Development	70
17 Music and Art	70
18 Physical Education	65
19 Home Economics	60

Note. N = 20. % of 3&4 Rating represents the frequency of respondents rating Important (3) or Very Important (4) on a four-point Likert scale.

Table 20 compares the content domains that achieved consensus in Round 2 with their corresponding percentage of respondents rating 3 or 4 in Round 1. In other words, it indicates the changes in the ratings of the panelists and shift towards consensus. Content domains noticing the highest shift were “Instructional Material Development” and “Educational Innovation and Information Technology” by 11%.

Table 20
Changes in Panel Ratings of Content Domains in Round 2

Content Domains	R 1	R 2	% Change
1 Language Skills	100%	100%	0%
2 Practicum	96%	100%	4%
3 Educational Measurement and Evaluation	93%	100%	7%
4 Instructional Material Development	89%	100%	11%
5 Psychology for teachers	93%	95%	2%
6 Literature	96%	90%	-6%
7 Theories, approaches, methods, and techniques of teaching	93%	90%	-3%
8 Culture	89%	90%	1%
9 Linguistics	89%	90%	1%
10 Teacher Characteristics Development	93%	85%	-8%
11 Educational Research Studies	85%	85%	0%

Content Domains	R 1	R 2	% Change
12 Educational Innovation and Information Technology	74%	85%	11%
13 Health Education	78%	80%	2%
14 Khmer Studies		80%	
15 Educational Leadership Management	70%	75%	5%

Note. Percentage of respondents rating an item 3 or 4 on a four-point scale. R1: Round 1 and R2: Round 2.

Based on data analysis of open-ended comments, there were no suggestions that warranted changes in the content domain titles. Thus, this resulted in the final list of 15 content domains used to design Round 3 survey.

Round 3 Results

The purpose of Round 3 was to gain a deeper insight into aims, key competencies and content domains that achieved consensus in Round 2. Round 3 survey comprised of the classification of 5 aims with 14 key competencies and 15 content domains which identified and prioritized by the panel from the previous round (see Appendix F). Participants were asked to rate their degree of agreement with the classification and also suggest any changes to improve the relevancy and inclusiveness of each item. All 20 respondents of Round 1 survey were invited for Round 3. A total of 17 participants responded in Round 3, resulting in a response rate of 85%.

Table 21 shows the participants' rating of their agreement of the classification of aims with key competencies and content domains. Items "To promote high professional standards of behaviors and maintain continuous professional development" and "To promote professional conscience and integrity in which they will become ethical and enthusiastic in the professional career" had low ratings. In contrast, item "To develop English professional teaching skills and teaching

methodology consist of teaching techniques, methods and approaches” had the highest rating.



Table 21
Panel Rating of the agreement in Round 3

Aims	Key competencies	Content Domains	% of 3&4 Rating
<p>1. To develop English professional teaching skills and teaching methodology consist of teaching techniques, methods and approaches.</p>	<p>Ability to produce effective instructional materials and learning resources.</p> <p>Ability to cultivate knowledge regarding educational psychology, educational research, teaching-learning approaches and classroom management.</p> <p>Ability to provide sufficient knowledge of subjects related to local syllabuses and curriculum development.</p> <p>Knowledge of planning, monitoring, assessing and reporting.</p>	<p>Practicum</p> <p>Educational Measurement and Evaluation</p> <p>Instructional Material Development</p> <p>Psychology for teachers</p> <p>Theories, approaches, methods, and techniques of teaching</p> <p>Educational Research Studies</p> <p>Educational Innovation and Information Technology</p> <p>Educational Leadership Management</p>	100
<p>2. To enhance the ability to effectively deal with the diversity of student learning needs, students' different socio-economic background as well as interests.</p>	<p>Being confident and understanding the work environment and teamwork, partnering community/society.</p> <p>Talents in cultivating knowledge with subject mastery, initiative, critical thinking, creative teaching and future focus.</p>	<p>Practicum</p> <p>Instructional Material Development</p> <p>Theories, approaches, methods, and techniques of teaching</p>	100
<p>3. To provide integrated academic knowledge, strong general educational foundation, multiple specializations, universal communicative languages, current ICT, and educational management.</p>	<p>Knowledge of Communicative skills.</p> <p>Ability to nurture the child and provide quality learning of the child.</p> <p>Talents in cultivating knowledge with subject mastery, initiative, critical thinking, creative teaching and future focus.</p> <p>Knowledge of World knowledge and life-long learning skills.</p>	<p>Language Skills</p> <p>Literature</p> <p>Culture</p> <p>Linguistics</p> <p>Educational Research Studies</p> <p>Educational Innovation and Information Technology</p> <p>Health Education</p> <p>Khmer studies</p> <p>Educational Leadership Management</p>	100

Aims	Key competencies	Content Domains	% of 3&4 Rating
4. To promote professional conscience and integrity in which they will become ethical and enthusiastic in the professional career.	<p>Knowledge of how to develop personal and professional integrity.</p> <p>Learning enthusiasm.</p> <p>Loyalty to the profession.</p> <p>Knowledge of how to cherish the national cultural heritage and ability to uphold the aspiration of the nation/national identity.</p> <p>Knowledge of resilience and adaptability.</p>	<p>Practicum</p> <p>Culture</p> <p>Teacher Characteristics Development</p> <p>Khmer studies</p>	94
5. To promote high professional standards of behaviors and maintain continuous professional development.	<p>Learning enthusiasm.</p> <p>Loyalty to the profession.</p>	<p>Practicum</p> <p>Teacher Characteristics Development</p> <p>Khmer studies</p>	94

Note: N = 17. % of 3&4 Rating represents the frequency of respondents rating Important (3) or Very Important (4) on a four-point Likert scale.



As observed from the descriptive statistics of the participants' ratings, there appears to be a high level of consensus about the classification of the aims with key competencies and content domains. Based on the content analysis of the open-ended comments, all the 5 titles of aims, 1 title of content domain were modified on wording (see Table 22), and 2 key competencies, 1 content domain were added, and 3 content domains were deleted (see Table 23). The final classification of aims with key competencies and content domains were shown in Table 24.

Table 22

Changes made based on Round 3 Responses

<i>Aims Modified</i>	
- To develop English professional teaching skills and teaching methodology consist of teaching techniques, methods and approaches.	- To develop English professional teaching skills and teaching methodology consisting of teaching techniques, methodologies and approaches.
- To enhance the ability to effectively deal with the diversity of student learning needs, students' different socio-economic background as well as interests.	- To enhance the ability to effectively deal with the diversity of student learning needs, students' different socio-economic backgrounds as well as student interests.
- To promote high professional standards of behaviors and maintain continuous professional development.	- To promote high professional standards of behavior and maintain continuous professional development.
- To provide integrated academic knowledge, strong general educational foundation, multiple specializations, universal communicative languages, current ICT, and educational management.	- To provide integrated academic knowledge, a strong general educational foundation, multiple specializations, universally communicative languages, current ICT, and educational management.
- To promote professional conscience and integrity in which they will become ethical and enthusiastic in the professional career.	- To promote the development of a professional conscience and integrity in which teachers will become ethical and enthusiastic in their professional careers.

Content Domain Modified

- | | |
|---|--|
| <ul style="list-style-type: none"> - Theories, approaches, methods, and techniques of teaching | <ul style="list-style-type: none"> - Theories, teaching techniques, methodologies, and approaches |
|---|--|
-

Table 23

Key competencies and content domains adjustment

<i>Aims</i>	<i>Key Competencies</i>	<i>Content Domains</i>
2. To enhance the ability to effectively deal with the diversity of student learning needs, students' different socio-economic backgrounds as well as student interests.	<ul style="list-style-type: none"> - Ability to nurture the child and provide quality learning of the child. (Added) 	
3. To provide integrated academic knowledge, a strong general educational foundation, multiple specializations, universally communicative languages, current ICT, and educational management.	<ul style="list-style-type: none"> - Knowledge of how to cherish the national cultural heritage and ability to uphold the aspiration of the nation/national identity. (Added) 	
4. To promote the development of a professional conscience and integrity in which teachers will become ethical and enthusiastic in their professional careers.		<ul style="list-style-type: none"> - Educational Leadership Management (Added) - Khmer studies (Deleted) - Culture (Deleted)
5. To promote high professional standards of behavior and maintain continuous professional development.		<ul style="list-style-type: none"> - Khmer studies (Deleted)

Table 24

Final Classification of Aims with Key Competencies and Content Domains

Aims	Key Competencies	Content Domains
1. To develop English professional teaching skills and teaching methodology consisting of teaching techniques, methodologies and approaches.	<ul style="list-style-type: none"> - Ability to produce effective instructional materials and learning resources. - Ability to cultivate knowledge regarding educational psychology, educational research, teaching-learning approaches and classroom management. - Ability to provide sufficient knowledge of subjects related to local syllabi and curriculum development. - Knowledge of planning, monitoring, assessing and reporting. 	<ul style="list-style-type: none"> - Practicum - Educational Measurement and Evaluation - Instructional Material Development - Psychology for teachers - Theories, teaching techniques, methodologies, and approaches Educational Research Studies - Educational Innovation and Information Technology - Educational Leadership Management
2. To enhance the ability to effectively deal with the diversity of student learning needs, students' different socio-economic backgrounds as well as student interests.	<ul style="list-style-type: none"> - Being confident and understanding the work environment and teamwork, partnering community/society. - Talents in cultivating knowledge with subject mastery, initiative, critical thinking, creative teaching and future focus. - Ability to nurture the child and provide quality learning of the child. 	<ul style="list-style-type: none"> - Practicum - Instructional Material Development - Theories, teaching techniques, methodologies, and approaches

