

Critical Thinking Cognitions and Pedagogic Practices of Thai EFL University Teachers

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Declaration

I declare that I have composed this thesis myself and that it embodies the results of my own research. Where appropriate, I have acknowledged the nature and extent of work carried out in collaboration with others included in the thesis.

Supanan Prommak

ABSTRACT

This dissertation examined Thai EFL university teachers' critical thinking cognitions and pedagogic practices. Their cognitions were examined in terms of their conceptions of critical thinking and their perceptions of critical thinking development in their students. Their conceptions and perceptions were then considered regarding whether and in what way they related to their own pedagogic practices. Maintaining a sociocultural and relativist stance, this ethnographic study used methodological triangulation; the data concerning the participants' cognitions was collected by using reflective writing and semi-structured interviews, and the data concerning their pedagogic practices was collected by using non-participant classroom observations.

The findings revealed that the participants conceived of critical thinking in the following three dimensions: its components (i.e., cognitive skills, affective dispositions, goal-orientation, and morality), its importance, and its innateness and teachability. These participants perceived that their students' critical thinking varied and that the students' critical thinking expressions could be affected by Thai culture and Thai Buddhism. The factors they perceived to have influence on their students' critical thinking development were classified into three groups, namely, education, socialisation, and media and technology. In the observed classes, it was found that there was a two-way interaction between teachers' cognitions and their teaching practices. Moreover, other contextual factors could also affect such practices.

These findings showed that critical thinking, to some extent, could be culturally related. The participants themselves claimed that Thai culture and Thai Buddhism could both facilitate and impede the development of critical thinking in their students. This study suggests a model of the process of critical thinking, derived from the findings in this study. In addition to this, a methodological contribution, practical implications, pedagogic implications, and research recommendations are also given.

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LIST OF ABBREVIATIONS

APA	American Philosophical Association
CT	Critical Thinking
EFL	English as a Foreign Language
ESL	English as a Second Language
GPA	Grade Point Average
Ss	Students
S	Student
T	Teacher
TESOL	Teaching English to Speakers of Other Languages
ZPD	Zone of Proximal Development

CHAPTER 1: Introduction

1.1 Statement of the Problem

In 2016, the Thai Minister of Education stated publicly that “Thai students lacked critical thinking and English language skills” and university education did not successfully produce graduates qualified for working in the business sector (Suvansombut 2016, n.p.). This raises an issue on the effectiveness of the instruction of these two entities, especially in university education. Although critical thinking and English have been made major educational aims in the recently reformed 1999 National Education Act (Office of the National Education Commission 2002), the development of them seems to be in question. Thai students’ lack of critical thinking, in particular, has been emphasised by several scholars (e.g., Adamson 2005; Chareonwongsak 2002; Kunchon 2012; Thamraksa 2003).

Since English is not a second or official language in Thailand, Thai students learn English as a Foreign Language (EFL). Critical thinking instruction in such a context can be challenging, as critical thinking and English are considered to be Western products and therefore potentially foreign to both teachers and students. Ideally, the development of English should run parallel to that of critical thinking. The former, namely learning the main global language used for information worldwide, enables students to access a wider world of knowledge. The latter, an induction into critical thinking, enables them to critically select and apply information that can be beneficial to themselves and to others. Furthermore, as evidenced in the literature, students’ critical thinking and their English language learning are mutually compatible. This is why researching critical thinking in EFL contexts is a rewarding sphere of study.

In Thailand, there has been scant research on critical thinking at the tertiary level, and most of this has been in the discipline of nursing (Buranapatana 2006). In the field of EFL, most critical thinking studies were conducted in literature classes. Studies undertaken in other EFL courses tended to focus on students. Little research, especially that using a qualitative approach, has focused on teachers. Moreover, critical thinking cognitions and pedagogic practices of Thai EFL university teachers who teach English

courses in teacher education programmes have been under-researched, and this was one of the compelling reasons why I decided to investigate them.

To shed light on this issue, I decided to use a qualitative approach to investigate the critical thinking cognitions and pedagogic practices of Thai EFL university teachers who taught various English courses in teacher education programmes. Besides the reasons and the gaps in the knowledge about this area that have already been mentioned, this study also had the following three additional justifications.

First, since the literature presents critical thinking as being contextually and culturally bound (Atkinson 1997; Brookfield 2012; Egege and Kutieleh 2004; Fox 1994; Kumaravadivelu 2003), Westerners and Easterners may define it differently.

Second, to develop Thai students' critical thinking, it is important to understand their teachers' cognitions and pedagogic practices in relation to it. The area of interest is therefore how Thai teachers think and work when discussing, teaching and assessing critical thinking. Moreover, given that critical thinking does not seem consistent with the Thai traditional teacher-centred approach, Thai teachers probably have to plan classroom strategies that they themselves may not be familiar with. They may also have to change their own ways of thinking and make extra mental efforts when teaching, as critical thinking is not a common practice in the Thai society. In such a context, teachers may then play a dual role: supporting critical thinking development in their students and suppressing any scepticism they may have about this seemingly un-Thai behaviour.

Lastly, because the participants in this study are in teacher education programmes, it is hoped that the findings will potentially increase the teachers' realisation of the importance of critical thinking development, and that this will, in turn, benefit their students who will be not only critical citizens but also critical teachers who will be able to further educate future generations of critical citizens for the Thai society.

1.2 Research Purpose and Questions

This study examined the critical thinking cognitions and pedagogic practices of Thai EFL university teachers who taught various English courses in teacher education programmes in South Thailand. Their cognitions were studied in terms of their conceptions of critical thinking and their perceptions of their students' critical thinking

development. Their pedagogic practices were observed so that it could be seen whether and in what ways their cognitions were in accordance with their practices. The research questions were designed to elicit data relevant to the purpose and were the following:

1. How do Thai EFL university teachers conceive of critical thinking?
2. How do Thai EFL university teachers perceive the development of critical thinking in their students?
3. To what extent do Thai EFL university teachers' conceptions of critical thinking and perceptions of their students' critical thinking development relate to their actual pedagogic practices?

The research purpose and the questions above guided my selection of the theoretical framework (as discussed in the next section) and the research methodology (see Chapter 3) and determined the data analysis of the study (see Chapter 4, 5, and 6).

1.3 Theoretical Framework

I took a position, based on Vygotsky's sociocultural theory, that critical thinking was culturally dependent. This theory sees human cognitive development as being engendered by learning in social interactions mediated by three agents, namely, materials, symbols, and human beings (Lantolf and Thorne 2007). These agents are shaped by cultural and historical conditions. Because of this, people's cognitive growth is influenced not only by biological factors but also sociocultural factors. According to Wertsch (1985), Vygotsky foregrounds these social interactions with these three mediators, particularly with more competent human others that activate people's learning. When people internalise what they learn and assign value to it, it thus becomes part of their developmental programme. From this perspective, learning is a prerequisite to development. The developmental transition moves from "direct, innate, natural forms and methods of behavior to mediated, artificial, mental functions that develop in the process of cultural development" (Vygotsky 1998, p. 168). In this study, sociocultural theory understands Thai EFL university teachers' conceptions of critical thinking, their perceptions of critical thinking development in their students, and their critical thinking pedagogic practices as the consequences of both their sociocultural mediation and their personal transformation.

This study also maintains a relativist stance, perceiving everything to be mutually relevant and inseparable. Relativism is related to my personal Buddhist beliefs of conditionality and causality: viewing everything in accordance with a cause-effect relationship. Relativist conceptions also align themselves with the nature of the issues being studied. The teachers' conceptions, perceptions, and pedagogical practices are not context-free. Therefore, they need to be examined in relation to their contexts, which have been fashioned by their culture and their history. As a result of this, there seems to be an intimate relationship between sociocultural theory and the relativist position.

Consequently, the findings of this study reflect insights into a particular culture and are therefore not highly transferable to other contexts. Although the study involved certain participants in certain contexts, the findings should not be used to stereotype all people in such settings. Even within the same culture, people relate to that culture in different ways so as to develop their identity which, from a sociocultural perspective, represents their "unique social experience (that) is embedded in broadly shared cultural elements" (Ratner 2004, p. 405). Such a phenomenon is perceived by Kim (2002) as "the nature of culture" (p. 839). This study therefore acknowledges the uniqueness of Thai EFL cultural contexts as well as the uniqueness of the participants as individual human beings.

Normally, there exist different cultural products, such as attitudes and ways of thinking, in different cultural groups (Egege and Kutieleh 2004). However, it may not be sensible to judge whether a certain culture is better than others. From the relativist viewpoint, each culture is valued and worth respecting (Foster 1996). However, if every culture is assumed to be valid according to its own value framework, how can development take place when all are required to be tolerant towards what already exists (Hammersley 1992)? Despite the realisation that relativism perhaps promotes egocentrism and ethnocentrism, this study advocates that examining issues and their relevance to culture is indeed advantageous, and development is thereby possible. This is because an examination of a particular culture may give outsiders finer appreciation of cultural differences, one that can result in their empathy, respect and negotiation regarding these differences. It is to "Maintain sensitivity to the ways of others, certainly, but not abject submission" (Gieve 1998, p. 128). Nevertheless, although relativism welcomes multiple interpretations of multiple realities (Andrews 2012), people from other cultures still

have the right to criticise a particular culture, providing that this is done with awareness and sensitivity.

Moreover, this process can also benefit insiders. As claimed by Kluckhohn (1951), “culture will accumulate and can become so ingrained that people are not conscious of the cultural assumptions that they or others make” (p. 86). Thai EFL university teachers’ conceptions, perceptions, and pedagogic practices may fall into this category. Therefore, the insights gained from this study can perhaps raise their concerns and awareness of these issues and present a hope for a development. Such development could be expected to be practical and sustainable since it will be based on the insights provided by insiders who themselves experience the phenomena.

1.4 Conceptual Terms

This thesis, ‘Critical thinking cognitions and pedagogic practices of Thai EFL university students’, focuses on three particular areas, namely, pedagogy, cognition, and practice. I realise each of these has its own competing definitions; therefore, I wish to discuss each of them in relation to my work.

The first term, ‘pedagogy’, involves teachers’ knowledge, skills, and practices (Inglis and Aers 2008) that are reflected in their teaching techniques and strategies employed in class to enable learning to take place (Siraj-Blatchford et al. 2002). Based on this concept, the current study defines pedagogy as what teachers have and do to encourage students’ learning. Moreover, due to the sociocultural and relativist framework of this study, pedagogy is also understood as being mediated by sociocultural influences, although some aspects share universal commonalities.

The second term is ‘cognition’. Borg (2003) describes teachers’ cognitions as “what teachers know, believe, and think” (p. 81). Borg maintains that such cognitions greatly affect their pedagogic practices, and therefore should receive attention. This study understands the participants’ cognitions in terms of their conceptions and perceptions. Conception is a forming of an idea into one’s mind (Brunswik 1956) while perception is an act of using human senses to understand things (Colman 2015). Brunswik (1956) claims that conception leads to perception. In other words, people use their formed conceptions through their senses to understand people or objects and construct them into sensory images. Vygotsky (1998) similarly states that perception is not merely a

result of human sensory functions: the way people make sense of something is shaped by the concepts they have about it. Moreover, Vygotsky views conceptions and perceptions as being socially organised. Borg (2003) similarly mentions four mediators that influence teachers' cognitions (conceptions and perceptions), these mediators are "schooling", "professional coursework", "contextual factors", and "classroom practice including practice teaching" (p. 82). In this study, the participants' conceptions of critical thinking are concerned with how they form their ideas of critical thinking in their minds (Research Question 1). Their perceptions of their students' critical thinking development are concerned with how they apply their conceptions of critical thinking through their senses to understand critical thinking development in their students (Research Question 2).

The last term is 'practice'. According to Borg (2003), teachers' cognitions shape their teaching practices, and the reverse holds true. However, Borg also claims that teachers' practices are influenced not only by their cognitions but also by contextual factors which can alter the implementation of their cognitions in class. Therefore, for Borg, teachers' actual classroom practices should not entirely be attributed to their cognitions. In this study, the participants' pedagogic practices are assumed to be the consequences of their cognitions and/or other contextual factors (Research Question 3).

1.5 Significance of the Study

This thesis aims to provide insights into Thai EFL university teachers' critical thinking cognitions and pedagogic practices. Since the teachers' conceptions of critical thinking were examined, this may produce interesting information about the extent to which these teachers understand this type of thinking and are aware of its importance. The teachers' perceptions of their students' critical thinking development and their own pedagogic practices are also investigated. Therefore, the findings may throw light on this development as well as identifying the factors affecting it. Potentially, these findings can provide additional information to account for the gap between the theory and practice of critical thinking development, as promoted by the 1999 National Education Act. Such information may in turn enable the educational authorities concerned to reconsider educational policies and develop them accordingly to most benefit the students. The practical implications from this study may also benefit Thai EFL university teachers, particularly those involved in teacher education programmes.

For other researchers interested in doing a study in this field, the current study may uncover gaps that need to be filled. In the literature, Thailand is influenced by both Thai culture and Thai Buddhism. The findings from this study may indeed add interesting information to the literature of critical thinking in a Buddhist-influenced educational context.

1.6 My Own Background

I was born Buddhist and reared in a traditional Thai way. Being obedient to my parents and respectful to others, I was always admired as a good and well-behaved child by people around me. My parents were given all of the credit for my good behaviour, which is in accordance with Thai culture. Moreover, since my parents were teachers, my good qualities were signs of their success not only as good parents but also as good teachers. Thai people in general believe that teachers who are capable of teaching their own children must also be good at teaching others' children. Social recognitions as a consequence of my qualities brought pride to my family and to me. This shaped me to be a traditional Thai person, someone who would rarely behave in a way that would be counter to good Thai cultural norms.

When I studied in school, I was cautious about my behaviour, because I felt that if I did wrong, it would reflect on and also affect my parents who were teaching in the same school. I was attentive to what my teachers were teaching and was usually given the first place in my class. This reinforced my belief that behaving in the way suggested by my parents and teachers was a virtue, and that it would allow me to continue to thrive and avoid undesirable distractions.

I remained the way I was until I finished my Master's degree and started my career as a university teacher. When teaching students, not realising my prejudice, I perceived those who were like me to be good students. I felt respected when students in my classes listened to me and behaved according to my suggestions. At that time, I tended to disagree with students who thought differently from me or from conventional norms. Being against any deviance, I was thoroughly conformist, living in my own little world. Only when I got a scholarship to further my PhD in the UK, were my deep-seated prejudices challenged and shaken to the core.

During the first year of my PhD, my supervisors asked me to read various relevant articles and summarise what I had learned from them. Reading my work, they gently suggested that I should be more critical. ‘In what way was I uncritical?’, I asked myself. I then discussed it with my Thai PhD friends here in Stirling. Surprisingly, we could not arrive at the consensus of what critical thinking really was. It took me almost a month to research what it actually was and why it seemed foreign to us. Getting deeper into the topic, I found that the area of critical thinking was not new in the Thai educational context. But why did several scholars still claim that most Thai students lacked critical thinking? This spurred me on to choose this seemingly un-Thai subject to be the topic of my research. After reviewing more of the relevant literature and completing two pilots, I was quite certain that I was on the right track.

Doing the research, I not only explored the critical thinking cognitions and pedagogic practices of Thai EFL university teachers but also reflected on my nascent critical thinking. In the UK, critical thinking seems to be a familiar concept for the locals. But I was a *bona fide* product of Thai traditional culture which emphasises conformity and obedience, and found myself struggling to be an effective critical thinker. At first, there seemed to be a conflict in my mind. I asked myself why I had to change. Is conformity not good? Is trying to be a product of another culture a way of insulting, even debasing, my own local identity? Would the change truly benefit me or was I just doing it for the sake of graduation in this new Western environment? However, on reflecting on my own problems and my family’s problems in the past, difficulties that had been caused by our lack of criticality, I was suddenly convinced and felt a need to adopt and embrace criticality in my life. Doing this thesis is a valuable journey, one that hopefully led me to become a critical thinker and critical researcher. Now, with my genuine and personal interest in this topic and with my intention to present the insights into it, I sincerely hope and believe this study will contribute to greater critical thinking development in Thai EFL university contexts.

1.7 Context of the Study

This study maintains the sociocultural and relativist stance. Therefore, it is important for my readers to understand the context of the study. In this section, general information about Thailand as well as that about South Thailand is first provided. As the participants in this study were Thai EFL university teachers, Thailand’s education system, teacher

education programmes in Thailand, and English language teaching in Thailand are also presented.

1.7.1 General Information about Thailand

The Kingdom of Thailand (or ‘Siam’ in the past) is one of the few Southeast Asian countries that have never been a Western colony. The term ‘Thai’ means ‘free’ or ‘independent’, and this is highly significant for Thai people who are proud of their country’s independence. ‘Thai’ signifies independence and patriotism, as well as the sacrifices their ancestors made to preserve the country’s sovereignty.

Thailand has an area of 513,120 km² and borders Burma to the north, Cambodia and the Gulf of Thailand to the east, Burma and the Indian Ocean to the west, and Malaysia to the south (Food and Agriculture Organization of the United Nations 2012). It has 76 provinces and one capital city, Bangkok, which is located in Central Thailand. The country is geographically divided into the following 6 regions: North, Central, East, West, Northeast, and South. Thailand's climate is described as a tropical monsoon with three distinct seasons, namely, the wet season, the cool season, and the hot season. The current population of Thailand, estimated at midyear 2018, is 66,234,000 (Mahidol Population Gazette 2018).

The Thailand of today is governed by a constitutional monarchy under the rule of King Vajiralongkorn or King Rama X. Due to the close relationship with Buddhism in Thai history, Thai kings observe this religion according to the constitution and integrate the Buddhist doctrines into their own governance so that they reign in righteousness.

The national religion of Thailand is Theravada Buddhism, observed by approximately 95 per cent of Thais. However, due to freedom of religion in Thailand, other religions are also practised; these are Islam, Sikhism, Christianity, and Hinduism. His Majesty King Vajiralongkorn, despite being a Buddhist, is the patron of all religions in the nation. Buddhism is claimed to be “the core of Thai national identity” (Ratanakul 2010, p. 233) since “It has done much to mould the Thai mind and Thai character” (Payutto 2007, p. 51). Years in Thailand are counted according to Buddhist Era which is 543 years in advance of the Western calendar.

Thai is the national language. Nevertheless, each region has its own dialect, such as Northern Thai and Southern Thai. The dominant national symbol of Thailand is *thong*

trai-rong (the Thai national flag), comprising five horizontal stripes of three colours, each of which symbolises a spiritual anchor for Thais: red for the nation, white for the religion (Buddhism), and blue for the monarchy. Thais believe this complementary triple concept on their flag enables them to maintain harmony and the country's sovereignty from the past to the present.

Thailand is an upper-income country (The World Bank 2018). The national economic development now is translating the 'Thailand 4.0' policy into practice. This policy follows three previous national economic policies that are Thailand 1.0 (agriculture), Thailand 2.0 (light industry), and Thailand 3.0 (heavy industry). In the Thailand 4.0 scheme, innovation, technology and creativity are promoted in support of a value-based economy.

All the participants in this study were of southern origin and teaching in universities in South Thailand. It is thus relevant to further describe the general information about this region.

South Thailand is the smallest geographic region. It has 14 provinces. These areas are hilly and mountainous, surrounded by the Gulf of Thailand from the east and the Andaman Sea from the west. Despite being the smallest, South Thailand is economically prosperous. This region has abundant natural resources, especially minerals and marine and coastal resources. There are also many islands and coastal destinations that attract large numbers of tourists each year. Rubber trees have been widely planted, making the region the largest centre of rubber production in the country.

Most South Thais are Buddhists, although there is quite a large number of Muslims living in the deep south, namely, the three provinces bordering Malaysia: Yala, Pattani, and Narathiwat. These areas have been troubled by rebel attacks. With the bloodshed increasing, the government has warned Thais and foreigners visiting there about the severity of some of the dangerous situations in these areas.

1.7.2 Education in Thailand

Education in Thailand dates back to the Sukhothai Period (1238-1378) when King Ramkhamhaeng the Great first invented the Thai alphabet (Ministry of Education 2018). Education back then took place in *wang* (palace) and *wat* (temple). Princes and boys from noble families were educated with "high level classic art and literature"

(Sangnapaboworn 2007, p. 260) in *wang* by *Rajabundit* (The Royal Institution of Instruction). Ordinary boys were educated in *wat* by Buddhist monks. The monastic education largely consisted of Buddhist-related knowledge as well as knowledge in other disciplines “such as astrology, medicine, poetry, and customary law” (Costa 1997, n.p.). Notably, Buddhist monks were also invited to teach in *wang*. These monks then educated “everyone from prince down to peasant” (Watson 1980, p. 70). As a result of this, education in *wang* and *wat* unavoidably included moral education too.

