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Master's Thesis of Arts

**A Study on Cambodia Pre-service
Secondary School Teacher Education with
the Perspective of Teacher Professionalism**

**- Focusing on secondary schools in Kampong Chhnang
Province -**

교원전문성 관점으로 본 캄보디아 중 예비교사교육 연구

- 캄풍츠낭 중등 학교를 중심으로 -

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Province -

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ABSTRACT

A Study on Cambodia Pre-service Secondary School Teacher Education with the Perspective of Teacher Professionalism

- Focusing on secondary schools in Kampong Chhnang Province -

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The purpose of this study is to propose implications for improving Cambodia secondary pre-service teacher education in the view of teacher professionalism. To do so, this study attempts to review the current system and implementation of Cambodia secondary pre-service teacher education and reveal perception of current Cambodia teachers. The survey data in this analysis are from the secondary school teachers in Kampong Chhnang province. Survey, conducted in 2020, provides detailed information on to realistic perception and understanding on effectiveness of pre-service teacher education and teacher professionalism. For analyzing data, descriptive statistics, independent samples t-test, one way ANOVA are performed using SPSS Window 27.0.

The research reveals that firstly, teachers have same degree of extrinsic motivation (monetary reward) and intrinsic motivation (interest in subject and teaching). As previous

research reveals, in developing nations, extrinsic motivation can promote intrinsic motivation of teachers who are facing poverty. It provides evidence to make ‘motivational synergy’ for increasing motivation of Cambodia teachers. Secondly, respondent teachers perceived level of effectiveness to professional identity is the lowest score. Lastly, teachers who perceive professional teacher as ‘highly respected with social status’ have the highest training need for continuous learning. Thus, policy implications for making teachers feel that they are socially respected and valued with high prestige is positively influencing to teachers’ will of pursuing continuous learning and professional development.

Finding suggests three policy implications. First, there needs to be greater need for improving curriculum for teachers’ professional identity. In other words, a focus on technical, competence and knowledge-based teacher professionalism need to be shifted to inner and moral aspect of teacher by developing curriculum and space to allow preservice teachers to shape and reflect on the meaning of teaching, learning and ultimately professional teacher. Secondly, additional one-year (named ‘professional year’) is recommended for enhance Cambodia teacher education credibility and extend career choices that preservice teachers have. Lastly guideline reports on teacher education in developing countries need to be published by professional Korean research institutions. It is because, despite of enhanced global standing and expectation of Korean international development, global education cooperation is not professional yet.

Keyword: Cambodia, Teacher Professionalism, Pre-service Teacher Education, Secondary Education, Secondary Teacher, Teacher Education Policy

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LIST OF ACRONYMS

CPD	Continuous Professional Development
DTMT	District Training and Monitoring Teams
EEQP	Enhancing Education Quality Project
EFA	Education for All
ESP	Education Strategic Plan
GTHS	General Secondary Education and Technical Education High School
ICT	Information and Communication Technology
INSET	In-Service Training for Teachers
ITE	Initial teacher education
JICA	Japan International Cooperation Agency
KDI	Korea Development Institute
KEDI	Korea Education Development Institute
KOICA	Korea International Cooperation Agency
MDGs	Millennium Development Goals
MoEYS	Ministry of Education, Youth and Sports
MOLVT	Ministry of Labor and Vocational Training
NGO	Non-governmental organization
NGS	New Generation Schools Reform
NIE	National Institute of Education
NPRD	National Program to Rehabilitate to international donors
NSDP	National Strategic Development Plan
OECD	Organization for Economic Cooperation and Development
ONSET	on-service teacher training
PCK	Pedagogical Content Knowledge
PISA-D	The PISA for Development

POE Provincial/Municipal Offices of Education
PRESET Pre-service Teacher Training Programs
PSTTC Pre-School Teacher Training Center
PTTC Provincial Teacher training Center
RTTC Regional Teacher Training Center
RUPP Royal University of Phnom Penh
SDGs Sustainable Development Goals
STEM Science, Technology, Engineering and Mathematics
TALIS Teaching and Learning International Survey
TCP Teacher Career Pathway
TCPP Teacher Career Pathway Policy
TEC Teacher Education Collage
TEI Teacher Education Institution
TEPS Teacher Education Provider Standards
TP Teacher Professionalism
TPAP Teacher Policy Action Plan
TTC Teacher Training Center
TTD Teacher Training Department
UIS UNESCO Institute for Statistics
UNESCO United Nations Educational, Scientific and Cultural Organization
USESDP Upper Secondary Education Sector Development Program

APPENDIX

Appendix 1. Written Permission Research Agreement from
'캄보디아학교세우기모임' (NGO)

Appendix 2. Written Permission of Research Agreement from Cambodia 'Glory
international school'

Appendix 3. English survey questionnaires

Appendix 4. Survey questionnaires in Khmer (Cambodian language)

CHAPTER I.

INTRODUCTION

1.1. Background of the Research

It is said that “*quality of education cannot exceed quality of teachers*”. Quality of teaching counts and good teaching requires professionals. Researchers consistently demonstrate that the role of teacher is the most important factor affecting quality of education (KEDI, 2010) and the quality of education ultimately depends on well-trained teachers (UIS, 2021). Internationally, the quality of teacher education has been central focus with the longstanding debates about the teacher professionalism (Menter and Flores, 2021). Sustainable Development Goal 4 specifically requires countries and donors to enhance the quality of their recruitment and training (UIS, 2021). To be more specific, teacher quality in developing countries deeply depends more and more on carefully structured and prepared teacher education (Huberman, 1984; Darling-Hammond, 2000). It is not surprising many studies revealed that teachers with less preparation through pre-service education, tend to have hard time when they plan curriculum, teaching, managing the classroom, and diagnosing students’ level of understanding and learning need even with lower responsibility of their job (Darling-Hammond, 2000).

It is obvious that secondary education in Cambodia has great challenges from low teacher quality. According to the UNESCO Global Monitoring Report (UNESCO, 2015), developing countries including Cambodia are not training enough secondary school teachers. The quantity of Cambodia secondary teachers is not enough and also quality needs to be more

improved with well trained and motivated teachers (UNESCO, 2015). Overall low performance of secondary students affects the next learning results at higher education which is one of the critical elements of national capacity. While several qualities have been discussed that are strongly interconnected with high performance of teachers, ‘professionalism’ through professional training has been considered as the most important quality of ‘good’ teachers.

According to the OECD Teaching and Learning International Survey (TALIS), ‘teacher professionalism (TP)’ is defined as the knowledge, skills, and practices that teachers must have to teach effectively. However, solution for nurturing professional teacher is not homogeneous. Because developing countries are on different stage in teacher education therefore obvious difference is found depending on national contexts (Weeks, 1988). Therefore, teacher professionalism in Cambodia needs to be examined within the issues of pre-service teacher education. There has been great emphasis on academic, technical and structural reform in pre-service teacher education in Cambodia (Tan and Ng, 2012) as adequate knowledge, skills, belief and attitude required for teachers can be taught and trained within the period pre-service education (Lim, 2012). Preservice teachers’ learning experience influence teacher’s future performance in teaching practice, thus, it will be eventually reflected in how they teach their students in actual teaching practice (Bober, 2004; Lee and Paik, 2020).

Accordingly, in recent years, Cambodia government has been active in suggesting new policy to enhance teacher education and teacher professionalism in Cambodia. In 2015, Ministry of Education, Youth and Sports (MoEYS) established Teacher Policy Action Plan (TPAP) from 2015 to 2020 that aims to establish a new vision for the ‘teacher’ (MoEYS, 2015).

In 2019, Continuous Professional Development (CPD) ¹has been suggested for developing teacher professionalism in Cambodia.

Despite continued government effort, most of Cambodia pre-service teacher education is not yet sufficiently prepared for providing systematic pedagogical knowledge and satisfied learning experiences for nurturing professional teachers (Tandon and Fukao, 2015). While governmental teacher education reforms have been planned and implemented, it is still irrelevant to Cambodia school setting and actual classroom without systematic teacher education curriculum. In addition to this, current teaching profession in Cambodia does not attract Cambodia's top graduates lowering overall teacher trainees' academic qualification (Tandon and Fukao, 2015). Furthermore, teacher reform and related policy are not effectively implemented by the legacy of Killing Field resulted that almost 80% of Cambodia's educators and university students fled or died. It resulted in massive under-educated population and unprepared teacher education program all over the country (Steven Prigent et al., 2016).

Then, why is the view of teacher professionalism is needed in the context of pre-service education, even in developing countries? Simply because it provides a vision of teacher education should go (Burke, 1996) and it is described as an important goal of pre-service education in previous literature. Pre-service teacher education research has grown rapidly over the last decade especially in high performing states. In contrast, in the context of developing nations, yet much is known about how pre-service education improvement with the pursuing

¹ In Cambodia, continuous professional development refers to a wide variety of specialized training, formal and informal education, or advanced professional learning intended to help classroom and specialist teachers and school directors improve their professional knowledge, skills, competence, and effectiveness (MoEYS, 2019).

for teachers' professional development. The concept and practice of teacher professionalism is relatively new in developing nations including Cambodia. However, in recent years, Cambodia faces need of social and secondary education changes with increase of knowledge-based society, knowledge-driven economy and globalization with growing attention of critical role of secondary teachers in the country. That said, the role and responsibility of teacher have become complicated and intricately connected with increasing national social needs. Accordingly, research on Cambodia teacher professionalism become forthcoming and it needs to discuss more on secondary teachers' professionalism and improvement of pre-service teacher education with special expectation on Cambodian teachers. Thus, this study adopted the perspective of 'teacher professionalism' in the context of analyzing and suggesting adequate policy to deal with current challenges of secondary pre-service teacher education in Cambodia.

1.2. Purpose of the Study

The purpose of this study is to propose implications for improving Cambodia secondary initial teacher education in the perspective of teacher professionalism.

1.2.1. The Need of the Study

In Korean research of education, much of the recent studies on teacher professionalism is situated within in-service teacher education (Anh et al, 2019), in the context of teacher competency evaluation² (Lee and Lee, 2020; Park et al., 2016) and supportive system

² Teacher competency evaluation can be called as "teacher appraisal for professional development".

development for teacher professional development (Hur, 2018). This study reviewed the literature on Cambodia pre-service education that was published after 2017 based on a fact that there has been great change on Cambodia teacher policy, “*Teacher Policy Action Plan*”, - after being actively implemented in 2016. Some significant research published before 2017 were included since small number of pieces of research on Cambodia secondary pre-service teacher education are conducted. This insight provided by this section will be of value in narrowing research questions and placing this research.

The research of Cambodia secondary teachers’ professionalism seems to be slowly evolving since the concept of teacher professionalism is comparatively new in Cambodia context. Also, there is little research that aims to develop pre-service education with the view of teacher professionalism. It is found that the study on the training need of Cambodia teacher trainee (Bohlinger and Müller, 2019), critical review on Cambodia teacher professionalism by Tan and Ng(2012) addresses similar concerns and issues of Cambodia pre-service teacher education and teacher professionalism with this study. Similarly, there are few relevant researches with the purpose of identifying teacher training needs and Cambodia teacher perception (Bohlinger and Müller, 2019; No and Heng, 2017; Tandon and Fukao, 2015), with the subject of Cambodia teacher professional development policy(Piper and Spratt, 2017; Tan and Ng, 2012). King (2018) provides insights and specific measure to strengthen Cambodia teacher capacity. Duggan (1996) provides a historical background for current Cambodia teacher training. Fergusson and Masson (2006) also provide a historical backdrop for the Cambodia teacher training.

Some studies centered mainly on teacher trainers as the most important factor influencing the quality pre-service teacher education in Cambodia (Courtney, 2017; Ravy and

Kinya, 2019; Van et al., 2018; Zein and Haing, 2017). Vast number of research focuses on specific subject teachers (Math, English, etc.) (Piper et al., 2018; Zein and Haing, 2017) or reviews Cambodia teacher education with the policy perspective (Ogisu and Saito, 2019; Pich, 2017). With the increasing need of ICT teaching method in Cambodia, it is found that several literatures focus on improvement of ICT skills and method applied in teacher education program (Lok et al., 2018; Peacock, 2019). However, in most literature, teachers' professional development tends to be discussed and understood as part of in-service teacher education (MoEYS, 2019; Ahn, 2019) or considered as vague term or concept without dealing with specific Cambodia teachers' perception and practical teacher education issue.

To address the limitations of previous studies, the current study adopted a secondary pre-service teacher education as the main research subject with the view of teacher professionalism. The view of teacher professionalism is greatly needed as it can be great attempt to find the way of improvement of pre-service teacher education.

This study focuses on Cambodia secondary pre-service teacher education rather than in-service teacher education in the view of teacher professionalism. To explore the way to improve current Cambodia pre-service teacher education, this study attempts to find evidence from survey on current teachers' perception on pre-service education and teacher professionalism. The response of current teachers provides actual need of professional development based on their practical teaching experience. Thus, this study assumes that current teachers have more clear perception on effectiveness of initial teacher education and teacher professionalism development than preservice teacher. This study focuses on exploring the way of improvements of pre-service teacher education in Cambodia. Consider the fact that Cambodia is still developing nation, this study assumes that pre-service teacher education in Cambodia has

different concerns and issues compared to high-performing states (Burke, A., 1996). Therefore, this study conducted literature review in two ways, one is reviewing the research on the problem teacher education in developing countries, the other is review teacher professionalism research both in developed and developing nations.

1.2.2. Research questions

The purpose of this study is to propose implications for improving Cambodia pre-service teacher education for secondary teacher in the view of teacher professionalism. This study mainly focuses on review of current system of Cambodia secondary pre-service teacher education in comprehensive manner due to the lack of proper literature on Cambodia pre-service secondary teacher education. To do so, this study provides a basic understanding of Cambodia secondary pre-service teacher education and reveals teachers' perception on pre-service teacher education, teacher professionalism and training need. Therefore, this study developed the survey questionnaires on (1) effectiveness of pre-service teacher education, (2) perceived level of recognition as professionals, (3) training need for professional development. In order to draw meaningful implication for the future pre-service teacher education and teacher professionalism in Cambodia. This study designed the following research question:

- First, what are the Cambodia secondary teachers' perception on pre-service teacher education for Cambodia secondary teachers?
- Second, what are the Cambodia secondary teachers' perception on teacher professionalism in Cambodia?

- Third, what are the Cambodia secondary teachers' training need on teacher professionalism development through pre-service teacher education?

1.2.3. Key research term and definition

Definitions of core concepts used in this study are as followed.

Teacher Education

Teacher education system are categorized into four phases. (1) pre-service education (initial formation), (2) induction, (3) in-service and (4) further expertise education. This study mainly deals with pre-service education.

Pre-service teacher education

Pre-service teacher education is defined as "teacher education before entering a classroom or other educational site as a fully responsible teacher" (ILO, 2012). It can be called as initial teacher education and training. Pre-service teacher education literally indicates that it is 'initial' courses for teacher candidates to acquire proper knowledge, insights, attitudes and create the intellectual and performance foundation for continuous learning throughout the teacher's career.

Secondary education

General secondary education has two phases. One is lower secondary or second stage of basic education, "lasting three years in principle compulsory for students aged 12-14". The other is upper secondary, which is not compulsory and lasts three years. Secondary school provides general, technical, vocational, or college-preparatory courses (Merriam-Webster, n.d.)

Teacher Educator

'Teacher educators' refers to both those who educate teacher college's students (preservice teachers) and those who educate practicing teachers. They help preservice teachers to learn theory of teaching and subject knowledge. Teacher educator is also called teacher trainers, those professionals who educate and train future teachers at tertiary level.

CHAPTER II.

THEORETICAL BACKGROUND

2.1. The Overview of Cambodia Teacher Education

2.1.1. Historical timeline of Cambodia teacher Education

The country left in chaos from the impact of killing field (genocide). Under the Khmer Rouge regime, education system was ruined during the two decades of chaotic political situation and harsh economic condition (Duggan, 1996; Tan, 2007). Before the Killing field, in 1970s, there were 200,000 teachers in Cambodia, but after the eradicating a generation of education professionals by Khmer Rouge regime, only 5,000 teachers remained (Chankea Phin, 2014). Most teaching force was either killed and sent to forced labor in rural areas or fled to neighboring countries as refugees. Duggan (1996) estimates that around 80% of teachers and university students fled or died. In 1975, the national invaluable knowledge was destroyed as the result of terrible turmoil (Tan, 2012; Fergusson and LeMasson, 1997).

Table 2-1. The Change of Teacher Training System since 1980

Lower secondary	Upper secondary
1980-82 (9+1)	1980-82 (10+3)
1982-84 (9+1 and 7+3)	1982-88 (10+3)
1984-1986 (7+3)	1988-95 (10+4)
1986-1989 (8+3)	1995 to date (BA+1)
1989-90 (8+3 and 11+2)	
1990-97 (11+2)	
1997- to date (12+2)	

(Source : No and Heng, 2017)

After the Khmer Rouge, Cambodian government has implemented education policy to strengthen the nation by quickly recruiting teachers even with insufficient education background and provided short-term training. Government effort from 1980s of improving teacher quality started to create greater effect from 1990s (King, 2018). As we see the table above, the fast-track pre-service trainings were prepared for preservice teachers (No and Nguon, 2018). With the course of time, teachers have been more educated.

1980 ~ 1990s

Since the early 1980s, Cambodia teacher education has been policy emphasis. In the early 1980s, to respond to the immediate needs and rehabilitate education system, teachers were recruited from across the county to be trained through short-term courses without sufficient qualification screening (Nath, 1999). Teacher education institutions were established to train lower and upper secondary school teachers. To be more specific, in 1982, Royal University of Phnom Penh provided short term³pre-service training for both lower and upper secondary school teachers (Steven Prigent et al., 2016).

In 1990s, major international partners have invested teacher training with arguing inadequate teacher force in quantity and quality. Since the 1990s, multilateral agencies and international donors have focused and largely invested teacher training and in particular in-service training (Duggan, 1996). At that time, 35 % of Cambodia teachers are poorly trained or untrained at all (Duggan, 1996). At the initial period of development, Teacher Training Centers (TTCs) ⁴started to provide formal and year-long preservice training courses for primary school. During several years, entry levels and the duration of pre-service teacher education at Provincial teacher training centers (PTTCs) was gradually upgraded from 7+1 to 8+2, then to 11+2 in 1994, eventually, 12+2, which is current teacher education period. ⁵ The MoEYS has planned and tries to implement programs to upgrade pre-service teacher (PRESET)

³ One year training period.

⁴ In Cambodia, teacher training centers(TTCs) refers all official higher education institutions that are responsible for nurturing all school level teachers.

⁵ “7+1”, “8+2”, “11+2” or “12+2” means 7,8,11 or 12 years of formal education plus another 1 or 2 years of teacher pedagogical training at TTCs.

and in-service teacher (INSET) training programs (Tan, C. and Ng, P.T., 2012). Specifically, pre-service teacher education requires two years of training in one of the 18 PTTC and the six RTTCs (Regional teacher training centers).

In 1991, “*The Paris Peace Accords*” were signed, after years of civil war and chaotic situations, encouraging free elections organized by the United Nations in 1993. After the Paris Peace Accords, Cambodia has been largely supported financially from the international donors and multilateral agencies. Especially UNICEF and the International Red Cross devoted to rebuilding 6,000 educational institutions and training thousands of teachers throughout the 1990’s (Tan, 2010).

1990~ Present

Since 1990s, heavy investment on whole education system and teacher education in Cambodia. Since 2000, It has been evaluated that the teacher training system in Cambodia changed and restored dramatically (Nishio, 2019). From 2004, the faculty of pedagogy (department of education) in RUPP had become the National Institute of Education (NIE). RTTC and NIE have started to collaborate with Department of Training of MoEYS for improving teacher education, and curriculum and textbooks development (No and Nguon, 2017).

2.1.2. Key Teacher Education Policy in Cambodia

Among various policy reforms, this section reviews only highly relevant reforms and policies to teacher quality enhancement and secondary school development. For enhancing teacher quality in Cambodia, Cambodian government has implemented Teacher Development Master Plan (2010), Teacher Policy Action Plan (TPAP) (2015) and other encompassing education policy such as Education Strategic Plan (ESP).

As one of the frameworks in ESP, TPAP (2015-2020) aims to extend the current two-year teacher training course to four years, and to open Teacher Education Collage (TEC) in Phnom Penh and Battambang by 2018 as a first step (MoEYS and JICA, 2017). Specific strategies for better quality teachers are suggested - teacher supply and demand, increase number of teachers, reforming current TTCs and higher education institutions.

Table 2-2. Recent Cambodia Education Policy Initiative

Year	Policy Initiative	Policy Aims and Purposes
2006-14	Enhancing Education Quality Project (EEQP)	- Supported by the Asian Development Bank, aiming to strengthen the quality of school education by carefully targeting support for (i) Education System Management and Development, (ii) Teacher Professional Development, (iii) Strengthening Secondary Education.
2009-13	Education Strategic Plan (ESP)	- To ensure that all Cambodian children and youth have equal opportunity for access to basic education, both formal and informal, without discrimination and to improve the quality of education
2010-2014	Teacher Development Master Plan	- To improve quality of teachers, curriculum reform, upgrade teacher educator's competency and qualification of teacher candidates.