Aims	Key Competencies	Content Domains
3. To provide integrated academic knowledge, a strong general educational foundation, multiple specializations, universally communicative languages, current ICT, and educational management.	<ul style="list-style-type: none"> - Knowledge of Communicative skills. - Ability to nurture the child and provide quality learning of the child. - Talents in cultivating knowledge with subject mastery, initiative, critical thinking, creative teaching and future focus. - Knowledge of World knowledge and life-long learning skills. - Knowledge of how to cherish the national cultural heritage and ability to uphold the aspiration of the nation/national identity. 	<ul style="list-style-type: none"> - Language Skills - Literature - Culture - Linguistics - Educational Research Studies - Educational Innovation and Information Technology - Health Education - Khmer studies - Educational Leadership Management
4. To promote the development of a professional conscience and integrity in which teachers will become ethical and enthusiastic in their professional careers.	<ul style="list-style-type: none"> - Knowledge of how to develop personal and professional integrity. - Learning enthusiasm. - Loyalty to the profession. - Knowledge of resilience and adaptability. 	<ul style="list-style-type: none"> - Practicum - Teacher Characteristics Development - Educational Leadership Management
5. To promote high professional standards of behavior and maintain continuous professional development.	<ul style="list-style-type: none"> - Learning enthusiasm. - Loyalty to the profession. 	<ul style="list-style-type: none"> - Practicum - Teacher Characteristics Development

Summary of Results

This section presents the results of the online Delphi survey to identify, prioritize, and classify the most important aims, key competencies and content domains for a primary English teacher training program at PTTCs in Cambodia. Staff from Cambodian Ministry of Education, English Curriculum developers and English teacher trainers, was invited to participate as expert panel. Of the total 27 potential participants responded in Round 1. For Round 2, all 27 respondents from Round 1 were invited, and 20 responses were received. For Round 3, out of 20 respondents from Round 2, 17 responses were received. The profile of the participants indicated that they had adequate disciplinary expertise, depth of experience and diversity of viewpoints in Cambodia.

Round 1 survey allowed participants to rate and also suggest additional aims, key competencies and content domains to be included in the list of relevant aims, key competencies and content domains for developing primary English teacher training programs. Round 1 comprised of 5 aims, 16 key competencies, and 18 content domains. Based on data analysis of Round 1 survey, Round 2 survey was developed. Two key competencies were modified and one content domain was added.

Round 2 comprised of 5 aims, 16 key competencies and 19 content domains. Participants for Round 2 rated their responses again in the light of the group responses from Round 1. Consensus defined as at least 75% of the respondents rating any item as Very Important (4) or Important (3). For the results, a total of 5 aims, 15 key competencies and 15 content domains were achieved consensus. Based

on data analysis of open-ended comments, 2 of the 15 key competencies were merged to develop a final list of 14 key competencies.

The purpose of Round 3 survey was to classify 5 aims with 14 key competencies and 15 content domains identified and prioritized by the panel from the previous round. Participants were asked to rate their degree of agreement with the classification and suggest any changes to make it more inclusive and relevant. The degree of consensus was high for the classification with at least 94% of the respondents agreed (3) or strongly agreed (4). Based on data analysis of open-ended comments, all 5 titles of aims and one title of content domain were modified, and 2 key competencies, 1 content domain were added, and 3 content domains were deleted.

To sum up, the expert panel participated in three rounds of the online Delphi survey and reached an overall consensus for a final list of the guidelines consisted of 5 aims, 14 key competencies and 15 content domains for developing primary English teacher training programs at PTTCs in Cambodia.

CHAPTER V

DISCUSSION

This chapter is based on the results presented in Chapter 4 and it presents guidelines for developing primary English teacher training programs, discussion, limitations of the study, offers recommendations for Ministry of Education, Youth and Sports and other stakeholders, and suggests future directions of the research.

Summary of Study

The researcher administered three rounds of the online Delphi survey to answer the research questions. The objective was to arrive at a consensus for proposing guidelines for developing primary English teacher training programs. The questionnaire was generated from an extensive review of the literature. In each round of the Delphi, the responses were summarized and used to generate a new questionnaire for the following rounds. English curriculum developers and English teacher trainers who are engaged with the project of English teacher training were invited to participate in the study. The Delphi survey was conducted via emails and lasted for 14 weeks in which the panelists were provided 10-day time for completing and returning the questionnaire. Data were analyzed based on the responses received after each round quantitatively and qualitatively.

In particular, the three rounds were respectively used to identify, prioritize, and classify the most important aims, key competencies, and content domains. A total of 27 selective participants completed responses in Round 1. All 27 respondents of Round 1 survey were invited to participate in Round 2. A total of 20 completed responses were received in Round 2, resulting in a response rate of 74%.

All 20 respondents of Round 2 survey were invited to participate in Round 3. A total of 17 completed responses were received, resulting in a response rate of 85%.

Findings

Based on the consensus of the experts, two key competencies were modified on wording and one content domain was added in Round 1. Two key competencies were merged to form one in Round 2, resulted in the list of 5 aims, 14 key competencies, and 15 content domains. Round 3 survey was to classify the aims with key competencies and content domains. Based on the results, 5 titles of aims and one title of content domain were modified on wording, two key competencies and one content domain were added, and three content domains were deleted.

A final list of 5 aims, 14 key competencies and 15 content domains was generated. These aims, key competencies and content domains were used to develop guidelines for primary English teacher training programs at PTTCs in Cambodia. The guidelines are visually presented in *Figure 6*.

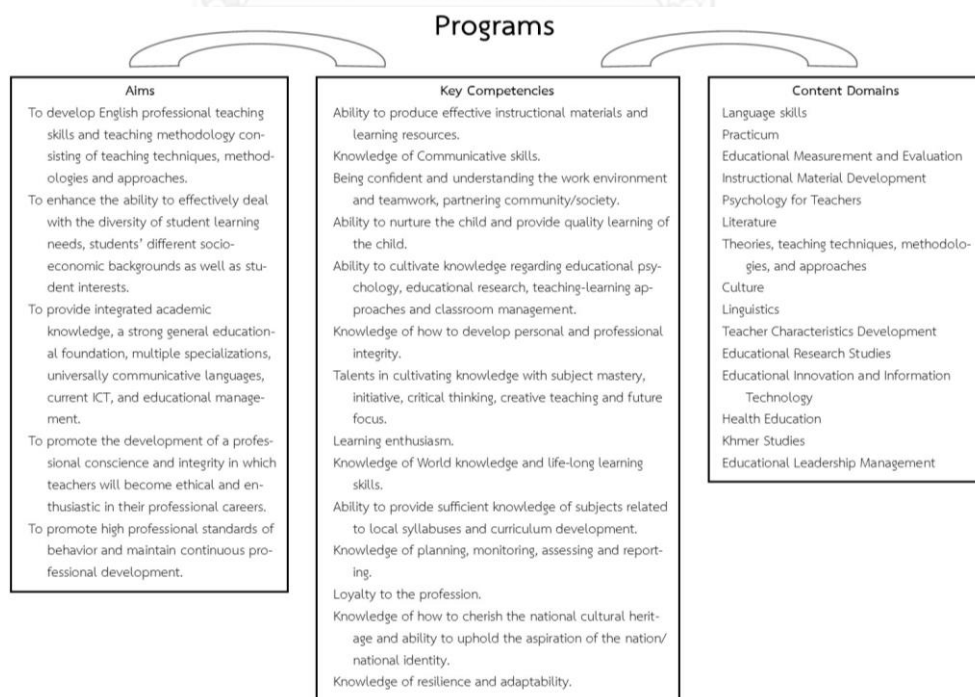


Figure 6. Guidelines for primary English teacher training programs

Discussion

Delphi research was described as a process of consensus-seeking (Gordon, 2003; Linstone & Turoff, 2002) and discovering mutual agreement among the members of a group (Scott & Flanigan, 1996). This group agreed on several items in accord with the literature, but there were a few items that did not meet consensus with the panelists on levels of importance. Therefore, the researcher decided to highlight only those items which the panels reached the consensus.

First of all, the three parts of aims, key competencies, and content domains accurately represented the consensus of the panel as critical areas for developing guidelines for primary English teacher training programs.

These research findings proposed that the guidelines for developing primary English teacher training programs were useful for the present context of Cambodia and it was consistent with Burns and Richards (2009) who mentioned that there have traditionally been two strands of content second language teacher education, one focusing on classroom teaching skills and pedagogical issues, and the other focusing on academic underpinning of classroom skills. Those strands were matched to all of the findings aims. Specifically, the first strand was matched to the findings of the first aim that focused on professional teaching skills and teaching methodology, and the third aim focused on integrated academic knowledge for the second strand, which accompanied by their key competencies and content domains (see Table 24).

Likewise, the findings, about the content domains were also consistent with the TPACK framework of Mishra and Koehler (2006), which has been used in a number of pre-service teacher education programs. The panel in this study agreed upon the content domains that suit with the three components: content knowledge,

pedagogical knowledge and technological knowledge in the TPACK framework as follows:

- Content Knowledge: - *Culture*
- *Literature*
- *Linguistics*
- *and language skills*
- Pedagogical Knowledge: - *Theories, teaching techniques,*
 methodologies, and approaches
- *Psychology for teachers*
- *Instructional material development*
- *Educational measurement and evaluation*
- *Educational leadership management*
- *Educational research studies*
- Technological Knowledge: - *Educational innovation and information*
 technology

Comparing to the existing two-year lower secondary school English teacher training programs that aimed at providing student teachers with general English language improvement, teaching methodology, and instructional evaluation, the guidelines proposed from the findings in this study showed differences in all component: aims, key competencies and content domains. For the aims, two prominent aspects of aims namely to enhance the ability to deal with learners and to provide ICT skills and educational management, were suggested to be included as the aims of the future primary English teacher training program. The finding about the first aim may due to the fact that classrooms have become more diverse in terms of

cultures, knowledge, and behaviors. Thus, the ability to deal with learners was highlighted as an aim for the new teacher training program. In addition, this finding was consistent with the other teacher education programs in other ASEAN countries which highlight the teachers' ability to deal with learners. For the second aim proposed in this study, supports the ideas of other developed countries that promote ICT as a part of universal skills, which is significantly important for instructional activities. Teachers who possess ICT skills will be able to keep themselves up to date to the current world and conduct their teaching by using technology. Interestingly, in the findings, the experts did not rate the ICT skills as one of the key competencies, but they did rate ICT skills as one of the aims and content domains. As we are living in the technological era, experts may view that ICT skills are important. However, the limited resources regarding electricity and computers in Cambodian schools may be the major barriers in instilling this competence.