Modern education first began in the reign of King Rama V or His Majesty King Chulalongkorn the Great (1868-1910). Modernisation was perceived as a means of preventing the country from being occupied by Western powers. His Majesty established modern Thai schools and the Ministry of Education. One of the schools, known as the Civil Service Training School, was later upgraded to be the country’s first university, ‘Chulalongkorn University’, in the reign of King Rama VI. The major aim of education at that time was to supply personnel for governmental services (Costa 1997). Nevertheless, showing clear vision and criticality, King Rama V insisted that Western modernisation be adopted in such a way that it would not destroy indigenous identities (Fry 2002). His Majesty’s determination on ‘going forward while maintaining Thai indigeneity’ set Thailand’s unique trajectory for developing the country. This trajectory has had a strong impact on the development of Thai education until today.

The provision of current education in Thailand is now regulated by the 1999 National Education Act (Office of the National Education Commission 2002). This act stipulates that the Ministry of Education is responsible for supervising the following three types of education: formal, non-formal, and informal education. As the participants in this study were Thai EFL university teachers, formal education, which includes university education, will be described.

Formal education includes basic education and higher education. Free-of-charge basic education in public schools was formerly 12 years and extended to 15 years in 2009 (Phaktanakul 2015). This free education includes the following 4 educational levels: 3-year pre-primary education, 6-year primary education, 3-year lower-secondary education, and 3-year upper-secondary education. All Thais are required to complete 9-year compulsory primary and lower-secondary education. Upon the completion of their compulsory education, students have the following two choices: either to leave school

or to further their studies. Their decision is mostly determined by their families' financial capacities. Students who wish to further their study are offered the following two strands: the academic strand (upper-secondary education) or the vocational strand (Kirtikara 2001).

Upper-secondary graduates are qualified to apply to university. Admission to public universities depends on students' national entrance examination scores and their upper-secondary school Grade Point Averages (GPA). The examination involves a set of three tests as follows.

- a) An Ordinary National Education Test covering five subjects: Thai; Mathematics; Science; Social Studies, Religion, Culture; and English
- b) A General Aptitude Test evaluating students' abilities in reading, writing, critical thinking, problem solving skill, and English communication
- c) A Professional Aptitude Test assessing students' basic knowledge and ascertaining if they have the professional basic aptitude required in their selected field of study

The inclusion of critical thinking in the national entrance examination is intended to increase the so-called positive washback from critical thinking cultivation in pre-university education. Moreover, the use of students' GPA is "aimed at eradicating rote learning and placing more importance on critical thinking, creativity, and authentic academic ability" (Sangnapaboworn 2003, n.p.). These show the increasing interest in critical thinking in Thai education. However, the use of students' GPA has recently become an issue because there has been a tendency for the standard of each school to be inconsistent.

Higher education offers diploma levels and degree levels (undergraduate levels and graduate levels) in 3 strands: academic, professional, and technology programmes (Kirtikara 2001). The Office of the Permanent Secretary under the Ministry of Education (2017) revealed that in 2016, there were 154 higher education institutes in Thailand (80 public institutes and 74 private institutes). Each institute type has its subtypes, as shown in Table 1.

Table 1: Higher education institutes classified according to their various types

Public universities	Private universities
Public universities	Private universities
Rajamangala universities of technology	Private colleges
Autonomous universities	Private institute
Open public universities	
Rajabhat universities (which were formerly teaching colleges)	

Higher education institutes are under the supervision of the Office of Higher Education Commission in the Ministry of Education. Despite the promotion of the student-centredness in accordance with the 1999 National Education Act, teaching and learning in higher education institutes still appear to be quite teacher-centred, with teachers as givers and students as receivers of knowledge (Thamraksa 2003). Most higher education students have been encouraged to memorise the contents of books, and their critical thinking abilities have rarely been cultivated (Kunchon 2012; Sangnapaboworn 2003). Nevertheless, as the new national education plan of Thailand, which has been implemented from 2017 to 2036, aims to equip Thai students with skills necessary for the 21st century (Saengpassa 2017), the development of their critical thinking appears to be needed.

1.7.3 Teacher Education Programmes in Thailand

According to Thongthew (2014), the first teacher training school was formed in 1892 to produce primary teachers. This school recruited secondary graduates who then spent one year in the school before obtaining approval to teach in primary schools. Until 1903, secondary teachers were allowed to teach only after they had spent two years in their teacher training schools. Teacher education reached a significant turning-point when the Teacher Training College Act 1975 came into force. This act stipulated that primary and secondary teachers were required to attain a Bachelor's degree. From 1975 onwards, teacher education has undergone several changes in attempts to upgrade the quality of the teaching profession. At present, graduates with a Bachelor's Degree in Education from universities where their teacher education programmes have been approved by the Board of Teacher Education are granted a Teacher Certificate. This

Certificate is a professional license, guaranteed by the law, for teaching in schools. Each programme (no matter what academic major) includes:

“the minimum of 160 credits offered throughout the programme in which all credits are to be broken down into 30 credits in General Education, 50 credits in Teaching Profession, 74 credits in the Subject of Specialisation and 6 credits in Elective Study” (Thongthew 2014, p. 549).

Nowadays, there are 35 teacher education programmes in 35 universities issuing a Teacher Certificate approved by the Board of Teacher Education (My translation 2018). These universities include 16 Rajabhat universities, 11 private universities, 3 Rajamangala universities of technology, 3 autonomous universities, and 2 public universities. These programmes comprise four years of coursework and one-academic-year internship in schools (Kantavong et al. 2012), producing qualified teachers for primary and secondary schools (Michael and Trines 2018). Students in such programmes are primarily taught to use learner-centred teaching methods (Trends in International Mathematics and Science Study and Progress in International Reading Literacy Study Center 2015). Despite this, Foley (2005) points out that “this approach did not succeed very well as it seemed to go against the rote learning tradition that was ingrained in both the educational and religious traditions of Thai culture” (p. 224).

In addition, the Framework of the Second 15-Year Long Range Plan on Higher Education of Thailand (2008-2022) (Commission on Higher Education 2008) shows interesting information. This framework contends that Thailand’s education is in “the vicious cycle” (p. 5). That is to say, the quality of primary and secondary teachers, produced by teacher education programmes, has decreased. The declining quality of teachers is likely to result in the declining quality of students. Some of the students, who decide to enter teacher education, will then again become teachers with decreasing quality. Due to this cycle, the quality of teacher education programmes in university appears to be a matter of great concern.

1.7.4 English Language in Thailand

The role of English language education in Thailand has changed considerably since it was first introduced. According to Durongphan et al. (1982 cited in Darasawang 2007, p. 187), the language first arrived in Thailand (or ‘Siam’ as it was called then) with

American missionaries in the reign of King Rama III (1824 -1851). In the reign of King Rama IV (1851-1865), Southeast Asian countries were threatened by Western powers. His Majesty coped with the colonial pressure by starting learning English himself and using his English abilities to form good diplomatic relationships with Westerners.

The role of English became particularly important during the reign of King Rama V (1868-1910) who perceived it as a constructive tool for modernising his country. Despite this, English language teaching during His Majesty's reign was still restricted to royalty and nobility. After His Majesty established schools for commoners, English was incorporated into primary and secondary education curricula in 1890. Until 1921, during the reign of King Rama VI, English was made a mandatory subject for fifth-grade students (*Prathomsuksa 5*), thereby firmly establishing itself in Thai formal education. In higher education, English was taught to specialised officials who worked for the civil service (Chutisilp 1984). English at that time was learned through rote memorisation and grammar-translation method.

The year 1996 saw a major change for English in Thai education. Primary students were mandated to learn it. Another significant change was evident in the recently reformed 1999 National Education Act (Office of the National Education Commission 2002) where a shift from teacher-centredness to learner-centredness was made, resulting in more emphasis on communicative approaches in English language learning. According to this act, English was no longer a mandatory subject, but it was designated the first foreign language required by students at practically all educational levels (Darasawang 2007). In university education, university students were required to enrol for 12 credits of English courses: “six in general English and the other six in English for academic or specific purposes” (Foley 2005, p. 225).

English is regarded as a foreign language in Thailand. There was an attempt to make English the official second language in mid-2010, but the proposal was eventually rejected by the Minister of Education at that time, who deemed that using English as a second language might cause “misunderstandings that Thailand had been colonised in the past” (Bunnag 2010, p. 5 cited in Darasawang and Watson Todd 2012, p. 207). This historical issue indicates Thailand's strong sense of independence as well as her national pride.

As can be seen, Thailand has benefitted from English in various ways. The language helped the country escape Western colonial rule and modernised itself. Although in the past English was an indicator of a high status as it was exclusively learned among the privileged, nowadays “English is no longer a luxury but a necessity” (Foley 2005, p. 233) for all Thais. Those mastering it will be offered more opportunities in life. Foley stresses its important role in several sectors in Thailand, such as education, media, tourism, and business. The importance of English in Thailand has never declined but instead has increased, especially in the current age of globalisation.

English language teaching in higher education nowadays is governed by the 1999 National Education Act (Office of the National Education Commission 2002), which promotes the following three main areas: student-centred learning, creative and critical thinking, and the inclusion of Thai culture in the learning process. However, there are a number of authorities maintaining that the implementation of critical thinking in Thai classrooms has not been successful (e.g., Kunchon 2012; Thamraksa 2003; Wallace 2003).

1.8 Outline of the Study

This study comprises seven chapters:

Chapter 1 contains the statement of the problem justifying why the study was undertaken and accordingly presenting the research questions. Following this, I discuss the theoretical framework that underpins this study, define the related conceptual terms, and describe how this study could potentially benefit others and contribute to the literature. I also detail my own background and explain how I came to choose this particular topic and was motivated to carry out this particular research. The study context is then given and the thesis structure described.

In Chapter 2, I review the literature relevant to the study topic. I first discuss critical thinking in general contexts before focusing on the Thai educational context. As the participants in the study were EFL university teachers, both the relationship between critical thinking and English language teaching and the role of teachers in developing students’ critical thinking are covered.

Chapter 3 focuses on the methodological framework. I detail the following methodological aspects, namely, the research strategy, my role as a researcher, pilot

studies, the recruitment of research participants, the research methods, the data collection process, the organisation of the collected data, the data analysis, the presentation of the analysed data, the strategies to ensure the rigour of the study, and the ethical considerations.

Chapter 4 presents the analysis of the findings for the first research question. In this chapter, the participants' conceptions of critical thinking are reported and discussed. Their conceptions are divided into three major themes: 'Components of critical thinking', 'Importance of critical thinking', and 'Innateness and teachability of critical thinking'.

Chapter 5 gives the analysis of the findings for the second research question. Two themes are identified and discussed; these are 'Thai EFL university students' critical thinking' and 'Factors affecting critical thinking development in Thai EFL university students'.

In Chapter 6, the analysis of the observational data for the third research question is reported and reflected on. It involves classroom characteristics of the observed classes and the relationship between Thai EFL university teachers' critical thinking cognitions and their pedagogic practices.

Finally, Chapter 7 concludes the study and highlights its theoretical contribution, methodological contribution, practical implications, and pedagogical implications. Research limitations are also acknowledged, and recommendations for future research are then given.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This study examined Thai EFL university teachers' conceptions of critical thinking, their perceptions of their students' critical thinking development, and their critical thinking pedagogic practices. In this chapter, I review six topics that ground my study: definitions of critical thinking, the importance of critical thinking, critical thinking in education, critical thinking and English language teaching, critical thinking and its cultural relevance, and critical thinking development in Thailand.

2.2 Definitions of Critical Thinking

The concept of critical thinking is claimed to have originated 2,500 years ago in the time of Socrates who asserted that the best way to teach people was to make them think (Fisher 2011). Maintaining this stance, Socrates deliberately posed questions to push his students to think more deeply and justify their acquired knowledge themselves. In the realm of formal education, critical thinking was possibly first addressed by John Dewey, a professor of philosophy at Columbia University, using the term 'reflective thinking' in his book 'How We Think' in 1910. Dewey's concept of reflective thinking is now known by today's educationalists as 'critical thinking'. Such reflection is so important that Brookfield (1987) equates it with critical thinking. Given this importance, many scholars therefore include the term 'reflection' in their definitions of critical thinking (e.g., Halpern 1998; Mayfield 1997; McPeck 1981).

Critical thinking is claimed to differ from 'normal' thinking in a number of ways. Lipman (1988) perceives that the former is more precise and rigorous than the latter. Paul (1990) also has a similar view, claiming that critical thinking is "disciplined, self-directed thinking that exemplifies the perfections of thinking appropriate to a particular mode or domain of thought" (p. 51). Paul adds that critical thinkers, unlike normal thinkers, have purposeful thinking. Halpern (1998) similarly defines critical thinkers as being "goal-oriented" (p. 450); they do not think for nothing but rather for enhancing "the probability of a desirable outcome" (p. 450). Brookfield (2012) notes another difference between the two types of thinking. He claims that, for some people, critical thinking can convey negative meanings, such as finding faults in others. Halpern (1998)

also mentions this point. However, she suggests that, instead of focusing on finding faults, critical thinking should be understood as aiming at “providing useful and accurate feedback that serves to improve the thinking process” (Halpern 1998, p. 451). Therefore, for Halpern, finding faults as part of critical thinking should not be for the sake of condemnation but rather for improvement.

When defining critical thinking, scholars usually include both cognitive skills and affective dispositions. In the following two sections, cognitive skills and affective dispositions favourable to critical thinking will be discussed.

2.2.1 Cognitive Skills

Numerous scholars have proposed definitions of critical thinking. Nevertheless, such a plethora of ideas can cause confusion, particularly when using them in critical thinking instruction. Realising the potential of causing such confusion, in 1990, the American Philosophical Association (APA) conducted a study to define the core meanings of critical thinking to facilitate critical thinking instruction at college level. Using the Delphi method, this study involved 46 college experts from different disciplines (i.e., philosophy, education, social sciences, and the physical sciences). The APA Delphi Report revealed that the process of critical thinking involved the following six cognitive skills: interpretation, analysis, inference, evaluation, explanation, and self-regulation (Facione 1990).

Other scholars mention similar cognitive skills they consider to be essential for critical thinking. For example, Pascarella and Terenzini (2005) say that critical thinkers should be able to:

“identify central issues and assumptions in an argument, recognize important relationships, make correct references from the data, deduce conclusions from information or data provided, interpret whether conclusions are warranted based on given data” (p. 156).

Brookfield (2012) emphasises the role of interpretation in critical thinking. He claims that critical thinkers interpret not only the embedded meanings of what they are thinking about but also their own thoughts and feelings. Aside from interpretation, critical thinkers should also have analytical skills. Several scholars (i.e., Brookfield 2012;

Halpern 1998; Mayfield 1997; Nickerson 1986; Paul 1990; Snyder and Snyder 2008) note the importance of analysis in critical thinking.

Another cognitive skill recognised in the critical thinking literature is reasoning. The reasoning process, Mayfield (1997) claims, occurs consciously. Critical thinkers engage in reasoning (Halpern 1998; Paul 1990; Paul and Elder 2002; Willingham 2007), inductively and deductively (Nickerson 1986). However, Peters (2008) cautions that reasoning itself can be influenced by culture. Egege and Kutieleh (2004) also mention this point. They claim that critical thinking originated in the West, and that reasoning standards for this thinking are thus shaped by Western cultures. Their notion implies that reasoning standards from one culture may or may not be applicable in other cultures.

McGregor (2007) claims that, as ‘critical’ is a term “derived from the Greek word *Kritikos* meaning to judge” (p. 9), this shows the close relationship between critical thinking and judging in the evaluation process. Brookfield (2012) also draws attention to this relationship, stating that when we think critically, we “assess whether or not our assumptions are valid and reliable guides for action” (pp. 11-12). Halpern (1998) associates evaluation with “calculating likelihoods . . . and making decisions” (p. 451), and Swartz and Perkins (2016) associate it with “forecasting possibilities” (p. 2). Lipman (1988) also states that critical thinking “facilitates good judgment because it relies upon criteria, is self-correcting, and is sensitive to context” (p. 39). Lipman’s notion that evaluation is based on criteria is also shared by Bailin et al. (1999) and Mayfield (1997).

2.2.2 Affective Dispositions

Although cognitive skills and affective dispositions are two different entities, both are mutually supportive and should be given equal importance (Facione 1990; Siegel 1988). Halpern (1998) argues that “Some people may have excellent critical-thinking skills and may recognize when the skills are needed, but they also may choose not to engage in the effortful process of using them” (p. 452). This implies that without dispositions, cognitive skills can have no usefulness.

Ennis (1996) defines disposition as “a tendency to do something, given certain conditions” (p. 166). Siegel (1988) contends that thinkers’ tendencies to engage in

critical thinking should be the result of their realisation of the importance of this thinking. To Siegel, critical thinking dispositions are concerned with the willingness and desire that underlie these dispositions. Facione (2000) also claims that such dispositions are “consistent internal motivations” (p. 64). Ennis (1996) sees dispositions as being “hidden qualities” (p. 166).

Paul (1990) believes critical thinkers are disposed to depend on themselves. For Paul, these thinkers are also independent learners. In the Delphi Report, mentioned earlier, educational experts agreed that critical thinking involves the following dispositions:

“inquisitiveness with regard to a wide range of issues, concern to become and remain generally well-informed: alertness to opportunities to use CT, trust in the processes of reasoned inquiry, self-confidence in one's own ability to reason, open-mindedness regarding divergent world views, flexibility in considering alternatives and opinions, understanding of the opinions of other people, fair-mindedness in appraising reasoning, honesty in facing one's own biases, prejudices, stereotypes, egocentric or sociocentric tendencies, prudence in suspending, making or altering judgments, willingness to reconsider and revise views where honest reflection suggests that change is warranted” (Facione 1990, p. 25).

With respect to inquisitiveness, Bailin et al. (1999) refer to “an inquiring attitude” (p.294) and Ennis (1987) mentions “try to be well-informed” (p. 12). However, Snyder and Snyder (2008) state that critical thinking should not be simply equated with inquisitiveness because not all inquisitive individuals are critical thinkers. Therefore, they suggest that inquisitive students also require critical thinking development.

Open-mindedness is highlighted by a number of scholars (i.e., Bailin et al. 1999; Ennis 1987; Halpern 1998; Simister 2004; Willingham 2007). Willingham (2007) asserts that critical thinking should be open-minded in accepting that their assumptions could be wrong. As well as having an open mind, critical thinkers sometimes have to invest great efforts in activating and ensuring critical thinking (Halpern 1998), being “persistent in seeking results which are as precise as the subject and circumstances of the inquiry permit” (Facione 1991, p. 14).

Moreover, Bailin et al. (1999) claim that critical thinkers have to have four different types of respect, namely, “respect for reasons and truth” (p. 294), “respect for high-quality products and performances” (p. 294), “respect for others in group inquiry and deliberation” (p. 295), and “respect for legitimate intellectual authority” (p. 295). Ennis (1996) also implies that respect is needed from critical thinkers, by mentioning “Care about the dignity and worth of every person” (p. 171).

Paul and Elder (2002) define those with high degrees of critical thinking dispositions as being strong sense critical thinkers. They clarify this by saying that strong sense critical thinkers have high degrees of courage, impartiality, and humility in diagnosing the biased assumptions not only of others but also even of themselves while weak sense critical thinkers think critically about assumptions they themselves disagree with and defend their own assumptions or beliefs.

Paul and Elder (2002) also maintain that strong sense critical thinkers have not only cognitive skills and affective dispositions but also an ethical sense of fair-mindedness. According to Paul and Elder, this fair-mindedness can be achieved through the possession of the following seven intellectual traits: intellectual humility as opposed to intellectual arrogance, intellectual courage as opposed to intellectual cowardice, intellectual empathy as opposed to intellectual self-centredness, intellectual integrity as opposed to intellectual hypocrisy, intellectual perseverance as opposed to intellectual laziness, confidence in reason as opposed to intellectual distrust of reason, and intellectual autonomy as opposed to intellectual conformity. Apart from the ethical sense of fair-mindedness, some scholars assert that morality issues should be included in the concept of critical thinking. The following section discusses these issues.

2.2.3 Morality

“...being moral is something more than abstract good-heartedness, (it should mean) that our basic ways of knowing are inseparable from our basic ways of being, that how we think and judge in our daily life reflects who we are, morally and intellectually” (Paul 1990, p.179)

The above statement reflects Paul’s (1990) contention that morality and criticality are interdependent. Morality, he maintains (see below), needs critical thinking because

without criticality, good-hearted people can be manipulated by propaganda, especially where self-interest is involved:

“Many good-hearted people cannot see through and critique propaganda and mass manipulation, and most good-hearted people fall prey at times to the powerful tendency to engage in self-deception, especially when their own egocentric interests and desires are at stake” (Paul 1990, p.193).