2014-18	Education Strategic Plan (ESP)	- Ensuring equitable access to education services - Improving quality and efficiency of educational services, Institutional and capacity development for educational staff for decentralization
2015-20	** Teacher Policy Action Plan (TPAP)	<i>- To develop teachers with quality, competencies and accountability in line with their professional code of conduct as well as providing enabling conditions to fulfill profession effectively and efficiently</i>
2015-	New Generation Schools (NGS) Reform	- Improve the quality and relevance of education to better prepare Cambodian youth for the 21C workforce with a particular focus on STEM, ICT and critical thinking.
2018	Upper Secondary Education Sector Development Program (USES DP)	- To support the implementation of key priorities of the Government's Education Strategic Plan 2014–2018 and National Strategic Development Plan 2014-2018 which emphasize improving access to and the quality and relevance of upper secondary education.
2019-2023	Education Strategic Plan (ESP)	- For establishing a robust base for education in 2030 and beyond.

Source: MoEYS, 2015, 2016, 2017, 2019)

Note: **TPAP is highlighted as it is the most important policy initiative on teacher education in Cambodia.

Teacher Policy Action Plan (2015-2020)

Teacher Policy Action Plan (2015-2020) is an encompassing education policy for developing teacher quality and teacher education. For improving quality of Cambodia teachers, TPAP is an extremely important in that it covers most significant issues and concerns related to teacher and teacher education such as legislation and systems related teaching position, teacher trainee attractiveness and assurance of TEI. MoEYS established a teacher policy implementation plan as a step-by-step guideline to implement future reform of Cambodia's teacher training system from 2015 to 2020. Specifically, MoEYS aims to improve the system

of pre-teacher training institutions to enhance teachers' capabilities (MoEYS, 2015). All significant strategies for enhancing pre-service teacher education are included in TPAP. Following sub-strategies of TPAP highlights the importance teacher professionalism.

- ***Key TPAP Strategies related to Pre-service teacher education are followed.***

For achieving the goal of TPAP, strategies actions below are suggested. The detailed strategies of TPAP are:

- Establishment of *legislation and systems* relating to teacher policy
- *Attracting top graduates* to teaching position
- *Assurance* of teacher education system *standard*
- *Establishment* of a teacher education institution
- *Reflecting teachers' opinion* on Teacher education system

TPAP implementation plan consists of a total of 34 detailed strategies based on 1) teacher policy legislation and system 2) teacher competitiveness 3) teacher training system 4) teacher training institution 5) teacher competency development 6) teacher sustainability 7) education manager capacity 8) teacher monitoring and evaluation system. The implementation plan is the most important teacher policy that gives validity to Cambodia's improvement in teacher training. (Anh et al., 2019).

Firstly, for establishing proper legislative system, MoEYS planned to revisit and amend new legislation on teacher policy. A proper legislative system for teacher is greatly in need for making teaching position safe and professional occupation with adequate support. Secondly, for attracting top graduate to teaching job, MoEYS set the plan to enhance overall

teacher compensation system. Thirdly, for assuring of teacher education system standard, enhancement of teacher education system and expand research about teacher education institution in Cambodia. Fourthly⁶, MoEYS plans to upgrade current to TTCs to teacher's college or four-year university and strengthen the capacity of current teachers by establishing more teacher education institutions. Lastly, MoEYS tries to hear and reflect teachers' opinion on teacher education system and modernize teacher education policy by increasing effectiveness of teacher education (Ahn et al., 2019). These specific strategies of TPAP contain and cover the actual need and proper legislative reform for teachers in Cambodia. However, still Cambodia does not have any comprehensive and nationally agreed system for teacher education institution quality assurance and teacher compensation. The legislative system for teacher compensation and TEI quality assurance should be required for enhancing the quality of teachers. For achieving TPAP specific strategies, it is believed that fiscal decision and overall legislative reform and enhancement will be the main issue.

Education Strategic Plan (ESP) 2019-2023

The Education Strategic Plan (ESP) describes the overall enhancement plan for national education, including TPAP and CPD. The ESP was announced in 2019 with providing the latest information on the CPD direction that the Cambodian Ministry of Education intends to proceed in the future. ESP combined all key educational policies that have been established over the past five years and suggest blueprint on teacher professionalism development and teacher

⁶ With respect to actual implementation of TPAP strategies, fourth goal of 'upgrading TTC to teacher's college' is currently implementing by JICA and MoEYS.

capacity (e.g., TEPS: Teacher Education Provider Standards (2016), CPD: Continuous Professional Development (2017), and TCPP: Teacher Career Pathways Policy (2018).

Teacher Career Pathway (TCP)

Teacher Career Pathway (TCP) is one of the short-term goals in TPAP, aiming for promoting Cambodia teachers' professional growth by suggesting professional vision as a teacher so that teachers can continue to pursue career profession. TCP is designed for guiding teacher's career not only as teaching staff but also professional occupational in the field of education. To achieve TCP successfully, MoEYS planned to develop "induction package" including "Teacher Career Pathway", "Teacher Professional Standard", "Teacher Autonomy Guideline" and other relevant documents for all newly commissioned teachers (MoEYS, 2015).

Continuous Professional Development (CPD)

Continuous Professional Development is deeply related to teacher professionalism development. Through Continuous Professional Development (CPD), MoEYS encourages teachers and school directors to become life-long learners within their own professional practice for meeting the needs of life-long learning of teachers and school directors to assist them to improve their professional knowledge, skills, competence, and effectiveness. CPD framework aims to strengthen the functions of centers for teacher development to provide continuous professional development. CPD is a catalyst for the change of attitudes, beliefs, behavior, and practice. It is only through the understanding, application, and evaluation of new methods that classroom teachers and school directors will change their attitudes and practice.

2.1.3. Teacher Education Policy as Human Resource Development

In order to find out the fundamental value and direction of Cambodia teacher education policy, this section attempts to analyze the contents of Cambodia's national development strategy. Cambodia has also actively acknowledged and advocated the value of "*Human Resource Development (HRD)*". Then, what is the controversial point of HRD in relation with the field of education?

Generally, in developing nations, 'educating next generation' is widely accepted as a major instrument for promoting socio-economic development without meaningful consideration of fundamental aims, direction and value of education policy they plan to implement. Without distinct national philosophy on education development and proper vision for teachers' role, education is bound to be considered as means of human resource development and mere 'effective mean' to develop the 'national economy'. In the view of HRD, overall education and teacher education are seen as means of economic development in certain society. In Cambodia policy papers, 'teacher education' is often mentioned in relation with the improvement of HRD and effective means to develop the capacities of all the people in society.

Human Resource Development

Human resource refers to valuable human abilities and characteristics, such as skills, information (knowledge), and moral maturity, that must be equipped to improve the quality of life of the nation, society, and individual people (Joe, 2001). Therefore, the development and management of human resources refers to national and social efforts, including education,

training, and other cultural activities and institutional improvements for the efficient development and utilization of human resources (Joe, 2001). The distinct nature of HRD is clearly revealed in that the pursuit of “competitiveness” is the basis of national strategy through excellent manpower training in accordance with the knowledge-based society⁷. It indicates that the national education development is getting more dependent on human resources. Internationally, the human resource development perspective has become a key national strategy for the development of society and economy in the era of globalization. Although it is understandable that HRD is adopted in the field of education since its definition can contain the educational purposes just as Craig (1976) defines that HRD is about maximizing “human potential in every aspect of life-long learning”, concerns and criticism of overuse of HRD in education policy papers have been arisen. Specifically, educationalists criticize HRD because its ultimate end of education and training is ‘economic’ development while the focus of educationalist is on ‘educational value’ or ‘human potential’ (Joe, 2001). In the same vein, from the view of human resource development, teacher education is understood as the means to develop ‘*teacher capacity*’ and ‘*teacher competency*’. Considering the fact that fundamental value and purpose of HRD is driven by ‘market principle’, it is not surprising that education scholars are strongly opposing the HRD perspective adopted into the education policy. When HRD perspective is applied to the teacher education policy, focus is shifted to more on teachers’ performance and qualification. Because HRD is realized and utilized as teacher eligibility(qualification), career path, teacher evaluation(assessment) related polies (Joe, 2001).

⁷ knowledge-based society refers to a society in which knowledge becomes a key element as a condition necessary for setting common goals, achieving economic development, and securing individual social behavior and status in society by consensus of members of society (Joe, 2001)

Cambodia education policy and HRD

From the policies such as “*Human Resource Development Policy*” (2012), “*Cambodia Industrial Development Policy*” (2015-2025), it has been clearly revealed that the direction of Cambodia teacher policy has been aimed at improving teacher quality by assuring and upgrading teacher qualification and strengthening teacher personal career pathway. There is various evidence that Cambodia government is working hard to achieve ‘HRD’ through STEM education and upgrading teacher education. “*Cambodia industrial Development policy*” (2015-2025) emphasizes skills and human resource development and advocates the principle of ‘human resource development’ through STEM education for secondary students.

“To strengthen competitiveness and enhance productivity of domestic industries; and moving toward developing a technology-driven and knowledge-based modern industry” (Royal Government of Cambodia, 2015)

In addition to this, 2019 policy paper of MoEYS, Overall CPD framework emphasizes *teachers’ knowledge, skills, competence, and effectiveness* that teachers should cultivate for “*becoming successful human resource*” in Cambodia. MoEYS’s Framework of ‘Teacher Career Pathways’ (2018), it is revealed that the policy aims develop education for achieving national growth. To be more specific, “*Teacher Career Pathway Framework*” aims to “strengthen the quality of educational staff especially teachers school leaders and education specialists *to respond to national and international economic and social changes and address education issues*”. As is evident from the recent policy papers of MoEYS, Cambodia government has

made great effort to implement policy related with teacher quality enhancement. Educationalists concern that HRD approach into teacher education can narrow the meaning of teacher education as ‘training’ without the distinguished educational goal for teacher college. For enhancing the quality of teachers in Cambodia, it is needed to pursue the meaning and fundamental value and future direction of teacher education especially in COVID 19 situation.

2.2. Challenge of Teacher professionalism in developing countries

In the context of developing nations, yet much is known about the concept of professionalism and teachers’ professional development. Compared to advanced nations, the concept of teacher professionalism is relatively new. Teaching is not yet much valued as professional practice. In comparison, teachers in advanced society are regarded as people who serve a very crucial work for society, community and their nation (Bek, 2007). Thus, they are recognized as socially responsible, professional profession. Also, overall people recognize that teaching job is respectful occupation and value-added. In comparison, pre-service teacher education in developing country is bound to respond to as a matter of urgency without sufficient quality. Teachers in developing countries are facing poverty and remote locations, poor working conditions, a lack of opportunities of professional trainings and limited interpersonal contact and administrative support. In this sense, teachers’ motivation, challenge and expectation on reward differ with countries and economic condition in communities and schools. Thus, challenge and concerns faced by Cambodian teachers are greatly different from those of ‘advanced’ society. Therefore, this section deals with challenges of teacher professionalism in developing nations and gives an account of how the concept of teacher

professionalism is accepted and what possible explanations of challengeable situation. Challenges suggested below are motivation, social recognition, salary and training paradigm and all challenges are inevitably interwoven.

2.2.1. Being poorly motivated

The period of initial teacher education is very important for preservice teachers as it is the period of 'learning to teaching'. Teacher candidates' faithfulness and high motivation into teaching are prerequisite for them to successfully learn the subject and pedagogy. Pich (2017) contends preservice teachers' perception on teaching and their satisfaction with teaching job can be greatly important research theme to understand for enhancing teacher education. Low motivated teacher trainee cannot commit into learning or focusing on academic discipline for their teaching performance. And it becomes one of the obstacles for teacher professional development in Cambodia. Specifically, World bank (2015) reports that teacher trainers are moderately concerned about unfaithful attitude of teacher trainee such as student teachers' cheating, tardiness, and absenteeism. Teachers and teacher trainees in developing countries are poorly motivated with low levels of job satisfaction due to low status and poor living and working condition. Low motivation of teachers in Cambodia is not a simple matter as it is related with other interrelated factors such as insufficient compensation, social recognition, level of support, academic results of teacher trainee. Low level of intrinsic motivation of overall Cambodia preservice teacher is problematic. It is because student teachers' motivation of choosing teaching position also influence their commitment and ultimately overall teaching quality and teachers' willing to make continuous effort for professional development (Pich, 2017). It is assumed that low motivation is derived from indifference in their academic

development because teaching is not only deeply related to students' academic development but also the teachers' personal academic achievement. Most Cambodia teacher trainees are those who did not academically perform well during high school (Tandon and Fukao, 2015). Previous literature has revealed the importance of academic ability of teacher candidates since qualified teacher trainees tend to have higher levels of job satisfaction. Teacher trainees who have good academic performance are more likely to have higher job commitment and better expectations for supportive and favorable environment such as better pay, working condition, instructional support (Urwick et al, 2005).

There are several motivating factors in pre-service teacher education. For instance, teacher trainee can be motivated by excellent lecture of professor (teacher educator), systematic and informative curriculum, their intrinsic motivation such as interest in teaching and subject, desirable relationship with other teacher trainee and monetary reward and compensation for teachers. Motivations can be categorized into two - extrinsic and intrinsic motivation-. Monetary reward and compensation are considered as extrinsic motivation and interest in teaching and subject is seen as typical intrinsic motivating factor for becoming teachers. When pre-service teacher education fails to motivate teacher trainee with proper motivating factors, teacher trainee cannot concentrate on their training period related with the low quality of teaching in actual school setting (Rautakivi et al., 2019). In comparison, teacher trainees in advanced nations are highly motivated having personal hope, expectation and vivid purpose of choosing teaching profession. Teacher college students in high-performing states highly evaluate the merit of teaching such as independence and autonomy and they desire to change society, serve the nation and to help students of different social backgrounds (Bastick, 2000).

“The degree to which teachers are properly accountable to their clients (children and parents) and their managers has a powerful influence on teacher motivation levels” (Bennell and Akyeampong, 2007: viii)

2.2.2. Social recognizing Education and Teachers matters

Depending on the national environment in which the teaching takes place, degree of recognition of teaching is determined. The low status of secondary teacher is negatively influencing to teachers’ low motivation and deter high commitment into teaching. In most of poor countries and marginalized community, teaching is normally regarded as “employment of last resort” (Bennell and Akyeampong, 2007). The degree of recognition of teacher professionalism indicates certain social understanding on importance and meaning of education and teachers. Accordingly, the social status of the teaching profession may vary based on the national priority and condition of the country. In short, Cambodia teachers are not yet seen as professional occupation with proper expertise.

In comparison, in Korea and Finland, the meaning of education and teaching is highly valued and recognized. Teaching is regarded as high respected profession and adequately paid. Many talented and academic able youth are hoping to become a teacher with desire of being a socially useful person. Teachers are recognized as professionals holding important role in advanced society. They are highly respected and adequately paid with compensation system. Ultimately, how much certain society recognize the importance of education and teaching profession is impacted by the educational attainment in that society. Cambodia’s education level and public recognition on importance of education is very low compared to other high-

performing nations. Considering the fact that how much certain society recognize the importance of education and meaning of teaching and teaching profession is deeply relate to quality of teacher education and teacher professionalism development, it should be priority to raise Cambodia public recognition on role of education and its importance. For example, Finland is supportive to provide preservice teacher proper learning experiences with skills and knowledge combining theoretical understanding and practical skills. Therefore, teachers in Finland are supportive and prepared based on knowledge and research skills with a great deal of autonomy and freedom (Mikkilä-Erdmann et al., 2019).

2.2.3. Low salary

Even though Cambodia secondary teacher salary has been increased, most of teachers in developing countries are underpaid and their wage can cover only their most basic subsistence needs. Unsatisfied level of salaries clearly shows the low status of teaching job and low recognition on importance of education. It is also related to Cambodia teachers' low occupational self-efficacy and de-motivating factor. It can be said that being a professional teacher is highly influenced by the matter of teacher salary compared other profession. In this sense, low and unregular salary of teacher in less-developed countries indicates poor social recognition and national attention on teaching job. Also, low salary is deciding factor on quality of teacher candidates because it is related matter of attractiveness of teaching profession. To enhance the quality of teachers in developing countries, attracting talented and academically able students is important task. In contrast, starting salary for teachers in high performing states is comparable to other professions. For instance, Singapore is on a level with the salaries of engineers and other professionals so that career can attract high performing students.

In developing countries, because of the low salary, when teachers cannot afford to support their family and their living conditions or they are extremely poor, they are prone to hold additional job for earning more money and “it creates divided attention and loyalty to teaching and deters to build teacher professionalism” (Bennell and Akyeampong, 2007). The ILO (1991) is also be of the same opinion, arguing that ‘low salaries may be root cause of brain drain some less-developed countries where salaries are too low to support a family and teacher feel it necessary to take a second job’ (ILO, 1991; Bennell and Akyeampong, 2007). Holding additional job leads to lack of time to develop teachers’ own professionalism.

2.2.4. Teacher “Training” Paradigm rather than Teacher “Education” Paradigm

In Cambodia context, teacher education institution (TEI) is often called as Teacher training center (TTC). When we call teacher ‘training’, the whole phases of teacher education are seen as simple and shortening program. The short period of pre-service training in developing countries to just one or two-year in TTCs has also “lowered the overall standing of teaching profession” (Bennell and Akyeampong, 2007: 9). However, to meet the immediate national need, Cambodia government has to choose train teachers in short-term. Therefore, the teacher ‘training’ paradigm has become dominant and common concept in the Kingdom. In that paradigm, trainee is regarded as ‘passive learner’ who are under the authority and control of the trainer. Normally, ‘training’ emphasizes the acquisition of skills and knowledge, thus, teacher professionalism can be understood narrowly that emphasizes the acquisition of mere skills and knowledge implemented by the state to enhance the efficiency of schools. Therefore, it is necessary to shift from a training paradigm to education paradigm. That is because teacher

“education” paradigm is more comprehensive, continuous, in-depth, learner-centered and learner-driven.

2.3. Pre-service Teacher Education in Cambodia

According to MoEYS (MoEYS official homepage, 2021), the primary objective of teacher education program is “to ensure an effective supply of teachers for all education levels so as to respond to the education system expansion through upgrading the competencies of TTC managers and education administrators, teacher trainers, school principals and other key staff of the MOEYS. The second objective is to ensure that the number of new intakes all of TTCs and the NIE and the subsequent deployment of new teachers should favorably respond to the growing for teachers in rural and disadvantaged areas through the recruitment and training of teacher trainee from these targeted areas as well as from the areas inhabited by ethnic minority people”. Cambodia secondary schools are divided into public and private school. Public teachers get official licensing from government after completing training at RTTC, TEC, NIE while private school teachers do not necessarily need national certification for teaching.

2.3.1. Secondary Pre-service Teacher Education Institution in Cambodia

Teacher education institution (TEI) are often called as teacher training center (TTC) in Cambodia. TTCs are categorized into four kinds depending on each school level. Preschool teacher training center (PSTTC), primary for provincial teacher training center (PTTC), lower secondary for regional teacher training center (RTTC), and upper secondary, conducted by the National Institute of Education (NIE).

For secondary school teacher, there are three kinds of training centers. 1) There are Six regional Teacher Training Centers (RTTCs) and two Teacher Education College (TEC)⁸ to train lower secondary school teacher trainees for two years 2) There is one National Institute of Education (NIE) provides one-year teacher training course to bachelor's degree holders to prepare them for upper secondary school teacher placement. NIE is located in Phnom Penh.

Table 2-3. Current Cambodia Lower Secondary Teacher Education System

Lower Secondary teacher training				
Type	Year of Training	Entrance Qualification	Entrance exam	Graduation exam
6 Regional Teacher Training Centers (RTTCs)	2 years	Complete at least high school (Pass of national leaving examination (grade 12 exit exam))	Three subjects - Two subjects from the specialization chosen to teach - one elective subject and general culture	Two subjects - Their specialization - In general culture and pedagogy
2 Teacher Education College (TEC)				

Source: Author summarized key findings from Prigent et al., 2016; Duthilleul, 2004.

⁸ TEC is relatively newly established by JICA and Cambodia government. It provides primary and lower secondary pre-service teacher education.

Table 2-4. Current Cambodia Upper Secondary Teacher Education System

Upper Secondary teacher training				
Type	Year of Training	Entrance Qualification	Entrance Exam	Graduation exam
A National Institute of Education (NIE)	1 year	To bachelor (4 years university) degree holders	Four subjects two subjects of their specialization, and in general culture and pedagogy.) and foreign languages	Five subjects two subjects of their specialization, and in general culture, pedagogy and foreign languages

Source: Author summarized key findings from Prigent et al., 2016; Duthilleul, 2004.

All applicants should pass entry exam to be admitted into teacher training program in RTTC and NIE and to be graduate each training courses. The number of TEI is not sufficient to education preservice teachers in whole nation. And TEIs are usually located in urban areas. Better access to TEI can encourage and attract more talented high school graduates who are living in local communities in to teaching position.