Regarding to the key competencies, the finding suggests including the ability to provide knowledge of subjects related to local syllabi and curriculum development, loyalty to the profession, knowledge of how to cherish national cultural heritage and ability to uphold the aspiration of nation/national identity. The findings on the ability to provide knowledge of subjects related to local syllabi and curriculum development were in line with the current situation of education in many countries, where there are core standards prescribed at the national level and each school has to develop its own curriculum to suit its local contexts. Thus, it is necessary that teachers are able to develop their local curriculum. The proposal of the ability to develop local syllabi shows the shift of the reform of the curriculum policy and the decentralization of authority to grassroots level curriculum developers

in Cambodia. Unlike in the past in which central curriculum was strictly used in all schools nationwide, the findings in this study confirms this new trend of localized curricula and the teachers' ability to design local curricula as the key competencies of the primary English teacher training program.

Regarding the content domains the finding suggests including the educational research study, literature, culture, and health education in the teacher training programs for English teachers. The finding was also in line with other developed countries that those content are very important for primary teachers.

Over all, the new findings in this study suggest that the future primary English teacher training programs in Cambodia should include new aims, key competencies, and content domains that will equip the pre-service teachers with knowledge and skills necessary for future English teachers.

Recommendations

The results of this study proposed guidelines for developing primary English teacher training programs at Provincial Teacher Training Colleges in Cambodia. These guidelines can aid curriculum developers in designing the programs effectively. The new programs should aim to produce pre-service primary English teachers who are able to implement English language teaching methodology, deal with diverse learners, integrate content knowledge, pedagogical knowledge, ICT, educational management, develop professional conscience and integrity, and continuously develop themselves professionally.

In implementing this new teacher training program, PTTCs may need to change some instructional strategies such as integrating the use of ICT in their programs to model how ICT can aid instruction as well as to enhance ICT skills for

the pre-service teachers, implementing curriculum design tasks to enhance the knowledge and skills of how to develop a local curriculum that suits with the context of the school and community, and direct exposing the pre-service teachers with direct classroom experiences to promote the understanding of the learner and classroom so that the pre-service teachers will be able to design appropriate instruction and manage the classroom effectively, and last but not least, promoting the love for learning in the pre-service teachers in order to enhance their continuous professional development.

Limitations of the Study

Like any research study, this study has some limitations. Firstly, the limitations come from the use of the Delphi method. The purposeful sampling strategy and limited number of respondents restricted the possibility of conducting inferential statistical analysis.

Secondly, the Delphi study consisted of three rounds, of which first round provided to participants an initial list of aims, key competencies and content domains that were generated from the literature to provide a starting point for the participants to rate and add more aims, key competencies and content domains. It is possible that the items provided may bias or constrain some experts' thought process.

Finally, since the participants had different disciplinary backgrounds, their interpretations and understanding of aims and key competencies may not be consistent. The two groups of participants, English curriculum developers and teacher trainers with their diverse perspectives added to the content validity of this study.

Suggestions for Future Research

This study has several suggestions for future research. In terms of the study design, Delphi method was found to be highly appropriate for the exploratory nature of this study where the experts were geographically dispersed and no research was available on the topic of investigation. Future studies for program or curriculum development are encouraged to use the Delphi method. This study used Microsoft Excel to conduct the survey, which had its benefits and limitations. The benefits included the ability to add open-ended comments for each item and also include participants' individual responses along with the statistical summary of the group responses in Round 2 survey. In addition, in the context of Cambodia where Internet may not be easily accessed in all areas, Microsoft Excel served very well in this study. However, the limitation of using Microsoft Excel was time consuming for organizing multiple files for each respondent across three rounds and compiling data. Future studies may develop web-based survey instruments to specifically meet the needs of the Delphi method.

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APPENDICES

จุฬาลงกรณ์มหาวิทยาลัย
CHULALONGKORN UNIVERSITY

Appendix A

Round 1 Email Invitation

Dear _____,

I am writing to you with reference to my Master's thesis that aims to design guidelines for a primary English teacher training program for Provincial Teacher Training Colleges (PTTCs) in Cambodia.

I would like to invite you to participate in this study as an expert for the Delphi survey. As you are an experienced professional engaged with the emerging field of teacher education, your expertise and knowledge will provide valuable insights and information for the study and in turn will contribute towards the advancement and development of teacher education in Cambodia. The findings of this study will be essential for making informed decisions about how to structure primary English teacher education programs at PTTCs.

The study comprises of three rounds of the Delphi survey to identify, prioritize and define the aims, key competencies and content domains for the primary English teacher training program at PTTCs. In each round of the survey, you will be asked to respond to a questionnaire which will not take more than 20 minutes of your time. You will be provided **10 days** to respond to the survey. The entire process will be completed in approximately twelve weeks.

Attached with this email is Round 1 questionnaire as an Excel sheet. I request your participation in the study by filling in the survey and sending it back to me via email at cheapum@gmail.com by <date>.

Your participation in this study is voluntary and your responses are confidential. The risks associated with this study are minimal. If, however, you experience discomfort you may discontinue your participation at any time. I respect your right to choose not to answer any questions that may make you feel uncomfortable. Refusal to participate or withdrawal from participation will involve no penalty or loss of benefits to which you are otherwise entitled. Your return of this survey will imply your consent to participate in the study.

If you have any concerns or complaints about how you are treated during the study, please contact my advisor, Dr. Jutarat Vibulphol, Faculty of Education, Chulalongkorn University, Thailand at jutarat.v@chula.ac.th. This study was approved by Faculty of Education Board Committee, Chulalongkorn University on April 5th, 2013.

I sincerely appreciate your time and contribution in this study. If you have any questions or concerns about the study, please feel free to contact me at cheapum@gmail.com or 012 200 040. Thank you for your time, expertise and support. I look forward to receiving your Round 1 survey response.

Respectfully yours,

Pum Chea

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Round 1 Questionnaire

Identification of aims, key competencies and content domains for a primary English teacher training program at Provincial Teacher Training Colleges.

Definition of Terms: In this study these terms are defined as follow :

- *Aim is an overall specification of the intention of the primary English teacher training programs.*
- *Key competencies refer to the expected outcomes in terms of knowledge, skills, and attitude that the students in the primary English teacher training programs should acquire from the program.*
- *Content domains refer to the areas of content subjects to be included in the primary English teacher training programs.*

Research Methodology

The Delphi survey allows for group communication among experts using feedback mechanism, multiple rounds, and anonymity of participants. This study will consist of three rounds of survey. Each round should not take more than 20 minutes of your time. Round 2 survey will be designed based on the responses received from this Round 1.

Instructions

This is Round 1 of the Delphi survey which consists of four parts. Please read the instructions for each part and indicate your responses. Once you have completed the survey, save the file and email it to **cheapum@gmail.com**. I appreciate your time and valuable comments in participating in this study.

Part 1: Participant Profile

Please fill in your personal information or choose from drop down options.

1.1	Full name (First, Middle, Last)
1.2	Title
1.3	Organization
1.4	Email address
1.5	Profession
1.6	Professional experience in years
1.7	Primary disciplinary expertise
1.8	Highest educational degree

Part 2: Aims

- Please rate the importance of the aims of the training course required for a primary English teacher training program from drop down options.
- You are encouraged to describe the aim with example or add comments/reasons for assigning particular rating to the aim. There is no restriction of word limit. Please add any overall/general comments at the bottom of the table.
- You may also suggest additional aims in the space provided at the bottom of the table. In case, you wish to modify an existing aim, please type the modified aim and its rationale under "description" column.

Aims	Rating	Description/Comments/Reasons
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2.1	To provide integrated academic knowledge, strong general educational foundation, multiple specializations, universal communicative languages, current ICT, and educational management.	Very Important (4)	
2.2	To develop English professional teaching skills and teaching methodology consist of teaching techniques, methods and approaches.	Important (3)	
2.3	To enhance the ability to effectively deal with the diversity of student learning needs, students' different socio-economic background as well as interests.	Somewhat Important (2)	
2.4	To promote professional conscience and integrity in which they will become ethical and enthusiastic in the professional career.	Not Important (1)	
2.5	To promote high professional standards of behaviors and maintain continuous professional development.		
	Others (please specify)		
	Overall comments about Aims:		

Part 3: Key Competencies

- Please rate the importance of the key competencies that a student teacher at P TTC should develop in order to be an effective primary English teacher. Select the rating from the drop down options.
- You are encouraged to describe the key competency with example or add comments/reasons for assigning the particular rating to the key competency. There is no restriction of word limit. Please add any overall/general comments at the bottom of the table.
- You may also suggest additional key competencies in the space provided at the bottom of the table. In case, you wish to modify an existing key competency, please type the modified key competency and its rationale under "description" column.