Because of these, Paul advocates integrating criticality in moral education. Cannon and Weinstein (1986) similarly endorse this view, claiming that in such an education, moral reasoning requires critical thinking. Bailin et al. (1999) claim that morality involves intellectual inquiry and therefore argue for incorporating critical thinking in this arena.

Morality is also demanded in the sphere of critical thinking development. Paul (1990) believes that critical thinkers should have a moral mind; the development of a strong sense critical thinking should also involve moral development. Sharing this view, Brookfield (2012) claims that:

“If critical thinking is understood only as a process of analysing information so that we can take actions that produce desired results, then some of the most vicious acts of human behavior could be defined as critical thinking” (p. 16).

For Brookfield, critical thinking seems to be the combination of a process and a product; the former involves intellectual abilities and the latter demonstrates moral ends. However, in a critical review, Mulnix (2012) argues that we should not conflate critical thinking with morality, claiming that morality is subject to individuals’ own interests and cultures and, relying on it, people can deviate from the “precepts of solid thinking” (p. 467).

Despite the potential influence of culture on morality, some scholars still believe that critical thinkers should be both critical and moral agents. Costa (2006) asserts that the world nowadays needs not only critical but also compassionate citizens. Fasko (1994) reviewed the relationship between critical thinking and moral reasoning and concluded that “education is a source of improving both critical thinking and moral reasoning skills” (p. 11). Paul (1990) held a similar idea, asserting that educating people with the two develops their life in both cognitive and humanistic domains. An emerging issue of interest is then how morality can be made valid and applied in the realm of critical

thinking. Moreover, as Wright and La Bar (1991) claim, if critical thinking is concerned with decision-making concerning what to believe or do, this inevitably involves moral beliefs. Another issue could be how universal morality should be defined when integrating it with the conceptions of critical thinking.

2.3 Importance of Critical Thinking

Several benefits of critical thinking are suggested in the literature. It is claimed that in the educational sphere, critical thinking can enhance students' educational opportunities (Hager and Kaye 1992). Howe (2004) conducted a comparative study to investigate Canadian and Japanese secondary teachers' conceptions of critical thinking. He found that the teachers from the West and from the East both saw the importance of critical thinking development in their students, although Canadian teachers were likely to associate critical thinking with cognitive domain while Japanese teachers focused on its association with the affective domain.

The cultivation of critical thinking is specifically emphasised in university education. This is probably because "knowledge acquired at university can be no more than a springboard for coping with change and complexity in everyday life and the workplace" (Entwistle 2009, p. 1), and critical thinking is regarded as an essential kind of such knowledge. Moreover, Barrie's (2012) research-based framework, addressing the generic attributes required of university graduates, seems to explain well the need for fostering university students' critical thinking. Barrie believes that university education should produce graduates who are capable of scholarship, global citizenship, and lifelong learning. For Barrie, graduates with scholarship perceive themselves as generators of new knowledge, keen learners of the knowledge surrounding them, and capable users of knowledge that can be applied in their life. Graduates who are global citizens have a strong desire to use their full potential to contribute to society. Graduates imbued with the concept of lifelong learning continue learning even when they are no longer in formal education. Obviously, critical thinking is central to the development of these attributes. Critical thinking is a tool to be used for graduates' acquisition and use of knowledge (Oliver and Utermohlen 1995), enabling them to attain the scholarship they seek. Graduates who are global citizens need to be critically responsive to the situations in a society that is challenged by complex problems. Graduates who are lifelong learners should possess learning autonomy which, as Halpern (1998) claims, is

itself enhanced by critical thinking. There are several scholars (i.e., Atkinson 1997; Halpern 1998; Howe 2004; Pascarella and Terenzini 2005; Pithers and Soden 2000; ten Dam and Volman 2004) advocating the development of critical thinking in university students. Given the importance of critical thinking in university education, this was the academic context that was chosen to be investigated in my research.

Aside from its merits in educational contexts, critical thinking also benefits people in their daily lives. Facione (1991) asserts that although critical thinking does not completely guarantee people's happiness, it provides the chances for it. Paul (1990) also perceives that happiness as a result of critical thinking appears to enrich not only the life of the thinkers themselves but also that of others.

In the age of globalisation, it is claimed that critical thinking becomes crucial. Brookfield (2015) asserts that students' critical thinking should be developed alongside their media and information literacy. In a similar vein, Marin and Halpern (2011) point out the importance of critical thinking in enabling people to tackle the Internet. It therefore appears that globalisation itself is forcing people to use their critical thinking to cope with its effects.

Critical thinking helps people solve problems (Bailin et al. 1999; Brookfield 2012; Paul and Elder 2002) and lessens the likelihood of encountering them. In their study, Butler et al. (2017) recruited 244 community adults and college students to take a critical thinking test, an intelligence test, and an inventory of life events to examine "whether critical thinking ability or intelligence was the better predictor of real life events" (p. 38). Interestingly, they found that the participants with higher scores in both tests reported fewer negative life events.

Critical thinking is also important for people in their working lives. According to Chartrand et al. (2009), several organisations use critical thinking assessment, in addition to a resume and an interview, as a tool for employee recruitment. This seems to suggest that university education may need to produce graduates equipped with this type of thinking. Halpern (1998) claims that people with critical thinking can make good career choices. When they work, they can make good decisions about the tasks that have to be done (Snyder and Snyder 2008). Since high positions in the workplace require people capable of making sophisticated decisions, employees who are capable of critical thinking tend to have better opportunities to be promoted to these positions.

Chartrand et al. (2009) note this point, basing it on recent research conducted by Pearson TalentLens (a company specialising in assessment) and by academics. The literature reviewed above highlights a number of merits of critical thinking which have led to it becoming a fundamental aim of education. The following section elucidates how critical thinking has been promoted within the realm of education.

2.4 Critical Thinking in Education

The increasing promotion of critical thinking development in students possibly demonstrates a belief among educators that critical thinking is learnable. This section will first consider this learnability and will then describe educational theories relevant to critical thinking development. The next topic involves classroom strategies used for developing students' critical thinking. We shall then consider what research suggests on whether critical thinking should be taught as a separate course or integrated with other subject areas. As teachers play a crucial role in students' development and are the subjects of the current study, this section ends with an examination of the role of teachers in developing their students' critical thinking.

2.4.1 Critical Thinking and Its Learnability

Several authorities perceive that critical thinking is teachable, assessable, and learnable. The teachability of critical thinking is well explained in Dewey (1990 cited in McGregor 2007, p. 205):

“Any subject, from Greek to cooking and from drawing to mathematics, is intellectual, if intellectual at all, not in its fixed inner structure, but in its function-its power to start and direct significant inquiry and reflection” (p. 39).

Moreover, critical thinking can be assessed using both subjective and objective tests. Although some scholars (i.e., Mehta and Al-Mahrooqi 2015; van Gelder 2005; Wade 1995) suggest assessing students' critical thinking through their essays or writing, Snyder and Snyder (2008) assert that the objective multiple-choice testing is also practicable:

“a question that asks students to identify the example that best applies a specific concept requires more critical thinking and analysis than a question that asks students to identify the correct term for a given definition” (p. 92).

Paul and Elder (2002) argue that critical thinking is a developable human skill. Nevertheless, Payutto (1993) and van Gelder (2005) claim that humans, by nature, are not critical. Halpern (1998) appears to hold this conviction, arguing that most people are prone to deficient reasoning. As a consequence of this, critical thinking development seems to require more than minimal effort (Browne and Keeley 2007). Marin and Halpern (2011) also assert that students' critical thinking development can be challenging and even slow but with appropriate instruction, teachers' support, and students' practice, progress can be made and development expected. These scholars' notions reflect their beliefs that critical thinking is not an innate ability but one that can and should be cultivated.

The learnability of critical thinking is usually linked to students' intelligence. Nickerson et al.'s (1985) distinguish between the two, claiming that the former is teachable while the latter is more due to humans' raw mental power. Halpern (2007) writes that the role of intelligence in critical thinking is not obvious. Brookfield (2012) notes that the association between critical thinking and intelligence is not significant, stating that many intelligent individuals are still poor thinkers. In their study, Stanovich and West (2008) recruited over 1,200 students in three experiments to examine whether more intelligent students would avoid "myside bias and . . . one-sided thinking" (p. 129). Their results revealed that the students' intelligence did not predict whether they would be critical thinkers. Similarly, Jantrasakul (2012) conducted a qualitative study examining the effectiveness of the critical thinking activities applied in her EFL classes at a Thai university. She found that students' grades in two semesters were not different although their knowledge of English vocabulary had increased.

Some scholars state that students' background knowledge can affect their ability to develop critical thinking. For example, Bailin et al. (1999) note that critical thinkers need to acquire intellectual resources, and background knowledge is one of the resources. Facione (1990) argue that domain-specific knowledge plays a role in the process of critical thinking. In his position paper, Willingham (2007) also maintains such a role, claiming that "Thought processes are intertwined with what is being thought about" (p. 10).

Zohar and Dori's (2003) study suggests that critical thinking is learnable by students of all academic ability levels. They conducted a series of four studies examining whether

high-achieving and low-achieving science students would benefit from the instruction of higher-order thinking skills. Zohar and Dori clarify the term ‘higher-order thinking skills’ by referring to Bloom et al.’s (1956) taxonomy of the cognitive domain. They associate three lower cognitive skills (i.e., knowledge, comprehension, and application) with lower-order thinking skills and three upper cognitive skills (i.e., analysis, synthesis, and evaluation) with higher-order thinking skills. Since the upper three cognitive skills are usually connected with critical thinking, higher-order thinking skills for Zohar and Dori are therefore concerned with this type of thinking. Their study revealed that high-achieving students obtained higher thinking scores. Nevertheless, the scores of both high-achieving and low-achieving students significantly increased, compared with their previous scores. They thus concluded that both high-achieving and low-achieving students could gain from teaching higher-order thinking.

Such learnability can also be found in young children. Brookfield (2012) posits that critical thinking “is *not* something that only happens when you reach a certain age” (p. 11). Rather, “It is a type of thought that even 3-year-olds can engage in” (Willingham 2007, p. 10). Simister (2004) similarly claims that teachers should enable pupils to ask questions, reason, and form potential solutions. Feuerstein et al. (1980) assert that teachers should give students ‘mediated learning experience’ (a way to teach children how to think) rather than merely giving them ‘direct learning experience’ (a way to teach children about facts). Bailin et al. (1999) suggest that elementary school teachers may begin by instilling critical thinking dispositions in young children. Through mediations scaffolded by their parents and teachers, Howe (2004) maintains, young children can learn to think critically. Their perceptions of the teachability of critical thinking in young children seem to be justified by sociocultural theory, which will be described later in this section.

In the literature, critical thinking is claimed to involve cognitive skills. Students’ development of critical thinking is therefore the development of their cognitions. In what follows, I discuss two educational theories, namely, Vygotsky’s sociocultural theory and Bloom et al.’s taxonomy of the cognitive domain, that account for students’ cognitive development in relation to critical thinking.

Vygotsky's Sociocultural Theory

Sociocultural theory was first propounded by the Russian psychologist Lev Vygotsky (1896-1934). Vygotsky understands humans' cognitive development as being driven by their biological and sociocultural factors. The sociocultural factors, Vygotsky (1978) maintains, extensively affect such development. According to this theory, people's learning takes place in social interactions with three types of mediators, namely, materials, symbols, and human beings (Lantolf and Thorne 2007), all of which involve sociocultural and historical conditions. The process of cognitive development goes through two sequential transitions: firstly, through acquiring knowledge in social interactions (learning) and secondly, through internalising the acquired knowledge and then adding value to it (developing) (Wertsch 1985). Through these transitions, the internalised and value-added knowledge becomes part of their developmental programmes. This suggests that learning comes before development. The former is concerned with an external process while the latter is the result of an internal process.

A key concept in sociocultural theory is the zone of proximal development (ZPD). Vygotsky (1978) defines ZPD as:

“the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (p. 86).

Vygotsky's ZPD therefore places more emphasis on the development of people's potential learning abilities than on their actual abilities. It also requires help from others so that one can move up from one's actual level to another higher level that one cannot reach on their own. Such a help can be in the forms of “explicit guidance, modelling, encouragement, mirroring, and feedback” (Salomon and Perkins 1998, p. 7).

The utility of sociocultural theory lies in enabling us to understand learning as a social phenomenon. For example, it enables us to explain how teachers support learners. In schooling contexts, teachers as more competent others are expected to provide students with meaningful learning activities that can effectively mediate students' learning. Teachers themselves also act as a major mediator scaffolding assistance for students so that they can acquire knowledge beyond what they have already known and within their

ZPD. The scaffolded assistances will be reduced when teachers notice students' increased competence in taking charge of their work (Chang et al. 2002). According to sociocultural theory, teachers therefore play a role as a facilitator, not as a feeder of knowledge. Such a role is an integral part of a learner-centred approach, and thereby showing the association between this approach and sociocultural theory. In addition, peers can also be more competent human others for students in the school context. This then suggests another role for teachers, according to sociocultural theory, in arranging learning activities in which students with different ability levels can learn in interactions with one another.

Social interactions in sociocultural theory and dialogic interactions promoted in critical thinking appear to be in alignment. This seems to indicate the practicality of applying the theory in developing students' critical thinking. Through this, students' interactions with both teachers and peers should be enhanced while teachers themselves observe the interactions and provide scaffolded assistance whenever needed. Lipman (1991) also postulates that human interactions stimulate thinking and learning. Since teachers' questions greatly influence students' critical thinking development (Clasen and Bonk 1990), one possible suggestion could be that teachers' scaffolded assistances during critical thinking activities should be in the form of questions that activate such thinking.

As sociocultural theory concurs with the philosophical assumptions of this study, it is used as part of the study's theoretical framework (see Section 1.3).

Bloom et al.'s Taxonomy of the Cognitive Domain

One of the most influential educational theories impacting on teaching and learning around the world is the taxonomy of the cognitive domain developed by Benjamin Bloom. Bloom et al.'s (1956) taxonomy is widely used as a guide to design curriculum objectives and to evaluate students' learning achievements. The taxonomy includes six cognitive levels that are claimed to be general and therefore applicable across disciplines, educational levels, and cultures. These cognitive levels are hierarchically ranked from the lowest cognitive level to the highest one: knowledge, comprehension, application, analysis, synthesis, and evaluation respectively, as shown in Table 2.

Table 2: Bloom et al.'s (1956) taxonomy of the cognitive domain

Evaluation	Making reasonable judgments on the information
Synthesis	Combining learned information to create a new work or idea
Analysis	Breaking down information into parts and seeing how they contribute and relate to the whole
Application	Using learned information in new contexts or situations
Comprehension	Understanding information
Knowledge	Recalling facts and information

The taxonomy is hierarchical in that the lower cognitive levels are to be mastered before moving up to the higher cognitive levels. Duron et al. (2006) associate the taxonomy with the levels of thinking abilities, namely, “The lower levels require less thinking skills while the higher levels require more” (p. 160). The upper three cognitive levels (i.e., analysis, synthesis, and evaluation) are usually equated with critical thinking. However, Paul (1990) asserts that this taxonomy may not be practical in the case of the critical thinking process. He disagrees with its one-way hierarchical principle which places knowledge as the base for all the other cognitive skills. For Paul, knowledge should be an educational achievement: “achieving knowledge *always* presupposes at least minimal comprehension, application, analysis, synthesis, and evaluation” (p. 427). He maintains that labelling the lowest cognitive level as knowledge can imply that knowledge means recalled knowledge instead of a product of thinking. Despite the shortcoming of the taxonomy, Paul still admits that critical thinking involves the cognitive skills included in it. Moreover, as thinking is an unobservable cognitive process, the cognitive behaviours in the taxonomy can still be constructive for teachers when observing students’ critical thinking. Consequently, Bloom et al.’s taxonomy was used as a framework to analyse students’ critical thinking activities in the observed classes taught by the participants in this study.

2.4.2 Classroom Strategies for Critical Thinking Development

Researchers have proposed various classroom strategies for developing students’ critical thinking. Brookfield (2012) claims that teaching students to think is challenging because they may perceive that they are learning nothing and hence feel “cheated, lost, and confused” (p. 225). Therefore, the first strategy for critical thinking development

may be that teachers make their students aware that thinking is actually a means of learning.

Paul (1990) suggests teachers pose critical questions in class to activate students' critical thinking. Browne and Keeley (2007) share their view but add that students themselves should be taught how to form such questions, be encouraged to use them, and be made aware of using them at the appropriate times. Brookfield (2012) postulates that, when responding to students' critical questions, teachers should not give them exact and clear answers. For Brookfield, critical thinking, once accomplished, should encourage more questions for the sake of more learning.

Paul (1990) claims that critical thinking is "the art of thinking about your thinking" (p. 32). By monitoring our own thoughts, we can detect and correct our biases (Clinchy 1994) and control them (Martinez 2006). However, Lipman (1991) notes that critical thinking and metacognition are not interchangeable terms, explaining that people do not always metacognitively interact with themselves in a critical manner. His notion indicates that metacognition itself is not always critical thinking but that all critical thinking is metacognitive. Therefore, Halpern (1998) suggests a four-part model for enhancing critical thinking, in which metacognition is part of the model. van Gelder (2005) also suggests the use of argument mapping as a metacognitive strategy to develop students' critical thinking in their writing. He believes that "When arguments are presented in diagrammatic form, students are better able to follow extended critical thinking procedures" (van Gelder 2005, p. 45).

Another strategy prevailing in critical thinking literature is modelling. Using this strategy, teachers model the critical thinking process for students before assigning tasks to them to practise it themselves (Brookfield 2012). By "making reasoning visible to students" (Lai 2011, p. 36), it is expected that their critical thinking skills and dispositions will be promoted (Facione 2000). This strategy appears to be consistent with the concept of scaffolding in sociocultural theory in that teachers need to scaffold knowledge to facilitate students' learning. Several scholars support the modelling strategy in critical thinking instruction (e.g., Costa 2006; Facione 2000; Halpern 1998; Snyder and Snyder 2008). In the process of modelling, Brookfield (2012) suggests teachers use their own personal examples, drawn from their own critical thinking experience, to "set a tone of openness that significantly influences students' readiness to

delve into their own assumptions” (p. 61). Nevertheless, Paul and Elder (2002) claim that teachers should not expect that students always listen to them actively and critically. van Gelder (2005) also cautions that teachers should not expect students to learn how to think critically just by imitating what has been modelled for them. He urges that modelling needs to be followed by students’ repetition and practice in different situations.

Critical thinking can also be practised through cooperative learning (Bailin et al. 1999; Brookfield 2012; Cooper 1995; Jantrasakul 2012). In such learning, students with different levels of ability undertake an assigned task to attain a common goal. As Totten et al. (1991) point out, such learning enables students’ learning autonomy and therefore promotes critical thinking. Since Vygotsky’s sociocultural theory sees human learning taking place in interactions with others, this theory thus appears to underpin such cooperative learning. Gokhale (1995) investigated the effectiveness of individualistic learning and collaborative learning in developing students’ critical thinking. He used a pre-test and a post-test to collect the data from 48 university students in Industrial Technology at a university in the United States. His study revealed that students learning through collaborative activities actually performed better in terms of their critical thinking abilities.

Another strategy is concerned with using the ‘real’ when engaging students with critical thinking. Brookfield (2015) claims that critical thinking tasks can actually be on any topic since “Everyday communications are subject to a continuous and ever-present set of assumptions” (p. 48). Using real life issues or authentic materials can increase the transfer of critical thinking to other contexts (Halpern 1998). Moreover, the use of real life case studies helps convince students that critical thinking is possible for them and not too difficult to develop (Brookfield 2012).

The next strategy is “providing an environment in which critical thinking is valued and students are encouraged and supported in their attempts to think critically” (Bailin et al. 1999, p. 299). A classroom culture favourable to students’ practice of critical thinking thus appears to be important. As McPeck (1990) points out, “students are not fools. If regurgitation and getting the “right” answer are what bring high marks, then that is what they will try to do” (p. 51). This implies that if teachers make critical thinking a classroom norm, there should be a tendency for students to abide by it.

Some researchers suggest the use of technology to promote students' critical thinking development. For example, Brookfield (2015) suggests the use of social media and DeRuisseau (2016) suggests the use of flipped learning. Gulek and Demirtas (2005) conducted a study with 259 middle school students to examine the effect of participation in a laptop programme on student achievement and concluded that the use of students' laptops lessened the students' dependence on their teachers' lectures and increased their concentration and their critical thinking. As Carson (2005) argued, students in the 21st century, or millennial students, tend to be good at multitasking through media and technology. Therefore, the use of technology for students' critical thinking development can positively be anticipated. However, despite this, Carlson also argues that these students tend to lack patience.