Table 2-5. Secondary Teacher Education Institution and Location

Education Target	Institution		Location
Lower Secondary Teacher	RTTC	1	Battambang
		2	Kampong Cham
		3	Kandal
		4	Phnom Penh (capital)
		5	Prey Veng
		6	Takeo
	TEC	1	Phnom Penh (capital)
		2	Battambang
Upper Secondary Teacher	NIE	1	Phnom Penh (capital)

Source: Author summarized key findings from Tandon and Fukao, 2015.

Regional Teacher Training Center (RTTC)

On July, applicants for RTTCs should ‘submit their applications to Cambodia’s Provincial Offices of Education and take a TTC entrance examination in October. The semester starts on the first of November (Tandon and Fukao, 2015). Candidates’ examination scores are rated. Based on the score, candidates are accepted by MoEYS based on available positions. To become a lower secondary school teacher, one must graduate from secondary education and

undertake a two-year pre-service training at one of the six regional teacher training centers⁹. Trainees in RTTC got pedagogical training in two areas of study including mathematics, biology, physics, chemistry, English, home economics, and Khmer literature, qualifying them to teach lower secondary level students (7th, 8th and 9th grades).

National Institute of Education (NIE)

National Institute of Education (NIE) is responsible for the training of upper secondary school teachers, principals and school administrators. NIE is located in the capital city of Phnom Penh and was firstly established in 1914, is one of the oldest higher education institutions in Cambodia. It is the one of the government's institutions, which is managed under and be under the direct supervision from the MoEYS (MoEYS, 2017). To become upper secondary school teachers, one must graduate university and then should be trained in a one-year pre-service training at NIE. Only NIE serves as a training center for upper secondary school teacher candidates. All teacher candidates took four weeks of practical training courses (practicum) in part of pre-service education.¹⁰ The NIE course is designed in accordance with the national curriculum and are required to include curriculum covering the National teacher standards for their respective subsectors (Prigent et al., 2016; Duthilleul, 2004).

⁹ RTTCs are located in Phnom Penh, Battambang, Pre Veng, Takeo, Kampon Cham, and Kandala Provinces which are sub-urban areas in Cambodia.

¹⁰ taken in early July and the results are announced in late August.

Teacher Education College (TEC)

Teacher Education College (TEC) is teacher's college for cultivating primary and lower secondary school teachers. Based on TPAP action plan, Cambodia government is required to appoint only to primary and lower secondary teachers who hold bachelor's degree in education (MoEYS, 2015). To implement TPAP effectively, the government with Japanese government, has established a four-year university, TEC in Phnom Peng and Batambang province from 2018 for attracting new students to nurture good teachers. Existing PTTC and RTTC has been elevated from current status and to a four-year university of education, TEC. TEC is to operate a "12+4" teacher training course for preservice teachers. TEC provides education chance to high school graduates who want to become elementary or middle school teachers. Through TEC, college students can be qualified as teachers by completing a four-year education college course at TEC (Ahn et al., 2019). MoEYS planned to change the existing RTTC to a four-year bachelor's degree and develop it into a TEC (MoEYS, 2015). However, all RTTC cannot be upgraded into TEC in short-term, they are currently selected as TECs to provide bachelor's degree only in Phnom Penh and Battambang, converting RTTCs and PTTCs from both regions to TECs. Upgrading all RTTC is expected to take a very long term as it requires a huge investment in infrastructure and human resources.

RUPP (Royal University of Phnom Penh)

The Royal University of Phnom Penh (RUPP) is not officially responsible for educating preservice teachers. Rather, it provides in-service teacher education program including teachers, school (vice) principal, administrator. RUPP is the oldest and the largest

public university in Cambodia with the only single scientific and renowned academics in Cambodia. In 1966, the renamed Royal University of Phnom Penh remains as Cambodia's only university. Mainstream university programs were not re-established until 1993(Duggan, 1996). RUPP provides BA+1 as in-service teacher education since 2006, RUPP has provided BA+1 Teacher Training Track as in-service teacher education.

2.3.2. Analytic Framework of Cambodia Pre-service secondary Teacher Education

This chapter summarizes the pre-service education for secondary teacher in Cambodia with four analytic framework - *Teacher Trainee, Curriculum, Teacher Educator, Educational Condition* based on relevant literature on pre-service teacher education (Joe, 2005; KEDI, 2020; UNESCO, 2015). Thus, this study set four analysis criteria for pre-service teacher education policy and implementation by retrieving criteria and analytical framework from Joe (2005), KEDI (2020), UNESCO (2015).¹¹

Table 2-6. Four Analytic Framework of Pre-service Teacher Education

Dimension of pre-service Teacher Education Policy	Policy Aim	Main Task
1. Teacher Trainee	Attracting high performing candidates	<ul style="list-style-type: none"> - Reform of Teacher Candidate selection (screening) process - Improving socio-economic status of teacher - Providing benefit and scholarship
2. Curriculum	Training professional and competent teacher	<ul style="list-style-type: none"> - Program content quality enhancement - Strengthen practicum experience - Proper character cultivation program - Teacher education institution program quality assurance process
3. Teacher Educator	Having high quality teacher trainer	<ul style="list-style-type: none"> - Checking Profile and - Qualifications of teacher educators
4. Educational Condition	Supportive system and management	<ul style="list-style-type: none"> - Lengthen the duration of education period - Securing supportive system of practicum - Prepare proper educational condition

Source: Author summarized key findings from Joe, 2005; KEDI, 2020; UNESCO, 2015.

¹¹ UNESCO (2015) published 'Teacher Policy Development Guide' for supporting the realization of the teacher related target in SDGs and facilitating the development of national teacher policies with emphasizing the role of teacher to achieve the SDG 4, supported the realization of the teacher target in SDGs and facilitate the development of national teacher policies.

Teacher Trainee

Teaching profession in Cambodia does not attract Cambodia's top high school graduates. Most teacher trainees are those who did not perform so well at high school at the same time very few teacher candidates have satisfied scores on the high school graduation exam (Tandon and Fukao, 2015). According to 2016 KDI report, Cambodia high school students who finished their high school and enter TTCs for their teaching career are often those who graduated with low or very low grades (D¹² - satisfactory or E - limited achievement). There are various reasons for this. Firstly, there is high possibility that students who are not accepted by universities are bound to apply TTCs as their last choice (KDI, 2016; Tandon and Fukao, 2015). Insufficient academic ability of teacher trainee can be problematic for student achievement and learning when teacher trainees become teachers. Secondly, a further reason may be that students who took their entrance exam at TTCs said the perceived level of entrance exam selection was too easy to, and thus lacking in its assessment function (Tandon and Fukao, 2015). Therefore, the school record of TTC candidate is lower than those of other university applicants because of the easy admission process of TTC.

¹² The scale according to the Department of General Secondary Education is : A=Excellence, B=Very Good, C=Good, D=Satisfactory, E=Limited Achievement, F=Fail

Curriculum

In curriculum for Cambodia secondary teacher education, every student teacher needs to take common course, courses of specialization and practicum. The length and contents of training is not identical but vary in different TTCs by different regions. Curriculum of RTTCs and NIE are designed in accordance with the national curriculum (Tandon and Fukao, 2015). In terms of distinction between lower secondary education and upper secondary education, lower secondary education and upper secondary education have a lot in common in that they are advanced level of basic education. However, it is clearly distinguished in several ways. In most countries, lower secondary education is considered as the compulsory education requirement while upper secondary education is neither compulsory nor free. Also, they have different purposes and educational goal. Lower secondary education is final phase of basic education with purpose of cultivating basic knowledge and skill while upper secondary education provides more advanced and systematic knowledge at the same time preparatory stage for higher education. Cambodia and Korea provide compulsory nine years (until lower secondary education) of free education to public school. Accordingly, with the consideration of distinguished educational goal between lower and upper secondary education, each teacher education curriculum needs to be designed with specialized purpose.

RTTC Curriculum (Lower secondary)

In the RTTC course, fourteen weeks of practical training in total is included (6 weeks in the first-year and 8 weeks in the second year). The lower-secondary school teacher training is conducted for 2,830 hours in two years' period. All year 1 trainees undertake a six-week

teaching practice where they observe real classroom teaching, Year 2 trainee undertake an eight-week teaching practicum (Tandon and Fukao, 2015). Due to limited availability of current official curriculum of RTTC, it cannot be fully covered in this study. However, it is helpful to know that according to an expert view, curriculum of TEC is quite similar to the curriculum of RTTC.

TEC Curriculum (Lower secondary)

Subjects provided from TEC are categorized into five subjects. (1) Education Studies, (2) Academic Subjects, (3) Language Enhancement and Academic Discourse Skills (LEADS), (4) Essential Course, (5) Practicum. TEC provides lower secondary teacher education program. In the lower secondary teacher preparation program, student teachers will be divided into several specialized courses, according to their interest and entrance exam scores. Provided subjects are (1) Khmer (2) Mathematics (3) Physics (4) Chemistry (5) Biology (6) Earth and Environmental Science (7) History - Geography (8) Moral Civics (Home Economics, Health Education) (9) Art (10) English (11) French. The subject of Art (Music and Visual Arts) is added as a specialized subject because this subject is very important for national identification and because some schools in some provinces do not have teachers for teaching Art.

Table 2-7. Allocation Credits per Subject of TEC curriculum

Unit : Credit

Subject	Year 1	Year 2	Year 3	Year 4	Total
1. Education Studies	5	6	6	1	18
2. Academic Subject	20	15	10	10	55
3. Curriculum Studies					
1) Non-foreign language course	-	3	3	6	12
2) Foreign language course	-	6	6	12	24
4. Language Enhancement and Academic Discourse Skills (LEADS)					
1) Non-foreign language course	5	3	3	3	14
2) Foreign language course	2	-	-	-	2
5. Essential course	1	1	4	3	9
6. Practicum	2	5	5	10	22

Source: Teacher Training Department (TTD¹³), 2018

Note: per 1 credit, 15 classroom hours lecturing (with 30 hours of self-study) or 30 classroom hours laboratory/ workshops (with 15 hours of self-study) or 45 practicum hours.

The practicum courses are compulsory for all student teachers. During their teaching practice (practicum), trainee have their own school mentors and cooperating teachers and they are provided with systematic observations, assistance and advise based on their teaching practice.

¹³ TTD supports and manages the operation of TTC throughout Cambodia except for NIE. TTD provides operation plan of TTC, curriculum development, and trainee selection process (Yoo et al., 2017).

NIE Curriculum (Upper secondary teacher)

The NIE teacher education program consists of three components, including (1) common education theory courses, (2) courses of specialized subject and (3) practicum (teaching practice). Preservice teachers in NIE must complete a practicum and pass final examination to graduate. All courses have required hours. Detailed training hour is as followed.

Table 2-8. Number of Teaching Hours for Each Class per Week

Domain	Courses	Hour	Number of Hours per week
Common courses (For all Student)	1. Psycho-pedagogy	4 hours	14 hours
	2. General Culture	1 hour	
	3. Professional Ethics	1 hour	
	4. Academic Administration	1 hour	
	5. Research Method in Education	2 hours	
	6. English or French Language	2 hours	
	7. Information Communication Technology	2 hours	
	8. Arts	1 hour	
Courses of Specialization	1. Courses of Specialization	8 hours	18 hours
	2. Teaching Methodology of Specialization	4 hours	
	3. Teaching Practices for Courses of Specialization	6 hours	
Practicum	One-month teaching practices at upper secondary schools		

Source: NIE, 2017

Note: NIE provide 32 hours class per week, total 34 weeks.

NIE provides 18 specialized subjects as of 2017. Provided subjects are (1) Khmer Literature (2) French Language (3) English Language (4) Civic Education (5) Animal Husbandary (6) History (7) Geography (8) Chemistry (9) Biology (10) Agronomy (11) Physics (12) Mathematics (13) Earth Science (14) Information Technology (15) Economics (16) Mechanics (17) Electricity (18) Electronics.

Teacher education curriculum is critically important since it is the first source of knowledge of preservice teacher and systematic knowledge become cornerstone of professionalism. However, there are concerns and criticism of teacher education curriculum. Firstly, teacher education program has difficulty integrating theory taught by TTC and teaching practice required from actual school setting. It is found that overall Cambodia curriculum is disconnected and irrelevant to actual school setting. (Tandon and Fukao, 2015). Irrelevant curriculum deters Cambodia preservice teachers' deep learning and quality learning experience. Cambodia pre-service teacher education has been failed to integrate teacher standards into the TTC. Secondly, national teacher education curriculum is not standardized yet. Education experts worried of the problem of 'incrementalism'. Cambodia teacher education curriculum is mostly designed by international experts and multilateral agencies, the curriculum has become eventually tweaked and modified in bits and pieces not in a comprehensive manner (World Bank, 2014). In addition to this, current curriculum which does not particularly meet the emerging requirements, insufficient and obsolete training materials (Aun and Wareerat, 2016).

Teacher Educator

Cooperated with multilateral agencies, Cambodia government provides training program for teacher trainer. As of 2016, RTTC in Phnom Penh has 93 teacher educators. RTTC has been involved in educating teacher trainer in Cambodia. In 2017, RTTC directly provides education program for teacher educator as weekend course supported by TTD in Cambodia. Recently, Cambodia government adopted and modified Singapore curriculum for teacher educator. From 2018, Cambodia government has planned and prepared teacher educator to earn a master's degree (Yoo et al., 2017). According to World Bank (2015), Cambodia's teacher trainers are not adequately prepared to instruct sufficient content mastery and student-centered pedagogy. Overall poor capacity of teacher trainers has been mentioned as main problem in Cambodia teacher education (Tandon and Fukao, 2015; Aun and Wareerat, 2016; Zein and Haing, 2017).

The curriculum and classroom management are not in harmony (Tandon and Fukao, 2015). National teacher training goal, curricular guidelines, and actual teaching practice in TTC classrooms are disconnected without any agreed form and standard. Problems include the absence of teacher educator job standards and proper guidelines for teacher education and management of courses, dealing with the dilemma of gap between the curriculum and actual school setting, and few chances for teacher educator to develop professionalism and expertise (Yoo et al., 2017). The teaching environment in the average TTC is teacher (educator)-centered and far from interactive and discussion. Teaching method and strategies are not diverse, almost lesson and lecture are based on cramming education with little feedback or applied activities. As reported by one tertiary professor:

“The embedded model of hierarchical relationships between teacher and pupil, where the focus is on teaching rather than learning, means that there has been no historical aim towards developing a facility for lifelong learning”
(Van et al., 2018).

Thus, there should be appropriate and sufficient instructional materials, a variety of presentations, debates, and especially good interactions between students and trainers. It requires more freedom and responsibility of trainee students. In other words, trainee students should be active learners who freely explore the content, autonomously analyze education resources and information they are given (Aun and Wareerat, 2016). According to Zein and Haing (2017), good teaching in teacher education needs highly qualified and well-trained teacher educators related teaching subject. Academic background in subject teacher educators teach is the important requirement for providing quality teacher education. However, the important role of teacher educator in teacher education has not been acknowledged, remaining being little research on teacher educator in Cambodia pre-service teacher education (Zein and Haing, 2017). Not much of Cambodia teacher educators does not have proper academic qualification and fail to provide meaningful contents master and do not utilize student-centered teaching method (Pich, K., 2017; Zein and Haing, 2017). For supporting Cambodia teacher educator, there is significant importance of providing adequate support for enhancing their academic qualification with useful field experience. Zein and Haing (2017) revealed the fact that when teacher educators have higher qualifications on their subjects, it will positively influence on students' motivation and learning result.

World Bank (2015), most RTTC trainers are university-educated. qualification and education background of teacher trainers have been increased. 90 percent of TTC trainers attended a teacher trainer program. Every teacher trainer is Cambodian. Most TTC trainers have teaching experience. About 70 percent of them are former teachers, and another 10 percent are former school director (principal, vice principal). About 15 percent do not have teaching experience. Additionally, most teacher educators in developing countries work in poor environments without sufficient provision of educational resources, administrative and collegial support. This poor support is related to low effectiveness of teacher education. 2015 World Bank report revealed the reality that teacher educators have ‘little contact with other teacher educators and colleague, “few visits from directors, and little input from Provincial Offices of Education about their classroom work”. Such isolation is not only negatively impact on continuous development of teacher educators, but also student teachers’ meaningful learning (Tandon and Fukao, 2015).

Education condition

According to World Bank survey on teacher educator (2015), teacher educator express concerns about the availability of education facilities and educational materials they need for teaching. Trainers reported that lack of teaching materials is major hinderance for good teaching. Fata and Heng (2017) also found that there is growing satisfaction on availabilities of bathrooms and library, learning materials. Currently, education condition and facilities of Cambodia TTCs have been developed. However, it is not fully prepared to meet the increasing technological demands and preservice teachers’ professional growth. As of 2015, most TTC

have basic infrastructure for internet connections, but actually only half of TTC students can utilize and access them (Tandon and Fukao, 2015).

With respect to intensity and duration of pre-service teacher education, secondary teacher education in Cambodia is one-year or two-years requiring low level of commitment and time for preservice teachers. Trainees are usually unable to obtain adequate knowledge within the short-term duration. Most of pre-service education is short-term, “meeting the immediate pedagogical needs of practicing teachers, compensating for the deficiencies of their earlier training, and reforming current pre-service teacher education practice” (Burke, A., 1996). It is not surprising short-term teacher training in developing countries is less effective resulting in less satisfaction with their preparation and less commitment of teaching (Darling-Hammond, 1989). If teachers need to be assigned to work for skillful teaching as a teaching profession, considerable period of time and effort are needed. Skillful, knowledgeable expertise, autonomous decision-making performance cannot be achieved by a single time and one occasions, rather it takes sufficient period of preparation and intensive learning (Darling-Hammond, 1989; Kim and Joe, 2003; Kim, 2006; Kim, 2007). As teaching professions, much effort and period are needed to be prepared to take responsibility for themselves. Every professional occupation needs immersion courses with sufficient length and systematic knowledge that is required for achieving skillful tasks (Kim, 2007). Cambodia lower secondary teacher education institution, RTTC provides 20 months (2 years) pre-service teacher education while NIE provides 10 months (1 year) teacher education. Considered the fact that teacher trainee could not take any teacher education courses under the undergraduate courses, 20 months for lower secondary teacher and 10 months for upper secondary teachers seems to be

short-term to be sufficiently prepared. Short period of teacher education negatively impacts on acquiring adequate knowledge and skills for teaching.

Secondary preservice teachers need enough times and opportunities to deeply learn content knowledge and teaching method within the pre-service teacher education period. Hargreaves and Fullan (2012) conclude that it takes 10,000 hours to be professional teacher. It indicates that there should be great investment on teacher education with the aim of making them professional capital. For aiming Cambodia teachers as professional occupation, pre-service teacher education should be more intensive and provide longer education period to prepare teachers. This short-term training may lead to low mastery knowledge and skills essential. Unlike systematic curriculum in developed nations, teachers in developing nations have low confidence in their basic knowledge and teaching capacity.

In this sense, short-term training and low level of required efforts can be factors negatively influences teacher professional identity in developing nations. Even in the context of Cambodia, short-term teacher training is inevitable, it is obvious that it deters teacher candidates learning and acquire of subject and pedagogical knowledges. In addition to this, inadequate quality and short-term pre-service teacher education can deter the attracting talented youth into teaching position and teachers' low occupational self-esteem. If certain occupation wants to be recognized as professional, pre-service education for preparing that job should be professional as well.

2.4. Literature Review

2.4.1. The Studies on Pre-service Teacher Education

Internationally, much attention has been paid in the last decades to initial teacher education (Macbride, 1996). (Darling-Hammond, 1990 ; 2016). Previous literature commonly believes the fact that initial teacher education is key to the teacher quality and performance (Bullough, 1997; Malm, 2009). In western education areas of research, there are critical advances in research on initial teacher education occurred in the 1990s and early 2000s (Darling-Hammond, 2016). Various researchers (Darling-Hammond, 2000; Phelps, 2006) took a positive attitude towards ‘teacher professionalism’ as it provides highest standards for teacher education and teachers’ professionalism can be developed through effective pre-service teacher education.

Vast amounts of research (Le Cornu, R., and Ewing, R., 2008; Bullough, 1997) on pre-service teacher education has demonstrated that adequate teacher training and experience are key factors of teachers’ attitude formation on continuing professional development. Teacher initial preparation functions as nurturing necessary set of attitudes of pursuing professional excellence and continuous self-development as teacher. Swedish researcher Malm (2009) also asserts that existing knowledge and beliefs of teacher trainee has a critical since it create their initial perspective on role of professional teachers (Malm, 2009).

Bullough (1997) also emphasizes the fact teacher professional identity is deeply related to teacher education development. He theorized about teacher identity commented on relation between teacher professionalism and initial teacher education. It is because that teacher

candidates learn subject knowledge, skills, proper attitude, views and value on teaching and education that is needed for future duty as teaching profession.

Macbride (1996) contends that pre-service teacher education is critical period in that it determines teacher candidate's set of values and views of teaching, professional confidence, occupational identity and self-efficiency through delivered contents as well as trainer's sincerity, trustworthiness, attitudes, experiences and beliefs on teaching job. As an educator and influential scholar, through her research studies, Darling-Hammond (1990) continuously emphasizes the importance of teacher education explaining that, on the pre-service education period, thoughtful, reflective and effective teaching should be provided so that pre-teachers have precise and uncompromising knowledgeable grounding to understand how their future students learn in particular ways". Also, while preservice teachers are studying "learning theory and pedagogy and in professional ethics, preservice teachers can responsibly resolve dilemmas of teaching practices" (Darling-Hammond, 1990). Therefore, for developing TP through initial teacher education, high quality and systematically planned pre-service education program should be provided for teacher students.