Key Competencies	Rating	Description/Comments/Reasons
3.1 Ability to nurture the child and provide quality learning of the child.		
3.2 Talents in cultivating knowledge with subject mastery, initiative, critical thinking, creative teaching and future focus.		
3.3 Ability to provide sufficient knowledge of subjects related to local syllabuses and curriculum development.		
3.4 Ability to cultivate knowledge regarding educational psychology, educational research, teaching-learning approaches and classroom management.		
3.5 Ability to produce instructional materials and learning resources.		

3.6	Understanding the environment and teamwork, partnering community/society.		
3.7	Knowledge of planning, monitoring, assessing and reporting.		
3.8	Knowledge of turning into self and professional conscience/ethic and ability to develop others.		
3.9	Learning enthusiasm.		
3.10	Loyalty to the profession.		
3.11	Knowledge of how to exercise personal integrity, morality, and religion.		
3.12	Knowledge of how to cherish the national culture heritage and ability to uphold the aspiration of the nation/national identity.		
3.13	Knowledge of resilience and adaptability.		
3.14	Knowledge of ICT skills.		
3.15	Knowledge of Communicative skills.		
3.16	Knowledge of World knowledge and life-long learning skills.		
	Others (please specify)		
	Overall comments about Key Competencies:		

Part 4: Content Domains

- Please rate the importance of the content domains from the drop down options that an ideal primary English teacher training program at PTTCs should include to help develop the key competencies for the student teachers at PTTCs.
- You are encouraged to describe the course with example or add comments/reasons for assigning particular rating to the courses. There is no restriction of word limit. Please add any overall/general comments at the bottom of the table.
- You may also suggest additional content domains in the space provided at the bottom of the table. In case, you wish to modify an existing content domain, please type the modified content domain and its rationale under "description" column.

Content Domains	Rating	Description/Comments/Reasons
4.1		Culture
4.2		Literature
4.3		Linguistics
4.4		Language Skills
4.5		Theories, approaches, methods, and techniques of teaching
4.6		Psychology for teachers

4.7	Curriculum Development		
4.8	Instructional Material Development		
4.9	Educational Measurement and Evaluation		
4.10	Educational Leadership Management		
4.11	Educational Research Studies		
4.12	Educational Innovation and Information Technology		
4.13	Teacher Characteristics Development		
4.14	Physical Education		
4.15	Health Education		
4.16	Music and Art		
4.17	Home Economics		
4.18	Practicum		
	Others (please specify)		
	Overall Comment about Content Domains:		

Please email the completed survey to cheapum@gmail.com . Thank you for your kind cooperation.

Appendix C

Round 2 Email Invitation

Dear _____ ,

Thank you very much for participating in Round 1 the Delphi study on the development of guidelines for primary English teacher training program for PTTCs.

Attached with this email is Round 2 survey and I request your continued participation in the study by filling the survey and sending it to me via email at cheapum@gmail.com by <date>.

The purpose of this Round 2 survey is to prioritize the aims, key competencies and content domains and arrive at a consensus. Based on the responses and comments received from 27 participants in Round 1 survey, I have reported descriptive statistics like mean and standard deviation along with percentage of respondents rating a particular aim, key competency or content domain as Very Important (4) or Important (3) on a four-point scale. It includes your individual response and the response of the panel. In light of this information, you are requested to re-rate the aims, key competencies and content domains. You are encouraged to provide reasons for retaining or revising any of the ratings.

If you have any questions or concerns about the study or survey, please feel free to contact me at cheapum@gmail.com or 012 200040. I look forwards to your response.

Thank you for your time, expertise and support.

Sincerely yours,

Pum Chea

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Appendix D

Round 2 Questionnaire

Delphi Survey Round 2: Prioritization of aims, key competencies and content domains for a primary English teacher training program at PTTCs.
This is Round 2 of Delphi survey and consists of three parts. The purpose of this round is to incorporate the feedback received in Round 1 survey and prioritize the aims, key competencies and content domains to be included in the primary English teacher training program. Please read the instruction given below to indicate your responses. Once you have completed the survey, save the file and kindly email it to cheepum@gmail.com. Your continued participation is very critical for the validity of this study and setting future directions for PTTCs. I appreciate your time and expertise.

Instructions:

- Given below are the Aims (Part 1), Key Competencies (Part 2) and Content Domains (Part 3) along with your individual rating and the statistical summary of responses by the panel from Round 1.
- Aims, Key Competencies and Content Domains highlighted in RED (No. 2.1, 2.9 and 3.19) indicate that they have been modified from Round 1 or added as new aims, key competencies or content domains.
- Aims, Key Competencies and Content Domains are sorted by % of participants rating them as Important (3) or Very Important (4).
- Please re-rate the importance of the aims, key competencies and content domains required for an primary English teacher training program at PTTCs from drop down options under the column "Your R2 Rating."
- Feel free to revise or retain your responses from the Round 1 in the context of the rating by the panel.
- You are requested to add comments or reasons for assigning particular rating to the aims/key competencies/content domains. There is no restriction of word limit.

Part 1: Aims		Panel R1 (Mean)	Panel R1 (Std. Dev.)	Panel R1 (% 3/4)	Your R1 Rating	Your R2 Rating	Description/Comments/Reasons
1.1	To develop English professional teaching skills and teaching methodology consist of teaching techniques, methods and approaches.	3.74	0.59	93%			
1.2	To enhance the ability to effectively deal with the diversity of student learning needs, students' different socio-economic background as well as interests.	3.37	0.74	93%			
1.3	To provide integrated academic knowledge, strong general educational foundation, multiple specializations, universal communicative languages.	3.48	0.70	89%			
1.4	To promote high professional standards of behaviors and maintain continuous professional development.	3.19	0.74	89%			
1.5	To promote professional conscience and integrity in which they will become ethical and enthusiastic in the professional career.	3.19	0.83	81%			
Overall comments about Aims:							
Part 2: Key Competencies		Panel R1 (Mean)	Panel R1 (Std. Dev.)	Panel R1 (% 3/4)	Your R1 Rating	Your R2 Rating	Description/Comments/Reasons
2.1	Ability to produce effective instructional materials and learning resources.	3.63	0.49	100%			
2.2	Ability to nurture the child and provide quality learning of the child.	3.70	0.54	96%			
2.3	Knowledge of Communicative skills.	3.48	0.58	96%			
2.4	educational research, teaching-learning approaches and classroom management.	3.59	0.64	93%			
2.5	Knowledge of turning into self and professional conscience/ethic and ability to develop others.	3.37	0.63	93%			
2.6	Knowledge of World knowledge and life-long learning skills.	3.44	0.64	93%			
2.7	Talents in cultivating knowledge with subject mastery, initiative, critical thinking, creative teaching and future focus.	3.56	0.70	89%			
2.8	Ability to provide sufficient knowledge of subjects related to local syllabuses and curriculum development.	3.19	0.62	89%			
2.9	Being confident and understanding the work environment and teamwork, partnering community/society.	3.37	0.69	89%			

2.10	Knowledge of planning, monitoring, assessing and reporting.	3.22	0.85	81%			
2.11	Learning enthusiasm.	3.22	0.75	81%			
2.12	Knowledge of how to cherish the national cultural heritage and ability to uphold the aspiration of the nation/national identity.	3.04	0.76	81%			
2.13	Loyalty to the profession.	3.26	0.90	78%			
2.14	Knowledge of how to exercise personal integrity, morality, and religion.	3.04	0.98	70%			
2.15	Knowledge of ICT skills.	3.04	0.81	70%			
2.16	Knowledge of resilience and adaptability.	2.78	0.70	63%			
	Overall comments about Key Competencies:						
Part 3: Content Domains							
		Panel R1 (Mean)	Panel R1 (Std. Dev.)	Panel R1 (% 3/4)	Your R1 Rating	Your R2 Rating	Description/ Comments/Reasons
3.1	Language Skills	3.78	0.42	100%			
3.2	Literature	3.37	0.56	96%			
3.3	Practicum	3.78	0.51	96%			
3.4	Theories, approaches, methods, and techniques of teaching	3.78	0.58	93%			
3.5	Psychology for teachers	3.52	0.64	93%			
3.6	Educational Measurement and Evaluation	3.41	0.64	93%			
3.7	Teacher Characteristics Development	3.41	0.64	93%			
3.8	Culture	3.37	0.69	89%			
3.9	Linguistics	3.41	0.80	89%			
3.10	Instructional Material Development	3.52	0.70	89%			
3.11	Educational Research Studies	3.26	0.71	85%			
3.12	Health Education	3.04	0.81	78%			
3.13	Educational Innovation and Information Technology	2.96	0.71	74%			
3.14	Educational Leadership Management	2.89	0.80	70%			
3.15	Physical Education	2.81	0.88	67%			
3.16	Curriculum Development	2.81	0.92	63%			
3.17	Music and Art	2.59	0.84	52%			
3.18	Home Economics	2.44	0.80	48%			
3.19	Khmer Studies			NEW ADDED			
	Overall Comment about Content Domains:						

Please email the completed survey to cheapum@gmail.com. Thank you for your kind cooperation.

Appendix E

Round 3 Email Invitation

Dear _____ ,

Thank you for participating in the Delphi study on the development of guidelines for English primary teacher training program at PTTCs.

Attached with this email is the Round 3 survey and I request your continued participation in the study by filling the survey and sending it to me via email at cheapum@gmail.com by <date>.

The purpose of this final round is to provide depth and details to the top aims, key competencies and content domains identified and prioritized from the previous two rounds. Specifically, I am asking you to rate your agreement with the classification of top aims with the top key competencies and top content domains, and provide your suggestions for making them more relevant.