These strategies used for promoting students' critical thinking development are considered to increase the students' motivation. In her paper, Turner (1995) claims that a number of studies reveal that activities requiring students' higher-order thinking skills are more motivating than activities requiring their recalled knowledge. For Turner, motivation enhances and is enhanced by such higher-order thinking skills.

As well as the classroom strategies proposed in the literature, critical thinking instruction also pays attention to teaching approaches that promote students' critical thinking. The next section will discuss this topic.

2.4.3 Teaching Approaches for Critical Thinking Development

Despite agreement that critical thinking should be a significant aim at all educational levels, teaching approaches to it are still being debated. Different views of the approaches to be used are the results of different opinions on whether critical thinking is a set of skills generic across disciplines or specific to a certain discipline. Consequently, those adhering to its generality tend to endorse a separate course for critical thinking instruction while those advocating its specificity tend to support an embedding of critical thinking in particular subject courses.

Ennis (1989) mentions four teaching approaches for critical thinking development, namely, the general approach, the infusion approach, the immersion approach, and the mixed approach.

a) The general approach

According to Ennis (1989), the general approach provides critical thinking instruction as a separate subject. The advocates of this approach are, for example, Halpern (1999), Marin and Halpern (2011), and van Gelder (2005). Halpern (1999) holds that, through this approach, critical thinking is explicitly taught and “multiple examples from several disciplines” (p. 70) are assigned to students to promote the transfer of critical thinking across disciplines. van Gelder (2005) believes that this approach gives students “deliberate practice” (p. 43) and therefore increases the likelihood of the transfer to other situations.

b) The infusion approach

Ennis (1989) claims that, in the infusion approach, critical thinking is explicitly taught, focusing on its general principles in the context of a specific subject matter. Scholars who support this approach hold that critical thinking is concerned with domain-specificity that requires particular or background knowledge to be able to think critically. For example, Glaser (1984) maintains that thinking skills are context-specific, and Willingham (2007) claims that “critical thinking is not a set of skills that can be deployed at any time, in any context” (p. 10).

c) The immersion approach

Ennis (1989) states that in the immersion approach, critical thinking is made part of a subject area but is not explicitly taught. Students are expected to naturally acquire critical thinking abilities. The most well-known advocate of this approach is McPeck (1981), who asserts that “critical thinking always manifests itself in connection with some identifiable activity or subject area and never in isolation” (p. 5). Notably, the infusion and the immersion approaches appear to share the same stance, namely, that critical thinking should be blended in a specific domain. However, Presseisen (1989) notes that critical thinking in such a blended instruction significantly depends on teachers who decide whether to teach or not to teach it. Because of this, critical thinking through embedded instruction by different teachers can vary.

d) The mixed approach

Ennis (1989) describes the mixed approach as “a combination of the general approach with either the infusion or immersion approaches” (p. 5). That is to say, critical thinking

is provided to students in both a separate course and other subject courses. This approach is promoted by a number of scholars such as Bailin et al. (1999) and Facione (1990).

Notably, Facione (1990) and Halpern (1999) assert that no matter what teaching approaches teachers employ in class, teachers should foster both critical thinking skills and dispositions. Decisions on the teaching approaches for critical thinking development in different educational institutions can depend on various factors, including those associated with teachers. Given that the participants in this study are teachers, and teachers' roles in developing students' critical thinking are obvious, the next section will then examine the roles.

2.4.4 Roles of Teachers in Students' Critical Thinking Development

The critical thinking literature clearly shows that fostering students' critical thinking is a crucial responsibility for teachers. Nevertheless, there are several factors affecting teachers' decisions about their critical thinking instruction. Paul (1990) asserts that teachers' criticality is the first and foremost factor to be considered when developing students' critical thinking. Hager and Kaye (1992) echo Paul's assertion, emphasizing that teachers should be open-minded enough to verify and then develop their criticality.

However, it cannot be guaranteed that teachers who are critical thinkers themselves know and understand what critical thinking is and how it should be taught as critical thinking itself is difficult to define (Atkinson 1997). Moreover, teaching is "a complex art" (Entwistle 2009, p. 4) involving "a unique set of personal skills which teachers apply in different ways according to the demands of specific situations" (Freeman and Richards 1993, p. 206). Therefore, the proper promotion of critical thinking knowledge and its pedagogies for teachers is needed. Such promotion has recently attracted interest from researchers possibly because unsuccessful critical thinking instruction can stem from a lack of teachers' critical thinking knowledge and pedagogies (Black 2005; Lauer 2005; Ruminski and Hanks 1995).

Another widely discussed topic is teachers' beliefs concerning critical thinking instruction. Borg (2003) perceives teachers' beliefs as part of their cognitions which are not always compatible with their classroom practices because such practices can also be affected by other contextual factors. Holt-Reynolds (1992) examined pre-service

teachers' personal history-based beliefs and revealed that their experience as learners strongly influenced their beliefs. van Gelder (2005) notes that such beliefs are not easily changed although there is reasonable evidence to indicate that change can pave the way to a better engagement with critical thinking instruction. However, Borg (2003) asserts that teacher education still plays a crucial role in the formation of teachers' beliefs, and their beliefs can be fluid and altered throughout their teaching lives.

Kabilan (2000) reviewed the literature concerning critical thinking pedagogies and argued that teachers' positive beliefs about questioning and their beliefs in students' readiness to learn this way of thinking are important for their critical thinking instruction. Zohar and Dori (2003) claim that most teachers tend to believe that high level critical thinking activities are exclusive to high-achieving students and therefore rarely give such activities to low-achieving students. Zohar et al. (2001) used semi-structured interviews to explore how 40 Israeli secondary school teachers perceived the use of high-critical thinking activities in their classes. The findings showed that 19 out of 40 teachers felt that high level critical thinking activities most suited high-achieving students while low level critical thinking activities most suited low-achieving students. This shows that almost half of the teachers believed critical thinking was limited to high-achieving students. Despite these findings, Zohar et al. suggest that critical thinking activities should be provided to students of all abilities. There are also other researchers who share this conviction, for example, Marin and Halpern (2011), Snyder and Snyder (2008), and Zohar and Dori (2003).

The roles of teachers discussed so far are for interdisciplinary teachers. In the sphere of English as a Second Language/English as a Foreign Language (ESL/EFL) which is the context under study, Davidson (1998) underlines the need for teachers to include critical thinking in their teaching, saying that "If we do not, our students may well flounder when they are confronted with the necessity of thinking critically, especially in an academic setting" (p. 121). With such essentiality, the relationship between critical thinking and English language teaching is then presented in the following section.

2.5 Critical Thinking and English Language Teaching

Critical thinking and language learning are considered to be related. The former is claimed to benefit the latter in a number of ways. For example, critical thinking enhances reading (Facione 1991), listening (Browne and Keeley 2007), and writing

(Browne and Keeley 2007). Olson (1984) contends that writing is a problem-solving activity in which students have to deal with it logically, so “By helping students become better thinkers, we would enable them to become better writers and vice versa” (p. 31).

In the field of ESL/EFL, educationalists agree that the inclusion of critical thinking in English language teaching facilitates students’ learning. Critical thinking is vital for students wishing to be proficient language learners (Kabilan 2000) and to develop their language learning autonomy (Lin and Mackay 2004). Liaw (2007) suggests the use of content-based instruction to enable students to learn not only the language and the subject matter but also critical thinking. Nunan (1987) perceives ‘referential questions’, ones that seek answers that are unknown by teachers and are usually in the form of WH questions, as generating not only students’ genuine communications but also their higher-order thinking skills in English language classes. Nevertheless, display questions, ones that seek answers known by teachers, are not useless as they can help the teachers control their lessons to be taught (Suter 2001). In addition, Beebe (1980) postulates that encouraging students to critically examine cultural differences of two languages (i.e., a native language and a target language) can promote their target language learning.

Davidson (1998) argues that critical thinking can be enhanced successfully in ESL/EFL classes. In their study, Davidson and Dunham (1997) used critical thinking essay tests to examine the critical thinking abilities of two groups of EFL Japanese college students: one was given only content-based English instructions and the other similar instructions but plus critical thinking development. Their results showed that the students treated with such development did better in terms of their critical thinking abilities. Liaw (2007) conducted a study investigating the effectiveness of enhancing critical thinking in EFL content-based instruction in Taiwan. The data was collected by using an English language proficiency test, a questionnaire, classroom tasks, and a critical thinking assessment. The findings revealed that by using this type of instruction, the students had significant English language proficiency test scores, advanced their critical thinking abilities and knowledge of the content areas learned, and also showed positive responses to such instruction. Moreover, several other studies (e.g., Alwehaibi 2012; Jantrasakul 2012; Park 2011) have been undertaken to probe the practicality of critical thinking

instruction in ESL/EFL Asian contexts. The results of these studies confirm such practicality.

Admittedly, promoting critical thinking in ESL/EFL learning may not be an easy task. This is probably because students are engaging with two functions of knowledge at the same time, namely, the English language and critical thinking. Their difficulty increases because English is not their mother tongue. This could result in cognitive overload. Cognitive load theory (Paas et al. 2003) states that in human working memory, there is limited capacity to store information and process knowledge, and learning two or multiple things concurrently can cause unsuccessful learning. Takano and Noda (1993) mention such overload has been found in EFL students, and it can result in a temporary decrease of their thinking abilities. In her study, Jantrasakul (2012) examined the effectiveness of critical thinking oriented EFL lessons with 37 first-year Thai EFL university students. She revealed that allowing the students to use Thai sometimes when they could not express themselves in English increased the liveliness of classroom participation during critical thinking activities. The solution to cognitive overload may lie in this finding in her study, namely, the occasional use of students' mother tongue during their EFL learning can lessen cognitive overload and hence leave some cognitive space for them to engage more fully in learning critically.

Despite the evidence claiming that critical thinking can successfully be promoted in ESL/EFL contexts, Atkinson (1997) suggests that "TESOL educators should be cautious about adopting critical thinking pedagogies in their classrooms" (p. 71). He argues that critical thinking is a Western product, and therefore teaching the thinking in Asian cultures can be challenging because of cultural differences. The next section will discuss critical thinking in terms of its cultural relevance.

2.6 Critical Thinking and Its Cultural Relevance

Atkinson (1997) and Fox (1994) argue that those, whose cultures advocate critical thinking and therefore socialise them with it, find it easier to practise this thinking. Since critical thinking is claimed to be first practised in Socrates's time (Fisher 2011), it seems to be perceived as a Western product. Lloyd (1996), comparing ancient Greek and ancient Chinese science and philosophy between 300 BC and 200 AD, contends that critical thinking is a Western cultural product. Egege and Kutieleh (2004) also

claim that several scholars tend to use Western cultures as the standards by which to judge critical thinking.

According to Stratton (1999), Western cultures are cultures of words. It could then be the case that critical thinking may be standardised as verbal thinking. However, using such Western standards in different cultures, particularly in the Eastern world, may lead to stereotyping issues. Kim (2002), conducting three studies to examine the effects of talking on thinking of East Asian Americans and European Americans, revealed that talking reduced East Asian Americans' performance more than that of European Americans. From this finding, she concluded that Asian cultures seem to be more to silent thinking, as opposed to verbal thinking. The different cultural modes of thinking may be the reason why Asian students tend to be stereotyped as uncritical thinkers (Atkinson 1997; Durkin 2008; Kumaravadivelu 2003; Egege and Kutieleh 2004; McVeigh 2002).

Nevertheless, Kim (2002) contends that Asian students engage in critical thinking through internal reflection and silent but nevertheless active listening. In international education contexts, Kim (2002) suggests that "Perhaps instead of trying to change their ways, colleges can learn to listen to their sound of silence" (p. 840). Reviewing the literature relevant to that matter, Rear (2017) revealed that there was scant evidence confirming the claim that Asian students lacked critical thinking. This seems to suggest that stereotyping should be treated with caution.

Moreover, there are a number of researchers refuting the claim that critical thinking is a Western product. For example, Davidson (1998) contends that critical thinking is already in every culture, but that its expressions across culture can vary. Kim (2003) reviews perspectives on learning in the Analects of Confucius and argues that Confucius, a strong influence on several Asian cultures, promotes reflection in learning and hence critical thinking. For Kim (2003), such reflection encourages not only cognitions but also dispositions applied in critical thinking:

"Reflection both presupposes and reinforces such critical thinking skills as examining underlying principles, being open-minded in listening and considering the views of others, being fair-minded in balancing and assessing evidence, and thinking autonomously in judging and assuming responsibility for one's beliefs" (p. 73).

In their critical review, Nisbett et al. (2001) also highlight the existence of dialectical reasoning in East Asian cultures. They argue that people socialised in different cultures can have different natures of cognitive processes. Regarding the natures of reasoning, they claim that East Asian reasoning seems more like holistic thinking while Western reasoning seems more like analytical thinking.

Hongladarom (1998) refers to the logical traditions found in India and China, both of whose cultures have greatly influenced Asian cultures. He argues that such traditions are nevertheless no longer prevalent because “they were eventually supplanted by the more dominant traditions which did not emphasize criticism or argumentation as much as social harmony or intuitive insights” (Hongladarom 1998, n.p.). Durkin (2008) similarly claims that the unpopularity of a cultural pattern of critical thinking in certain cultures is because members of the cultures “prefer certain patterns to others” (p. 44).

Kumaravadivelu (2003) mentions Tsui (1996) who conducted classroom action research to examine what 38 teachers teaching English as a Second Language (ESL) at the University of Hong Kong perceived to be the factors contributing to their students’ reticence in class. Tsui revealed that the teachers viewed their students’ reticence as being caused by their individual factors, such as low language learning achievements, a low level of confidence, or fear of making mistakes. Kumaravadivelu points out that none of the teachers in Tsui’s study referred to cultural factors. Kumaravadivelu then concludes that Asian students’ silence, which is usually interpreted as a lack of critical thinking, should not simply be attributed to their local cultures. Nevertheless, it should be noted that many studies on Asian students’ reticence investigated students in the disciplines of ESL/EFL where English was not their mother tongue. Therefore, it is plausible that their reticence could be caused by non-cultural factors such as a low level of English proficiency. However, given that some researchers, as mentioned earlier, claim that critical thinking traditions in Asian cultures can possibly be supplanted by other cultural values, it seems that cultural factors potentially affecting critical thinking in such contexts should not be overlooked.

In the sphere of critical thinking development, Ennis (1996) believes that considering the importance of cultural relevance, it should be nurtured by seeking effective learning approaches that can accommodate students in different cultural contexts. Egege and Kutieleh (2004) posit that using Western-centric criteria in Asian contexts may not be

entirely practical. To reconcile potential cultural issues, they then suggest that Asian teachers and students should view critical thinking as a learning approach that is useful for their knowledge acquisition rather than being so focused on correcting cultural differences, which may seem to them to be unattainable. For Egege and Kutieleh, oversensitivity to cultural differences may cause resistance rather than openness and development.

The compromise suggested by Egege and Kutieleh is in accordance with Durkin's (2008) concept of a middle way to cultivate critical thinking in international students. Durkin interviewed East Asian Master's students in a UK university to discover how they adapted themselves to Western education which viewed critical thinking as the educational norm. She found that:

“the majority of the students opt for a ‘middle way’ which synergizes their own cultural approach to critical thinking with those aspects of Western-style critical thinking and debate that are culturally acceptable to them” (Durkin 2008, p. 15).

This finding indicates that the students did not completely acculturate themselves in the new culture nor did they completely erase their local identities. A suggestion derived from the finding in Durkin's study was that students' cultural identities have to be taken into account whenever any learning skill that does not seem to be promoted in their local contexts is being developed.

Interestingly, the literature concerning critical thinking in Asian cultures is usually associated with Confucius. Only a few studies focus on critical thinking in Asian cultures that are influenced by Buddhism. To shed light on this particular issue, this study investigated critical thinking cognitions and pedagogic practices of Thai EFL university teachers who are Thais and influenced by the Thai culture, which in turn is affected by Thai Buddhism. The following section will examine these relevant issues.

2.7 Critical Thinking Development in Thailand

Since this study is guided by sociocultural theory and relativism, Thai culture needs to be considered when examining the critical thinking cognitions and pedagogic practices of Thai EFL university teachers. To understand Thai culture, it is vital to understand Thai Buddhism for it is Thailand's national religion and claimed to be the foundation of Thai culture. Therefore, three topics will be discussed respectively in this section,

namely, Thai Buddhism, Thai culture, and critical thinking development in Thailand's education system.

2.7.1 Thai Buddhism

Thai Buddhism is Theravada Buddhism and has been in Thailand since the establishment of the first kingdom of Thailand, Sukhothai Kingdom (Ratanakul 2010). The relationship between Thailand and Buddhism since then has been so close that "The history of the Thai nation is, therefore, also the history of Buddhism" (Payutto 2007, p. 127). Buddhism has influenced Thai people's minds, characters, identities, and ideologies (Adamson 2005; Baker 2008; Foley 2005; Kapur-Fic 1998; Komin 1990; Payutto 2007; Ratanakul 2010). It has also affected the trajectory set for the nation's development. As stated in the Tenth National Economic and Social Development Plan (2007-2011), Thais should be enriched with 'morality-based knowledge' (Ministry of Education 2008).

In the realm of education, Buddhism was where Thailand's education first began, and it has continued playing a role in education until today. Buddhist Studies is a mandatory subject for primary and secondary students. In higher education, although it is not a required separate course, teachers are encouraged to instill morality in their students, according to the 1999 National Education Act (Office of the National Education Commission 2002). Thai teachers are expected to not only teach students morality but also to personify it (Deveney 2005; Kapur-Fic 1998; Wallace 2003). Teachers' morality appears to be of a great concern. Teacher education programmes are expected to produce moral teachers for society. Interestingly, according to the Office of the Permanent Secretary, the Ministry of Education (2017), the main aims of teacher education in Thailand are stated with morality being mentioned prior to knowledge:

"to acquire morality, knowledge, ability and skills in teaching and motivating learners to learn; to be mindful of professionalism, spirit and responsibility of teachers; to serve as a role model for learners regarding social behavior, life style and preservation of the national language and culture; to develop an inquiring mind and engage in continuous improvement of themselves and their teaching capability; and to engage in community development, as well as in rehabilitation, conservation and enrichment of local and national environment and culture" (p. 6).

The lasting role of Buddhism in Thailand may be because the religion is science-based. Payutto (1993) notes that Buddhism is closely linked to natural science for its principles are based on the logic of causes and conditions. Such causation seems to make Buddhism a critical philosophy despite it being a religion.

Criticality in Buddhism is reflected in the Buddha’s name, the Buddha’s attributes, the Buddha’s way of teaching, and Buddhist doctrines. The name ‘Buddha’ literally means the enlightened individual completely purified from any ignorance and lust. His name implies the promotion of criticality. The history of the Buddha also appears to indicate that he is a critical thinker. He was born into the highly respected ruling Hindu caste in 563 B.C (Kapur-Fic 1998). Despite his wealthy and fortunate origin, he questioned the inequality of people and the causes of their suffering. He then decided to abandon worldly happiness in search of the spiritual enlightenment that ends all suffering. This decision demonstrates his strong motivation to be different, particularly at that time when caste was strictly adhered to and leaving the caste system was a tremendous issue. He insisted on his path of ordination, despite meeting with objections and obstructions. He sought salvation by learning from different teachers, questioning them, practising potential ways, and finally finding out the truth himself. The Buddha’s attributes that seem to indicate his criticality are listed in Table 3.

Table 3: The Buddha’s attributes as a critical thinker

Cognitive skills	Affective dispositions
Reflection	Inquisitiveness
Evaluation	Daring to be different/Intellectual courage
	Perseverance
	Self-reliance

After his enlightenment, the Buddha taught people through dialogic exchanges and encouraged them to think and reflect internally (Payutto 1992). Samuels (1999) similarly mentions a Socratic-like dialogue between the Buddha and a lay person named Sona, as a result of which Sona decided to become a lay follower of Buddhism. When responding to people’s questions, the Buddha reflected on them in an analytical way so that his answers would benefit the people (Harvey 2012) and suit each person’s individuality (Payutto 2007). The latter is what today education calls ‘individual differences’. The Buddha positioned himself as a guide, not a feeder, emphasising that

people should think and verify his doctrines themselves. His way of teaching seems to denote learner-centredness. This suggests that in Buddhism, criticality comes before faith, and that the faith attained should then become rational.

Moreover, there are a number of Buddhist doctrines that appear to promote critical thinking; they are *Kalama Sutta*, *ariya-sacca*, *sati*, self-refuge, and *kamma*.