Korean scholar Yun (2002) argues that main problems of pre-service teacher education are insufficient attracting and selecting policy and not enough benefit for attracting talented high school graduates, absence of distinct and unique identity and purpose of teacher's college, weak teaching practice(practicum), poor education condition and support, weak quality assurance(screening) system for teacher education institution. Lee (2020) points out the problem of Korea teacher education, it too much focuses on providing subject knowledge and teaching expertise while it cannot guarantee the development of preservice teachers' personality and proper disposition and attitude as a good teacher.

Also, Lee (2020) added that there is no need to distinguish between knowledge-based professionalism and personality development. Rather, goal of teachers' knowledge expertise and personality development should go together in an integrated manner for enhancing the quality of pre-service teacher education curriculum and contents. Lee and Paik (2020) also address problems in pre-service teacher education in Korea with four agendas - (1) selection standards, (2) educational curriculum, (3) practicum, (4) employment examination. A study by Yun and Shin (2006) concluded that policy for TP should be focusing more on 'curriculum improvement' and content of teacher education program especially in accordance with the national teacher qualification or teacher standard. Many scholars (Lee and Paik, 2020) stress out the importance of school-based teaching in pre-service teacher education for narrowing gap between curriculum and educational site.

There is common consensus in the literature on pre-service teacher education arguing that balance between theory and practice. It needs to narrow gap between curriculum and actual school setting, the role of teaching practice(practicum) and supportive system for practicum are critically important (Jeong et al., 2010; Lee, 2015; Park et al., 2016). Practicum is the distinguished feature of teacher education in comparison to other profession. Scholars (Joe, 2005; Wilson and I'Anson, 2006; Ko, 2019) emphasize that practicum is critically important learning experience of diverse problematic situations in actual school setting that gives chance to shape proper attitude and professional attributes that is required for teachers in actual educational site. Scholars on pre-service teacher education converge on describing features of pre-service teacher education, characterized by balance between theory and practice (Koh, 2018).

Found from the various literature on teacher education, pre-service teacher education

should not be fragmented and rather be in continuous manner. In other words, it needs to be designed “*as a part of an integrated professional development model*” to help preservice teachers to pursue “*ongoing professional development throughout a career*” (UNESCO, 2019). Previous literature believes that the ultimate goal of teacher education is to develop teacher professionalism. Therefore, the view of teacher professionalism is greatly needed as it can be great attempt to find the way of improvement of pre-service teacher education.

2.4.2. The Studies on Cambodia Teacher Education

Vast of research on Cambodia teacher and studies on teacher education were conducted in historical approach (Fergusson and Masson, 2006; Duggan, 2010; Pov and Kawai, 2020) rather than comprehensive systematic and structural manner. Literature on Cambodia secondary teacher education focuses on specific (or regional) cases and project conducted by international partners. In addition to this, there is growing attention on specific subject teachers such as English (Lim, 2020) and STEM¹⁴ subjects (Jane, 2007; Chun, 2017) and literacy (Piper et al, 2018). Furthermore, with the increasing demand and need of ICT and web-based learning(teaching) method, actively studied on teaching method within Cambodia teacher training (Mednick, 2017; Lok et al, 2018; Peacock, 2019).

Regarding the teacher professionalism in Cambodia, few research including Tan and

¹⁴ STEM: Science, Technology, engineering and mathematics. Currently, Cambodia government promotes STEM majors for burgeoning Cambodian economy. STEM includes agricultural and environmental sciences, biological sciences, engineering, health, natural science, and information technology (L. Perez-Felkner et al., 2020)

Ng (2012) and King (2018) provides a picture of reality of Cambodia teacher professional development. King (2018) examines Cambodia teachers' professional development within the context of certain project named 'District Training and Monitoring Teams (DTMTs)' which is established by moeys and UNICEF. King (2018) suggests expanded model for Cambodia teacher capacity development, which includes school-based training, incremental training and ongoing training for teacher trainers and principals. Tan and Ng (2012) comprehensively examines the reality of Cambodia teacher professionalism development using Hargreaves (2000)'s four ages of teacher professionalism and professional learning to analyze the discussion. Specifically, among several dimensions of TP, Tan and Ng (2012) concludes that Cambodia teachers aims to become "autonomous professionals in terms of curriculum interpretation and pedagogical improvements". This research has value in that it can prove possibility of international comparative study on teacher professionalism between high-performing states and Cambodia. However, study is limited in that its analytic tool of the study Hargreaves (2000)'s theory of teacher professionalism is developed by high-performing states. Thus, much attention to contextual and historical factor and realistic improvement has to be made.

Rautakivi et al (2019) shed the light on the reality that Cambodian teachers have limited time and energy to do self-research for knowledge development or professional development as teacher. From his research Rautakivi et al (2019) concluded from their stud that professional development was the first rank of extrinsic work motivation of public secondary school teachers. From his study, Ratutakivi et al (2019) found that Cambodia secondary teachers already realize the importance of professional development and one of the hinderances of Cambodia teachers' professional development is revealed as 'low salary'. In the

context of developing country like Cambodia are less paid than teachers in advanced country, and it diminish the chance of developing their professionalism having secondary career for money (Rautakivi et al, 2019). It is surprising that Cambodia teachers deeply recognizes the importance of professional development amidst the poor condition. Fata and Heng (2017) provides baseline data for better TPAP implementation with Cambodia teachers perception on prior pre-service teacher education experience, satisfaction and motivation level, challenges for professional development. Fata and Heng (2017) resulted in low attractiveness of teaching profession in Cambodia. Teaching profession is viewed as stressful and hard-working. Cambodia teachers are not sufficiently aware of ‘Teacher career pathway’. Detailed measures are suggested to improve teacher professionalism in Cambodia such as incentive systems (salary, incentive, health care or other support for their subordinates such as spouses and children), teacher guidebook, teaching materials and school management and leadership reform.

Bohlinger and Müller (2019) gives insights of Cambodia teachers education improvement from the view of preservice teacher, teacher, teacher trainer in Cambodia. As the part of project CONTESSA¹⁵, Bohlinger and Müller (2019) identify training need of pre-service teachers, current teachers, teacher trainers. Based on the focus group interview in Cambodia in March 2019. Participant teachers reported that they are lacking of time to prepare adequately for each class and feel exhausted due to double position (as part-time teacher and teacher trainee). Their common training needs are teaching method (pedagogical knowledge

¹⁵ CONTESSA is a three-year project (2018-2021) funded by the European Union’s Erasmus+ Program covering four countries in Europe and Asia for establishing a teacher education program that support preservice teacher, current teacher, teacher educator.

and skills), individual enhancement of knowledge and skills, knowledge about ICT and the ability to apply this knowledge, teacher training curriculum and teacher training structures.

Aun and Wareerat (2016) attempts to examine teacher trainees' critical thinking ability and learning at the RTTC in Takeo province, Cambodia with the purpose of evaluating the quality RTTC's training based on the specific measurement, trainees' critical thinking. It contends that student teachers' learning should be more associated with students' needs and their actual life. Also, more opportunities are needed to enhance trainees' motivation, cooperative learning, teamwork. Supported by World Bank Group, Tandon and Fukao (2015) published comprehensive informative and survey-based article on teacher quality in Cambodia. The study reveals the reality and gives informative suggestion for enhancing teacher education system. Tandon and Fukao (2015) suggest all possible teacher education issues and gives us informative sources for researching Cambodia pre-service teacher education.

KDI (2016) identify teacher education issues as the key variables for Cambodian education. And contextualizes Korean experiences into Cambodian Teacher education policy. In order to understand issues related to teachers in the rural area during the fieldwork for data collection in Phnom Penh and Siem Reap Province. Yoo et al. (2017) conducts need analysis on establishment of College of Education of Cambodia RUPP and strategy for Cambodia higher education ODA model. It gives us foundational information on the role of RUPP in teacher education and overview of the quality of Cambodia teachers and educators.

Reviewing literature on Cambodia teacher quality and teacher education, it is identified that many scholars stress the need for deepen research on Cambodia teacher education with the perspective of teacher professional development with exploring its detailed dimensions. Overall, comprehensive and informative research on Cambodia teacher education system is

little studied yet. Most of systematic analysis on Cambodia secondary pre-service teacher education and its system is provided by multilateral agencies such as World Bank, ADB and UNICEF. Studies regarding Cambodia teacher professionalism (Tan and Ng, 2012) failed to reveal actual hinderance and challenge of Cambodia teachers confront and teachers' understanding perception on TP. We could identify that not much quality work on secondary pre-service teacher education development with and systematic understanding in comprehensive manner. Also, very little studies on Cambodia teacher professionalism development (Tan and Ng, 2012; Piper and Spratt, 2017; King, 2018) and quality improvement of secondary pre-service teacher education. Despite of the need of research on TP in Cambodia, still, there is little research on Cambodia teachers' professionalism and realistic approach on developing their professionalism in vivid account on Cambodia teachers' reality. To address the limitations of previous studies, this study adopted Cambodia secondary pre-service teacher education as the main research subject with the view of teacher professionalism. The view of teacher professionalism is greatly needed as it can be great attempt to find the way of improvement of Cambodia secondary pre-service teacher education.

2.4.3. The studies on Teacher Professionalism

The perspective TP is understood as complex and ongoing concept rather than defined static concept. Interpretation of the meaning of TP can open the discussion on 'what is good teacher'. TP is important topic in research on teacher as TP highly influences on teachers' job satisfaction, self-efficacy, occupational commitment and their motivation. Therefore, there is high possibility that teachers without professional identity leave teaching position within five years of being employed (Kremer and Hofman, 1985; Moore and Hofman, 1988; Canrinus et

al, 2011). In this sense, teacher professionalism is not only important factor influencing to teachers themselves but also to student learning.

The Concept of Teacher Professionalism

In most of studies consider TP same as ‘teacher expertise’ or ‘teacher competency’ with the purpose of strengthen knowledge and overall competency of teachers. TP is understood as teacher ‘quality’, and similar terms are ‘teaching competence’, ‘job ability’, and ‘expertise’, ‘professional identity’. Regarding the most commonly used terms - *quality and expertise*, teacher quality has broader meaning than professionalism since teacher quality is used with the purpose of controlling teacher quality at national and policy level, while TP is used when it implies teachers’ professional development through acquisition of proper knowledge, attitude, practice, skills (Kim and Joe, 2003). The dictionary definition of expertise is ‘the special functions and practical and methodological knowledge (know how) acquired through experience and training in a particular field’ while the meaning of TP contains more comprehensive dimensions (Park, 2005). Teacher professionalism can be understood as teacher quality, teacher competency, capacity and teacher empowerment. Thus, teacher professionalism is not clearly defined in a clear-cut way, however, it mostly can be understood as required level of *knowledge, skill, attitude* for excellent teaching (Jeong et al., 2010).

Definition of Teacher Professionalism

Overall studies on teacher professionalism revealed that ‘teacher’ professionalism includes more ‘relational’ aspects such as building ‘meaningful’ relationship with students,

other teachers and parents compared to other profession. Educationalists and scholars have been made effort to capture the characteristics and define the concept of teacher professionalism. Dong seop Joe (2005) proposes four attributes of professional teachers have (1) knowledge-based professionalism (2) competency-based professionalism, (3) value-based professionalism. Competence-based professionalism refers instructional expertise, classroom management, student counseling. And knowledge-based professionalism includes general pedagogical knowledge and subject knowledge. Lastly, value-based professionalism includes aptitude of teaching and personality development of teachers - personal perspective and value on teaching and sense of calling (Joe, 2005).

Education scholar Hye Sook Kim (2003) proposes professional teachers have expertise on subject knowledge, class management, proper personality as educator. Yong ho Park et al. (2012) argues that teachers with professionalism should have (1) interpersonal capacity that requires teachers to understand teacher-student relationship and student relationships (2) Subject knowledge that includes subject and content knowledge, extra-curricular knowledge, curriculum development skill, actual school setting and teaching development (3) Student understanding - learning theory, development theory, understanding learners (4) Teaching and as Instructional Expertise meaning that teachers should be prepared to make good lesson plan and teaching structure development, teaching and self-reflection (5) Communication capacity - Verbal and nonverbal communication with other teachers and students. (6) Counseling capacity for student counseling, guidance, career counseling (7) Administration and management capacity that includes class management skills, understanding school operation, administration work and documenting work.

Beijaard D.C. et al (2000) defines teacher professionalism with three dimensions - (1)

the personal dimension, (2) the environmental dimension (3) professional knowledge and skills dimension. While Turner-Bisset (2001) suggests seven attributes for teacher professionalism - (1) subject knowledge (2) curriculum knowledge (3) learning model, class model, teaching method knowledge (4) knowledge on learner (5) education situation knowledge (6) knowledge of themselves (7) class situation knowledge.

Australian Institute for Teaching and School Leadership (AITSL) (2011) notes that professional teacher should have knowledge, practice and engagement. Firstly, professional knowledge is to know students and how they learn and the content and how to teach it. Secondly, professional practice is ability to plan for and implement effective teaching and learning and create and maintain supportive learning environments, assess, provide feedback, and report on student learning Lastly, professional engagement is about engaging in professional learning, connecting to their colleagues, parents and caregivers, and the local community school belongs. The concept of professionalism is considered to be scholarly debate on what 'good teacher' is. Even the fact that clear definition of what is meant by that term is not easy, workable definition for TP should include some characteristic and certain standards.

Dimension of Teacher Professionalism

Identifying the major dimensions of TP is same as exploring the nature of teacher's work and proper role. In other words, definition of TP is bound to include essential elements of the best teaching and attribute of good teacher. Those elements can be seen as dimension of teacher professionalism. In the same vein, dimension of teacher professionalism can be understood as a basic competency of what good teachers should be able to know and do and think, believe.

Still, defining TP is difficult task since TP can be interpreted in various ways depending on various perspective on teacher and teaching job (Kim et al., 2004; Kim 2006). Revealing and defining teacher professionalism and its dimension can simplify the meaning of TP and deter comprehensive understanding on teacher image and teaching job. However, for systematic understanding and discussion, this study attempt to identifying major aspects and characteristics as the nature of teaching job and teacher professionalism.

It is obvious that simply defining TP cannot be possible since teaching has diverse aspect and teachers have multiple roles. Therefore, in order to define the TP, we need to be careful because identifying dimension of teacher professionalism may narrow the interpretation of teacher professionalism and teaching job, however, attempt to clarify some aspects of teacher professionalism is required for raising further implication of pre-service teacher education.

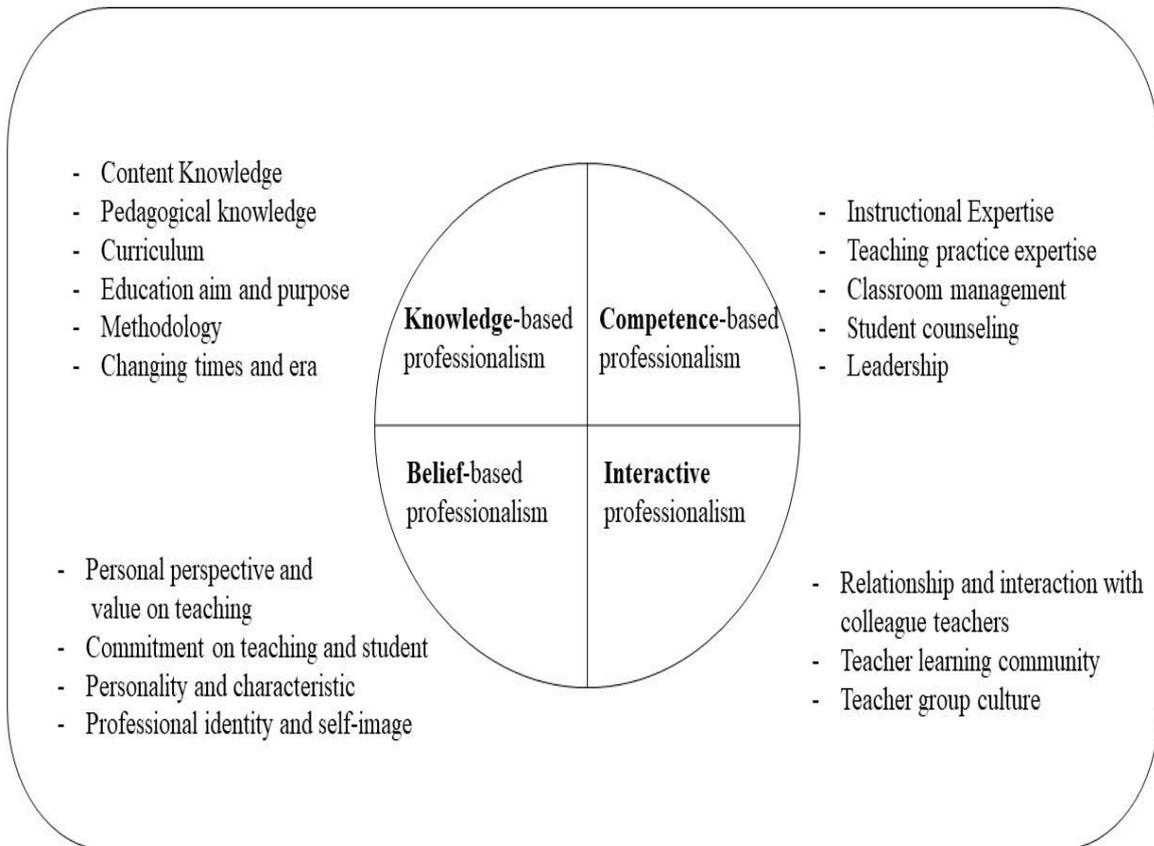


Figure 2-1. Four Dimensions of Teacher Professionalism

Source: Figure illustrated by the author

Table 2-9. Four Dimensions of Teacher Professionalism

	Dimension of TP	Detailed Meaning
1	Knowledge-based Professionalism	<ul style="list-style-type: none"> - Content knowledge - General pedagogical knowledge - Pedagogical content knowledge (PCK) - Curriculum knowledge - Knowledge of education aims and purposes - Knowledge of learners and their characteristics - Knowledge of educational contexts - Knowledge of educational ends, purposes and value - Education philosophical and historical grounds - Education methodology - Understanding of changing times and era
2	Competence-based professionalism	<ul style="list-style-type: none"> - Instructional Expertise - Teaching practice expertise (lesson plan, practice, reflect on teaching) - Classroom management - Student counseling - Leadership
3	Value-based Professionalism	<ul style="list-style-type: none"> - Personal perspective and value on teaching Sense of calling - Commitment on teaching and student - Proper personality and characteristic - Professional identity and self-image

4	Interactive Professionalism	<ul style="list-style-type: none"> - Relationship and interaction with colleague teachers - Teacher learning community - Teacher group culture
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Source: Author summarized key findings from Hargreaves, 1996; Joe, 2005.

This study specifically took three dimensions of TP suggested by Joe (2005) and the concept of collegial Professionalism from Hargreaves (1996) for clarifying the concept of TP. Joe (2005) categorized TP into three aspects of professionalism - (1) knowledge-based professionalism (2) competency-based professionalism, (3) value-based professionalism. Firstly, knowledge-based professionalism is meaning of subject knowledge and comprehensive knowledge on student and their learning. Secondly, competency-based professionalism is about teaching activity and performance. More directly, it refers class management, teaching, student counseling, leadership. Thirdly, value-based professionalism includes having an aptitude for teaching, value-based professionalism also entails the value, attitude, sense of responsibility as teaching profession with clear understanding on public service, commitment to students and society. Lastly, Interactive Professionalism is on teachers' group and their continuous effort to develop their professionalism in teachers' learning community. Accordingly, this study assumes that TP can be divided as four dimensions - knowledge-based professionalism, competency-based professionalism, value-based professionalism and interactive professionalism.

Knowledge-based Professionalism

The professional identity of teachers is largely indebted in the systematic knowledge that is required of their job and specific tasks (Shulman, 1986; Menter and Flores, 2021). Shulman (1986) put emphasis on the sources of the knowledge base for teaching. Knowledge-based professionalism refers the intellectual component of professionalism. Teachers' knowledge and understanding and knowledge structures (Evans, 2011). Teachers' degree of reasoning can be useful when teachers' knowledge is applied to their teaching practice. In brief, knowledge-based professionalism refers to what teachers know and understand. Professional knowledge for teaching and teacher is dynamic, multi-faceted. Shulman (1986, 1987) deeply studied on what knowledge is most necessary for teaching. Bousted and Johnson's (2005) also stress teachers' knowledge and listed components of professional knowledge of teacher as

“Knowledge about learning, knowledge of curriculum content, a wide range of teaching practices and methods, knowledge and understanding of diverse pupils, knowledge about the complex and compelling forces that influence daily living in a changing world, the ability to adapt teaching practice practices and method” (Bousted and Johnson's, 2005: 18).