Based on the responses and comments received from 20 respondents in the Round 2 survey, I have reported top aims, key competencies and content domains that have been identified as Important (3) or Very Important (4) by at least 75% of the respondents (See in the Delphi Survey Round 3 Questionnaire/Sheet 1).

I sincerely appreciate your time and contribution despite your busy schedule. If you have any questions or concerns about the study or survey, please feel free to contact me at cheapum@gmail.com or 012 200040. I look forwards to your response.

Thank you for your time, expertise and support.

Sincerely,

Pum Chea

Master Student in TEFL Program
Faculty of Education
Chulalongkorn University
Phyathai Road, Bangkok 10330
Thailand
Mobile: 012 200040/ (+66) 87 4841948

Round 3 Questionnaire

Delphi Survey Round 3: Classifying aims, key competencies and content domains for a primary English teacher training program at PTTCs. This is Round 3 (final round) of Delphi survey and consists of top aims, key competencies and content domains. Once you have completed the survey, save the file and kindly email it to cheapum@gmail.com. In this round of survey, I am asking you to respond on two primary aspects: 1) Rate your degree of agreement with the classification of top aims with the top key competencies and top content domains identified and prioritized by the panel from the previous two rounds, on a scale of 1-4 (1-Strongly Disagree to 4-Strongly Agree) from the drop-down options. 2) Provide suggestions and comments for improving the relevancy and inclusiveness of each item.				
Part 1: Aims	Part 2: Key Competencies	Part 3: Content Domains	Rating	Suggestions/Comments
1.1 To develop English professional teaching skills and teaching methodology consist of teaching techniques, methods and approaches.	2.1 Ability to produce effective instructional materials and learning resources. 2.5 Ability to cultivate knowledge regarding educational psychology, educational research, teaching-learning approaches and classroom management. 2.10 Ability to provide sufficient knowledge of subjects related to local syllabuses and curriculum development. 2.11 Knowledge of planning, monitoring, assessing and reporting.	3.2 Practicum 3.3 Educational Measurement and Evaluation 3.4 Instructional Material Development 3.5 Psychology for teachers 3.7 Theories, approaches, methods, and techniques of teaching 3.11 Educational Research Studies 3.12 Educational Innovation and Information Technology 3.15 Educational Leadership Management		
1.2 To enhance the ability to effectively deal with the diversity of student learning needs, students' different socio-economic background as well as interests.	2.3 Being confident and understanding the work environment and teamwork, partnering community/society. 2.7 Talents in cultivating knowledge with subject mastery, initiative, critical thinking, creative teaching and future focus. 2.8 Learning enthusiasm. 2.12 Loyalty to the profession.	3.2 Practicum 3.4 Instructional Material Development 3.7 Theories, approaches, methods, and techniques of teaching		
1.3 To promote high professional standards of behaviors and maintain continuous professional development.	2.2 Knowledge of Communicative skills. 2.4 Ability to nurture the child and provide quality learning of the child. 2.7 Talents in cultivating knowledge with subject mastery, initiative, critical thinking, creative teaching and future focus. 2.9 Knowledge of World knowledge and life-long learning skills.	3.2 Practicum 3.10 Teacher Characteristics Development 3.14 Khmer studies 3.1 Language Skills 3.6 Literature 3.8 Culture 3.9 Linguistics 3.11 Educational Research Studies 3.12 Educational Innovation and Information Technology		
1.4 To provide integrated academic knowledge, strong general educational foundation, multiple specializations, universal communicative languages, current ICT, and educational management.				



	1.5 To promote professional conscience and integrity in which they will become ethical and enthusiastic in the professional career.	2.6 Knowledge of how to develop personal and professional integrity. 2.8 Learning enthusiasm. 2.12 Loyalty to the profession. 2.13 Knowledge of how to cherish the national cultural heritage and ability to uphold the aspiration of the nation/national identity. 2.14 Knowledge of resilience and adaptability. Overall Comment about Key Competencies:	3.13 Health Education 3.14 Khmer studies 3.15 Educational Leadership Management 3.2 Practicum 3.8 Culture 3.10 Teacher Characteristics Development 3.14 Khmer studies Overall Comment about Content Domains:		
Overall comments about Aims:					

Please email the completed survey to cheapum@gmail.com. Thank you for your kind cooperation.

Appendix G

Letter to Experts for Checking Quality of Questionnaire

23 August 2013

Dear _____,

I am presently conducting a research study on the topic of “**Proposed Guidelines for Developing Primary English Teacher Training Programs for Provincial Teacher Training Colleges, Kingdom of Cambodia**”. The objective of this study is to obtain the experts’ opinions about the **aims, key competencies** and **content domains** for primary English teacher training programs. This study uses the Delphi method to determine the most important *aims, key competencies* and *content domains* required for proposing guidelines for developing primary English teacher training programs at Provincial Teacher Training Colleges (PTTCs) in Cambodia.

The questionnaire was generated from documentary research: the review of curriculum of teacher education in Singapore, the Philippines, Malaysia, Thailand, Vietnam, Lao PDR and Cambodia, and the TPACK framework uses in pre-service teacher education. The questionnaire will be sent to the selected group of Cambodian experts: English curriculum designers and English teacher trainers. The experts will receive the questionnaire in Microsoft Excel (.xls) file and will be asked to rate the items in the questionnaire from the provided drop-down options. They are also encouraged to add description, comments and or reasons for assigning a particular rating to each item.

Before using the questionnaire to collect the data, I would like to ask for your opinions about the format and the wording in this questionnaire.

Accordingly, please give your comments about this questionnaire by responding to the questions in the attached Questionnaire Evaluation Form. In this folder, I have enclosed the following documents for your consideration:

- | | |
|--|--------------------------|
| 1. Questionnaire Evaluation Form | 1 hard and 1 soft copies |
| 2. The Proposal | 1 copy |
| 3. Questionnaire (Round 1 Questionnaire) | 1 hard and 1 soft copies |
| 4. List of explanation of terms | 1 copy |
| 5. CD of Soft Copies | 1 CD |

If there is any query about my study and/or this questionnaire evaluation, please contact me through my mobile: **087 484 1948** or my email: **cheapum@gmail.com**.

I am very thankful for your kind assistance. Please accept my deep appreciation for taking your value time on this evaluation.

Respectfully yours,

Pum Chea

Questionnaire Evaluation Form

Questionnaire Evaluation Form

Please answer the following questions. You can type in the file or use extra page to write your comments.

1. What is your overall comment about the wording of the instruction in this questionnaire? i.e. clarity, comprehensibility.

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2. What do you think about the wording of the items in the questionnaire? i.e. clarity, the use of language, comprehensibility. Please specify the items that you have comments.

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3. What do you think about the format of the questionnaire?

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4. To what extent can the questionnaire be used to elicit the responses that serve the purposes of the study? i.e. to obtain expert's opinions about the aims, key competencies, and content domains for primary English teacher training programs.

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5. Other comments (please specify)

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Date: _____/_____/ 2013

(_____)

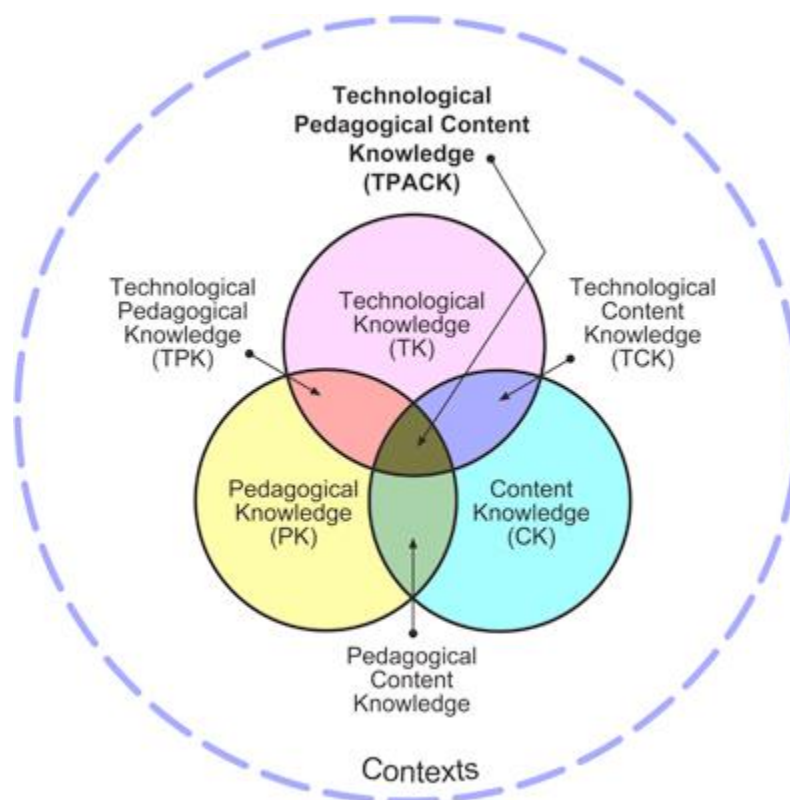
Expert

List of Experts for the Validating of the Questionnaire

N°	Name	Place of Work
1.	Associate Professor Dr. Siripaarn Suwanmonkha	Faculty of Education, Chulalongkorn University
2.	Associate Professor Dr. Arunee Wiryachitra	Freelance Educator
3.	Dr. Major Ra-Shane Meesri	Faculty of Education, Chulalongkorn University



Appendix H
The TPACK Framework



(source: www.tpack.org)

Appendix I

Instruction for the Electronic Questionnaire

Instructions for filling up the electronic version of the Questionnaire

About drop-down options

1. Mouse click on the designed-cell, and then the button shows up at the cell corner.
2. Click the button and select the options provided.
3. Mouse point to the red edge-corner of the cell, and then the explanation will show up.