Kalama Sutta

The Buddha delivered this doctrine to the *Kalama* people who approached him for suggestions on what religions they should observe. The Buddha said:

“Here, Kalamas,

Do not believe simply because you have heard it.

Do not believe simply because you have learned it.

Do not believe simply because you have practiced it from ancient times.

Do not believe simply because it is rumored.

Do not believe simply because it is in the scriptures.

Do not believe simply on logic.

Do not believe simply through guesswork.

Do not believe simply through reasoning.

Do not believe simply because it conforms to your theory.

Do not believe simply because it seems credible.

Do not believe simply out of faith in your teacher.”

(*Kalama* or *Kesaputtiya Sutta*, A.I. 188 cited in Payutto 1993, p. 41).

The Buddha asserted that belief should be a consequence of people’s direct verification. He maintained that even his own teachings were also subject to the verification. The doctrine appears to promote the six aspects necessary for critical thinking: open-mindedness, prudence, inquisitiveness, reflection, judgment, and self-reliance.

Ariya-sacca

Ariya-sacca or the fourfold noble truth is the doctrine that offers a method for problem-solving by using scientific logical analysis. The doctrine is in the first sermon delivered by the Buddha after his enlightenment (Harvey 2012). Payutto (1993) writes that *ariya-*

sacca is a critical method to solutions and is applicable to all kinds of problems or suffering. He explains this doctrine as follows.

a) *Dukkha* (suffering)

The Buddha proclaims that humans, irrespective of origin and status, cannot escape suffering. To gain release from suffering, we first need to realise its existence.

b) *Samudaya* (the cause of suffering)

After realising the existence of suffering, we must examine its potential causes.

c) *Nirodha* (the ending of suffering)

When knowing what causes suffering, we must then establish our goal, considering what we will achieve after our suffering ends.

d) *Magga* (the way to the cessation of suffering)

With this goal in mind, we examine the ways to end our suffering and then follow them.

To provide a clear picture of the process of *ariya-sacca*, I have created an example of it, as shown in Figure 1.

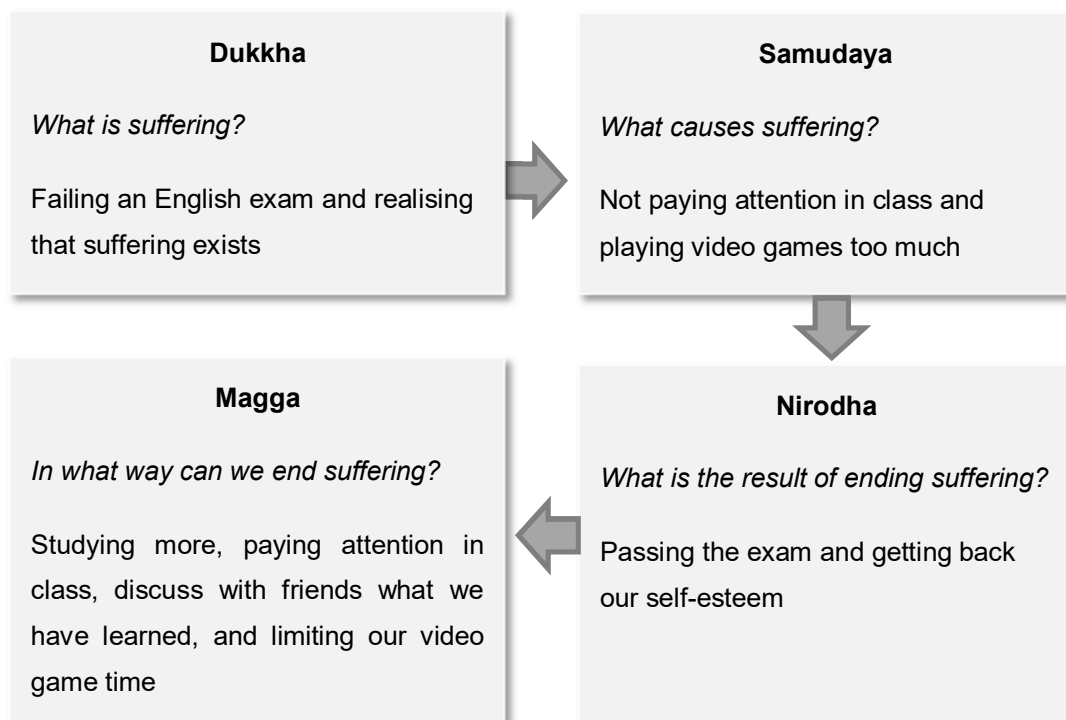


Figure 1: Example of using *ariya-sacca* as a problem-solving method

As can be seen, the doctrine represents a method of reasoning applied to thinking. The chain of thinking begins with considering from effect (*dukkha*) to cause (*samudaya*) and then again from effect (*nirodha*) to cause (*magga*). To find out what causes a problem (*samudaya*), we need to know what the problem really is (*dukkha*). Then to find out potential solutions (*magga*), we need to know the aim of solving it so that we can figure out potential ways leading to this aim (*nirodha*). This causal reasoning is clearly part of critical thinking.

Sati

Sati in Buddhism is the ability of our minds to stay focused on what we are engaging in, to be metacognitively aware of it, and to see it from all possible perspectives, realising that everything has arisen according to causes and conditions (Payutto 1997). From this perspective, *sati* enables us to realise the present state of our thinking and that of others and therefore increase our mindfulness. People with *sati*, Payutto maintains, have an unbiased mind and can find any fallacies that may have formed, leading to decision-making on how best to tackle them. Therefore, *sati* appears to offer the following two benefits. First, it includes mindfulness and metacognition. In relation to critical thinking, the former is concerned with a supportive disposition while the latter is concerned with a supportive cognitive skill. Second, *sati* as a tool to develop mindfulness and facilitate a decision-making implies human self-control and empowerment. The term '*sati*' is widely and positively used in Thailand. Thai people use it to caution others so that they will not engage in inappropriate or wrong thoughts, speech, or actions.

Self-refuge

Self-refuge is considered to be the core concept of Buddhism (Payutto 1997). The Buddha maintains that we were born alone, will die alone, and will travel alone in *samsara* (Pali, the endless reincarnation). Therefore, to attain worldly or spiritual happiness, we must be the lamp for ourselves. The Buddhist self-refuge is obvious in the Buddha's last sermon, "Do not trust my words, rely only upon your own light" (Matilal and Chakrabarti 1994, p. 2). Given that critical thinkers are also independent thinkers (Paul 1990), the Buddhist self-refuge is therefore related to critical thinking. The relationship between the two is also mentioned by Kumaravadivelu (2003).

At a glance, it seems Buddhism promotes independence through self-refuge. However, independence sometimes brings egocentricity. This is possibly why Buddhism encourages people to develop self-refuge alongside *anatta* (Pali, non-existence of self) (Payutto 2007). According to *anatta*, Payutto maintains, all things including human thinking change through time, and attaching to them brings nothing but sufferings. The Buddhist self-refuge is thus understood as depending on oneself and not getting into attachment. In the realm of critical thinking, self-refuge can be associated with self-reliance, and detachment from the awareness of self can be associated with open-mindedness. Interestingly, these are the two dispositional features many scholars deem essential for critical thinkers.

Kamma

Thais in general understand Buddhist *kamma* as a fixed condition that controls life. This tends to incline them to be content with who they are and what they have (Holmes and Tangtongtavy 1995), and thereby dealing with matters in life uncritically (Kapur-Fic 1998). However, Kapur-Fic herself claims that Buddhist *kamma* actually represents “the Cosmic Law of Causation” (p. 95). Such causation should make *kamma* relevant to critical thinking.

Kamma embodies the logic that all deeds bring results. That is to say, good deeds bring success, happiness, or wealth while bad deeds attract various forms of physical and mental pain. Therefore, “We are both deeds and consequences of deeds” (Ratanakul 2010, p. 233). As Buddhism believes in reincarnation, what we did in our last life can have consequences in this life and what we do in this life may have effects in either this life or in the next life. Fruitions can be instant or delayed depending on the extent of the conditions in the causation (Payutto 1997).

In fact, “Buddhism states that old *kamma* is merely one of the factors in the whole cause and effect process” (Payutto 1997, p. 83). In Buddhism, Payutto argues, wise men with critical minds do not simply let *kamma* affect their lives by doing nothing. Rather, they will outrun previous bad *kamma* by accumulating new good *kamma*. This outrunning, according to Buddhism, is to delay the retribution of bad *kamma* and to enable the fruition of good *kamma* to manifest itself. It is the Buddhist way for wise men to happily live their worldly lives.

However, worldly happiness is impermanent since the bad *kamma*, though delayed, still exists. Given that humans can easily be tempted with defilements, it is quite plausible that bad *kamma* can accumulate more than good *kamma* in most people's lives. Furthermore, good and bad *kamma* take turns to come to play endlessly. The Buddha thus encourages people to end this cycle so as to accomplish *nibbana* (Pali, the ultimate spiritual salvation) which is the condition that all bad and good *kamma* become non-existent, leaving only an eternally peaceful happiness. *Nibbana*, the Buddha maintains, can be accomplished by practising the Noble Eightfold Path incorporating "Right View, Right Intention, Right Action, Right Livelihood, Right Effort, Right Mindfulness and Right Concentration" (Payutto 1997, p. 87). Bodhi (2010) contends that in order for people to attain the 'Right' in the Noble Eightfold Path, they need critical thinking. Therefore, it can be said that critical thinking helps wise men tackle *kamma* wisely, thereby paving the way for their worldly and spiritual happiness.

Despite the evidence showing that Buddhism promotes critical thinking, there seem to be some contradictions between Buddhist beliefs and criticality practice. Buddhism supports harmony: between oneself and one's mind, between oneself and other people, and between oneself and one's surroundings (Payutto 2007). Kapur-Fic (1998) similarly argues that Buddhists tend to avoid conflicts and prefer conformity. As critical thinkers should be disposed to have intellectual autonomy instead of intellectual conformity (Paul and Elder 2002), this shows how the Buddhist-influenced conformity raised by Kapur-Fic can affect people's critical thinking practice. However, based on the history of the Buddha, he seems to have been a revolutionary of his time, declaring that humans were born equal and should not be classified into the various strata of the Hindu caste system (Harvey 2012). The Buddha's intellectual autonomy seems to suggest that Buddhism promotes criticality as well as critical harmony.

Another Buddhist virtue that is seemingly a hindrance to critical thinking is gratitude. Thai people in general have this virtue instilled in them in their early socialisation. This is the noblest virtue, one that Thai Buddhists are expected to show to benefactors, especially parents. According to Buddhism, we eternally owe our parents a moral debt since they give us life and nurture (Kapur-Fic 1998). To repay this debt, we should look after them physically and mentally in return (Payutto 1997). This repayment should be in the form of respect and obedience. Gratitude expressed through respect and

obedience is equated with goodness in Thai society. It is valued as a sign of being good people. Kapur-Fic (1998) maintains that children talking back to their parents or having different ideas from them can be viewed as showing ingratitude, and such children will then be socially judged as bad people. This, Kapur-Fic claims, prevents Thai people from engaging in critical thinking when being with their parents or with benefactors, such as their relatives or their teachers.

Moreover, Thai people are also expected to respect and obey those with seniority and/or authorities (Pornpitakpan 2000). This can possibly be explained by Buddhist *kamma*. As claimed by Kapur-Fic (1998), most Thais believe people gain authority in this life because they accumulated good merits in the past and/or in their previous lives. Those in authority and those subordinate to them then appear to be content with their status and act in accordance with it. However, as Brookfield (2012) puts it:

“The trouble with habitually relying on people with authority or credibility to tell us what to think is that sometimes these people are, at worst, evil and manipulative, or, at best, prejudiced or unreliable” (p. 13).

Brookfield’s statement indicates that authorities are not always right and critical. He thus suggests subordinates need to have critical thinking. Nevertheless, it seems that Buddhism realises the potential dangers of blind respect for authorities. One of the statements in the Buddhist *Kalama Sutta* advises Buddhists not to blindly conform to authorities.

In conclusion, this discussion of Thai Buddhism in relation to critical thinking shows consistencies as well as potential clashes between the two. Given that Thai Buddhism influences almost all units of Thai society, Thai culture should not be an exception. The next section discusses aspects of Thai culture, followed by a reflection on whether the culture is in accordance with critical thinking.

2.7.2 Thai Culture

Thai culture has been influenced by Thai Buddhism (Kapur-Fic 1998; Komin 1990; Payutto 2007; Ratanakul 2010) and an authoritarian hierarchy (Kapur-Fic 1998; Pornpitakpan 2000). The former can be explained by the long-lasting relationship between Buddhism and the nation. The latter may be a result of the feudalism in Thailand’s ancient times. The feudalism or ‘*sakdina*’ in Thailand can be described as a

hierarchical system which involves two main social divisions: the upper class and the lower class (Scupin 1988). Chiengkul (2017) writes that “Even when the Sakdina and corvee system were abolished, traditional personal linkages between people of different classes persisted as patron-client relationships” (p. 58). With such relationships, those with more powers protect and assist those lower than themselves, either for the sake of mutual interests or for benefitting their own relatives or cliques. In Thailand, “the long-used patronage approach is the acceptable way of business, politics and education” (Wallace 2003, p. 3), and many Thais give importance to this approach, believing that patrons can help them move to a higher status (Kapur-Fic 1998).

Hierarchy in Thai society is established through innateness and personal achievement (Pornpitakpan 2000). This hierarchy is determined “in terms of age, wealth, power, knowledge, and religious or governmental role” (Philips 1965 cited in Smith 1979, p. 18), which “reflects power, prestige, and a range of influence” (Kapur-Fic 1998, p. 58). For example, the younger is subordinate to the older, and the poorer is subordinate to the richer. Nevertheless, despite the wide range of power among Thai people, good treatment among them is culturally expected (Holmes and Tangtongtavy 1995) and valued as “the essence of reality” (Mulder 1985, p. 170). Holmes and Tangtongtavy (1995) observe that people in the lower social classes are expected to be polite and to show respect to those above them whereas people in the higher social classes are expected to be generous and polite to those below them. However, since people in the upper ranks are regarded as authorities with privileges, they themselves seem to be able to choose whether to be nice to those below them. On the contrary, those below who fail to live up to the cultural expectations can potentially be faced with social sanctions. The hierarchical value is also found in the Thai language. Foley (2005) contends that Thai represents this value while English represents an equality value. In Thai workplaces, the hierarchical value is adhered to, namely, subordinates are to follow those superior to them (Fieg 1989; Holmes and Tangtongtavy 1995; Komin 1990). Fieg (1989) maintains that although subordinates’ opinions are allowed in some organisations, many of them are not bold enough to express them.

Thai Buddhism and Thai hierarchy have influenced the formation of Thai cultural values. Komin (1990) used a survey to collect empirical data on Thai cultural values from a large number of national and rural Thai people and finally identified nine

clusters of Thai cultural values. Below are these nine clusters, ranked according to their importance.

a) Ego orientation

In Komin's (1990) findings, ego orientation was ranked as the most important. Komin noted that many Thais tended not to be tolerant when their egos and those of the ones they loved were threatened. She claimed that this ego orientation accounted for the value Thais placed on face-saving, adhered to by Thais in general irrespective of their hierarchical status. For most Thais, she maintained, saving their face and that of others was tremendously important while making others lose face was regarded as an insult and or a mark of disrespect. She pointed out that this resulted in many Thais' indirect expressions in their speech and actions. Paradoxically, she noticed that this Thai ego orientation was counter to the Buddhist teaching of *anatta* (Pali, non-existence of self). It would therefore seem that this cultural value is not a Buddhist legacy.

b) Grateful relationship orientation

Grateful relationship value is equated with '*bunghun*' in Thai. Komin (1990) described *bunghun* as:

“a psychological bond between someone who, out of sheer kindness and sincerity, renders another person the needed helps and favors, and the latter's remembering of the goodness done and his ever-readiness to reciprocate the kindness” (p. 168).

She contended that such a value was instilled in Thai people from their early socialisation. When helped by others, she maintained, they should be appreciative of them and reciprocated them whenever opportunity to do so occurred. The reciprocity could be in any form but “should not and cannot be measured quantitatively in material terms” (Komin 1990, p. 168).

c) Smooth interpersonal relationship orientation

Komin (1990) claimed that most Thais were likely to have “a non-assertive, polite and humble type of personality (expressed through appearance, manners, and interpersonal approach)” (p. 74). Thai people in general, she maintained, appeared to be relaxed and pleasant in front of others. This may account for Thailand being known as ‘the land of smiles’. Moreover, she noted that this smooth interpersonal relationship orientation

gave rise to eight related social values: “caring and considerate; kind and helpful; responsive to situations and opportunities; self-controlled, tolerant and restrained; polite and humble; calm and cautious, contented, and social relations” (Komin 1990, p. 74). This orientation appears to be closely linked to the ego orientation, namely, people are concerned about face-saving and accordingly try to maintain smooth interpersonal interactions.

d) Flexibility and adjustment orientation

Komin (1990) observed that being flexible and adjustable to situations, most Thai people tend not to take anything very seriously. She pointed out that this could cause negative behaviour, such as easily changing their decisions or being reluctant to follow rules and regulations. She noted that this value orientation was likely to be practised to maintain smooth interpersonal interactions among people.

e) Religio-psychical orientation

Komin’s (1990) finding on the religio- psychical orientation indicates that Theravada Buddhism affected Thai people’s lives. She claimed that one of the Buddhist concepts that most influenced Thais was *kamma* and that most Thais seemed to use it to account for almost every matter in life, and thereby being fatalistic. However, she maintained that despite the Buddhist influence on Thai people, not many Thais fully understood Buddhist doctrines and put them into practice in their lives. Rather, they were prone to focus more on form, engaging in Buddhist rituals, especially supernatural ones.

f) Education and competence orientation

Komin (1990) revealed that most Thai people saw the importance of education. However, she stated that they tended to learn not for the sake of learning; they viewed learning as “a ‘means’ of climbing up the social ladder, in terms of higher prestige and higher salary, than as an end value in itself” (Komin 1990, p. 226). This seems to indicate that they were likely to be more concerned about form than content. In addition, she related this orientation to ego orientation, saying that educational attainment could signify their status, and hence face.

g) Interdependence orientation

Komin (1990) noted that many Thai people realised they had to co-exist and were interdependent. Such a realisation, she maintained, constituted brotherhood and nurtured a spirit of community collaboration, especially among those in Thai rural communities. She claimed that Thai people in general were highly likely to participate in helping others. She added that with the four orientations (i.e., interdependence, ego, smooth interpersonal relationship, and flexibility and adjustment), Thailand appeared to be unique and successful in assimilating the different cultures of the various ethnic groups in the country.

h) Fun-pleasure orientation

Komin (1990) claimed that Thai people often engaged in interactions that were “pleasant, light, might be superficial, yet fun and humorous in nature” (p. 234). According to her, they perceived fun and pleasure as a means of sustaining their smooth interpersonal relationships with others. She noted that they were prone to treat everything joyfully but got bored easily. She observed that this value implied their lack of perseverance in doing unpleasant work, whether it was hard or easy.

i) Achievement-task orientation

Achievement-task orientation was ranked as the least important in Komin’s (1990) study. She pointed out that many Thai people rarely made great efforts to undertake a task if it did not give them a sense of pleasure. Moreover, they tended to believe hard work alone was not enough; instead they appeared to see:

“prestige and social recognition as goals for success in life, with work and relations as necessary means. With social recognition as an important underlying motive for success, achievement in Thai society is more social in nature.” (Komin 1990, p. 208).

As can be seen, some of Komin’s values appear to be interrelated and can be overlapped. Nevertheless, the clusters of these values should not be used to simplify Thai culture nor to make generalisations about Thai people. Komin herself is aware of this point, asserting that even the order of the orientations can be altered in different people and dependable on situations. Moreover, since her research was done during 1978-1981, it is possible that some cultural aspects, particularly the order of their

importance, could have now changed due to the effects of globalisation and socioeconomic development.

The Thai values presented by Komin appear to conform to those of Hofstede (1980). Hofstede develops the following four cultural dimensions to account for characteristics in different cultures; these are power distance, individualism/collectivism, masculinity/femininity, and uncertainty avoidance. According to Hofstede, power distance is concerned with the extent to which those members with less power accept an unequal power distribution. The individualism/collectivism dimension reflects the extent to which members can be independent and personal-oriented or socially-oriented. The masculinity/femininity dimension indicates the extent to which a culture adheres to assertive values or tender values. Uncertainty avoidance pertains to the degree to which members of a culture can be tolerant to ambiguity and uncertainty.