Shulamn (1987) classifies the elements of teachers' knowledge as follows: content knowledge, pedagogical content knowledge, curriculum knowledge, pedagogical content knowledge, general pedagogical knowledge, knowledge of education aims, values and

purposes, knowledge about learners and their characteristics, educational contexts, and their philosophical and historical grounds. He suggests this category for understanding the unique process of pedagogical reasoning and action (Gudmundsdottir and Shulman, 1987). Among several knowledge for teachers, especially Shulman (1986) emphasizes the “*pedagogical content knowledge*” (PCK), PCK is combined knowledge with general pedagogical knowledge and content knowledge. PCK is teachers’ knowledge base for capable of teaching. And it is “the way of knowing and understanding the subject matter that distinguishes the teacher from the subject matter experts” (Gudmundsdottir and Shulman, 1987: 60).

PCK is influenced by content knowledge. To be more specific, it includes knowledge of the central topics, concepts, and areas of the subject matter for teaching students (Shulman, 1987). PCK is influenced by general pedagogical knowledge, subject content knowledge and learners’ knowledge. In other words, teachers should wisely use PCK in accordance with students’ preconceptions or misconceptions about topics in their lesson (Gudmundsdottir and Shulman, 1987). Shulman (1987) claim that indeed, PCK distinguishes the veteran teacher and novice teacher. Also, PCK is unique body of knowledge that can distinguish education scholar and practitioner (teacher). Grossman (1990) defined PCK as composed of four factors : (1) *knowledge of students’ conceptions of the content* (2) *curriculum* (3) *teaching strategies and* (4) *purposes for teaching*. Especially PCK thus embodies the working knowledge teachers use to plan, organize, and guide their teaching.

Competence-based Professionalism

Competence-based professionalism is about teachers' actual performance in class and school setting. Also, it is about how teachers can translate and apply their knowledge into their performance in actual school practice. (Joe, 2005). It contains teaching practice, classroom management, student counseling, leadership. Specifically, here, teacher leadership refers the ability to analyze and respond to future situations students will face, as well as the ability to present and guide students to realize their vision (Joe, 2005). Teachers' ability to put their professional knowledge to good use in their class and lecture. Education scholars (Son, 2005; Lee, 2020) recognized that main competence of teacher should be realized in teaching practice(classroom). In this regard, competence-based professionalism can be interpreted as "instructional expertise" or "teaching ability" (Kor. 수업전문성). Instructional Expertise (teaching ability) is related to PCK suggested by Schulman (1986, 1987). Among various teacher activities, teachers spend a great deal time in teaching. Thus, teaching and lecturing are the most important and unique among the various roles of teachers (Lee, 2020), a significant body of research examines the teacher professionalism by focusing on 'instructional' expertise. (Son, 2005 ; Lee, 2006 ; Jang and Jung, 2017; Lee, 2020). Several perspectives and studies on class expertise are significant in that they provide a conceptual framework to capture the unique expertise of teachers (Lee, 2020). However, professionalism focusing on "teaching" can narrowly interpret TP and cannot contain variations in role and practice of teachers since teaching-based professionalism can be re-interpreted depending on times, region, context and need.

Value-based Professionalism

Teacher professionalism depends upon not only teacher's knowledge but also teacher beliefs and attitude, personal perspective and value on teaching. Value-based professionalism is what value and view teachers have (Joe, 2005) and indeed, it has a powerful impact on the practice on teaching (Belbase, 2012). Value-based professionalism includes proper ethic and a strong sense of service for future of students who are still juvenilistic and immature. More directly, Joe (2005) gives concrete example a *sense of calling*(vocation), *teaching aptitude*, *personality*, *view of teaching*. Added to this, this study further examines teachers' *professional identity* as value-based professionalism.

Teacher professional identity is about teachers' self-image formation process and teachers' self-recognizing such as a subject matter expert, pedagogical expert, didactical expert (Beijaard et al, 2004; Kim, 2018). Song (2015) interprets teachers' professional identity as the process of having significance, meaning and value on their teaching activities based on teachers own autonomy and insights as profession. Teacher professional identity and teacher self-image has become separate research subject (Beijaard et al, 2004). Studies on teaches' professional identity provide teachers' personal and psychological understanding (beyond the interpretation of TP as knowledge and teaching expertise) specifically on relevant explanation of 'what it feels like to be teacher in school setting'. The commitment level of teachers heavily relies on teacher's professional identity. Teacher identity is perceived as the teachers' belief, values, attitudes and characteristics that can define the role of teaching profession (Granjo et al., 2021). Much recent literature connects teacher professionalism with teachers' identity (Kelchtermans and Vandenberghe, 1994; Beijaard et al., 2004; Palmer, 1997; Catherine and Lynn, 2009). It is

because ‘teaching is an occupation that strongly involves *the teacher as a person*’ (Kelchtermans and Vandenberghe, 1994). ‘Involving teachers as a person’ is unique feature of teaching profession that is distinguished from other professional occupations. Nias(1989) also believes that the teacher’s self-image stating that teachers’ self-image is more important to them as practitioners than is the case in occupations where the person can easily be separated from the craft’ (Nias, 1989). How teachers develop their identity is essential in understanding the actions and commitments of teachers in their daily work (Ball and Goodson, 1985).

In addition to this, renowned education and teacher education scholar, Palmer (1997) explained that bad teachers have little in common with each other however, good teachers have one thing in common, *strong personal identity* was embedded in class of professional teacher. Good (Professional) teachers join self into their teaching practice, subject and students since good teachers teach from an integral and undivided self; they open their personal life to provide a connectedness between class and students’ life. ‘Good teachers have competence to weave a complex relation between themselves, subject knowledge and their student’s lives. Only from professional teachers, Students can learn their subject not only by knowledge, but by whole understanding on teaching content’ (Palmer, 1997). ‘The self not only influences the way people perceive concrete working conditions and requirements but also the way people act’ (Kelchtermans and Vandenberghe, 1994). Especially building professional identity as a teacher means a lot in their teaching practice, it indicates that unique and self-embedded teaching rather than imitating others’ techniques and knowledge. If teachers consider their teaching as mere ‘technical’ matter which does not have anything to do with their (inner) identity, those teachers need to develop their professional identity rather than acquiring advanced teaching method and knowledge for improving their excellence. In this sense, the research on teacher identity

involves more on individual teacher's psychology and perception rather than merely listing teachers' tasks and competences.

Interactive Professionalism

Hargreaves and Fullan (2012) noted that there has been 'more emphasis on interactive professionalism among teachers'. Traditional scholarly work on teacher professionalism is largely based on an individualist model emphasizing individual ability, expertise and effort to upgrade professional competencies while recent education scholarly papers in many countries highlight teachers' interactive (collegial, collective) professionalism. In other words, teacher professionalism has become a community-based capacity and analyzed in the context of 'professional learning community' and 'teacher groups' rather than individual teachers. Hargreaves (2000) emphasizes teacher's professional learning in more positive in flexible, wide-ranging and inclusive ways (Demirkasimoğlu, 2010). Specifically, interactive professionalism is realized in teacher groups, Lieberman (2009) contend that 'through collegial interactions such as observations and meetings, teachers can develop and re-develop skills, knowledge, beliefs and philosophies of teaching and learning that directly influence their practice of teaching mathematics to students, and therefore their identity of who they are as teachers.'(Lieberman, 2009). Learning community is 'groups of teachers voluntarily gathered for the purpose of learning about teaching and learning' (Meyer, 2002). Every teacher is in need of sharing their dilemmas and thinking with other teachers (Meyer, 2002). Teacher collegial professionalism is more than the teacher individual professionalism and receives a lot of attention. (Hargreaves and Fullan, 2012; Seo, 2015; 2019). Collegial professionalism redefines teaching practice as 'collaborative activity' shifted from the perspective on teaching

as ‘individual’ activity (Seo, 2019) and interpret teacher professional development as ongoing process in the context of teacher community and groups (OECD, 2016).

Previous Research on Defining of Teacher Professionalism

Depending on changing historical context and political and educational need, the nature and characteristics of professional teacher has been changed. Attempt to define TP has been much debated over many years in multiple context and nation. However, clear definition for today’s teacher professionalism is not clear-cut. Various perspective on TP has been suggested and diverse meanings have been developed with multiple authors (Hilferty, 2008). Regarding this, Lee (1995) and Han (1997) insisted that teacher professionalism can be discussed with standardized tool, knowledge and skill as the pace of social change was not that fast and rapid (Lee, 2020), however, current education context has been rapidly changing with increasing expectation of role and responsibility of teachers. There has been change of TP interpretation. The early stage of teacher education development, the criteria of TP is about mainly on effectiveness such as preservice teachers’ broad knowledge and best effect of teacher education. The main focuses of TP were teachers’ individual capacity and knowledge in the technological perspective. With the course of time, inner aspect (psychological factors and beliefs) of teacher and overall and whole approach on teacher professionalism has been developed.

In this view, main components of TP are cooperation, professional learning community, reflexive dialogue, collaborate with a focus on students learning, collegial trust in schools, sharing work value (Park et al, 2018) Such technical rationality, it is argued, militates against

teacher professionalization and represents a narrow view of professionalism. Park et al (2018) criticized the previous definition of TP since it controls teaching activity and views teacher as mere technicians or 'doer', narrowing understanding of TP by focusing on technological perspective on teaching.

In fact, research on re-definition and alternative approach on TP began to grow in the United States (Lieberman, 2000; Hargreaves, 2003) since 2000s (Chan and Pang, 2006). Unlike existing and dominant interpretation on TP, new research on TP attempt to interpret teachers as autonomous and continuous 'learners' (rather than instructor and lecturer) and also whole teacher community as collective 'learning community' that continuously make effort to be grow and learn in their teaching practices by sharing their teaching activity and practices to other teachers (Seo, 2019). Sachs (2003) names this transition as "transformative professionalism". Old professionalism includes aspects such as; (1) exclusive membership (2) conservative practices (3) self-interest (4) external regulation (5) slow to change and (6) reactive. In the contrast, new professionalism has characteristics such as (1) inclusive membership (2) public ethical code of practice (3) collaborative and collegial (4) activist orientation (5) flexible and progressive (6) responsive to change (7) self-regulating (8) policy-active (9) enquiry-oriented (10) knowledge building. Sachs (2003) names this transition as "transformative professionalism". Since 2000s, current researches on TP are focusing more on how teachers participate in communities of practice in improving their individual knowledge and practice. There are many variants of research on teachers as a community of learners: teacher networks (Lieberman, 2000), professional learning communities (Hargreaves, 2003), communities of learners (Wineburg and Grossman, 1998), teachers as communities of learners (Shulman and Sherin, 2004).

CHAPTER III.

RESEARCH METHODOLOGY

3.1. Research Design

This study is based on a quantitative approach with the purpose of revealing the Cambodia secondary teachers' perception on pre-service teacher education effectiveness, teacher professionalism and training need. To do so, this study examines realistic Cambodia current teachers' recognition and understanding on teacher professionalism and pre-service teacher education. Based on data result, this study will also see whether lower secondary and upper secondary teacher have different perception. Lastly, this study will elaborate that how significant results can be used for Cambodia secondary pre-service teacher education policy recommendations.

3.2. Data

3.2.1. Development of the Questionnaire

To collect data, a set of questionnaires was developed. The process of developing the survey questionnaire began with a review of related literature on pre-service teacher education, teacher professionalism, Cambodia teacher. The survey aims to capture the Cambodia secondary teachers' perception on pre-service teacher education and teacher professionalism and training need for professional development, eventually for identifying teachers' perception and providing plausible evidence for solution to improve pre-service teacher education and

professional development. Based on this evidence, this study will present picture of problem and training need for Cambodia secondary teacher professionalism. The process of developing the survey questionnaire began with a review of theoretical literature (Tandon and Fukao, 2015; KDI, 2016; TTD, 2018) and adapting from the available survey questionnaire on teacher professionalism and based on the realistic understanding from pilot study with prior interview with Cambodia secondary teachers and educators in February 2020 before this study was conducted.

The survey questionnaire (see Appendix 3) designed for the study includes 23 items under the following 3 subscales. The three major subscales of the questionnaire are perception on pre-service teacher, perception on teacher professionalism (image of professional teacher, perceived level of recognition as professionals), training need for professional development.

Three Subscales

- ***Effectiveness of pre-service teacher education (5 items)*** : in this subscale, what are motivating factors in pre-service teacher education how effective pre-service teacher education to shape professional identity, school applicability, curriculum, teacher educator were explored.

- ***Perceived level of recognition as professionals (4 items)*** : in this subscale, how much secondary teachers feel that they are recognized from parent, student is explored.

- ***Training need for professional development (4 items)*** : in this subscale, teachers' training need for professional development is explored.

The questionnaire subscales and items are as follows:

Table 3-1. Questionnaire Subscales and Items

Subscale		Items	Number of Question
Pre-service teacher effectiveness	Motivating factor	What motivated you to be a teacher in teacher training courses and pre-service education?	5
	Professional identity	Is Pre-service teacher education effective to have pride(self-esteem) as a teacher?	
	Effectiveness	Is Pre-service education directly helpful to your current job?	
	Curriculum	Are you satisfied with the curriculum in pre-service education?	
	Teacher educator	Overall, are you satisfied with the quality of Professor in teacher training center (or university)?	
Perception on teacher professionalism	Image of teacher professionalism	choose the expression that describe teacher professionalism properly	4
	Perceived level as professional occupation	do you believe that you are respected and recognized as professional occupation(job) and expert at specific field?	
	Perceived level as profession from parent	do you believe that you are respected and recognized from Parents as professional occupation?	
	Perceived level as profession from student	do you believe that you are respected and recognized from Students as professional occupation?	
Training need for professional development	Subject knowledge	Understanding and having subject knowledge	4
	Student understanding	Students understanding	
	School understanding	School understanding	
	Professional development	Intellectual growth and continuous learning	

3.2.2. Validity and Reliability

In order to assess the data validity and reliability, firstly all the developed questionnaire was reviewed from content expert (academic advisor). Secondly, the questionnaire was translated into the Cambodian language. Finally, the survey was 'pilot tested' with 10 teachers. Furthermore, to indicate the extent to which the responses on the items within a measure are consistent, Cronbach's alpha is frequently used for measuring internal consistency (Sung, 2008). Test of reliability produced an overall *alpha value of 0.917*, which is considered good for social science research (Kwak, 2019).

3.2.3. Data Collection

Survey was carried out from 2020 October 19th to November 6th. The questionnaire was applied by double-translating the original text into English and Cambodian language. For distributing of the questionnaire, first, the name of secondary schools and high schools in Kampong Chhnang were listed. Among them, ten schools were selected as sample. Before the survey was conducted, the school principal's approval has been obtained.

3.2.4. Research Sample and Site Characteristics

This study was conducted for identifying current secondary teachers who completed their training at official teacher training centers (RTTC, TEC, NIE). Survey target in this study is current Cambodia secondary teachers in Kampong Chhnang province. Because the current teachers' perception can contain and reveal confronted reality of teaching based on their empirical belief and knowledge (Hur, 2018). Participants in the study were 218 secondary school teachers from nine secondary schools which are located in Kampong Chhnang province.

Research Sample

A total of 218 teachers has official teacher training experience at RTTCs and NIE and official teacher's license. Respondent teachers who are belong to private school also have official teacher's license but they teach both private and public school as part time job¹⁶. Pre-service teacher education experience is not same because some respondent teachers were educated recently and just a few ago, some respondents were trained 10 years ago. However, considering the fact that Cambodia teacher education has been mostly quantitatively expanded not in qualitatively within 10 years, all respondent teachers' experience and survey response can give relevant and useful information to answer the research questions.

The total distribution of questionnaires was 502 copies and the collected and statistically analyzed quantity is 218 copies. The return rate is 42.8%. One of the possible reasons for the 42.8% return rate is due to the reason that teachers do not work full-time, and due to the non-

¹⁶ Many Cambodia school teachers with teachers' license are part-time teaching for making additional pay and experiences. It aggravates overall low quality of teaching in Cambodia.

cooperation of some schools that were considered strange. It is assumed that the method of questionnaire study is uncommon in Cambodia context. And total 218 teachers, 212 public teachers and 6 private school teachers responded to the survey. Quantitative research is for explaining phenomena by using particular statistics. Sampled teachers are categorized by school type (lower secondary or upper secondary), teaching experience, teaching subject, degree.

- **School level** - Out of 218 secondary school teachers, lower secondary is 56.9% (n=124) and upper secondary teacher is 43.1% (n=94).
- **Teaching experience** - 1 ~ 4 years: 10.1% (n= 22), 5 ~ 9 years: 14.8 % (n= 49), 10 ~ 15 years: 17% (n= 72), 16 ~ 40 years 34.4 % (n= 75).
- **Teaching subject**, Khmer 14.7 % (n=32), English 11.5 % (n=25), Math 14.2% (n=31), History 6.4 % (n=14), Biology 6.9 % (n=15), Chemistry 6.4 % (n= 14), Computer 0.45% (n=1), Earth science 3.2 % (n=7), Economy 4.6 % (n=10), Ethics 2.75% (n=6), Geography 4.6 % (n=10), Physics 5.5 % (n=12), Sport 2.3 % (n=5), Teachers who teach double subject are 16 % (n=35).¹⁷
- **Education level** - Bachelor degree 89% (n=194), Master degree 11% (n=24)

Site Characteristics

There are 7 districts and 1 municipality in the province Kampong Chhnang. The Capital city of Kampong Chhnang Province is Kampong Chhnang. The capital city of Kampong

¹⁷ Due to the shortage of secondary teachers in Cambodia

Chhnang is located 88km northwest of Phnom Penh, on national road five connecting Phnom Penh and the Thai capital Bangkok. There is total 42,532 secondary teachers across the whole country. Target population is 76 secondary schools and 1,567 secondary teachers in Kampong Chhnang. <Table 16> below provides detailed information on target population ¹⁸in Kampong Chhnang province. Secondary teachers in Kampong Chhnang province are sampled cases that are eligible for the survey.

Table 3-2. Target Population (Kampong Chhnang Province)

	Number of schools	Teaching staff	
		Total	female
Whole secondary school	76	1,567	641(40.9%)
Sampled school	9	718	-
Respondent teachers	9	218	-

Table 3-3. Sampled School Information

	School name	Teacher Number	History and School condition	Characteristics
1	Public Hunsen Kampong Tralach High School	75	- Established in 2004 until now 16 years in high school educated - There are 5 building and 35 classrooms	- No school fee - student and teachers living near from school

¹⁸ The target population for a survey is the entire set of units for which the survey data are to be used to make inferences (Lavrakas, 2008).

2	Public Cheasim Kampong Tralach High School	47	- Established 37 years - 3 building and 25 rooms - About 879 students studying	- No school fee - students and teachers living near from school
3	Public Pres Batsoramorith High School	174	- Established in 1980 - 15 building and 88 rooms	- No school fee - most loved and professional school in province
4	Public Tek Hout High School	78	- Established in 2005 - 3 building and 12 classroom	- No school fee - students and teachers living near from school
5	Public Bun Rany Rolea Boea High School	135	- Established in 1982 - 11 buildings and 80 classroom	- No school fee - students and teachers living near from school
6	Public Kampong Chhnang City High School	124	- Established in 2001 - 9 buildings and 57 room	- No school fee - students and teachers living near from school
7	Private Kampong Chhnang Vision School	8	- Established in 2013 - Foreign language education Art, and sport are activated.	Parents who want to learn a special curriculum that cannot be studied in public schools are enrolling in a hurry. In particular, they began to show movements to advance their children abroad
8	Private Borey Vichea School	52	- Established in 2007 - First private school in Kampong Chhnang city	Quality and discipline better than public school. there are school bus service with safety. Good communicated with parents that care for education
9	Private Bright Hope School	25	- Established in 2003 - The first private school in Kampong Chhnang province	Near their houses, the private school that combined from primary to university communicated with parents that care for education.

3.3. Data Analysis

Firstly, descriptive analyses were used to examine response rates, means and standard deviations by subscale. Secondly, t-test was performed to see whether Lower secondary teacher and upper secondary teacher have different motivating factor, different average of perceived effectiveness level, perception on teacher professionalism. Thirdly, One-way Analysis of Variance (One-way ANOVA) was conducted to see whether the perceived level of pre-service teacher education is same across the groups set by response from motivating factor in pre-service teacher education, image of professional teachers.

Independent two- samples t-test

This study uses an independent samples t-test ¹⁹to see whether lower secondary teacher and upper secondary teacher have different average perceptions.

One way ANOVA

One-way Analysis of Variance (One-way ANOVA) ²⁰was conducted to see whether the average perceptions level of being respected is same across the groups set by response from *motivating factor, image of professional teacher*.

¹⁹ The independent samples t-test is used to test the null hypothesis that the means of two populations are the same when a sample of observations from each population is available (Landau & Everitt, 2003).

²⁰ The analysis of variance (ANOVA) is a partitioning of the total variance in a set of data into a number of component parts, so that the relative contributions of identifiable source of variation to the total variation in measured responses can be determined (Sabine & Everitt, 2003).

CHAPTER IV.

RESULT

The results of this study are presented in four sub-sections. The first section is a teachers' motivating factor in pre-service teacher education, the second section is teachers' perception on effectiveness of pre-service teacher education, and third section is perception on teacher professionalism, lastly, fourth section is teachers' training need on subject knowledge, student understanding, school understanding, continuous learning.