You may type for other blanks, i.e. suggestions or comments...

Part 1: Participant Profile Please fill in your personal information or choose from drop down options.

1.1	Full name (First, Middle, Last)	
1.2	Title	Teacher Trainer
1.3	Organization	
1.4	Email address	
1.5	Profession	English Teacher Trainer
1.6	Professional experience in years	
1.7	Primary disciplinary expertise	Curriculum Developer
1.8	Highest educational degree	English Teacher Trainer

Part 2: Aims

Please rate the importance of the aims of the training course required for a primary English teacher training program from drop down options.
 You are encouraged to describe the aim with example or add comments/reasons for assigning particular rating to the aim. There is no restriction of word limit. Please add any overall general comments at the bottom of the table.
 You may also suggest additional aims in the space provided at the bottom of the table. In case, you wish to modify an existing aim, please type the modified aim and its rationale under "description" column.

Aims	Rating	Description
2.1 To provide integrated academic knowledge, strong general educational foundation, multiple specializations, universal communicative languages, current ICT, and educational management.		
2.2 To develop English professional teaching skills and teaching methodology consist of teaching techniques, methods and approaches.		
2.3 To enhance the ability to effectively deal with the diversity of student learning needs, students' different socio-economic background as well as interests.	Very Important (4)	
2.4 To promote professional conscience and integrity in which they will become ethical and enthusiastic in the professional career.	Important (3)	
2.5 To promote high professional standards of behaviors and maintain continuous professional development.	Somewhat Important (2)	
Others (please specify)	Not Important (1)	

You may also suggest additional content domains in the space provided at the bottom of the table. In case, you wish to modify the modified content domain and its rationale under "description" column.

Content Domains	Rating
4.1 Culture	
4.2 Literature	
4.3 Linguistics	
4.4 Language Skills	
4.5 Theories, approaches, methods, and techniques of teaching	
4.6 Psychology for teachers	
4.7 Curriculum Development	
4.8 Instructional Material Development	
4.9 Educational Measurement and Evaluation	
4.10 Educational Leadership Management	
4.11 Educational Research Studies	
4.12 Educational Innovation and Information Technology	
4.13 Teacher Characteristics Development	

English Teacher Trainer
 Curriculum Developer
 English Teacher Trainer
 University Faculty
 Others

Very Important (4)
 Important (3)
 Somewhat important (2)
 Not Important (1)

Linguistics: refers to the scientific study of a language and its structure, including the study of phonetics, phonology, morphology, syntax, semantics, pragmatics and sociolinguistics.

Linguistics: refers to the scientific study of a language and its structure, including the study of phonetics, phonology, morphology, syntax, semantics, pragmatics and sociolinguistics.

Appendix J

List of Term Explanation

List of Explanation of terms of Content Domains


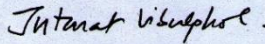
- **Culture:** refers to the study of ideas, beliefs, and knowledge which constitute the shared bases of social action in order to raise awareness of the intercultural diversity.
- **Literature:** refers to the study of the art of written work in language such as short story, novels, and poems.
- **Linguistics:** refers to the scientific study of a language and its structure, including the study of phonetics, phonology, morphology, syntax, semantics, pragmatics and sociolinguistics.
- **Language skills:** refers to the study of language skills in speaking, listening, writing and reading such as language enhancement and academic discourse skills (LEADS)
- **Theories, approaches, methods and techniques of teaching:** refers to the development of key concepts and principles in education for effective instruction and reflective practice. It equips student teachers with methods and approaches in teaching.
- **Psychology for teachers:** refers to the study of basic psychology relating to human development, educational psychology, guidance and counseling psychologies.
- **Curriculum development:** refers to the study of curriculum theory; philosophy, concept and theory of education; vision and development plan for education; background and educational administration system; curriculum development; curriculum standards and intended levels; curriculum development for educational institutions; problems and trend of curriculum development.
- **Instructional material development:** refers to the study which enables students to create and use of instructional materials effectively such as material design or material development.
- **Educational measurement and evaluation:** refers to the study of principles and techniques of educational measurement and evaluation, creation and implementation of educational measurement and evaluation tools, authentic assessment, portfolio assessment, performance assessment, formative and summative evaluations.
- **Educational leadership management:** refers to the study of management theory and principles, educational leadership, systematic thinking, learning of organizational culture, organizational human relations, organizational communication, classroom management, educational quality assurance, teamwork, academic program

preparation, occupational training program, development programs and activities, information system for management, community development education.

- **Educational research studies:** refers to the study of research theory, research model, research design, research process, statistics for research, classroom action research, research training, research presentations, use of research process for problem solving, project proposals for research, search and study on research for development of learning management process.
- **Educational innovation and information technology:** refers to the study of educational concept, theory, technology and innovation that promote the learning quality development; technology and information; analysis of problems arising from use of technology and information innovation; learning sources and network; innovation design, creation, implementation; evaluation and improvement.
- **Teacher characteristics development:** the study of importance of the teaching profession and teacher's roles, duties and workload; development of the teaching profession; characteristics of good teachers; building positive attitude towards the teaching profession; strengthening teachers' potentiality and capabilities; being learning persons and academic leaders; criteria and standards for the teaching profession; teaching profession ethics; laws governing education.
- **Physical education:** refers to an educational course related to the physique of the human body that encourages psychomotor learning in a play or movement exploration setting to promote health.
- **Health education:** refers to a course designed to help individuals and communities improve their health, by increasing their knowledge or influencing their attitudes. It helps educating people about health.
- **Music and art:** refers to the study of music and art.
- **Home economics:** refers to the field of study that deals with the economics and management of the home and community including consumer education, institutional management, interior design, home furnishing, cleaning, handicrafts, sewing, clothing and textiles, commercial cooking, cooking, nutrition, food preservation, hygiene, child development, managing money, and family relationships.
- **Practicum:** refers to field experience or teaching practice.

Appendix K

Relevant Letters with Chulalongkorn University
Letter from Chulalongkorn University to MoEYS

Ref.0512.6(2771)/56-2571		Faculty of Education Chulalongkorn University Phayathai Road, Pathumwan Bangkok 10330, Thailand
September 20, 2013		
H.E. Minister (H.E. Im Sethy) Ministry of Education, Youth and Sports Kingdom of Cambodia		
Subject: Request for cooperation in a master's thesis research project		
Dear H.E. Minister of Ministry of Education, Youth and Sports,		
Attachment: Mr. Pum Chea's thesis proposal		
On behalf of the Faculty of Education, Chulalongkorn University, I am writing to request cooperation in a research project conducted by Mr. Pum Chea, one of our students in the Master of Education Program in Teaching English as a Foreign Language. Mr. Pum Chea is currently conducting his master's thesis research project on "Proposed Guidelines for Developing Primary English Teacher Training Programs for Provincial Teacher Training Colleges, Kingdom of Cambodia" . This research is advised by Jutarat Vibulphol, Ph.D.		
In this research project, Mr. Pum Chea needs to collect data from a number of officials from the Department of Curriculum Development, NIE, RTTCs and PTTCs. The target group of are English curriculum designers and English teacher trainers, in particular.		
We are hoping that you will grant permission to Mr. Pum Chea to collect the data with those officials mentioned.		
I would like to express our sincere appreciation for your kind cooperation.		
Yours sincerely,		
		
(Jutarat Vibulphol, Ph.D.)		
Associate Dean		
Office of Academic Affairs Tel: 02-218-2681 Ext. 600		

Appendix L

Relevant Letters with the Cambodian Ministry of Education, Youth and Sports
Letters Written by Researcher to MoEYS

ព្រះរាជាណាចក្រកម្ពុជា
ជាតិ សាសនា ព្រះមហាក្សត្រ

ខ្ញុំបាទឈ្មោះ **ជាន់ តុំ** ជានិស្សិតអាហារូបករណ៍ នៃសាកលវិទ្យាល័យជូឡាឡុងកន ព្រះរាជាណាចក្រថៃ ។

សូមគោរពខ្ញុំន
ឯកឧត្តមរដ្ឋមន្ត្រីក្រសួងអប់រំ យុវជន និងកីឡា
សូមផ្តល់ជ្រាប ។

កម្មវត្ថុ : សំណើចុះកម្មសិក្សាស្រាវជ្រាវជាមួយមន្ត្រីអភិវឌ្ឍន៍កម្មវិធីសិក្សាផ្នែកភាសាអង់គ្លេស និងគ្រូឧទ្ទេសផ្នែកភាសាអង់គ្លេស ។

យោង : លិខិតឧទ្ទេសនាមលេខ ០៥១២.៦(២៧៧១)/៥៥-២៥៧១ ចុះថ្ងៃទី ២០ ខែកញ្ញា ឆ្នាំ ២០១៣ របស់លោកស្រីបណ្ឌិត **ជូតារត វិបុលផុល** (Jutarat Vibulphol, Ph.D.) ព្រឹទ្ធបុរសរង មហាវិទ្យាល័យអប់រំ នៃសាកលវិទ្យាល័យជូឡាឡុងកន ។