With reference to Thai culture, Hofstede (1980) characterises it as having a high power distance, a high collectivism, and a high femininity, but a mid-level of uncertainty avoidance. The following four paragraphs provide details of these characteristics.

a) High power distance

According to Hofstede (1980), Thai culture exhibits high power distance. In this culture, people's powers appear to be not equal, and subordinates are expected to follow what their superiors have told them. This aspect, by nature, aligns itself with Thai hierarchical society where "inequality is accepted as a norm" (Pimpa 2012, p. 37). Pimpa states that Thai people are made aware of their hierarchical status from their early socialisation. Hofstede's categorisation of Thai culture as having high power distance appears to accord with Komin's concepts of religio-psychical orientation and education and competence orientation. The religio-psychical orientation can be related to the high power distance orientation in that Thais accept their different statuses because they believe it is already predestined by their Buddhist *kamma* (Kapur-Fic 1998). The education and competence orientation can be related to the high power distance in that Thai people realise the existence of the distance and accordingly use education as a means to upgrade their social status which can mean their social power is then similarly upgraded.

b) High collectivism

Hofstede (1980) views Thailand as having a high collectivist culture. He claims that most Thai people are likely to care about what others think of their actions. Consequently, they tend to act in a way that meets their cultural expectations to gain others' respect. Such respect could ensure them that their face is not threatened, and that they are still members of their groups. Hofstede's categorisation of Thai culture as having high collectivism seems to concord with Komin's concepts of ego orientation, grateful relationship orientation, smooth interpersonal relationship orientation, flexibility and adjustment orientation, interdependence orientation, fun-pleasure orientation, and achievement-task orientation. Collectivism in Thailand can perhaps be explained as an instillation of '*sa-makki*' or harmony and unity in Thais. Most Thai people are socialised with it throughout their lives. Thai people in general believe *sa-makki*, in addition to the three spiritual anchors (i.e., the nation, Buddhism, and the monarch), has helped the nation maintain its sovereignty and solidarity until today.

c) High femininity

Thai culture is highly feminine (Hofstede 1980). A Thai with such values "can be interpreted as a non-competitive, passive, soft or slow person in the non-Thai context" (Pimpa 2012, p. 36). Hofstede's categorisation of Thai culture as being high feminine appears to be consistent with Komin's concepts of ego orientation, grateful relationship orientation, smooth interpersonal relationship orientation, flexibility and adjustment orientation, religio-psychical orientation, and interdependence orientation.

d) Mid-level of uncertainty avoidance

Thai culture is ranked as being mid-level regarding uncertainty avoidance (Hofstede 1980). Hallinger and Kantamara (2000) similarly point out that Thai people in general are risk-averse and therefore stick to their familiar and accepted practices. Kapur-Fic (1998) also claims that there is a strong tendency for most Thais to prefer predictability as they are taught from their early socialisation that thoughtful consideration before acting out help them "avoid threats and dangers" (p. 55). Many Thai people, Kapur-Fic maintains, prefer to have moral rules, no matter whether they will follow them or not. Because of this, Hofstede's categorisation of Thai culture as having mid-level of uncertainty avoidance appears to be compatible with Komin's concept of religio-psychical orientation.

Nevertheless, Hofstede’s (1980) work has also been criticised for being unable to accommodate cultural complexity. For example, Signorini et al. (2009) discuss the limitations of Hofstede’s work which include:

“an oversimplification of cultural differences, inconsistencies between his categories, lack of empirical evidence from educational settings and overall a model of culture as static (instead of dynamic)” (p. 253).

Triandis (1989) argues that Hofstede’s dimension of individualism/collectivism may not be mutually exclusive as some cultures “are close to the middle of the dimension, and other variables are also relevant” (p. 510). Orr and Hauser (2008) say that Hofstede’s cultural dimensions may be obsolete nowadays and therefore suggest that “Hofstede’s theoretical constructs need to be thoroughly reexamined within the context of early 21st century cross-cultural attitudes and patterns of behavior” (p. 16). In an attempt to develop his work, Hofstede (2001) identifies the fifth dimension, namely, long-term orientation/short-term orientation. For Hofstede, cultures with long-term orientation are concerned with values given to efforts and persistence in order to accomplish future goals while those with short-term orientation are concerned with values given to respect for tradition and reciprocity for others.

Although Komin’s (1990) and Hofstede’s (1980) work can possibly be considered to be outdated, some of the Thai cultural aspects mentioned in their work appear to be in accordance with twelve core Thai values recently promoted in Thailand. In 2014, Prime Minister General Prayut Chan-o-cha proposed these twelve core values for Thais to develop so as to make Thailand a strong nation (see National News Bureau of Thailand 2014). Table 4 presents these values, compared with Komin’s (1990) clusters of Thai values and Hofstede’s (1980) Thai cultural dimensions.

Table 4: Twelve core Thai values promoted by the Royal Thai Government compared with Komin’s (1990) clusters of Thai values and Hofstede’s (1980) Thai cultural dimensions

Twelve core values	Komin (1990)	Hofstede (1980)
1. “Upholding the three main pillars: the nation, the religion, and the monarchy”	Religio-psychical orientation	High collectivism
2. “Being honest, sacrificial and patient, with positive attitude for the common	Religio-psychical orientation	High collectivism

	good of the public”		
3.	“Being grateful to the parents, guardians and teachers”	Grateful relationship orientation and religio-psychical orientation	High femininity
4.	“Seeking knowledge and education directly and indirectly”	Education and competence orientation	
5.	“Treasuring cherished Thai traditions”		High collectivism
6.	“Maintaining morality, integrity, good wishes for others as well as being generous and sharing”	Religio-psychical orientation	High femininity
7.	“Understanding, learning the true essence of democratic ideals, with His Majesty the King as Head of State”		High collectivism
8.	“Maintaining discipline, respectful of laws and the elderly and seniority”		High power distance
9.	“Being conscious and mindful of all actions in line with His Majesty’s the King’s royal statements”		High collectivism
10.	“Applying His Majesty King Bhumibhol Adulyadej’s Sufficiency Economy, saving money for times of need, being moderate with a surplus for sharing or expansion of business while having good immunity”	Interdependence orientation and religio-psychical orientation	High femininity
11.	“Maintaining both physical and mental health and being unyielding to the dark forces or desires, having a sense of shame over guilt and sins in accordance with the religious principles”	Religio-psychical orientation	High femininity
12.	“Putting the public and national interest before personal interest”		High collectivism

The twelve core Thai values, as shown in Table 3, show the desirable cultural values expected of Thais. Interestingly, the core values begin with three main pillars (i.e., the nation, the religion, and the monarch) which are representative of Thai identity. The subsequent values appear to underpin the trio: the values 5, 7, 8, and 12 for the nation;

the values 2, 3, 6, 10, and 11 for the religion or Buddhism; and the values 7, 9 and 10 for the monarch. There is only one value (number 4) that focuses on individuals. The implication here could be that Thailand prioritises collectivism and femininity over individualism and masculinity. The twelve core values that underpin the three pillars signify that Thailand's development has been geared not only to keep up with globalisation but also to maintain the Thai identity.

If we accept Hofstede's (1980) analysis of Thai culture and Komin's (1990) survey findings on Thai cultural values, it appears that most Thai cultural values identified in the literature reviewed above appear incompatible with critical thinking assumptions. For example, Hofstede's Thai cultural dimensions (i.e., high femininity, high collectivism, high power distance, and mid-level uncertainty avoidance) seem to contradict conceptions of critical thinking. As claimed by Brookfield (2012), critical thinking "represents a masculine approach to knowledge that emphasizes doubting, not believing, and that ignores connected knowing" (p. 214). It grants thinkers equal rights to think and express themselves freely and fully (individualism and low power distance). Critical thinkers, as Paul and Elder (2002) argue, should have the intellectual courage to take risks by thinking differently from the accepted practices or conventions (low uncertainty avoidance). Given these cultural values, it is interesting to examine how critical thinking has been promoted in Thai cultural settings where the thinking itself may not be consistent with Thai culture as it is portrayed in the literature reviewed here.

2.7.3 Critical Thinking in Thai Education

Prior to discussing critical thinking development in the Thai educational context, it is essential to understand the teaching and learning situations in Thailand. This section thus begins with a reflection on the Thai teaching approach and the roles of teachers and students.

Teaching and Learning in Thailand

Teaching and learning in Thailand has long been teacher-centred. The reason for this may be that this approach itself is in accordance with the high value placed on hierarchy in Thai society. Thai classrooms are defined with a high power distance between teachers and students, in which teachers play a central role in imparting knowledge to

students who generally remain passive receivers (Thamraksa 2003). In response to teachers' questions, students will answer what their teachers wish to hear (Dumteeb 2009). Given all this, this approach is unlikely to promote Thai students' critical thinking skills (Adamson 2005; Buranapatana 2006; Chareonwongsak 2002; Dumteeb 2009; Prangpatanpon 1996; Thamraksa 2003).

The fact that Thai classrooms are affected by Thai culture (Adamson 2005; Baker 2008; Thamraksa 2003) which is claimed to have a mid-level of uncertainty avoidance (Hofstede 1980) may be the reason why Thai students expect their teachers to have all the answers (Kapur-Fic 1998) and Thai teachers themselves prefer lecturing which is a one-way interaction (Naruemon 2013), lessening the likelihood of being faced with unpredictable questions from students. Thamraksa (2003) argues that most Thai teachers feel secure using this approach because it gives them power and hence recognition. In this approach, we find Komin's (1990) concept of ego orientation. Thai students avoid losing face and also save face of their teachers by not asking questions (Pattapong 2015). Therefore, Thai students' risk aversion can be a result of their culture. The teacher-centred approach which is consistent with the Thai culture and hence familiar to both teachers and students can then potentially be a barrier to students' development of critical thinking.

Nevertheless, learning through the teacher-centred approach may not be practical in today's world. Biggs and Tang (2007) suggest that learning should not be the consequence of "the acquisition of information" but rather "the way we structure that information and think with it" (p. 21). Rote-learning which is prevalent in the teacher-centred approach is usually associated with surface learning. Such learning is the opposite of deep learning which Biggs (1994) equates with good learning. For Biggs, deep learning involves appropriate engagement in the task, reflection, metacognition, learning autonomy, and pleasure/joy in the learning process. It appears that what Biggs regards as the characteristics of good learning are indeed compatible with a student-centred approach, the one that is not widely applied in Thai educational contexts.

Realising the importance of deep learning and its association with the student-centred approach, the 1999 National Education Act (Office of the National Education Commission 2002) was enacted. The essence of this act is the development of an "inward and outward orientation" (Witte 2000, p. 224) in which education will be

improved to keep pace with the changing world while maintaining the Thai identity. To reiterate, this developmental trajectory was set by King Rama V (Fry 2002). A significant change under the act is the transformation from a teacher-centred approach to a student-centred one. The latter approach emphasises the enhancement of critical thinking, learning autonomy, and lifelong learning. With reference to the promotion of critical thinking, it is stated in the act that education at all levels should:

“(2) provide training in thinking process, management, how to face various situations and application of knowledge for obviating and solving problems; (3) organise activities for learners to draw from authentic experience; drill in practical work for complete mastery, enable learners to think critically and acquire the reading habit; and develop a continuous thirst for knowledge” (Chapter 4, Section 24).

However, the act has not yet been effectively enacted (Thamraksa 2003). Hallinger and Lee (2011) regard the act as an “impossible dream” (p. 156) as it promotes an extreme change from the most familiar to the most unfamiliar. Kantamara et al. (2006) attribute its ineffectiveness to the fact that “Thai teachers perceive the current reforms as “foreign” in origin and in nature” (p. 7). Therefore, to understand critical thinking development which is strongly emphasised in the act, it is important to understand Thai teachers’ cognitions and pedagogic practices regarding this development. The current study thus aims to investigate this matter.

Teachers’ Roles

Teachers in Thailand are believed to be another parent of students. They are viewed as students’ third object of gratitude with their fathers as the second and their mothers as the first. Teachers are therefore expected to not only give students knowledge but also instill other virtues, ones that are essential to sustain the students’ lives (Thamraksa 2003). Similarly, Deveney (2005) claims that Thai students are in moral debt to their ‘parental’ teachers and expected to pay them back. Since this payment “should not and cannot be measured quantitatively in material terms” (Komin 1990, p. 168), respect and gratitude, which are regarded as spiritual honours, are deemed to be appropriate. Kapur-Fic (1998) too states that gratefulness and respect are the Buddhist virtues Thai people in general practise, even in classroom settings.

Consequently, '*Wai Kru*' (the Thai rite of paying homage to teachers) is held at all educational levels, usually at the beginning of each academic year. According to Prangpatanpon (1996), this rite has been performed since ancient times as an occasion for students to show their gratitude and respect to their teachers who, at that time, taught them without getting paid except with kindness for doing so. He claims that the rite still remains, although nowadays teaching is a professional career with a salary. Nevertheless, it should be noted that high respect for teachers comes with high expectations of them. Teachers should behave in a way that shows they are worthy of such respect.

The parental role expected of Thai teachers is in accordance with a teaching ethic, stating that Thai teachers are to "Conduct themselves as a good role model for learners" (Teachers Council of Thailand 2005, n.p.). Teachers' good behaviour is then highly expected in Thai society, one which Mulder (1985) considered to be a "presentational society" (p. 170).

Other roles of Thai teachers are also stated in the 1999 National Education Act (Office of the National Education Commission 2002). They are expected to encourage not only students' learning but also community learning:

"Educational institutions in co-operation with individuals, families, communities, community organizations, local administration organizations, private persons, private organizations, professional bodies, religious institutions, enterprises, and other social institutions shall contribute to strengthening the communities by encouraging learning in the communities themselves. Thus communities will be capable of providing education and training; searching for knowledge, data, and information; and be able to benefit from local wisdom and other sources of learning for community development in keeping with their requirements and needs; and identification of ways of promoting exchanges of development experience among communities" (Chapter 4, Section 29).

Moreover, teachers themselves are encouraged to "carry out research for developing suitable learning for learners at different levels of education" (Chapter 4, Section 30).

In most Thai classrooms where the teacher-centred approach is practised, teachers are believed to know best, having all the answers for students and giving them only the

right ones (Loima and Vibulphol 2016). Teachers being assumed to give only correct answers to students may be explained by what Biggs (1994) mentions about teaching in China: “Chinese educators also believe that art should not only be beautiful but also morally good. The idea of one right way pervades teaching” (p. 28). Thailand is a similar case. The nation is influenced by the concept of morality derived from Buddhism. Although Chinese Buddhism (Mahayana) is different from Thai Buddhism (Theravada), the core of both branches aims at enhancing people’s morality. Morality in Buddhism has binary judging: either right or wrong. Therefore, it is possible that morality conceptions can affect teaching and learning in Chinese and Thai educational contexts. Namely, Chinese students and Thai students view knowledge in a two-perceptual way: either right knowledge or wrong knowledge. This is possibly why they expect only one right answer. In addition, morality seems to be adhered to in Asian cultures. Examining the cross-cultural differences between the Eastern world and the Western world, Ng (2001) observes that Asian children are encouraged to behave according to moral criteria. In Japanese educational contexts, Howe (2004) claims that “The Japanese school curriculum emphasizes, in addition to course content, socialization, morality and behaviour rather than cognitive ability” (p. 521).

Nevertheless, the expectation of teachers in Thai classrooms as those knowing best may hinder Thai students’ development of critical thinking. This is because in critical thinking instruction, teachers sometimes end their classes with ambiguity, instead of giving students absolute and correct answers, in order to trigger the students’ curiosity (Brookfield 2012). Critical thinking instruction in Thai classroom contexts then can be challenging as it may go against Thai students’ expectations.

Students’ Roles

Thai students learning through the teacher-centred approach highly respect their teachers who play a central role in giving them knowledge. The students revere their teachers not only as their benefactors but also as their seniors. Therefore, to them, asking questions or challenging their teachers is considered to be inappropriate (Kapur-Fic 1998; Mulder 1985; Wallace 2003) as it can mean questioning or challenging them as a person (Foley 2005). These cultural issues give rise to students’ politeness and obedience in class. Kapur-Fic (1998) points out that silence is indeed expected from

students since their early socialisation when they are “discouraged from expressing their feelings openly” (p. 55).

When learning, Thai students tend to deem teachers’ spoon feeding to be concrete evidence, assuring them that they have been taught something (Thamraksa 2003). Kapur-Fic (1998) notes that most Thai students’ learning goals are determined by their parents’ wishes. Students’ academic success can signpost the success of their parents. Consequently, Thai students seem to be exam-driven, struggling to use education as a means to obtain social recognition for themselves and their parents (Komin 1990). Students’ educational failure, on the other hand, affects their face and their parents’ face (Kapur-Fic 1998). Therefore, learning, to most Thai students, appears to be socially oriented (Komin 1990). Such achievement motivation can also be found in Japanese students. McVeigh (2002) revealed that most Japanese students studied for the sake of “filling the exam sheets, filling out forms and proving to the authorities that one has persevered through the ordeal of ingesting large amounts of data” (p. 96). This indicates that Asian cultures, to some extent, reinforce achievement motivation in their students.

Critical Thinking Development in the Thai Education System

As can be seen thus far, education in Thailand is affected by Thai culture and Thai Buddhism. Some characteristics of such education, such as the teacher-centred approach, high respect for teachers, and students’ obedience, seem to hinder Thai students’ critical thinking development.

The interdisciplinary promotion of critical thinking in the Thai education system has continuously been undertaken. Such promotion is obvious in the 1999 National Education Act (Office of the National Education Commission 2002). This resulted in critical thinking becoming a mandatory term in every curriculum, starting from primary education to university education. Nevertheless, despite such promotion, numerous educationalists and researchers have found Thai students lack critical thinking.

In the discipline of EFL in Thai contexts, it seems that Thai students have not been adequately equipped with critical thinking. Moreover, only limited research has been found in this discipline. Most of that found was undertaken in literature classes. Other studies conducted in other English courses focused on students and critical thinking activities. For example, Nanni and Wilkinson (2014) quantitatively assessed the critical

thinking of 14 Thai EFL university students at a university by using Facione's Holistic Critical Thinking Scoring Rubric. The participants had received critical thinking instruction over a ten-week term. The results revealed that students made significant improvements in terms of their critical thinking abilities. Jantrasakul (2012) verified the effectiveness of the critical thinking-based EFL lessons employed in a class in two foundation courses (English 1 and English 2) over two semesters. Her participants included 37 first-year students whose English was at quite a low level. The data was collected by using classroom observations, task sheets, writing assignments, and tests. The results revealed that such lessons produced lively and supportive learning atmospheres. Since such lessons created a less competitive classroom atmosphere, higher-achieving and lower-achieving students seemed to empower one another in learning.

There are also some studies focusing on EFL teachers. For example, Dumteeb (2009) studied questions and questioning techniques Thai EFL university teachers used to promote their students' critical thinking. The participants in her study were 2 Thai EFL university teachers and their two classes of first-year English major students. The data was collected by using the following five methods: classroom observations, questionnaires, focus group interviews, teacher individual interviews, and document analysis. She found several findings, for example, repetition was the questioning technique most employed in the observed classes, and most questions the teachers posed in class were at the knowledge level, based on Bloom et al.'s (1965) taxonomy of the cognitive domain. Buphate and Esteban (2018) surveyed Thai students' and teachers' attitudes towards critical thinking in classes in a Thai university. The participants were 200 university students from different faculties and 20 EFL university teachers. The results revealed that the students had an inadequate understanding of critical thinking and needed more development of it. The teachers reported that they had not found teaching critical thinking easy and needed more training workshops to develop their teaching.

Nevertheless, it should be noted that not much research examining the cognitions and pedagogic practices of university teachers teaching English courses in teacher education has been found. This study thus intends to address this gap.

2.8 Summary

This literature review has presented definitions of critical thinking in terms of its cognitive skills and affective dispositions. The importance of critical thinking is recognised in multiple domains of life. Having such importance, it has become an essential educational goal, particularly emphasised in university education. Because of this, university level was selected to be the educational context for this study.

In the realm of education, critical thinking is widely promoted, signifying its learnability and the importance of its cultivation. Several classroom strategies as well as teaching approaches have been suggested. The role of teachers in enhancing students' critical thinking is claimed to be crucial. Nevertheless, teachers' decisions and teaching practices regarding critical thinking instruction can be influenced by several factors, particularly in Thailand, where critical thinking is largely taught as an embedded topic, which means it depends on the teachers themselves. Given this situation, a detailed study considering teachers' critical thinking cognitions and pedagogic practices in the Thai educational context seems to be needed.

According to the literature reviewed here, critical thinking promotes ESL/EFL learning. This study therefore selected Thai EFL university teachers to be the research participants.