4.1. Effectiveness of Pre-service Teacher Education

4.1.1. Motivating Factor in Pre-service Teacher Education

For analyzing teachers' perception on motivating factor in pre-service teacher education, descriptive statistics, t-test and ANOVA were performed. Likert 5 scales are used. Participants were asked about motivational factor in pre-service teacher education period.

Table 4-1. Descriptive Statistics - Motivating Factor

	Great Teacher educator	Curriculum	Interest in teaching and subject	Classmate and teacher's culture	Monetary reward	Total
N	4	4	103	0	103	214
%	1.9 %	1.9 %	48.1 %	0 %	48.1%	100 %

The highest frequency of motivating factor in pre-service teacher education are *subject interest* ($n=103, 48.1\%$) and *monetary support* ($n=103, 48.1\%$). Almost half of the teachers (48.1 %) show their motivating factor as subject interest and monetary support. There is no respondent with motivating factor of classmate and teachers' culture. And little number of respondents show their motivating factor as great teacher educator (1.9%) and good curriculum (1.9%).

4.1.2. Professional Identity

Table 4-2. Descriptive Statistics - Effectiveness to Professional Identity

	Strongly disagree	Disagree	moderate	Satisfied	Very satisfied
N	198	5	7	8	0
%	60.2 %	1.5 %	2.1 %	2.4%	0 %

Table above shows that the perceived effectiveness on secondary teachers' professional identity. 60.2 % of Cambodia secondary teachers choose 'strongly disagree' for the question that 'pre-service teacher education is effective to have self-esteem as a teaching profession'. Professional identity is important process of having meaning and value on teaching activities and teaching profession (Beijjarrd, 2004; Song, 2015). Only 2.4% of secondary teachers responded 'satisfied' with the effectiveness on professional identity. Sizeable proportions of teacher respondents indicates that teachers are unsatisfied with the role of pre-service teacher education for developing their professional identity. In addition to this, lower secondary and

upper secondary teacher have different average on perceived effectiveness of pre-service teacher education on their professional identity.

Table 4-3. Two-sample T-test Result - Effectiveness to Professional Identity

		Lower secondary teacher	Upper secondary teacher
Professional identity	Frequency	132	86
	Mean	1.26	1.10
	SD	0.05	0.067
		* -1.661 (<.001)	
		t(p)	

Note: * p<.05, ** p<.01, *** p<.001

T-test is used to address the question of whether lower secondary teacher and upper secondary teacher have different perceived effectiveness level of professional identity. In question 1-1, lower secondary school teachers have higher recognition on effectiveness on their professional than upper secondary teachers do. Results from a independent samples t-test revealed significant difference in the teacher educator satisfaction scores between lower secondary (M= 1.26, SD=0.05) teacher and upper secondary teacher (M= 1.10, SD=0.067); t = 1.661, *p= <.001.

4.1.3. Actual Teaching Practice

Table 4-4. Descriptive Statistics - Effectiveness to Actual Teaching Practice

	Strongly disagree	Disagree	moderate	Satisfied	Very satisfied	total
N	0	1	4	142	71	218
%	0	1.2 %	1.2 %	43.2%	21.6 %	100%

Regarding the level of effectiveness on actual teaching practice, 43% Secondary teachers responded ‘satisfied’ on the question ‘is pre-service teacher education directly helpful to your current job?’. The 21.6% of secondary teachers responded they are ‘very satisfied with school setting application of pre-service teacher education’.

Table 4-5. Two-sample T-test Result - Actual Teaching Practice

		Lower secondary teacher	Upper secondary school teacher
Perceived effectiveness to actual teaching practice	Frequency	132	86
	Mean	4.33	4.24
	SD	0.519	0.530
	t(p)	1.229 (.137)	

Note: *p<.05, **p<.01, ***p<.001

There is no difference between average of lower secondary and upper secondary teachers. There was no significant difference in the perceived level of effectiveness to actual teaching practice for lower secondary.

4.1.4. Satisfaction with Curriculum

Table 4-6. Descriptive Statistics - Satisfaction with Curriculum

	Strongly disagree	Disagree	Moderate	Satisfied	Very satisfied	Total
N	0	0	19	137	62	
%	0	0	5.8 %	41.6 %	18.8 %	

In terms of the satisfaction level on curriculum, 41.6% of Secondary teachers responded that they are ‘satisfied’ with the curriculum in pre-service teacher education. And 18.8% of secondary teachers responded ‘very satisfied’ with the curriculum in pre-service teacher education.

Table 4-7. Two-sample T-test - Satisfaction with Curriculum

		Lower Secondary Teacher	Upper Secondary Teacher
Satisfaction with Curriculum	Frequency	132	86
	Mean	4.24	4.13
	SD	0.054	0.054
		* 1.433 (< .001)	
		t(p)	

Note: * p<.05, ** p<.01, *** p<.001

There was a significant difference in the curriculum satisfaction scores for lower secondary (M= 4.24, SD=0.054) teacher and upper secondary teacher (M= 4.13, SD=0.054).

($t = 1.433$, $*p < .001$). Lower secondary teachers' average score of satisfaction with curriculum is higher than Upper secondary teachers' average score.

4.1.5. Satisfaction with Teacher Educator

Table 4-8. Descriptive Statistics - Satisfaction with Teacher Educator

	Strongly disagree	Disagree	Moderate	Satisfied	Very satisfied	Total
N	0	2	21	131	64	218
%	0 %	0.6 %	6.4 %	39.8%	19.5%	100%

Regarding the satisfaction of teacher educator, around 40% of Secondary teachers responded 'satisfied' with the question of 'are you satisfied with the quality of teacher educator in pre-service teacher education?' 19.5% of participants secondary teachers are 'very satisfied' with the quality of teacher educator.

Table 4-9. Two-sample T-test Result - Satisfaction with Teacher Educator

		Lower secondary teacher	Upper secondary teacher
Satisfaction with teacher educator	Frequency	132	86
	Mean	4.21	4.13
	SD	0.666	0.570
	t(p)	* -0.965 (.033 < .05)	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

There was a significant difference in the teacher educator satisfaction scores for lower secondary ($M = 4.21$, $SD = 0.666$) teacher and upper secondary teacher ($M = 4.13$, $SD = 0.570$). (t

= -0.965, *p= 0.33). Lower secondary teachers' average score of satisfaction with teacher educator is higher than upper secondary teachers' average score.

One-way ANOVA

Table 4-10. One-way ANOVA Result (Motivating Factor - Professional Identity)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.774	3	1.258	3.172	* .025
Within Groups	81.317	205	.397		
Total	85.091	208			

Note: * p<.05, ** p<.01, *** p<.001

One-way ANOVA was performed to see compare the perceived level of pre-service teacher education effectiveness on professional identity, satisfaction with curriculum, satisfaction with teacher educator in different motivating factors (great teacher educator, good curriculum, interest in subject knowledge, good classmate and teachers' culture, monetary support). There was a significant effect of the perceived level of pre-service teacher education effectiveness on professional identity at the p<.05 level for the three conditions [F (3,205) = 3.172, p= 0.025]

Table 4-11. ANOVA Descriptive (Motivating Factor - Professional Identity)

	N	M	SD	SE	95 % Confidence interval for Mean	Minimum	Maximum

Teacher educator	4	2.00	1.414	0.707	-0.25	4.25	1	4
Curriculum	2	1.00	.000	0.000	1.00	1.00	1	1
Interest in teaching	101	1.24	.709	0.071	1.10	1.38	1	4
Monetary support	102	1.10	.498	0.049	1.00	1.20	1	4

Post hoc comparisons using the Tukey HSD test indicated that the mean score for motivating factor 1 (great professors and trainer) perceived effectiveness on professional identity (M= 2.00, SD= 1.414) was significantly different than the motivating factor 5(Monetary support) perceived effectiveness on professional identity (M= 1.10, SD= 0.498). The importance of good teacher trainer is revealed here.

4.2. Perception on Teacher Professionalism

4.2.1. Image of Teacher Professionalism

Table 4-12. Descriptive Statistics - Image of Professional Teacher

N	%	Image of Professional Teacher
83	25.2%	Skillful and trained with teaching expertise
60	18.2%	Knowledgeable and academic
41	12.5%	High ethicality and morality
31	9.4%	Student caring and thoughtful
3	0.9%	Highly respected and high social status

25.2 % (1st rank) teachers consider professional teachers as ‘*skillful and trained with teaching expertise*’ while 18.2 % (2nd rank) teachers consider ‘professional teachers’ as *knowledgeable and academic*. Cambodia secondary teachers put priority on teaching skills and subject knowledge as professional attributes. And thirdly 12.5 % of teachers believe that professional teachers are *high ethicality and morality*. The least option is ‘highly respected and having social status’. Only 0.9% teachers believes that professional teacher is highly respected and special social status.

Table 4-13. Comparison of Frequency on Image of Professional Teacher

		Skillful and trained with expertise	Knowledgeable and academic	student caring and thoughtful	Highly respected and high social status	High ethicality and morality
Lower secondary	N	47	20	7	2	10
	%	54.7%	23.3%	8.1%	2.3%	11.6 %
Upper secondary	N	36	40	24	1	31
	%	27.3%	30.3%	18.2%	0.8%	23.5%

Data provides us comparison of image of professional teacher between lower secondary school teacher and upper secondary teacher. 54% of lower secondary teacher have image of professional teacher as skillful and trained expertise while 30.3% upper secondary teacher have image of professional teacher as knowledgeable and academic. The lower secondary teachers' response indicates that the highest rank is skillful trained expertise (54.7%), and secondly, knowledgeable and academic (23.3%), and thirdly, high ethicality and morality (11.6%). The upper secondary teachers' response indicates that the highest rank is knowledgeable and academic (30.3%), and secondly, skillful and trained expertise (27.3%), and lastly high ethicality and morality (23.5%).

4.2.2. Perceived Level of Being Respected as Professional Occupation

Table 4-14. Perception on Being Respected as Professional Occupation

	Strongly disagree	Disagree	moderate	Satisfied	Very satisfied	total
N	0	0	8	130	80	218
%	0 %	0%	3.7 %	59.6%	36.7%	100%

Respondent teachers were asked that ‘do you believe that you are respected and recognized as professional occupation(job) and expert at specific field?’ and 59.6% of teachers are satisfied.

4.2.3. Perceived Level of Being Respected as Profession from Parents

Table 4-15. Perception Level of Being Respected as Professional from Parent

	Strongly disagree	Disagree	moderate	Satisfied	Very satisfied	total
N	1	0	7	133	77	218
%	0.5%	0 %	3.2 %	61.0%	35.3%	100%

Respondent teachers were asked that ‘do you believe that you are respected and recognized from Parents as professional occupation?’ and 61% of teachers are satisfied.

4.2.4. Perceived Level of Being Respected from Students

Table 4-16. Perception Level of Being Respected from Student

	strongly disagree	Disagree	moderate	Satisfied	Very satisfied	total
N	0	0	3	126	89	218
%	0 %	0%	1.4 %	57.8%	40.8%	100%

Respondent teachers were asked that ‘do you believe that you are respected and recognized from Students as professional occupation?’ and 57.8% of teachers are satisfied.

Independent Samples T-test

- There was no significant difference in the social recognition scores for lower secondary (M= 4.36, SD=0.529) teacher and upper secondary teacher (M= 4.31, SD=0.554). $t = -0.661, p= 0.510$
- There was no significant difference in the parental recognition scores for lower secondary (M= 4.31, SD=0.515) teacher and upper secondary teacher (M= 4.30, SD=0.617). $t = -0.136, p= 0.297$
- There was no significant difference in the student recognition scores for lower secondary (M= 4.38, SD=0.513) teacher and upper secondary teacher (M= 4.40, SD=0.522). $t = -0.307, p= 0.580$

One-way ANOVA

One-way ANOVA was conducted to see whether the average perceptions level of being respected is same across the groups set by response from image of by professional teacher.

Table 4-17. One-way ANOVA Result - Image of Professional Teacher (Perceived Level of Being Respected from Student)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.805	4	0.701	2.703	* .032
Within Groups	55.268	213	.259		
Total	58.073	217			

Note: * p<.05, ** p<.01, *** p<.001

Table 4-18. One-way ANOVA Descriptive (Image of Professional Teacher - Perceived Level of Being Respected from Student)

	N	M	SD	Std. Error	95% Confidence interval for Mean		Minimum	Maximum
Skillful and Trained with expertise	83	4.27	.444	0.049	4.17	4.36	4	5
Knowledgeable and academic	2	4.53	.536	0.069	4.39	4.67	3	5

student caring and thoughtful	101	4.42	.564	0.101	4.21	4.63	4	5
Highly respected and high social status	102	4.67	.577	0.333	3.23	6.10	3	5
High ethicality and morality	41	4.41	0.547	0.085	4.24	4.59	3	5
Total	218	4.39	0.517	0.035	4.33	4.46	3	5

Post hoc comparisons using the Tukey HSD test indicated that the mean score for image 1(Skillful and trained with expertise) perceived respect from student (M= 4.27 , SD= 0.444) was significantly different than the image 2(knowledgeable and academic)'s perceived respect from student (M= 4.53 , SD= 0.536). However, the image 3,4,5 did not significant differ from the image 1 and image 2.

4.3. Training Need for Professional Development

Descriptive Statistics

Teachers are asked to rate their degree of knowledge and skill in each of the competencies - (1) subject knowledge, (2) student understanding, (3) school understanding, (4) continuous learning using scale of 1-5. ²¹

Table 4-19. Response of Question on Training Need

		1	2	3	4	5	total
Subject knowledge	n	0	3	10	56	151	218
	%	0	0.9 %	4.5 %	25.7 %	69.2 %	100%
Student understanding	n	0	0	15	61	141	217
	%	0	0	6.9 %	28.0 %	64.7 %	99.5
School understanding	n	0	0	12	68	138	218
	%	0	0	5.5 %	31.2 %	63.3 %	100%
continuous learning	n	0	1	16	64	137	218
	%	0	0.5 %	7.3 %	29.4 %	62.8 %	100%

²¹ 1 = very important (No knowledge/skill), 2 = fairly important (A little knowledge/skill but considerable development required,) 3 = Moderate (Some knowledge/skill but development required), 4 = slightly important(Good level of knowledge/skill displayed, with a little development required) 5 = Not at all important (Fully knowledgeable/skilled – no/very little development required).

Independent Two- samples T-test

There was no significant difference in the training need scores (on subject knowledge, student understanding, school understanding, continuous learning) for lower secondary teacher and upper secondary teacher.

One-way ANOVA

One-way Analysis of Variance (One-way ANOVA) was conducted to whether the level of training need on subject knowledge, student understanding, school understanding, continuous learning is same across the groups set by response from image of by professional teacher.

Table 4-20. Result of ANOVA - Image of Professional Teacher - Training Need

		Training need for continuous learning					
		N	M	SD	F	p	scheffe
Image of professional teacher	skillful and trained with expertise	83	4.55	.685	3.037	0.018*	4<1,2,3,5
	knowledgeable	60	4.53	.623			
	student caring	31	4.68	.475			
	Highly respected	3	3.33	.577			
	ethicality and morality	41	4.54	.674			

Note: *p<.05, **p<.01, ***p<.001

There was a significant effect of the training need of continuous learning at the p<.05 level for the five options (image of professional teachers) [F (3, 205) = 3.037, p= 0.018] Teachers with image of teacher of Highly social respected have the highest score on training

need of continuous learning. Teachers with image of teacher of Student caring have the lowest score on training need of continuous learning.

Table 4-21. ANOVA Result - Image of Professional Teacher - Continuous Learning

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.966	4	1.241	3.037	* .018
Within Groups	87.075	213	.409		
Total	92.041	217			

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

There was a significant effect of the perceived level of pre-service teacher education effectiveness on professional identity at the $p < .05$ level for the three conditions [F (3,205) = 3.172, $p = 0.025$]

Table 4-22. ANOVA Descriptive - Image of Professional Teacher - Training Need

	N	M	SD	SE	95 % Confidence interval for Mean		Mini mum	Maximu m
Skillful and trained with expertise	83	4.55	.685	0.075	4.40	4.70	3	5
Knowledgeable	60	4.53	.623	0.080	4.37	4.69	2	5
Student caring	31	4.68	.475	0.085	4.50	4.85	4	5
Highly respected	3	3.33	.577	0.333	1.90	4.77	3	4
Ethicality and morality	41	4.54	.674	0.105	4.32	4.75	3	5

Post hoc comparisons using the Tukey HSD test indicated that the teachers with image of (4) highly respected from society mean score for effectiveness on professional identity (M= 3.33, SD= .577) was significantly different than teachers with image of (1) Skillful and trained with expertise (M= 3.33 , SD= .577) and teachers with image of (2) Knowledgeable (M= 3.33 , SD= .577), (3) Student caring (M= 3.33 , SD= .577), (5) Ethicality and morality > (M= 3.33 , SD= .577) perceived effectiveness on professional identity.

CHAPTER V.

DISCUSSION

First, the quantitative analysis illustrates that Cambodia teachers have same degree of extrinsic motivation (monetary reward) and intrinsic motivation (interest in subject and teaching) provided from pre-service education. Second, Cambodia teachers responded that pre-service teacher education is not effective to shape their professional identity. Lastly, teachers who believe that “socially respected and valued as professional occupations” is professional teacher, they are more likely to pursue “continuous learning” to cultivate their professionalism. Accordingly, a curriculum that allows preservice teachers to reflect the meaning of teaching and education eventually for shaping their professional identity should be considered by providing more psychological and teacher trainee’s inner aspect related courses such as reflection class dealing with the meaning of teaching and learning.

5.1. Cambodia Teachers' Motivating Factor

- Motivational Synergy between Extrinsic and Intrinsic motivation -

It is noteworthy that half of respondent secondary teachers are influenced by extrinsic motivation for becoming a teacher and the other half of teachers are motivated to become a teacher with interest in teaching. What can we learn from their response? In terms of relationship between extrinsic and intrinsic motivation, there has been prevailing belief that extrinsic motivation undermines intrinsic interest suggested. This view believes that if teachers who love to teach for its own sake (which is intrinsic motivation) is offered extra money for teaching, it will be easier that teachers will lose their interest of teaching in the absence of extrinsic motivation. However, extrinsic motivation can promote intrinsic motivation of Cambodia teachers with somewhat different situations and challenges. There are situational factors that need to be considered because teachers in developed nations and developing countries have different situational dilemmas and needs. Teachers in high-performing states decide to become teachers with a wish to share their knowledge and think that the rewards of teaching are not tangible. In other words, in developed countries, pay and compensation incentive cannot be the answer to motivate teachers. Motivational factor is related to people's satisfaction. There is Csikszentmihalyi's plausible explanation on satisfaction of people. He notes that, up to some point, people are satisfied with extrinsic motivations such as monetary reward such as a salary hike, bonus, award, or public recognition. However, after people have taken basic amount of money for their living, Csikszentmihalyi discovered that people are no longer satisfied with extrinsic motivation and rather they find genuine satisfaction with an activity which "*involves their creative abilities*" and high commitment (Csikszentmihalyi, 1990). Spear et al (2000) also found that influential factors of teachers' job satisfaction in

United Kingdom are “professional autonomy” and “intellectual challenge” in their actual school setting to be highly motivated rather than enhanced pay and improved social and legal status. Deci et al (1999) also states that “offering additional extrinsic rewards has even been found to undermine the intrinsic motivation of teachers”.

In developed countries, pay incentives have been found to be generally ineffective in increasing teacher motivation. Teacher motivation is based on intrinsic factors and that true job satisfaction is based on higher order needs (Sylvia and Hutchinson, 1985).

In comparison, teachers in developing countries, who are confronting economic disadvantaged situations, can be highly motivated to teach when they are provided extrinsic motivations such as pay incentive and compensation reform based on their actual need. For them, extrinsic motivation can promote intrinsic motivation and increase the attractiveness of teaching position. In this regard, for teachers in developing countries, ‘motivational synergy’ can be relevant. “*Motivational synergy*” was suggested by Amabile (1993) and means that encouraging extrinsic motivation can be wisely used for boosting intrinsic motivation. Motivational synergy indicates that intrinsic and extrinsic motivation can combine positively since it is not that intrinsic and extrinsic motivation are not totally separated (Amabile, 1993). Amabile (1993) contends that some degree of extrinsic motivation can support the intrinsic motivation of Cambodia teachers. Especially, considered the context of developing nations, basic compensation system for secondary teachers is not well prepared. In addition to this,

boosting extrinsic motivation can attract top-tier graduates and talented youth into teaching positions (Rautakivi et al., 2019).