សេចក្តីដូចបានជម្រាបជូនក្នុងកម្មវត្ថុ និងយោងខាងលើ ខ្ញុំបាទសូមជម្រាបជូនឯកឧត្តមរដ្ឋមន្ត្រីឲ្យបានជ្រាបថា ខ្ញុំបាទជានិស្សិតឆ្នាំទី២ ថ្នាក់អនុបណ្ឌិត ផ្នែកវិធីសាស្ត្របង្រៀនភាសាអង់គ្លេស (Teaching English as a Foreign Language) នៃសាកលវិទ្យាល័យជូឡាឡុងកន មានបំណងចុះកម្មសិក្សាស្រាវជ្រាវជាមួយមន្ត្រីអភិវឌ្ឍន៍កម្មវិធីសិក្សាផ្នែកភាសាអង់គ្លេសនៅនាយកដ្ឋានអភិវឌ្ឍន៍កម្មវិធីសិក្សារបស់ក្រសួងអប់រំ យុវជន និងកីឡា និងគ្រូឧទ្ទេសផ្នែកភាសាអង់គ្លេស នៅវិទ្យាស្ថានជាតិអប់រំ សាលាគរុកោសល្យ និងវិទ្យាស្ថានភូមិភាគ និង សាលាគរុកោសល្យ និងវិទ្យាស្ថានភូមិភាគ ដើម្បីសរសេរនិក្ខេបបទបញ្ចប់ការសិក្សា ក្រោមចំណងជើង **“សំណើសុំគោលការណ៍ណែនាំសម្រាប់អភិវឌ្ឍកម្មវិធីបណ្តុះបណ្តាលគ្រូភាសាអង់គ្លេសកម្រិតបឋមសិក្សាសម្រាប់សាលាគរុកោសល្យ និងវិទ្យាស្ថានភូមិភាគព្រះរាជាណាចក្រកម្ពុជា”** រយៈពេល ០៣ ខែ ចាប់ពីថ្ងៃទី ០១ ខែ តុលា ដល់ថ្ងៃទី ៣១ ខែ ធ្នូ ឆ្នាំ២០១៣ ។

អាស្រ័យដូចនេះ ខ្ញុំបាទ សូមឯកឧត្តមរដ្ឋមន្ត្រី មេត្តាអនុញ្ញាតដល់ខ្ញុំបាទ បានចុះកម្មសិក្សាស្រាវជ្រាវបញ្ចប់ការសិក្សាដោយសេចក្តីអនុគ្រោះ ។

សូមឯកឧត្តមរដ្ឋមន្ត្រី មេត្តាទទួលនូវការគោរពដ៏ខ្ពង់ខ្ពស់អំពីខ្ញុំបាទ ។

កំពង់ធំ ថ្ងៃទី ខែ ឆ្នាំ២០១៣
ហត្ថលេខា

ជាន់ តុំ

Letters from MoEYS to Prospective Institutions



ព្រះរាជាណាចក្រកម្ពុជា
ជាតិ សាសនា ព្រះមហាក្សត្រ

ក្រសួងអប់រំ យុវជន និងកីឡា
លេខ: ៣៣៧/១៦ អយក. ៥/៧

រាជធានីភ្នំពេញ, ថ្ងៃទី ១០ ខែ តុលា ឆ្នាំ ២០១៣

រដ្ឋមន្ត្រីក្រសួងអប់រំ យុវជន និងកីឡា
ជម្រាបជូន

ឯកឧត្តមនាយកវិទ្យាស្ថានជាតិអប់រំ

លោកប្រធានមន្ទីរអប់រំ យុវជន និងកីឡា

រាជធានីភ្នំពេញ ខេត្តកណ្តាល គារ៉ែត កំពង់ធំ កំពង់ឆ្នាំង កំពង់ស្ពឺ សៀមរាប បាត់ដំបង និងខេត្តព្រៃវែង

- កម្មវត្ថុ : ការអនុញ្ញាតឱ្យនិស្សិតឈ្មោះ ជា ពុំ ចុះធ្វើកម្មសិក្សាស្រាវជ្រាវ
- យោង : -លិខិតរបស់សាកលវិទ្យាល័យ ជូឡាឡុងកុង នៃប្រទេសថៃ ចុះថ្ងៃទី ២០ ខែ កញ្ញា ឆ្នាំ ២០១៣
- ពាក្យស្នើសុំរបស់សាមីជន ចុះថ្ងៃទី ២៣ ខែ កញ្ញា ឆ្នាំ ២០១៣

តាមកម្មវត្ថុ និងយោងខាងលើ ខ្ញុំសូមជម្រាបជូន ឯកឧត្តម លោកប្រធានថា លោក ជា ពុំ ជានិស្សិត អាហារូបករណ៍ថ្នាក់បរិញ្ញាបត្រជាន់ខ្ពស់ ផ្នែកការអភិវឌ្ឍន៍វិស័យអប់រំ នៃសាកលវិទ្យាល័យជូឡាឡុងកុង (Chulalongkorn University) ប្រទេសថៃ បានស្នើសុំចុះធ្វើការសិក្សាស្រាវជ្រាវ និងប្រមូលទិន្នន័យពាក់ព័ន្ធនឹងប្រទេសប្រជាជាតិកម្ពុជា ការណែនាំសម្រាប់អភិវឌ្ឍន៍វិស័យអប់រំ និងប្រមូលទិន្នន័យពាក់ព័ន្ធនឹងប្រទេសប្រជាជាតិកម្ពុជា ការណែនាំសម្រាប់អភិវឌ្ឍន៍វិស័យអប់រំ និងប្រមូលទិន្នន័យពាក់ព័ន្ធនឹងប្រទេសប្រជាជាតិកម្ពុជា នៅវិទ្យាស្ថានជាតិអប់រំ និងមជ្ឈមណ្ឌលគរុកោសល្យភូមិភាគរាជធានីភ្នំពេញ សាលាគរុកោសល្យ និងវិទ្យាស្ថាន និងតាមបណ្តាខេត្តរួមមាន កណ្តាល កំពង់ធំ តាកែវ កំពង់ឆ្នាំង កំពង់ស្ពឺ សៀមរាប ព្រៃវែង និងខេត្តបាត់ដំបង រយៈពេល ០៣ ខែ ចាប់ពីថ្ងៃទី ១២ ខែ តុលា ឆ្នាំ ២០១៣ ដល់ថ្ងៃទី ៣១ ខែ ធ្នូ ឆ្នាំ ២០១៣ ដើម្បីជំនួសស្ថាវត្តិក្នុងការសរសេរនិក្ខេបបទបញ្ចប់ការសិក្សាថ្នាក់បរិញ្ញាបត្រជាន់ខ្ពស់ នៅសាកលវិទ្យាល័យជូឡាឡុងកុង ប្រទេសថៃ ។

អាស្រ័យហេតុនេះ សូម ឯកឧត្តម លោកប្រធានមេត្តា ជួយសម្រួលដល់ការចុះធ្វើកម្មសិក្សាស្រាវជ្រាវរបស់និស្សិតរូបនេះតាមការគួរ ។
សូម ឯកឧត្តម លោកប្រធាន ទទួលនូវការរាប់អានដ៏ស្មោះពីខ្ញុំ ។

រដ្ឋមន្ត្រីក្រសួងអប់រំ យុវជន និងកីឡា
អនុរដ្ឋលេខាធិការ

សាមីឌី ស៊ីវឌ្ឍនា



ព្រះរាជាណាចក្រកម្ពុជា
ជាតិ សាសនា ព្រះមហាក្សត្រ

ក្រសួងអប់រំ យុវជន និងកីឡា
លេខ: **៣៥៧** អយក. ២០១៣

រាជធានីភ្នំពេញ, ថ្ងៃទី **២៤** ខែ តុលា ឆ្នាំ ២០១៣

រដ្ឋមន្ត្រីក្រសួងអប់រំ យុវជន និងកីឡា
ជម្រាបជូន

លោកប្រធាននាយកដ្ឋានអភិវឌ្ឍន៍កម្មវិធីសិក្សា
លោកប្រធាននាយកដ្ឋានបណ្តុះបណ្តាល និងវិក្រឹតការ

- កម្មវត្ថុ :** ការអនុញ្ញាតឱ្យនិស្សិតឈ្មោះ ជា ពុំ ចុះធ្វើកម្មសិក្សាស្រាវជ្រាវ
- យោង :** -លិខិតរបស់សាកលវិទ្យាល័យ ជូឡាឡុងកុង នៃប្រទេសថៃ ចុះថ្ងៃទី ២០ ខែ កញ្ញា ឆ្នាំ ២០១៣
- ពាក្យស្នើសុំរបស់សាមីជន ចុះថ្ងៃទី ២១ ខែ តុលា ឆ្នាំ ២០១៣

តាមកម្មវត្ថុ និងយោងខាងលើ ខ្ញុំសូមជម្រាបលោកប្រធានថា លោក ជា ពុំ ជាជនស្ថិតនៅក្នុងប្រទេសកម្ពុជា ត្រូវបានបញ្ជូនមកសិក្សាប្រចាំឆ្នាំ នៅសាកលវិទ្យាល័យ ជូឡាឡុងកុង (Chulalongkon University) ប្រទេសថៃ បានស្នើសុំចុះធ្វើការសិក្សាស្រាវជ្រាវ និងប្រមូលទិន្នន័យពាក់ព័ន្ធនឹងប្រធានបទ " សំណើសុំគោលការណ៍ណែនាំសម្រាប់អភិវឌ្ឍន៍កម្មវិធីបណ្តុះបណ្តាលគ្រូកាសាអង់គ្លេសកម្រិតបឋមសិក្សាសម្រាប់សាលាគ្រូកាសល្យ និងវិក្រឹតការក្នុងព្រះរាជាណាចក្រកម្ពុជា " នៅនាយកដ្ឋានអភិវឌ្ឍន៍កម្មវិធីសិក្សា និងនាយកដ្ឋានបណ្តុះបណ្តាល និងវិក្រឹតការរយៈពេល ០៣ ខែ ចាប់ពីថ្ងៃទី ២៥ ខែ តុលា ឆ្នាំ ២០១៣ ដល់ថ្ងៃទី ៣១ ខែ ធ្នូ ឆ្នាំ ២០១៣ ដើម្បីជាជំនួយស្នាមក្នុងការសរសេរនិក្ខេបបទបញ្ចប់ការសិក្សាថ្នាក់បរិញ្ញាបត្រជាន់ខ្ពស់នៅសាកលវិទ្យាល័យជូឡាឡុងកុងប្រទេសថៃ ។