Concerning its cultural relevance, researchers tend to perceive critical thinking to be Western. However, there are also a number of researchers asserting that critical thinking is actually in Asian cultures, but that it may be suppressed by other cultural values. When associating critical thinking with Asian cultures, most of them associate it with Confucius. Little research has examined critical thinking development in Asian Buddhist-influenced cultures. The present study therefore investigates this issue in Thailand whose culture has greatly been shaped by Buddhism.

Some evidence shows that Thai Buddhism promotes critical thinking. However, there are also a number of Buddhist virtues that seem to hinder it. Many Thai cultural aspects themselves appear incompatible with critical thinking practices. This could possibly make critical thinking development in Thailand's education, which is strongly influenced by Thai Buddhism and Thai culture, even more challenging. Even though the recent 1999 National Education Act (Office of the National Education Commission

2002) significantly promotes critical thinking, it seems its implementation is still in question. Although the research investigating critical thinking development in Thailand is plentiful, Thai EFL university teachers' cognitions and pedagogic practices remain under-researched. To address this gap, this study examines this particular issue. The research methodology applied in this study will be elaborated in the following chapter.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This study investigates the critical thinking cognitions and pedagogic practices of Thai EFL university teachers. Their cognitions were examined in terms of their conceptions and perceptions while their classroom practices were explored in terms of what they do in class. Given that teachers' cognitions are likely to shape their classroom practices and vice-versa (Borg 2003), this study examined three entities that could be assumed to be related, namely, Thai EFL university teachers' conceptions of critical thinking, their perceptions of critical thinking development in their students, and the degree to which their conceptions and perceptions relate to their actual pedagogic practices. The three research questions were therefore formulated as follows.

1. How do Thai EFL university teachers conceive of critical thinking?
2. How do Thai EFL university teachers perceive the development of critical thinking in their students?
3. To what extent do Thai EFL university teachers' conceptions of critical thinking and perceptions of their students' critical thinking development relate to their actual pedagogic practices?

This chapter begins with Section 3.1 providing the introduction. Section 3.2 justifies the use of ethnography as the research strategy. My role as a researcher is defined and described in Section 3.3 to ensure that my close engagement in the research context would not threaten the rigour of the study. The qualitative research methods that were planned to be used were piloted twice, as explained in Section 3.4; and they were shown to be workable and thereby applied in the main study. Section 3.5 gives the criteria for the recruitment of the participants, the justifications for any changes during the recruitment, and the participants' own contexts.

The research methods described in Section 3.6 comprise reflective writing, semi-structured interviews and non-participant classroom observations. Section 3.7 provides details of the data collection process and also justifies why each method had to be used sequentially. Section 3.8 describes the organisation of the data, and Section 3.9 explains the whole process of data analysis. Section 3.10 elucidates how the findings will be

presented, namely, by using comprehensive themes accompanied by some of the participants' relevant quotes. Section 3.11 elaborates on how the trustworthiness (Lincoln and Guba 1985) of this research was established and the rigour of this study thereby ensured. Finally, Section 3.12 explains the ethical considerations that ensured this study was conducted ethically.

3.2 Research Strategy

Taking ontological and epistemological stances are essential to every research study (Creswell 2013). Ontology, or “the form and nature of reality” (Guba and Lincoln 1994, p. 108), is an initial stance of researchers taking in their investigation of the nature of knowledge. To understand the knowledge, an epistemological perspective is important as it guides researchers on where such knowledge is generated from and how it can be obtained (Blaikie 1993). Epistemology shows “how we know what we know” (Crotty 1998, p. 3) and the nature of the relationship between researchers and what they are researching (Guba and Lincoln 1994).

The sociocultural and relativist framework of this study informed the ontological stance of diverse realities, viewing Thai EFL university teachers' conceptions, perceptions, and pedagogic practices as being not only varied but also potentially unique owing to their culture as well as their subjective lived experience. Accordingly, there were two epistemological ways to discover their realities: these were through examining their “subjective evidence” (Creswell 2013, p. 20) gleaned from their views and practices as expressed in the data collected and through my own close engagement with them.

Philosophical assumptions shape a research paradigm which has been described as a “basic set of beliefs that guides action” (Guba 1990, p. 17). Maintaining the stance of multiple realities, this study lends itself to the qualitative research paradigm (Braun and Clarke 2013). This paradigm allowed me to examine and collect the participants' data in their actual working environment, make sense of it, and analyse it into patterns, representing the participants' voices (Creswell 2013). Even though qualitative research may be regarded as unstructured (Morse 1994), it certainly involves the whole process of a scientific method comprising a research problem, research questions, data collection, data analysis, results, and discussion; all these are systematically interrelated and represent “the quantitative side of qualitative research” (Wolcott 1994, p. 26).

The qualitative research paradigm determined the selection of the research strategy. Since I needed to be in the participants' own contexts for data collection, I decided that an ethnographic research strategy would be the most appropriate to fulfil this task. According to Creswell (2013), ethnography allows researchers to be in participants' contexts so as to examine their "shared patterns of behavior, beliefs, and language" (p. 90). This ethnographic study therefore examines such patterns in relation to critical thinking cognitions and pedagogic practices found in the participants in this study. Moreover, as argued by Creswell, ethnography is also concerned with examining participants' culture. This is clearly compatible with the two theoretical concepts applied in this study, namely, sociocultural theory and relativism.

Being in the same contexts as the participants, I was involved in the data reflexively and was careful "not to determine the 'truth' but to reveal the multiple truths apparent in other 'lives'" (Emerson et al. 1995, p. 3). Although my own interpretation inevitably came into play, I reminded myself to use it to disclose their actual meanings.

3.3 My Role as a Researcher

Doing this qualitative study, I was "a central figure who influences the collection, selection, and interpretation of data" (Finlay 2002, p. 531). Because of this, my subjectivity and biases could not be avoided. Reflexivity therefore became crucial. As Mann (2016) puts it, "Reflexivity involves examining yourself as researcher and also your research relationships" (p. 27). In this study, I was reflexive on my position in involving in every aspect of this research, such as the participants, the contexts being investigated, and the writing up process (Gray 2008). Here, I used my research diary to examine my ideas, feelings, strengths and limitations throughout the study. The process of my self-awareness was expected to determine the level of trustworthiness (Finlay 2002) and hence the rigour in this research (Angen 2000).

However, reflexivity practice is not to generate complete objectivity "but to use the researcher's personal interpretive framework consciously as the basis for developing new understandings" (Levy 2003, p. 94). In this study, I also revealed my 'baggage' (Scheurich 1995), what I had brought to the study, by detailing my past experiences and motivation for doing this study (see Section 1.6) and revealing my theoretical assumptions (see Section 1.3) and my philosophical assumptions that determine the selection of the research strategy of this study (see Section 3.2). By so doing, my

readers could see how my aspects justified the data collected, and how these influenced the way the data was analysed, discussed and presented (Greenbank 2003).

In this study, my role was made explicit to both readers and the participants. I disclosed myself as a researcher, an interviewer and a non-participant observer. As a Thai EFL university teacher in the Thai context, I acknowledged that I was part of the discipline and of the whole setting under investigation. Because of this, my pre-existing relationship with some participants could affect the data generated in the interviews (Garton and Copland 2010). Nevertheless, I was constantly reflexive on this by recording my thoughts and feelings in my research diary.

In this research, there appeared to be two types of relationship between the participants and myself: a previous relationship and a non-previous relationship. The participants who had had prior relationship with me were either my colleagues or my former students who were now teachers while those that had no previous relationship with me were teachers I had met for the first time during the data collection.

My role with my colleagues shifted from being that of a colleague to that of a researcher. The previous relationship, to some extent, created a supportive and relaxed atmosphere conducive to the provision of data; this facilitated my interpretations of what they attempted to express, and also helped establish trust and intimacy. However, such a relationship could restrict my views of the data, resulting in preconceived interpretations. Another downside was that it was sometimes awkward for us to communicate in a more academic way. However, the strengths outweighed the weaknesses when the data collection ensued.

Regarding my former students who were now teachers, the power relations between us seemed to be influenced by a strong sense of Thai hierarchy. Although their social status had changed, they still perceived themselves to be my students, paying great respect to me as their teacher and being too cautious in their responses. As a result, during their interviews, they usually asked me whether their ideas were good enough and whether they were right or wrong. To deal with this issue, I usually began the interviews with encouraging phrases such as ‘As we both are teachers, what do you think about ...?’ to lessen their potential feelings of inferiority. When met with ambiguity in their responses, I tried to raise probing questions carefully in a way that would not make them feel that their unclear statements were mistakes. In this case, I did

it by showing my interest in knowing more about what they were referring to, using pleasant and positive non-verbal communication, and asking further questions in a respectful manner.

For the participants whom I met for the first time during the data collection, our roles were immediately set, namely, those of a researcher and a participant. Irrespective of whether the participants had a previous relationship with me or not, the interactions between us reflected power asymmetry. Although I was “usually positioned as the relatively more powerful side” (Kvale and Brinkman 2009, p. 76), the participants also had the power to decide the extent to which they would cooperate in the process of data collection (Karnieli-Miller et al. 2009). Despite knowing that equal power relations were not possible, I was nevertheless mindfully aware of my own controlling behaviour during the data collection process and took steps to minimise the power imbalance by empowering the participants to:

- a) select their own place and time for their interviews,
- b) choose which class they felt comfortable in to be observed,
- c) express their ideas freely in their reflective writing and interviews,
- d) verify their interview transcripts and decide which part they wanted to be discarded, and
- e) possess the right to withdraw from the study at any time for any or no reason.

As well as the considerations mentioned above, I took into account the power relations between the students and me in the observed classes. In addition to identifying myself to them as a researcher and a non-participant observer, I also informed them that I was a PhD student; thereby showing that my educational status was in fact similar to theirs. I did this deliberately in an attempt to, to some extent, reduce their anxiety and awareness of being observed.

3.4 Pilot Studies

I conducted two pilot studies to ensure the applicability of my research methods. These pilots gave me the opportunity to verify:

- a) the comprehensibility of reflective writing questions and interview questions,

- b) the effectiveness of using reflective writing and the textbook as interview prompts, and
- c) the practicality of using an audio-recorder and the observation protocol.

Furthermore, the pilot studies cultivated my qualitative inquiry skills which, to some extent, enhanced the credibility of the present study (Padgett 2008).

The first pilot study has been done from November 2015 to January 2016. The participants were nine Thai EFL university teachers at a university in South Thailand (male=4, female=5). Their ages ranged from 30 to 65 (\bar{X} =42, SD =12). Their teaching experience ranged from 1 to 42 years (\bar{X} =11, SD =11). The study used semi-structured interviews, using the participants' textbook as an interview prompt. From the first pilot, I learned several lessons which are listed below.

- a) Empowering the participants to select their interview time and place made them feel more comfortable.
- b) Using Thai (our mother tongue) or sometimes a southern Thai dialect (our shared dialect) reduced their anxiety and created a relaxed atmosphere.
- c) Asking about 'What is it not?' instead of 'What is it?' helped them figure out things better. For example, when asked about the characteristics of good teaching, they might not express themselves as fluently as they did when talking about bad teaching.
- d) Avoiding expressing my own ideas and correcting their responses enabled me to elicit their genuine responses.
- e) Examining the outlines and notes from the participants during the interviews helped me clarify what they had tried to explain in writing. Although the data was audio-recorded, examining their outlines and notes helped me understand their ideas and intentions more easily.

Interestingly, one participant suggested collecting the data using both speaking and writing to suit participants' preferred styles of communication. I thus decided to try out a reflective writing method in the second pilot study.

The second pilot study was conducted from May to July 2016. The participants were eight Thai EFL university teachers at universities in South Thailand (male=2, female=6). Their ages ranged from 29 to 56 years old (\bar{X} =39, SD=9). Their teaching experience ranged from 2 to 12 years (\bar{X} =7, SD=3). This project employed an ethnographic strategy, using the following three research methods: reflective writing, semi-structured interviews and non-participant classroom observations. The following three lessons were learned from the second pilot study:

- a) Although the reflective writing elicited a great amount of interesting data, the method still had a drawback. One participant admitted that she was at first not certain about the definitions of critical thinking, and so she had searched for them on the Internet. However, using a semi-structured interview could double-check this.
- b) Using a semi-structured interview with their textbook and their reflective writing made them feel less nervous because this structure provided them with some ideas to ponder and discuss.
- c) A non-participant classroom observation provided me with constructive contextual data. However, asking for their teaching plans inevitably raised their awareness of being observed for they then seemed to be worried and looked at their plans often in class. Their students also noticed it and tried to be cautious about their classroom behaviour. As a result, I decided not to ask for lesson plans from the participants in the present study.

3.5 Research Participants

This study examined Thai EFL university teachers' conceptions of critical thinking, their perceptions of critical thinking development in their students, and their critical thinking pedagogic practices in class. It is intended to present the participants' cognitions and practices which are probably unique and context-bound, and therefore not likely to be transferable. A purposeful sampling strategy was thus considered suitable as it would allow me to select the participants who seemed capable of providing an insight into the topics being investigated (Patton 1990; Creswell 2013).

The recruitment of the participants in this study had to meet the following three criteria: a willingness to take part in the study, permission from their institutions for data

collection, and their ability to give time to provide data. Using purposeful sampling, 15 Thai EFL university teachers teaching undergraduate students majoring in English in teacher education programmes were selected for this study. Such programmes in Thailand offer a bachelor's degree in education with the aim of providing knowledgeable and qualified teachers for primary and secondary schools (Michael and Trines 2018). According to the 1999 National Education Act, the programmes include four-years of coursework and a one academic year internship in schools (Kantavong et al. 2012). There are 35 universities running such programmes in Thailand, and all are under the supervision of the Office of Higher Education Commission, Ministry of Education. I decided not to include all 35 universities in Thailand, but instead to focus on 7 universities in South Thailand because a valid ethnographic study can be done with "a subset of a group" (Creswell 2013, p. 91). The final descriptions generated from such a group can also explain the complexity of the topics being studied in a local context and denote its position within the whole group.

The selection of the sites in South Thailand was also based on my budget as several regions for data collection might have caused affordability problems. Although good ethnographers should study issues or subjects that fall beyond their areas of familiarity (Wolcott 2008), as a person originating from South Thailand, I believed my origin was actually an asset as it would help me understand the participants' Southern Thai slangs as well as non-verbal communications, intentions and expressions, aspects of their behaviour that are culturally unique to this region. However, realising that this perhaps leads to a bias that could affect the study, I was continuously reflexive throughout the research process.

Using my personal connection, I contacted potential participants for this study. These participants also suggested some of their colleagues to me. I then approached them, and all agreed. Initially, I had 18 participants from these 7 universities. However, due to dangerous political situation at that time in Thailand's deep south and unavailability of some teachers, I decided to collect the data from 15 participants in 4 universities, namely, three Rajabhat universities and one autonomous university. Rajabhat universities were formerly public teacher training colleges that were upgraded to university level in 2004. Although all were government universities receiving budget allocations from the government, each university type had its own unique characteristics. Unlike Rajabhat universities that follow government regulations, an

autonomous university establishes its own regulations, resulting in a more independent administration (Michael and Trines 2018).

Each participant in this study was assigned a fictitious name during data collection and data analysis to anonymise his/her information. Moreover, any identifiable information, such as names and places, was replaced with pseudonyms. When reporting and discussing the findings, I tried to avoid mentioning the participants' fictitious names so as to maintain their anonymity. I deliberately used their names only when presenting and referring to their quotes.

The participants were 15 Thai EFL university teachers (male=5, female=10). Their ages ranged from 28 to 45 years old (\bar{X} =34, SD =6), and their teaching experience ranged from 2 to 15 years (\bar{X} =6, SD =5). Fourteen of them were Buddhists while one was Muslim. They taught various English courses to English major undergraduate students. Their level of education was at least a Master's degree, and some had a doctoral degree.

Regarding their postgraduate education, some had obtained their degrees overseas while others had obtained them from Thai universities. However, all of them shared substantial educational backgrounds in the Thai educational context: in primary, secondary, and undergraduate education. Being part of the Thai educational context as learners and teachers, it was anticipated that they would be able to provide valid and insightful data.

3.6 Research Methods

Research methods are designed to collect data which is expected to provide answers to the research questions, and there should be an alignment between the two (Crotty 1998). The selection of the appropriate methods began by considering the expected outcome (Creswell 2013). This study aimed to examine Thai EFL university teachers' conceptions of critical thinking, their perceptions of critical thinking development in their students, and their critical thinking pedagogies in their classes; so the instruments used needed to be exploratory and serve my epistemological aim to have a close relationship with the participants in the study.

This study used methodological triangulation which includes the following three research methods: reflective writing, a semi-structured interview, and a non-participant classroom observation. The reflective writing and the semi-structured interview produce

emic data (the participants' perspectives) while the non-participant classroom observation generates etic data (my perspectives). The use of methodological triangulation is beneficial in five ways:

- a) presenting data in different angles (Miles et al. 2014),
- b) lessening my bias (Miles et al. 2014),
- c) compensating for the limitations of each method (Lincoln and Guba 1985),
- d) helping me get closer to what is being researched (Arksey and Knight 1999),
and
- a) increasing the trustworthiness of this study in terms of its credibility, dependability and confirmability (Merriam 1998).

The triangulation in this study has two major aims: completeness and confirmation. Breitmayer et al. (1993) suggest that the choice of goal should be clearly explained. Attempting to accomplish both aims, the data collection began by using the reflective writing, followed by the interview in an attempt to complete the reflective writing data. The third and last method was the non-participant classroom observation, which was used to confirm or disconfirm the data derived from the reflective writing and the interview. Moreover, each method was used to gain answers to certain research questions. The reflective writing and the semi-structured interview were designed to produce data to answer the first and second research questions while the non-participant classroom observation sought to find data to answer the third research question. This triangulation is shown in Figure 2.

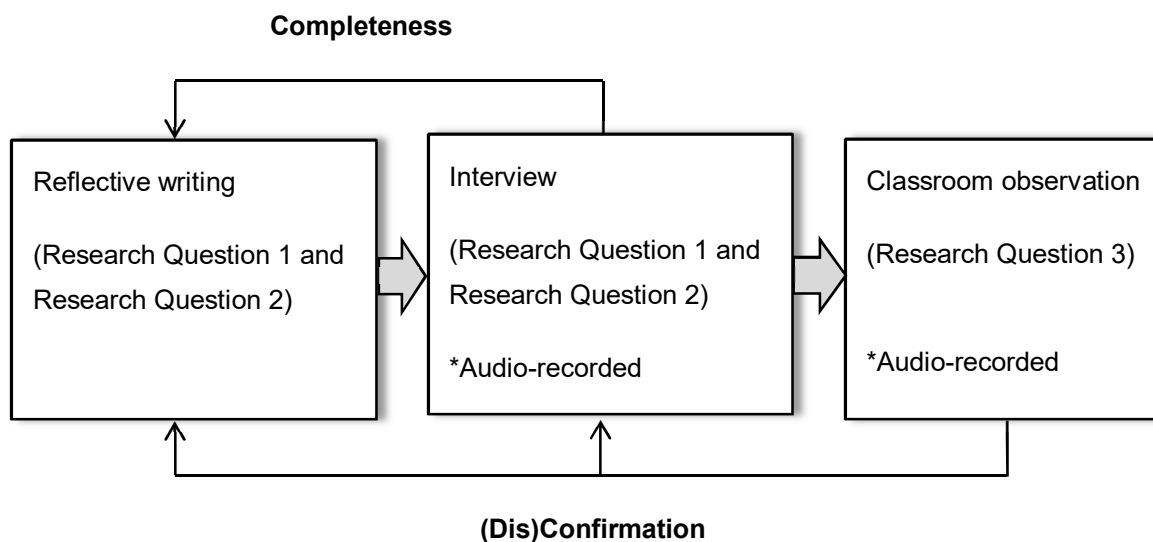


Figure 2: Aims of the methodological triangulation and research methods used to answer the research questions

Reflective Writing

The first method used was reflective writing. I gave nine questions to the participants, who had to respond and submit their answers to me one week prior to their interview. The reflective writing questions were determined by the research questions (see Appendix A). Some examples of these reflective writing questions are given below:

- a) What do people do when they think critically?
- b) To what extent and in what ways is critical thinking important?
- c) Are critical thinking and English language teaching related to each other? Why do you think they are/are not? Please explain and give some examples.
- d) Are your students critical thinkers? Why do you think they are/are not? Please explain and give some examples.

The questions were first written in English so that I could discuss them with my supervisors. In the discussion, ambiguous questions were adjusted, irrelevant questions were deleted, and other questions emerging from the pilot interviews were carefully considered and added. The revised questions were then translated into Thai. Using peer-debriefing, I asked three Thai PhD students in three different faculties at three universities in the United Kingdom to help me verify the comprehension and the clarity of the questions in the Thai version. The selection of peers from different faculties

ensured that such questions were clear, simple, general and comprehensible even to those in other disciplines. Moreover, using Thai people to verify the Thai version was advantageous in that they could examine the sensitivity of these questions in the Thai cultural context.