Even a high initial degree of intrinsic motivation toward one's work can, over time, be undermined by a work environment that is unsupportive of intrinsic involvement in the work and that places a heavy emphasis on extrinsic motivators (Amabile, 1993:12)

In other words, in the context of developing nations, teachers' extrinsic motivation can support and strengthen intrinsic motivation at the same time especially in a situation where extrinsic factors are unsupportive of intrinsic involvement of Cambodia teachers, continuous effort for develop their teaching quality cannot be lasted. Extensive literature supports need of increase compensation of teachers in Cambodia because Cambodia teachers have relatively low standard of living with poor support and teaching is not yet considered as professional occupations with insufficient remuneration and poor compensation system that is an inappropriate level for valued occupation in Cambodia society. Low salary leads to teachers' financial anxiety and resulted in making them to hold additional job that deters teachers to perform well on a challenging task with sense of responsibility and commitment into time and energy for preparing quality teaching (Bennell and Akyeampong, 2007). Thus, policy makers consider this contextual difference, the result of high percentage of Cambodia teachers' extrinsic motivation is not a necessarily subject of criticism. In this sense, more policies for upgrading extrinsic motivation including economic reward and social status enhancement,

reform of teacher compensation can increase self-esteem and proper identity as a teacher and save a lot of time to devote to teaching rather than holding additional job for making extra money. It is no wonder that the ultimate goal of increasing extrinsic support is to promote intrinsic motivation more (Amabile, 1993; Rautakivi et al., 2019) and giving more “chances of professional development” to Cambodia secondary teachers.

5.2. Teachers’ Perceived Effectiveness of Pre-service Teacher Education

- Shaping Professional Identity in Pre-service Teacher Education -

Professional identity is the key word throughout the data analysis process. It is found that pre-service teacher education provides insufficient chances for Cambodia secondary preservice teacher to reflect on their psychological and social function as teaching profession. Through pre-service teacher education, preservice teachers can have chances to find their identity as professional teachers. As many authors revealed, pre-service teacher education is an initial stage that help prospective teachers feel a call to teach with finding meaning and identity of being a ‘teacher’. Initial teacher education is about meaningful personal learning experience for preservice teachers (Beijaard, 2004). In this regard, pre-service teacher education has vital role in supporting preservice teachers to formulate teacher identity and professional identity. In addition to this, as Granjo et al. (2021) contends, professional identity is related to teachers’ quality of performance and teaching practice of teachers. Teachers’ commitment and self-identity deeply rely on how much teachers identify themselves as “professionals” (Granjo et al., 2021). Teacher identity is interpreted as ‘the teachers’ belief, values, attitudes and

characteristics that can define the role of teaching profession' (Granjo et al., 2021) and how preservice teachers identify with being a teacher and how one feels as a teacher (Mayer, 1999).

It is noteworthy that respondent teachers perceived level of effectiveness to professional identity is the lowest score. Furthermore, with the increased need of ICT and online learning in teacher education derived from the COVID-19 pandemic situation, teacher education often overemphasizes more on skills and teaching method, with less focus on philosophical foundation of teacher education and teacher in the absence of long-term strategy in teacher education. Cambodia government and international partners have encouraged accountability focused policy and teacher standard policy initiatives with overemphasizing teachers' professional knowledge, skills. Together with Cambodia policy makers, international partners, preservice undergraduate students, there has been growing attention to upgrade teachers' 'knowledge' and visible 'performance' which is external aspects of teacher professionalism with less consideration proper attitude and beliefs on teaching and learning.

Upper Secondary Teachers with Lower Professional Identity

Regarding the comparison with the perception of lower secondary and upper secondary teachers, upper secondary teachers have lower effectiveness of pre-service education to shape their professional identity. We hypothesized that upper secondary teacher education has to do with more proper belief on teaching and professional identity since upper secondary teachers provide guidance and counselling for students who are important season with need to prepare for their career.

From the result of the t-test, significant difference level of professional identity between lower secondary and upper secondary teacher was found. Cambodia lower secondary teachers perceive higher effectiveness of pre-service education for their professional identity development than Cambodia upper secondary teachers do. Upper secondary teachers are responsible for provide essential knowledge, learning opportunity to develop reasoning capacity. Furthermore, it is believed that task of upper secondary teacher is not identical with lower secondary teacher's task since upper secondary teachers have more duty to foster the vocational guidance for very next chapter, entering tertiary education institution (university. Thus, NIE (upper secondary teacher education institutions need to provide learning opportunities for shaping teacher identity. Once a week, NIE provides 8 hours class on teaching subject, 4 hours class on teaching method total 12 hours while psycho-pedagogy is provided 4 hours a week. And there seems to be no class to give meaningful reflection for preservice teachers on the meaning of learning and becoming teacher to shape the professional identity except one hour class named 'professional ethics'. There is clear need of related class to shape teachers' professional identity and effective mentor who can assist in the development of professional identity of preservice teachers.

5.3. Teachers' Perception on Teacher Professionalism

5.3.1. Image of Professional Teacher

Lee (2020) argues that the teachers' own interpretation and image of "professional teachers" can provide possible goal. Also, teacher perceptions of teaching and teacher professionalism influence their teaching practice and decisions about how to perform as a teacher. Through examining Cambodia teachers' perceived image on professional teacher, it is identified that most frequent response is '*skillful and trained with teaching expertise*'. Second frequent response is '*knowledgeable and academic*'. It is assumed that overall Cambodia teachers believe that being a professional teacher is about having more knowledge and competency.

With increasing need of technical advancement in teaching methodology even in field of education, it is expected that the tendency of focusing on knowledge-based and competency-based professionalism will be stronger. In addition to this, the COVID-19 pandemic has forced Cambodia educators and policy makers adopt more technical approach, remote teaching and online teaching in teacher education with the lack of precision and depth in understanding callings as teachers. We should not overlook the importance of value-based professionalism in Cambodia secondary initial teacher education. However, teachers' professionalism is more like having meaningful relationship with students through subject. Unlike other professions, the activity of 'teaching' not only requires knowledge and teaching ability.

When it comes to difference between lower secondary teacher and upper secondary teachers, we can hypothesize that upper secondary teachers are more likely to put importance on value-based professionalism rather than knowledge and competency-based professionalism

while lower secondary teachers are inclined to emphasize knowledge and competency-based professionalism. Therefore, distinct approach is required for lower and upper secondary teacher education separately.

5.3.2. Lower and Upper Secondary Teachers' image on professional teacher

Found from the data result, perceived image of professional teacher between lower secondary teacher and upper secondary teacher is different. Around half of lower secondary teachers perceive that professional teacher *is skillfully teaching and trained with expertise* (competency-based professionalism) while 30.3% upper secondary teachers perceive that professional teacher is *knowledgeable and academic* (knowledge-based professionalism). Interestingly, 23.5% of upper secondary teachers think that professional teacher is high *ethicality and morality* while lower secondary teachers think that only 11.6% teachers perceive professional teacher is high *ethicality and morality* (value-based professionalism). 18.2% of upper secondary teachers think that professional teacher is *student caring and thoughtful* while lower secondary teachers think that only 8.1 % teachers perceive professional teacher is *student caring and thoughtful* (value-based professionalism).

Teachers' image on professional teachers alters what kind effort teachers put forth. Lower secondary teachers who think that professional teachers are skillfully teaching and trained with expertise are more likely to become a skillful instructor with professional teaching. While upper secondary teachers who think that professional teachers are knowledgeable and academic are more likely to enhance their intelligent ability. Based on different image of professional teacher, different approach is needed for RTTC and NIE. In addition to this, found

from the data result, more upper secondary teachers think that professional teacher is *ethical being with morality* (value-based professionalism). Thus, more curriculum in direction for enhancing teacher personality and make ethical decision with proper degree of morality since the training need of teacher ethicality and morality of upper secondary teacher might be higher than lower secondary teachers' need.

5.3.3. How Others Perceive Teachers as Professional Occupation

The perceived level of being respected as professional occupation from parents and students is analyzed as 'what other expect from the person, and what the person allows to impact on him or her greatly affect his or her identity as a teacher' (Reynolds, 1996). How much teachers feel that they are respected as professionals from parents and students can greatly affect teachers' professional identity and self-image as a teacher. It is found that Cambodia teachers who believe that professional teacher is *'knowledgeable and academic'* have *'higher recognition of being respect from student'* (M= 4.53, SD= 0.536) than teachers who think professional teacher is *skillful and trained with expertise* (M= 4.27, SD= 0.444). From this finding, we can hypothesize that, for secondary teachers, level of being respected from student depends on knowledge and academic competency teachers hold. Therefore, the findings of this study support recommendations of previous studies that teachers' confidence on their knowledge and academic competency make teachers feel valued and appreciated as professionals from their student.

5.4. Teachers' Training Need for Professional Development

- Making Teachers Feel Respected with Proper Social Status to Motivate Them to Pursue Continuous Learning

Most respondent teachers are confident that they have some knowledge in subject knowledge, student understanding, school understanding and continuous learning. Among four training needs, teachers training needs on *student understanding* and *continuous learning* have higher score than *subject knowledge and school understanding*.

Found from ANOVA analysis result, for teachers who hold different professional image, teachers who perceive professional teacher as '*highly respected with social status*' have the highest training need for *continuous learning* indicating that the more they feel they have high social respect and status, the more they desire to learn continuously. From this finding, we assume that policy implementations for making teachers feel that they are socially respected and valued with high prestige is positively influencing to teachers' will of pursuing continuous learning and professional development which help Cambodia teachers to become more professional occupations. The social status and feeling socially respected implies 'social standing as an occupation in a hierarchy of all occupations' (Fwu and Wang, 2002). Also, it can be one of the indicators the significance attached to education in certain society (Biddle, 1995).

Is Cambodia secondary teacher valued and respected with high prestige than other occupations? In actual context of Cambodia, teachers in developing countries are not valued enough either recognized as professionals and knowledgeable without social recognition on teachers' particular value (KDI, 2016) without proper level of academic competency. Therefore, there is great need of improving Cambodia teachers' social status and self-esteem

as teacher. The more teachers feel that they are socially respected, the more they are willing to learn continuously. Measures to increase feeling of confidence as professional occupation is highly related to provide chance for professional development (Rautakivi et al., 2019) and attracting academically able students into teaching profession (Inayet et al, 2015).

CHAPTER VI.

CONCLUSION

*“The ultimate goal of teacher education is to inspire teachers
love more their student.”*

After recovery from Pol Pot’s Killing Fields and long years of civil war, Cambodia teacher education have been recovered with vast amount of international support and effort. Even some problems remained unresolved, still it is very hopeful that younger teachers are getting better educated and have acquired higher professional qualifications. With The COVID-19 pandemic, it has forced developing countries adopt more technical approach including remote teaching and online teaching. (UNESCO, 2021) with the lack of precision and depth in understanding callings as teachers. But we should remember that what essential value need to be recovered for better teacher education. Nevertheless, from this study, we learned that we need to focus more on fundamental value of teaching, role of teacher and direction of teacher education not to be overwhelmed by increasing dominance of technology and methodology advancement and international pressure. Still, the way of successful teacher education in this pandemic era may be the very simple and basic one. *Maybe what Cambodia teacher education need to recover is the ‘relationship’ - relationship with teacher themselves and student. Initial teacher education needs to help teachers to find their professional identity, to feel a call to teach and to love their learning, teaching and students more.*

6.1. Summary

Chapter 1 proposes the need and purpose of the study with background of the study. Chapter 2 covers brief history of Cambodia teacher education and Cambodia teacher related policy. With an analytic framework including domain of teacher trainee, curriculum, teacher educator, education condition, this study analyzes current situation and problem Cambodia secondary pre-service teacher education. In the part of literature review, key research themes - teacher professionalism, pre-service teacher education, Cambodia teacher education were reviewed through insightful literatures. Chapter 3 covers method and data from survey that was conducted to demonstrate Cambodia current teachers' perception. Chapter 4 addresses the results of this study raised an important issue to consider regarding the current Cambodia teachers' perception on pre-service teacher education effectiveness, teacher professionalism, how much they feel recognized and valued as professionals, training need for developing professionalism. What this review has conclusively shown is that the notion of teacher professionalism and teacher professional identity in Cambodia has a long way to go before it shifts from ideology to reality. Cambodia teachers' perception on professional teacher is mainly on technical and knowledge-based attributes since most of respondent teachers saw professional teachers as a *'skillful and trained with teaching expertise'* and *'knowledgeable and academic'*. Three conclusions emerge from the above analysis.

First, Cambodia teachers are motivated by their interest in subject and teaching and at the same ratio, being motivated by monetary reward pre-service education institution provide for teacher trainee. Thus, creating motivational synergy combining intrinsic and extrinsic motivations is needed. Second, there needs to be greater need for improving curriculum for professional identity especially in upper secondary teacher education. Third, different approach

to develop lower and upper secondary teacher professionalism in teacher education is needed due to the difference image of professional teacher between lower secondary teachers and upper secondary teachers. Lastly, there is need of preparing proper system to make teachers to feel that they are highly respected may lead them to learn continuously.

6.2. Policy Implication

The policy implications are presented below to share several insights for improving Cambodia secondary pre-service teacher education based on the result of the study. Policy implications are suggested in three aspects - (1) *curriculum aspect*, (2) *education period aspect*, (3) *international education development aspect*.

6.2.1. Developing ‘Reflection Class’ Combined with Teaching Practice

The result of the study reveals that lack of professional identity of Cambodia secondary teachers is problematic. Cambodia secondary pre-service teacher education needs to develop ‘*Reflection Class*’ combined with teaching practice for *shaping professional identity*. ‘*Reflection Class*’ can set a very solid philosophical foundation to build Cambodia secondary pre-service teacher education. It is obvious that there has been strong tendency within initial teacher education to prioritize *knowledge, teaching performance and skills* with less focusing more on teachers’ identity formation and professional ethics. Too much stressing out knowledge and advanced teaching method and skill in teacher education can become a shortsighted policy without nurturing sense of calling as a teacher. Preservice teachers need meaningful chance for reflectivity focusing on their own biographic that make them to become a teacher and their manner of teaching. Pre-service teacher education should give space for preservice teachers to build their self and identity as a teacher through proper curriculum and qualified teacher educator. Accordingly, this study suggests implement ‘reflection class’ for two weeks that is linked to ‘teaching practice’ by attaching meaning and value into their teaching practices. ‘*Reflection Class*’ combined with teaching practice gives them chances to

tell their own stories so that it helps them to overcome obstacles in possible human relationships in actual school setting, help them make choices, find direction, identify moral hazards, and better understand their own personal situations and experiences. Reflection class also can help preservice teachers to find the reason to pursue teaching career and various areas of studies and give chances preservice teachers to attach meaning to experience through the telling and retelling of personal stories to evaluate the past and create purpose for their future as teacher (Binks et al., 2009) Through self-reflection class, preservice teachers can have proper level of professional identity, they can have self-understanding on what they should do and perform as teaching profession. Development ‘*Reflection Class*’ by implementing a reflection assignment since all teacher trainees have their own life story of choosing teachers as their life-long career. Cambodia secondary pre-service teacher education should give more opportunities to open up the possibility of discussion to regularly reflect on what they think teaching is about. Through this kind of ‘reflection class’, trainee teachers can refine their personal philosophies of teaching and teachers. preservice teachers can broaden their fixed perspective and understanding on teaching, student, schoolwork, teacher.

Before	NUMBER OF TEACHING HOURS FOR EACH CLASS PER WEEK (32 HRS/WEEK)	
	Courses	Number of Hours per week
Common courses (for all classes)	1. Psycho-Pedagogy (4 hrs)	14 hours
	2. General Culture (1hr)	
	3. Professional Ethics (2hr)	
	4. Academic Administration (1hr)	
	5. Research Methods in Education (2 hrs)	
	6. English or French Language (2 hrs)	
	7. Information Communication Technology(2 hrs)	
	8. Arts (1hr)	
Courses of Specialization	1. Courses of Specialization	8 hours
	2. TM for Courses of Specialization	4 hours
	3. Teaching practices for Courses of Specialization	6 hours
Practicum	One-month teaching practices at Upper Secondary Schools	

After	NUMBER OF TEACHING HOURS FOR EACH CLASS PER WEEK (32 HRS/WEEK)	
	Courses	Number of Hours per week
Common courses (for all classes)	1. Psycho-Pedagogy (4 hrs)	17 hours (+ 3 hours)
	2. General Culture (1hr)	
	3. Professional Ethics (2hr)	
	4. Academic Administration (1hr)	
	5. Research Methods in Education (2 hrs)	
	6. English or French Language (2 hrs)	
	7. Information Communication Technology(2 hrs)	
	8. Arts (1hr)	
	9. Teacher Professional identity (2 hrs)	
Courses of Specialization	1. Courses of Specialization	8 hours
	2. TM for Courses of Specialization	4 hours
	3. Teaching practices for Courses of Specialization	6 hours
Practicum	One-month teaching practices at Upper Secondary Schools	
Reflection	Two weeks reflection about teaching practice experience	

Figure 6-1. Developing Reflection Class

Source: Figure illustrated by the author

6.2.2. Professional Year

The short period of pre-service training in developing countries to just one or two-year in TTCs has also increase the doubt of teacher education quality (Bennell and Akyeampong, 2007). Secondary education is, as the previous step of higher education, critical period that should be prepared with adequate basic knowledge and attitudes. Thus, secondary teachers should be well prepared to help them to look for realistic aptitude and career. To be prepared to effectively help students, initial teacher education should provide sufficient period and chance because pre-service education is ‘learning to teach’ period. Therefore, proper system to make teachers to feel that they are highly respected is needed in Cambodia because feeling of being valued and recognized as professionals may lead teachers to learn continuously to develop teacher professionalism.

In response to the result of study, additional one-year (named ‘professional year’) is recommended for enhance social standing and credibility toward the quality of Cambodia teacher. Also, it is better to provide additional learning year only for academically more able pupils based on their performance and attitude can motivate preservice teacher. It is not that additional education period merely guarantee the increase of social trust on teacher education and teachers. Teacher education institutions can inform preservice teachers of career choices and have option to choose one-year additional education period for developing their professionalism.

Table 6-1. Suggestion for Implementing ‘Professional Year’

Professional year			
Career Track	Longer Education period	Applicant Required Qualification	Policy Task for Professional Year
<ul style="list-style-type: none"> - Classroom teacher - Educational leadership and management position - Teacher educator 	RTTC, TEC : 3 years	<ul style="list-style-type: none"> - Academically more able pupil - Recommendation from teacher education - Personal dream of becoming professional teacher 	<ul style="list-style-type: none"> - Independent budget for Professional year - Official Mentoring program for preservice teacher - Giving education research opportunities for meaningful experience
	NIE : 2 year		

MoEYS’s CPD framework focuses on cultivating continuous career path of Cambodia current teachers as a mean of teacher evaluation system. It is essential for preservice teachers to be informed diverse career choices including classroom teacher, educational leadership and management position and teacher educator - for motivated and academically more able preservice teachers. Diverse career path can motivate and inspire preservice teachers to sharpen their academic ability and to have comprehensive work experiences. TEC and NIE can provide (optional) additional one-year education period to eager students to develop their professional knowledge and skills in accordance with their career track choices. For instance, preservice teachers who want to become a management position in school can take more courses related to school administration and management classes. One-year longer school term can give more

time for preservice teachers to broaden their perspective on teaching as well as sharpen and cultivating their knowledge and ability for being prepared as professional educator in the future.

6.2.3. Reporting Guidelines on Cambodia Secondary Pre-service Teacher Education

Korea, as a former recipient country, has enhanced global standing of middle-power donor country forces Korea to conduct various international development programs and projects. Foreign aid had a huge impact on Korean teacher education development. For instance, ‘*The Peabody project*’ which was designed by university in USA to improve the teacher education quality in Korea. Now the role of Korea in education development cooperation is appreciated and valued by recipient countries. However, Korea international development programs mainly focus on technical assistance and not yet professional especially in education aid program. Contrastively, Japanese international education development, programs are very well designed in accordance with the recipient countries’ need. JICA has professional teams and cooperative system with higher education institutions (university) for international education development that enable them to conduct detailed analysis of participants’ situation and actual need before conducting development programs.

Relevant research and practice can go together in Japanese international development system. Considering the fact that Korean responsibility and high teacher education quality is very high and international, Korea international development needs to be more professionalized. For conducting improved international teacher development program for recipient countries, reporting guidelines on Cambodia secondary pre-service teacher education can become important tools in Global(international) education cooperation by giving a clear and complete account of the current situation on Cambodia secondary teacher education. Professional research institutions in Korea need to publish guidelines report annually including checklist for international development of Cambodia teacher education.

Specifically, Korean current significant comprehensive reports on Cambodian teacher development cooperation are mostly published by the KEDI (Park et al., 2015; Kim et al., 2016; Anh et al., 2019) and KOICA (Korea International Cooperation Agency), but there are no guideline reports on Cambodia secondary teacher education. Ahn et al. (2019) from KEDI is the only report that focuses on strengthening teachers' capabilities, but it covers only primary school teachers. KOICA has published much more quantity of papers on Cambodia than KEDI, however, little reports focus on teacher training enhancement. Multilateral development agencies including World Bank, JICA, UNICEF have actively engaged into Cambodia secondary pre-service teacher education by publishing comprehensive and detailed analysis and realistic survey report and professional research on teacher training. Including Cambodia, teachers in developing countries have different political, economic, social context from advanced nations. For example, they have low self-esteem and low social respect as professionals which are different struggle from advanced countries. For implementing effective international education development projects on teacher training, it should be examined overall situation and current implementation of Cambodia teacher education system exhaustively for understanding possible challenge clearly. Therefore, Reporting guidelines on Cambodia secondary teacher training need to be published.