អាស្រ័យហេតុនេះ សូមលោកប្រធាន ជួយសម្រួលដល់ការចុះធ្វើកម្មសិក្សាស្រាវជ្រាវរបស់និស្សិតរូបនេះ តាមការគូរ ។
សូមលោកប្រធានទទួលនូវការរាប់អានពីខ្ញុំ ។

ជ. រដ្ឋមន្ត្រីក្រសួងអប់រំ យុវជន និងកីឡា
សាមីឌី ស៊ុនឡា

Appendix M
Curriculum Structure of Lower Secondary English Teacher Training Program in Cambodia

Curriculum structure of lower secondary English teacher training program in Cambodia

	SUBJECT	Year1		Year2		TOTAL HOURS
		1 st Semester 18hrs x15w =270hrs	2 nd Semester 18hrs x15w =270hrs	1 st Semester 18hrs x15w =270hrs	2 nd Semester 18hrs x13w =234hrs	
1	English Language Development	140hrs	128hrs	163hrs	203hrs	634hrs
2	Introduction to Learning & Teaching	44hrs				44hrs
3	Pronunciation & Language Awareness	36hrs				36hrs
4	Study Skills	22hrs				22hrs
5	Methodology		104hrs	100hrs		204hrs
6	Visual Aids		30hrs			30hrs
7	Revision	18hrs			21hrs	39hrs
8	Assessment	10hrs	8hrs	7hrs	10hrs	35hrs
Total Hours		270hrs	270hrs	270hrs	234hrs	1044hrs

Note:

- The course starts on the 1st of October of the 1st academic year and finishes on the 31st of July of the 2nd
- Teaching practice, for ten weeks, which takes place in between the first semester and second semester of year2, is not included in the table above.

(Source: Ministry of Education, Youth and Sports, 2012)



Appendix N

Core Curriculum of Bachelor in Elementary Education (BEd) in the Philippines

General Education	68 units
English	9 units
Literature in English	3 units
Filipino Language	6 units
Filipino Literature	3 units
Natural Sciences	6 units
Mathematics	6 units
Humanities	6 units
Social Sciences	12 units
Mandated Subjects	6 units
Computer Literacy	3 units
Physical Education	8 units
Professional Education	57 units
Human Growth & Development	3 units
Foundations of Education 1 & 2	6 units
Principles & Methods of Teaching	3 units
Education Technology	3 units
Education Measurement & Evaluation	3 units
Introduction to Educational Research	3 units
Guidance and Counselling	3 units
Social Philosophy 1 & 2	6 units
Livelihood & Non-Formal Education	3 units
Community Integration	3 units
Teaching Strategies 1, 2 & 3	9 units
Student Teaching	12 units
Area of Concentration	24 units
Communication Arts in English	
Communication Arts in Filipino	
Science & Health	
Mathematics	
Social Studies	
Music, Art & Physical Education	
Values Education	
Early Childhood Education	
Special Education	
Guidance & Counselling	
Home Economics & Livelihood Education	
Educational Technology	
Other	
TOTAL	149 units

(Source: The International Qualifications Assessment Service (IQAS), 2007)

Appendix O
Course Component of Teacher Education in Malaysia

Component	Course	
	Primary Teacher	Secondary Teacher
Core Subjects	860 hrs	860 hrs
Specialization	230 hrs	547 hrs
School Subjects	693 hrs	252 hrs
Self-Enrichment	97 hrs	135 hrs
Teaching Practice	19 weeks	19 weeks
Extra Curriculum	210 hrs	210 hrs
Total	2090 hrs	2004 hrs
Tutorials	430 hrs	478 hrs
Resilience Program	1 week	1 week
Grand Total	2520 hrs	2483 hrs

(Source: Teacher Education Division, 1992, cited in Mohamad Taib, 2002)

Appendix P
Curricula of English Teacher Education in Vietnam

Language Skills			
Phase I	Listening	Phase II	Listening
	Speaking		Speaking
	Reading		Reading
	Writing		Writing
	Grammar		Translation
Methodology			
Theory and Teaching Methodology			
General Issue in Language Learning and Teaching			
Teaching Language Skills			
Interactive Language Teaching			
English Language Teaching Practice			
Linguistics			
Comparative Linguistics			
Phonetics and phonology			
Morphology			
Syntax			
Semantics			
Sociolinguistics			
Sociolinguistics and teaching methods			
Discourse Analysis			
Culture and Literature			
Introduction to literature			
History of British literature			
British civilization			
British Literature			
American Civilization			
American literature			
International communication			

(Source: The Impact of Vietnam's Globalization on National Education Policies and Teacher Training Programs for Teachers of English as an International Language, Lam, 2011)

Appendix Q
Structure of Foreign Language Teacher Education Curricula in Lao PDR

Course	Duration	Broad areas	Sub-units	Equivalent hours	Credits points
11+3 Foreign Language	36 weeks	- Pedagogy	- General pedagogy	336 hrs	16
			- Teaching method	416 hrs	17
			- Teaching practice	512 hrs	12
		- Academic content	- Foreign languages	1312 hrs	65
Total				2576 hrs	110 cr.

(Source: Teachers and teacher education in Southeast Asia countries, 2002)

Appendix R
List of Experts' Profile

Expert	Professional Experience	Educational Degree	Profession	Disciplinary Expertise
1	20+	Doctorate	Curriculum Developer	Curriculum Development
2	20+	Master's	Curriculum Developer	Curriculum Development
3	15-20	Master's	Curriculum Developer	Curriculum Development
4	15-20	Master's	English Teacher Trainer	TEFL
5	15-20	Bachelor's	Curriculum Developer	Curriculum Development
6	10-14	Master's	English Teacher Trainer	TEFL
7	10-14	Master's	Curriculum Developer	TEFL
8	10-14	Bachelor's	English Teacher Trainer	TEFL
9	10-14	Bachelor's	English Teacher Trainer	TEFL
10	5-9	Master's	Curriculum Developer	TEFL
11	5-9	Master's	English Teacher Trainer	TEFL
12	5-9	Master's	English Teacher Trainer	TEFL
13	5-9	Master's	Curriculum Developer	Curriculum Development
14	5-9	Bachelor's	English Teacher Trainer	TEFL
15	5-9	Bachelor's	English Teacher Trainer	TEFL
16	5-9	Bachelor's	English Teacher Trainer	TEFL
17	5-9	Bachelor's	English Teacher Trainer	TEFL

Appendix S

List of Acronyms

ACoLADE	Raising A wareness, Structuring C onsolidation, Facilitating Assessment for L earning, Enabling A pplication, Guiding D iscovery, Instructing E xplicitly
ADS	Academic Discourse Skills
AUs	Academic Units
B Ed	Bachelor of Education
BA	Bachelor of Arts in Education
BECed	Bachelor of Early Childhood Education
BEEd	Bachelor of Elementary Education
BSc (Ed)	Bachelor of Science in Education
BSEd	Bachelor of Secondary Education
CEF	Common European Framework
CHED	Commission on Higher Education
CIP	Community Inhancement Projects
CLLIPS	C ontextualisation, L earner-centredness, L earning-focus Interaction, I ntegration, P rocess Orientation, S piral Progression
CST	Communication Skills for Teachers
DepEd	Department of Education
DipED	Diploma in Education
EFA	Education for All
EFC	English for Cambodia
ELL	English Language Learner
ESL	English as a Second Language
GESL	Group Endeavours in Service Learning
GTCs	Graduand Teacher Competencies
ICT	Information and Communications Technology
IQAS	International Qualifications Assessment Service
ITP	Initial Teacher Preparation
LEADS	Language Enhancement and Academic Discourse Skills
MOE	Ministry of Education
MOET	Ministry of Education and Training
MoEYS	Ministry of Education, Youth and Sports
MOHE	Ministry of Higher Education
NCBTS	National Competency-Based Teacher Standards

NIE	National Institute of Education
NTC	National Charter of Teacher Competencies
PEFLT	Primary English Foreign Language Teacher
PGDE	Post Graduate Diploma in Education
PstTC	Pre-school Teacher Training Centre
PTTC	Provincial Teacher Training College
PW	Project Work
RTTC	Regional Teacher Training Centre
TCT	Teachers Council of Thailand
TDC	Teacher Development Centre
TEDP	Teacher Education and Development Program
TEI	Teacher Education Institution
TLLM	Teach Less, Learn More
TPACK	Technological Pedagogical Content Knowledge
TSLN	Thinking Schools, Learning Nation
TTI	Teacher Training Institute
UNESCO	United Nations Educational, Scientific and Cultural Organization
V ³ SK	Values, Skills, Knowledge

VITA

Mr. Pum CHEA was born in Kampong Thom province, Kingdom of Cambodia. He obtained his B.A. in English from the University of Cambodia in 2006. He also gained teaching certificates in English-Khmer from the Faculty of Pedagogy in 1999, and English-Educational Psychology from the National Institute of Education in 2008 in Cambodia. He works as an English teacher trainer at Kampong Thom Provincial Teacher Training College. During his work, he has been on a teacher exchange program, Fredskorpset, for eleven months in Kristiansand, Norway. He has over ten years' experience teaching English in a number of schools in Cambodia. In 2011, he won a scholarship to study a Master's Degree in Teaching English as a Foreign Language (TEFL) at the Faculty of Education, Chulalongkorn University, Bangkok, Thailand through the Scholarship Program for Neighboring Countries.