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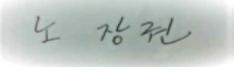
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APPENDIX

Appendix 1. Written Permission Research Agreement from 캄보디아학교세우기모임(NGO)

기관장 연구 수행 허락서			
연구책임자명	이신애	직위	석사과정
소 속	서울대학교 사범대학 글로벌교육협력 전공		
연구과제명	교원전문성 관점으로 본 캄보디아 중등 예비교사교육 실태와 개선방안		
연구기간	2020. 10. 10 ~ 2020. 11. 30		
연구대상	캄보디아 중등 학교 교장 및 교원	모집인원 (최대)	7명
연구방법	1. 캄보디아 중등 학교 교장(깜뽕츠낭 꿈의학교)을 대상으로 한 면담 (40분 소요) - 면담내용은 ‘교직 및 교원전문성에 대한 인식, 교원 교육에 대한 기대와 바람, 캄보디아 교육부(MoEYS)의 교원 정책 입안 과정에 대한 의견, 교장으로서의 학교 경영, 관리, 교사 교육에 대한 어려움’입니다. 2. 블랙농학교 캄보디아 중등교원을 대상으로 한 설문조사 (20분 소요) - 설문내용은 교원전문성 인식, 예비교사교육 경험, 교원전문성 지원 정책에 관련한 내용이며, 총 10 문항 내외로 이루어져 있습니다.		
<p>본인은 상기 연구를 진행하는 것을 허가합니다.</p> <p>2020년 09월 28일</p> <p>기관명 : 캄보디아학교세우기모임 NGO</p> <p>기관장 : 노장권 (자필 서명): </p>			
서울대학교 생명윤리위원회 귀중			

Appendix 2. Written Permission of Research Agreement from Glory international school

기관장 연구 수행 허락서			
연구책임자명	이신애	직위	석사과정
소 속	서울대학교 사범대학 글로벌교육협력 전공		
연구과제명	교원전문성 관점으로 본 캄보디아 중등 예비교사교육 실태와 개선방안		
연구기간	2020. 10. 10 ~ 2020. 11. 30		
연구대상	캄보디아 중등 교원	모집인원 (최대)	30명
연구방법	1. 캄보디아 중등 학교 교장을 대상으로 한 면담 (40분 소요) - 면담내용은 ‘교직 및 교원전문성에 대한 인식, 교원 교육에 대한 기대와 바람, 캄보디아 교육부(MoEYS)의 교원 정책 입안 과정에 대한 의견, 교장으로서의 학교 경영, 관리, 교사 교육에 대한 어려움’입니다. 2. 캄보디아 중등교원을 대상으로 한 설문조사 (20분 소요) - 설문내용은 교원전문성 인식, 예비교사교육 경험, 교원전문성 지원 정책에 관련한 내용이며, 총 11 문항 내외로 이루어져 있습니다.		
본인은 상기 연구를 진행하는 것을 허가합니다. 년 월 일 기관명 : Glory International School (영광국제학교)			
기관장 : 오주영			(자필서명)
서울대학교 생명윤리위원회 귀중			

Appendix 3. English survey questionnaires

Survey on Teacher Professionalism

※ Only current Cambodian secondary school teacher can answer this survey.

Hello, every dear participants.

This survey is designed for Cambodian secondary teacher to ask teacher professionalism.

We'd love to hear from you about what teacher support policy you need the most and how much you recognize teacher professionalism overall.

You can only take the survey once, but you can edit your responses until the survey is closed on November 10, 2020.

All Questions are required.

If you have any questions about the survey, please email us

Seoul National University, Global Education Cooperation Major

Principal Investigator : Shin Ae LEE

※ Questions below are analyzed in statistic tools. Please fill out all questionnaires.

Basic Information of Participants

1. How many years you started to teach (teaching experience) : _____

2. The school level you teach

① lower secondary teacher ② upper secondary teacher ③ etc ()

3. Subject you teach

① Khmer language ② English ③ History ④ Geography ⑤ Mathematic

⑥ Physics ⑦ Chemistry ⑧ Biology ⑨ Earth Science ⑩ Physical Education

4. What is your highest level of education?

① A Bachelor's degree

② A master's degree

③ A doctoral degree

I. Effectiveness of pre-service teacher education

1-1. What is the motivating factor in pre-service teacher education?

- ① great professors and trainers ② good curriculum ③ interest in subject knowledge ④ Good
Classmate and teacher's culture ⑤ Monetary support

1-2. Is Pre-service teacher education effective to shape professional identity as a teacher?

- ① Not at all ② Slightly ③ Moderately ④ Very ⑤ Extremely

1-3. Is Pre-service education directly helpful to your current teaching job?

- ① Not at all ② Slightly ③ Moderately ④ Very ⑤ Extremely

1-4. Are you satisfied with the curriculum in pre-service education?

- ① Very dissatisfied ② Dissatisfied ③ Neither ④ Satisfied ⑤ Very satisfied

1-5. Overall, are you satisfied with the quality of Professor in teacher training center?

- ① Very dissatisfied ② Dissatisfied ③ Neither ④ Satisfied ⑤ Very satisfied

II. Perception on teacher professionalism

2-1. please choose the expression that describe teacher professionalism properly

① skillful and trained with expertise ② knowledgeable and academic ③ student caring and thoughtful ④ highly respected and high social status and standing ⑤ high ethicality and morality

2-2. Overall, do you believe that you are respected and recognized as professional occupation(job) and expert at specific field?

① Very Strongly disagree ② disagree ③ moderate ④ agree ⑤ very strongly agree

2-3. Overall, do you believe that you are respected and recognized from Parents as professional occupation?

① Very Strongly disagree ② disagree ③ moderate ④ agree ⑤ very strongly agree

2-4. Overall, do you believe that you are respected and recognized from Students as professional occupation?

① Very Strongly disagree ② disagree ③ moderate ④ agree ⑤ very strongly agree

III. Training need for professional development

3-1. Cambodian teachers have enough subject knowledge

① Strongly Disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly Agree

3-2. Cambodian teachers have enough students understanding

① Strongly Disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly Agree

3-3. Cambodian teachers have enough school understanding

① Strongly Disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly Agree

3-4. Cambodian teachers make enough effort to intellectual growth and continuous learning

① Never ② Rarely ③ Sometimes ④ Very Often ⑤ Always

Appendix 3. Khmer (Cambodian language) survey questionnaires

ការចុះអង្កេតលើគ្រូដែលមានជំនាញឯកទេស

※ Only current Cambodian secondary school teacher can answer this survey.

សំរាប់គ្រូគ្រូមធ្យមសិក្សានៅប្រទេសកម្ពុជាប៉ុន្មោះដែលអាចឆ្លើយរាល់ការអង្កេតនេះ។

Hello, every dear participants.

សួរស្តីអ្នកទាំងអស់គ្នាដែលបានចូលរួមនៅទីនេះ
 ការចុះអង្កេតនេះត្រូវបានធ្វើឡើងដើម្បីដឹងពីស្ថានភាពគ្រូដែលមានជំនាញឯកទេសនៅប្រទេសកម្ពុជានៅក្នុងកម្រិត
 គម្រោងសិក្សា(អនុវិទ្យាល័យ)។
 ពួកយើងរីករាយក្នុងការទទួលយកអំពីអ្នកនៅរាល់អំឡុងពេលនេះយោងតាមការចុះអង្កេតនេះ ដែលអ្នកត្រូវការជាសំខាន់
 ហើយនឹងអ្វីដែលអ្នកទទួលស្គាល់អំពីគ្រូដែលមានជំនាញឯកទេស ជាទូទៅ។
 អ្នកអាចទទួលបានការអង្កេតតែម្តង
 ប៉ុន្តែអ្នកអាចបន្ថែមរាល់ការឆ្លើយតបរហូតដល់ការចុះអង្កេតនេះត្រូវបានបញ្ចប់នៅថ្ងៃទី១០ខែវិច្ឆិកាឆ្នាំ២០២០។
 រាល់ទាំងសំណួរត្រូវបានឆ្លើយ។
 ប្រសិនបើអ្នកមាននូវសំណួរអំពីការអង្កេតនេះ សូមទំនាក់ទំនងមកតាមរយៈអ៊ីម៉ែល:

 សកលវិទ្យាល័យជាសេដ្ឋីល ជំនាញកិច្ចសហប្រតិបត្តិការណ៍ការអប់រំសកល
 អង្គការសិក្សា ស៊ីន អេ លី(Shin Ae Lee)

 Seoul National University, Global Education Cooperation Major
 Principal Investigator : Shin Ae LEE

សំនួរខាងក្រោមជាសំណួរត្រួតពិនិត្យសំខាន់ៗ សូមបំពេញនៅរាល់សំនួរខាងក្រោម។

ព័ត៌មានគោលនៃការចូលរួម

1. ឆ្នាំនៃបទពិសោធន៍នៃការបង្រៀន: _____

2. សញ្ជាតិទៅ

① ក្រុងធុរ្យ ② ក្រុងវិទ្យាល័យ

3. មុខវិជ្ជាដែលអ្នកបង្រៀន

① ភាសាខ្មែរ ② អង់គ្លេស ③ ប្រវត្តិសាស្ត្រ ④ ភូមិសាស្ត្រ ⑤ គណិតវិទ្យា ⑥ រូបវិទ្យា ⑦

ភីមីវិទ្យា ⑧ ជីវវិទ្យា ⑨ វិទ្យាសាស្ត្រផែនដី ⑩ អប់រំកាយ

4. តើការអប់រំកម្រិតខ្ពស់បំផុតរបស់អ្នកគឺជាអ្វី?

① បរិញ្ញាបត្រ

② អនុបណ្ឌិត

③ សញ្ញាបត្របណ្ឌិត

I. ប្រសិទ្ធភាពមុនពេលអប់រំ

1-1. តើអ្វីដែលជំរុញឱ្យអ្នកក្លាយជាក្រុមគ្រូបង្រៀននៅក្នុងវគ្គបណ្តុះបណ្តាលក្រុមគ្រូបង្រៀននឹងមុនការអប់រំ? ជ្រើសរើសចម្លើយមួយហើយប្រសិនបើអ្នកជ្រើសរើស (b) សូមសរសេរមូលហេតុ។ ()

- ① សាស្ត្រាចារ្យនឹងមកបង្ហាត់បង្រៀន ② កម្មវិធីសិក្សាល្អ ③ ការចាប់អារម្មណ៍លើចំណេះដឹង ④ មិត្តល្អនិងរូបធម៌របស់គ្រូល្អ ⑤ ការទាក់ទាញជីវិតជាក្រុមគ្រូបង្រៀន

1-2. តើការបណ្តុះបណ្តាលក្រុមអប់រំមានប្រសិទ្ធភាព ដើម្បីអោយមានមោទនភាព (ការគោរពខ្លួនឯង) ជាក្រុមគ្រូបង្រៀនដែរឬទេ? ()

- ① មិនមែនទាល់តែសោះ ② បន្តិច ③ ល្មម ④ ខ្លាំងណាស់ ⑤ ខ្លាំងណាស់

1-3. តើការអប់រំរបបម មានអត្ថប្រយោជន៍ផ្ទាល់ដល់ការងារបច្ចុប្បន្នរបស់អ្នកដែរឬទេ? ()

- ① មិនមែនទាល់តែសោះ ② បន្តិច ③ ល្មម ④ ខ្លាំងណាស់ ⑤ ខ្លាំងណាស់

1-4. តើអ្នកពេញចិត្តនឹងកម្មវិធីសិក្សាក្នុងការអប់រំរបបមដែរឬទេ? ()

- ① ពិតជាមិនពេញចិត្ត ② មិនពេញចិត្ត ③ ធម្មតា ④ ពេញចិត្ត ⑤ ពិតជាពេញចិត្ត

1-5. សរុបមក តើអ្នកពេញចិត្តនឹងគុណភាពរបស់សាស្ត្រាចារ្យនៅក្នុងក្រុមជួមជុល (ឬសាកលវិទ្យាល័យ) ដែរឬទេ? ()

- ① ពិតជាមិនពេញចិត្ត ② មិនពេញចិត្ត ③ ធម្មតា ④ ពេញចិត្ត ⑤ ពិតជាពេញចិត្ត

II. ការទទួលស្គាល់លើក្រុងដែលមានជំនាញឯកទេស

2-1. ជ្រើសរើសយកការបង្ហាញពីរដែលពិពណ៌នាអំពីជំនាញឯកទេសរបស់គ្រូឱ្យបានត្រឹមត្រូវ ()

①មានជំនាញនិងបណ្តុះបណ្តាលជំនាញ ②ចំណេះដឹងនិងការសិក្សា ③យកចិត្តទុកដាក់និងភ័ក្ត្រខ្ពស់ ④មានការគោរពខ្ពស់និងមានឋានៈខ្ពស់ក្នុងសង្គមនិងមានជំហរខ្ពស់ ⑤ ក្រមសីលធម៌និងសីលធម៌ខ្ពស់

2-2. ជាទូទៅ តើអ្នកជឿថាអ្នកត្រូវបានគេគោរពនិងទទួលស្គាល់ថាជាអ្នកជំនាញឯកទេស (ការងារ) និងជាអ្នកជំនាញផ្នែកជាក់លាក់ណាមួយដែរឬទេ? ()

① ពិតជាមិនយល់ព្រម ② មិនយល់ព្រម ③ ធម្មតា ④ យល់ព្រម ⑤ ពិតជាយល់ព្រម

2-3. ជាទូទៅ តើអ្នកជឿថាអ្នកត្រូវបានគេគោរពនិងទទួលស្គាល់ពីឪពុកម្តាយជាអ្នកមានជំនាញឯកទេសដែរឬទេ? ()

① ពិតជាមិនយល់ព្រម ② មិនយល់ព្រម ③ ធម្មតា ④ យល់ព្រម ⑤ ពិតជាយល់ព្រម

2-4. ១.៤ ជាទូទៅ តើអ្នកជឿថាអ្នកត្រូវបានគេគោរពនិងទទួលស្គាល់ពីសិស្សថាជាអ្នកមានជំនាញឯកទេសដែរឬទេ? ()

① ពិតជាមិនយល់ព្រម ② មិនយល់ព្រម ③ ធម្មតា ④ យល់ព្រម ⑤ ពិតជាយល់ព្រម

III. តម្រូវការបណ្តុះបណ្តាលសម្រាប់ការអភិវឌ្ឍន៍វិជ្ជាជីវៈ

3-1. ត្រូវជនជាតិខ្មែរមានចំណេះដឹងគ្រប់គ្រាន់លើមុខវិជ្ជា។ ()

- ① មិនដែល ② កម្រណាស់ ③ ពេលខ្លះ ④ ញឹកញាប់ណាស់ ⑤ ជានិច្ច

3-2. ត្រូវជនជាតិខ្មែរមានការយល់ដឹងគ្រប់គ្រាន់អំពីសិស្ស។ ()

- ① មិនដែល ② កម្រណាស់ ③ ពេលខ្លះ ④ ញឹកញាប់ណាស់ ⑤ ជានិច្ច

3-3. ត្រូវជនជាតិខ្មែរមានការយល់ដឹងពីសាលាគ្រប់គ្រាន់។ ()

- ① មិនដែល ② កម្រណាស់ ③ ពេលខ្លះ ④ ញឹកញាប់ណាស់ ⑤ ជានិច្ច

3-4. ត្រូវជនជាតិខ្មែរមានការលូតលាស់ផ្នែកចំណេះដឹងគ្រប់គ្រាន់និងបន្តការរៀនបន្ថែម។ ()

- ① មិនដែល ② កម្រណាស់ ③ ពេលខ្លះ ④ ញឹកញាប់ណាស់ ⑤ ជានិច្ច

국문 초록

교원전문성 관점으로 본 캄보디아 중등 예비교사교육 연구

- 캄퐁츠낭 중등 학교를 중심으로 -

서울대학교 대학원
글로벌교육협력전공
이신애

본 연구의 목적은 교사전문성의 관점에서 캄보디아 중등 예비교사교육의 현황을 분석하고 그 발전방안을 위한 정책적 시사점을 제시하기 위함이다. 이를 위해 본 연구는 캄보디아 중등 교사 교육의 현 체제와 실제 운영 현황을 살펴보고 현직 중등 교사를 대상으로 설문조사를 진행하여 캄보디아 중등 예비교사교육의 효과성, 교사전문성, 교사전문성을 위한 교육적 필요에 대한 캄보디아 현직 중등 교사의 실제적인 인식을 드러내고자 하였다. 이를 위해 캄보디아 교외 지역인 캄퐁츠낭(Kampong Chhnang) 지역 중등교사를 대상으로 설문조사를 진행하여 총 218 명의 중등교사의 예비교사양성과정, 교사전문성, 교육적 필요에 대한 인식에 대한 설문데이터를 얻을 수 있었다. SPSS Statistics 27 for Window 프로그램을 통한 기술통계, T-test, ANOVA 분석을 통하여 설문을 통해 얻은 데이터를 분석했다.

설문 결과, 첫째, 설문에 참여한 캄보디아 중등교사들의 교직 진입의 동기는 외재적 동기(금전적 보상)와 내재적 동기(담당 교과에 대한 흥미)가 같은 비율로 나타났다. 외재적 동기가 내재적 동기의 촉진을 저해하는 선진공여국의 교사들의 경우와 달리 개발도상국 맥락에서는 외재적 동기는 내재적 동기를 촉진하는 특수한 역할을 한다는 선행연구의 내용을 종합할 때, 캄보디아 교사의 전반적 동기 향상을 위해 외재적 동기를 통해 교사의 내재적 동기를 더욱 촉진할 수 있도록 하는, 이른바 ‘내 · 외재적 동기의 시너지’ (motivational synergy)의 필요성이 두드러질 것으로 보인다. 둘째, 캄보디아 예비교사교육의 효과성 중 ‘전문적 정체성 형성 (professional identity formation)’ 이 가장 비 효과적인 것으로 밝혀졌다. 다시 말해, 캄보디아의 예비교사교육이 예비교사의 교과지식과 교수 방법 습득에 지나치게 집중하는 경향에서 벗어나, 예비교사가 교사의 역할과 교육의 의미를 성찰할 수 있도록 하는 교사들의 ‘전문적 정체성 형성’에 더욱 힘써야 할 것을 시사한다. 셋째, 응답자 교사 집단 중 ‘사회적으로 인정’ 받는 교사가 ‘전문적인 교사’ 라고 인식하는 집단일수록, 지속적 교육 (continuous learning)에 대한 요구가 높게 나타났다. 따라서 캄보디아 교사가 ‘사회적으로 인정’ 받는다는 인식을 제고할 수 있도록 교사의 사회적 지위 및 인식 제고를 위한 실제적인 정책 지원과 방법이 마련되어야 할 것이다.

설문 결과를 토대로, 이 연구에서 향후 캄보디아 중등 예비 교사 교육의 향상을 위한 세가지 시사점을 제시했다. 첫째, 최근 코로나 19 로 인하여 캄보디아를 비롯한 개발도상국에서도 비 대면 교육, ICT 기술 및 지식 위주의 교사교육이 강조되고 있다. 하지만 연구 결과에서 밝혀진 바, 예비교사교육 기간 동안 교사의 지식과 기술 습득에

집중되는 것 보다는 ‘교직’과 ‘교육’의 의미를 깨닫고, 교육적 가치관을 정립하여 교사의 적절한 정체성, 특별히 전문가로서의 교사의 정체성(Professional Identity)을 형성하는데 캄보디아 중등 교사 교육의 방점을 둘 필요가 있음을 논의하였다. 구체적으로, 캄보디아 교육부의 지속적 전문성 개발(Continuous Professional Development: CPD)의 정책 기조에 맞추어, 1 년의 교사 교육의 기간을 늘려 교사가 전문가로 성장할 수 있는 실질적인 전문가로서의 성장 기간(Professional Year)을 제공하고 일반교사(classroom teacher) 이외에도 행정가, 관리자, 교원 교육가 등 다양한 진로 선택을 제공하여 교사가 교직에 대한 더 넓은 전망을 가져 전문가로 성장할 수 있도록 하는 것에 대해 제안하였다. 마지막으로 한국의 교육개발협력에서의 역할과 국제적 기대에 비하여 인프라 구축 및 기술 전달 위주의 개발협력이 지배적이라는 점, 교육개발협력분야의 전문성이 여전히 낮다는 점을 고려하여 교육 및 개발협력 연구 기관에서 ‘교사 교육’에 대한 가이드라인 리포트(Guideline Report) 및 정기 보고서를 작성할 것을 제안하였다.

주제어: 캄보디아, 교사전문성, 예비교사교육, 중등 교육, 중등 교사, 교사 교육 정책

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Isaiah 61:1 NIV

“The Spirit of the Sovereign LORD is on me, because the LORD has anointed me to proclaim good news to the poor. He has sent me to bind up the brokenhearted, to proclaim freedom for the captives and release from darkness for the prisoners”

I dedicate this dissertation to my heavenly father God and creator who loves and cares Cambodia so much. Also, this dissertation is dedicated to the memory of my mother. Although she was my mentor and inspiration to pursue my academic career and dream, she was unable to see my graduation. This is for her.

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