Reflective writing was used for the following three reasons. First, one participant in the first pilot study suggested the data collection should be conducted through both interviews and writing to accommodate individual differences in terms of their preferred communication styles. The use of reflective writing was then tested in the second pilot study and proved to be effective in eliciting informative data. Second, as the participants were asked to respond in their reflective writing before being interviewed, it helped them prepare some ideas to discuss in their interviews and thus lessen their anxiety and worry about the discussions. Last but not least, by asking them to submit their writing to me one week before their interviews, I could examine their written ideas and add some questions to my prepared interview guide to elicit any potentially interesting data. As Arksey and Knight (1999) suggest,

“approaching research questions from different angles and bringing together a range of views has the potential to generate new and alternative explanations, ones that better capture the social complexity that the fieldwork explores” (p. 22).

Semi-Structured Interview

The second method applied was the semi-structured interview which is considered to be a reasonable and not extreme type of interview compared with structured and unstructured interviews. Although unstructured interviews would have been highly explorative in capturing the data, they are potentially random and uncontrolled. The semi-structured interview gave me two advantages. First, it allowed me to have an interview guide and to stay focused on the main topics under investigation. However, despite having the interview format, the fact that it was semi-structured still gave the participants the freedom to express diverse ideas. Second, it gave me “room for negotiation, discussion and expansion of the interviewee’s responses” (Mann 2016, p. 91).

The questions in the interview schedule were determined by the research questions. They underwent the same process used for polishing the reflective writing questions:

being written in English, being discussed with my supervisors, being translated into Thai, and their translation and appropriateness being verified by Thai peers, ensuring they were in accordance with Thai culture. The polished interview schedule is in Appendix B, but a few examples are given below.

- a) What is the most suitable learning method for Thai students in the Thai setting?
- b) What are the characteristics of critical thinking enhancement activities?
- c) What do you think you know about critical thinking and what do you not know?
- d) Do you think you yourself are a critical thinker? What makes you think you are/you are not?

As well as the questions in the interview schedule, more questions were also posed when I noticed any emerging issues. Even with the same question guide, each participant's responses varied from person to person depending on his/her different lived experience. Moreover, as Mann (2016) points out, "the interview enacts its own context and this unfolds through the interaction" (p. 66). The interactions and power relations between us were also actively and constantly negotiated (Scheurich 1995). I therefore acknowledged that the meanings in the participants' interview accounts were not only context-bound but also were co-constructed by the participants and me, the researcher.

Non-Participant Classroom Observation

The last method used was the non-participant classroom observation that was aimed at examining the participants' critical thinking pedagogies, as practised in their classes. It was also used to confirm or disconfirm the data derived from using other two methods in which the participants might merely "report the desired information" (Patton 1990, p. 262). Therefore, the classroom observational data in this study had an etic perspective: what I saw and how I interpreted it.

Five justifications for using the non-participant classroom observation are:

- a) It enabled me to collect relevant data as well as seemingly taken-for-granted but constructive data to answer the third research question.

- b) As a non-participant observer, I had my own private place to keep track of the objects or aspects of observation.
- c) As an outsider observing from a distance, an authentic classroom atmosphere could be maintained to some extent.
- d) As I did not interfere with the participants' teaching, the power dynamic between us was consequently balanced; they still had authority in the classroom (Merriam 1998).
- e) With minimal interference from me and with the teachers' usual classroom power, the students would feel comfortable in their regular everyday conditions.

Although prolonged observation is encouraged (Creswell 2013), "There is no ideal amount of time to spend observing" (Merriam 1998, p. 98). This study chose to use a one-time observation for each participant because of my time constraints and the participants' availability. However, the study maintained its rigour because it had the following three strengths:

- b) The credibility of the collected data was enhanced by using methodological triangulation.
- c) Using 15 participants increased the variety of perspectives on the topic under examination.
- d) The 4 sites selected expanded the degree of transferability for readers interested in replicating this study or in implementing the study's findings in their own contexts.

In the observed classes, I used an audio-recorder instead of a video recorder because I deemed the former to be less intrusive, and it had also proved to be effective in capturing the data in both pilot studies. In addition to audio-recording, I also took field notes so that I could "return to field notes to conjure up the experience again, reflect on it, and seek a deeper understanding of the actions and practices that occurred during that time and place" (Copland and Creese 2015, p. 43).

The field notes comprised observation date and time, a sketch of the classroom, and a descriptive session (see Appendix D). Creswell (2013) suggests using an observation protocol that contains both descriptive and reflective sections. Nevertheless, when tried out in the second pilot, such a protocol causes confusion because I had to be aware of categorising my language into the sections, whether it was a descriptive language or it was a reflective one. I then realised that the descriptions in the field notes were already evaluative messages selected and reflected by me the researcher (Copland and Creese 2015). I thus decided not to use that protocol but instead wrote down everything I found in the observed classes. Nevertheless, I listed the topics to be observed as an observation guide (see Appendix C) to remind myself of what needed to be observed and recorded. The guide was created as a result of the second pilot study. I realised that without it and with unexpected distractions in each class, some important observational issues could be missed. I used both English and Thai to ensure my note-taking was fluent.

3.7 Data Collection Procedure

I had collected the data from July to December 2016. I asked the participants to arrange the dates and times for my data collection. The three methods were sequentially followed, as shown below in Figure 3.

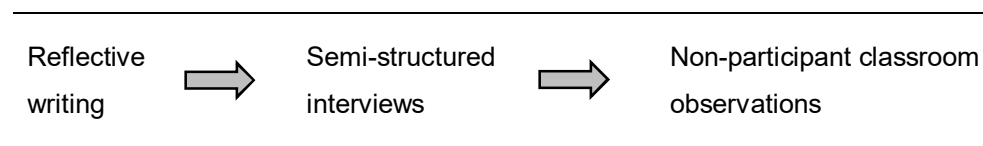


Figure 3: Data collection procedure

Collecting Data Using Reflective Writing

The first method used was the reflective writing. I asked the participants to respond to nine reflective writing questions. The expected submission date for their writing was one week prior to their interview appointment as I needed to carefully review it and flag up any ambiguous or interesting points to discuss in their interviews.

Collecting the Data Using a Semi-Structured Interview

The second method used was the semi-structured interview. Before going to interview the participants, I familiarised myself with the interview schedule and understood the

way it underpinned the research questions. Despite the realisation that the interview questions did not need to be mechanically posed in a sequential manner in the interviews, familiarisation with what information should be derived from them increased my confidence and made the interview communication more authentic and effective. Prior to the interviews, I contacted the participants to confirm their appointed time and place. As the piloting had established that participants being able to select the time and place of the interview was advantageous, the selection was made by the participants themselves in this study and was therefore at their convenience. Moreover, I reminded them to bring their textbooks as we would be discussing them. I also reminded them that as well as the textbooks, their reflective writing would also be used as an interview prompt. Actually, the use of the two interview prompts was initially stated in my information sheet (see Appendix J) that the participants were asked to read before considering whether or not to partake in this study. I did this intentionally to “avoid awkwardness or discomfort” (Mann 2016, p. 67) that could possibly occur in their interviews.

For every appointment date, I reached each participant’s chosen place early and waited somewhere nearby until the actual interview time so that I would be in the correct place on time. When having any interaction with them, I “try to be sensitive to the group’s cultural norms. This sensitivity manifests itself in apparel, language, and behavior” (Fetterman 2010, p. 47). I dressed modestly but appropriately and formally, realising that the way I dressed reflected the respect I paid to the participants and their workplaces which were government buildings. I also showed my respect for them through my politeness and courtesy, which are standard good manners in Thai culture and society.

Before the interviews took place, they were informed again of the purpose of the interviews, the use of an audio-recorder, their rights as research participants, their access to their interview transcription and analysed data, and the use of collected data in publications. They were also assured of anonymity and confidentiality concerning themselves and any data they may provide.

During the interviews, I used their textbooks and their reflective writing as interview prompts, audio-recorded the interview conversations, and took notes on any interesting

points. As it had proved useful in the first pilot, I prepared some paper in case they requested it to write outlines, notes or mind maps to clarify their ideas.

The language used for interviewing was Thai. Using our mother tongue, as evidenced in both pilot studies, eliminated the language barrier, and the participants could easily comprehend the interview questions and thus express their opinions fully and freely. Using the shared language was also beneficial in that some cultural conceptions expressed through specific cultural words could be more easily comprehended. As the participants were English teachers, they sometimes used English words and phrases to convey their understanding of the topics under discussion. Each interview lasted approximately 60-90 minutes in the interviewee's office, a language laboratory or a small conference room. Notably, the interview duration was not fixed, and they could extend it if they wished.

When interviewing them, I always started by talking about their educational and teaching background not only to elicit the data that was relevant to the study, but also to serve as an icebreaker (Fetterman 2010). The questions in the interview schedule and the emerging questions tried to follow Merriam's (1998) suggestions, namely, avoiding multi-questions, leading questions, and yes-no questions. But, in fact, leading questions and yes-no questions were unavoidably asked during the interviews. I also sometimes used leading questions to get the interviews back on track (Agar 2008) and yes-no questions to confirm the data the participants had given (Fetterman 2010).

During the interviews, I applied what I had learned from the two pilots and the literature:

- a) listening to them attentively,
- b) being open-minded about their different views (Hatch 2002),
- c) giving them time to think and respond,
- d) empowering them to tell their stories (Creswell 2013),
- e) noticing emerging angles and posing further probing questions (Hatch 2002),
- f) respecting their individual differences and sensitivities,
- g) staying focused on the interview conversations,

- h) asking questions using a friendly tone of voice,
- i) controlling my emotions and facial expressions, such as unconsciously giving a sign of disagreement that might cause unease to them,
- j) focusing on “detecting symptoms of resistance in the respondents” as well as “refraining from pressuring the respondent for information before he is willing or able to give it” (Gordon 1969, p. 61),
- k) asking the same questions in alternative ways when they did not understand the former questions raised (Guest et al. 2012), and
- l) avoiding giving my own ideas or correcting their responses.

When interviewing them using the audio recorder, I also took note of some issues I found particularly interesting. Although this might disrupt the flow of an interview, it was a way to show my interest in and attention to what they were trying to express. Moreover, in the actual interviews, my act of note-taking seemed to encourage them to express themselves more possibly because they deemed that their ideas were being recognised and were useful to me.

Using the interview method was quite relevant to some of the cultural issues involved. During the interviews, I found that one particularly effective way to encourage the participants to provide the maximum data was to tell them how others would benefit from their responses. This may be because in Thai culture, generosity and helping others are much valued and the Thai community at large practises the virtue (Komin 1990).

However, interestingly I also found that some Thai cultural aspects seemed to challenge the interviewing process. First, when some participants showed uncertainty in expressing their ideas, it did not always mean that they were uncertain. It could be a way of showing their humility, which is considered a virtue in Thai society. To deal with this issue, using probing questions could help ascertain whether their expressions were in fact their genuine feelings or just their adherence to the value of that virtue.

Second, smiling or laughing was culturally determined. In Thai culture, smiling is very common, and it can occur with or without any apparent reason. This made the interpretation of their smiles rather difficult, even by me who was also Thai. Their

smiles could be signals either of their resistance (such as: embarrassment, sadness, discomfort), their support and invitation (such as: happiness, willingness, encouragement), or a way to lessen their tension. Therefore, despite being confused about the meaning of their smiles, I also noted their non-verbal communication and changed the subject under discussion whenever I met with any of their resistances. As can be seen from this, sharing the same culture with the participants was beneficial in that I, to some degree, could understand their cultural expressions during the interviews. Nevertheless, I was quite cautious about this and did not generalise these cultural issues to all participants.

Simultaneously in the interviews, I established a good rapport with the participants, hoping that it would help enhance their trust and intimacy and result in the generation of informative data and hence increased credibility (Arksey and Knight 1999). Although such a relationship could be perceived as an insincere friendship (Duncombe and Jessop 2002), I believed that real sincerity could indeed exist through genuine appreciation of their cooperation in the study, and this could be expressed by listening attentively to what they were sharing. Attentive listening inspired them to think more about the data they were giving and made me better understand their experience and their feelings towards it. Understanding led to empathy, and this was the way in which a good rapport could be established.

After each interview, I used my research diary to record my feelings, strengths and challenges, and to note possible improvements that could be made for further interviews. The reflected feelings here were important as they helped me perceive my biases and be cautious when analysing the data. An example of my reflexive accounts is as follows.

Date: August 4, 2016

Time: 2 PM-3.15 PM

Although I practised interviewing skills in two pilot projects, I still felt nervous in the first interview of my main study. We began with small talk and gradually went on to the topic. She expressed tiredness from her excessive workload, and I tried to comfort her and showed her I was ready to listen to her if she wanted to share. I think showing my empathy opened-up her mind, and our conversation seemed to go well. I was able to cover all of the interview questions. However, it seemed I tried to note things down too often for I was too concerned about what might be missed, although I realised the data was being audio recorded. At that time, I just felt that if I wrote it after the interview, I might forget some of it. This made me embarrassed to be only a taker, concentrating only on my work, not on the interviewee. I should have been more appreciative of the present of her presence. I should be more careful about this in the next interview.

**Potential bias: empathy and guilt

As shown in the above account, I reflexively monitored my own thoughts and feelings as they had occurred in the interview. From this reflection, I learned that although letting the participant share her stories before conducting the interview created a good rapport, the digression wasted the interview time. So, in further interviews, I stayed more focused on the interview topics under discussion. Regarding my overconcern about note-taking, instead of doing away with writing, I tried to balance my two roles as a listener and a note-taker. This reflexive account showed not only what I needed to improve but also my strength in being a good listener. Realising this strength, I kept reminding myself in subsequent interviews that the voices most heard should be those of the participants.

Collecting Data Using a Non-Participant Classroom Observation

Each participant's teaching was observed once after their reflective writing and interviews had been completed. Prior to each observation, I contacted each participant to confirm the date, the time and the room for observation. I also reminded them about the use of an audio-recorder, the maintenance of confidentiality and anonymity, their rights as research participants, their access to the analysed observational data and to any publications generated from the study.

On each observation date, again I dressed and acted in the same way I had when going to interview them: dressing modestly, appropriately and formally and expressing respect

through politeness and courtesy. Dress and manners should be unobtrusive, according to Thai culture and society, hence minimising intrusion in the observations.

In class, I was careful not to interrupt classroom teaching, classroom activities and classroom interactions. Although I realised that it was impossible to eliminate the participants' and their students' awareness of being observed, I tried to minimise it as much as possible by sitting in the corner of the back row and not attracting attention from the participants or their students. I asked the participants in advance about what they were teaching but did not ask for their teaching plans so as to maintain the authentic classroom atmosphere. If they planned to give their students worksheets, they were asked to give them to me before their appointed observation dates. It was thought that by doing so it would lessen any classroom interaction between us and so reduce reactivity effects during the classroom observations.

The audio-recorder was placed on the participants' tables in front of the class. When the classes began, the participants introduced me to their students. I told the students briefly about my research project, their rights as subjects in the data collection sites, the use of an audio-recorder, and the commitment to confidentiality and anonymity. In order to avoid reactivity, I emphasised that my observation would not affect their grades in any way, and what I would do was just to observe silently, not to monitor them as an authority. All of the students were willing to take part in this project, and they signed a consent form (see Appendix L) for me. However, since this was a one-time observation for each participant, longitudinal observations might have given different results.

During the observations, I took notes on general circumstances and then on matters relevant to the research questions (Creswell 2013). Although "where to focus or stop action cannot be determined ahead of time" (Merriam 1998, p. 97), I used all available opportunities to collect all possible data that could contribute to answering the research questions.

As a Thai EFL university teacher, I realised that I was also an insider, already aware of the settings under investigation. Although this familiarity with the Thai education system facilitated my understanding of what the participants said, particularly in terms of cultural and linguistic expressions (Atkinson et al. 2003), it might have brought certain preconceptions into the observed classes, resulting in my overlooking data which seemed familiar and ordinary. To tackle this issue, I was continuously open-

minded, reflexive and “aware of the mundane details that most people filter out of their routine observations” (Angrosino 2007, p. 57) so as to discover the “invisibility of everyday life” (Erickson 1990, p. 92). I also used probes, raising ‘why’, ‘how’ and ‘what if’ questions about what seemed to be routine in the classroom. Sometimes when jotting down what happened in the observed classes, some themes occurred to me, and I then noted them. Therefore, in the data collection process, I applied multiple skills such as listening, reflection, interpretation, note-taking, concentration, criticality, and analysis. It should be noted that in this study the data was analysed not only in the actual process of data analysis but also during the data collection process.

During the observations, although they had been informed in advance of my role as a non-participant observer, there were certain nonverbal-classroom interactions between us. Some participants frequently smiled and made eye contact with me, and I perceived this as their expression of generosity: trying not to ignore me and respecting my presence. Nevertheless, this drew the students’ attention to me and hence possibly increased their awareness of having someone special in their classroom. In dealing with this issue, I avoided making eye contact with them and told other participants in subsequent observations that I would appreciate being ignored in their classrooms.

Unavoidably, my subjectivity interfered with the collection of observational data (Merriam 1998). Therefore, after each observation, I deliberately expressed my feelings and ideas about it in my research diary. An example of my reflexive writing is the following.

Date: November 2, 2016

Time: 9 AM-11 PM

Today I could not write down as much of the data as I had expected. I think it is because we are still in a period of deep mourning after the death of our beloved King Bhumibhol Adulyadej. The teacher and most of the students were sad, and appeared lost and dejected. Unlike some of the teachers who were observed to start their classes by disciplining their students' behaviours, she began her class by talking about His Majesty's sacrifices for the Thai people. I noticed some students crying quietly. The class seemed to run passively. I myself was absent-minded from time to time. I found it hard to control my sensitivity to this event. Data collection in a particular unit unavoidably involves cultural factors, especially in a setting that has deep-rooted cultural ties and has the deepest love for and incalculable loyalty to a leader like the King of Thailand. The loss of the most beloved King had the potential to shake the whole setting tremendously. Not only did the intense grief affect me the researcher, the teacher, and the students, but the site seemed gloomy and in mourning.

In class, the teacher wrote on the board some grammatical rules the students had learned the previous week and asked them to give some examples for each rule. The students formed their questions in Thai and then gave their responses to her. Then she asked them to try changing the sentences into English. Still, it appeared that almost all the English words and sentences were produced by their teacher. I felt that the students did not seem to try hard enough to do this activity. Many could not form even simple English sentences. I was rather upset as I had expected that as English major students they should have been able to do this. Then I realised that I am now a researcher, not a teacher. So, I should not feel confused about my role.

** Potential bias: emotional involvement and high expectation

After each classroom observation, the participant asked me whether the gathered data sufficed, and we informally discussed the observed class. The discussions took approximately 15-20 minutes and were not audio-recorded. Within 24 hours after each observation, I had transcribed my handwritten field notes and typed them in a Word document. This provided me with the opportunity to add some more details that I may have missed recording during the observation time, expound my reflections on the recorded details, and notice any issues that should be more considered in the further observations of other participants.

After the completion of the data gathering process, all the participants were invited to review their interview transcripts. Nine of them agreed while the other three said they

could not make it because of their excessive workload. Nevertheless, all of them offered to help if I needed to collect some more data for this study.

3.8 Data Organisation

Before conducting the data analysis, I organised the data to ensure ease of analysis and reference. The participants' reflective writing and my reflexive accounts on their writing were grouped together as one set. After that, I scanned their writing for any identifiers such as names and places and substituted them with pseudonyms.

The interview recordings were transcribed verbatim by two Thai professional transcribers. Verbatim transcription was selected as it facilitated the analysis of ethnographic data and provided an audit trail showing the process of data analysis (Halcomb and Davidson 2006). Before sending the recordings to them, I checked the quality of the recorded voices so as to avoid inaudibility problems. In an attempt to maintain data confidentiality, I decided to use the transcribers who lived in Bangkok, rather than in South Thailand. Using the professional transcribing service was beneficial, given that it was affordable, and the quality of the transcription was guaranteed for its accuracy and readability with an exact turnaround time. However, I also cross-checked each of the returned interview transcripts against its recording. Minor mistakes were found. Some softly produced words were missed while others were in the form of mistransliteration of English words which the transcribers might not be familiar with. While verifying the accuracy of the data, I also replaced some identifiable data with fictitious names.

Afterwards, I sent the transcripts to the nine participants who agreed to check their own transcripts. Member checking is a technique in which participants verify and confirm the accuracy of their transcripts (Lincoln and Guba 1985). Although the participants' validation enriched the study's credibility and transparency, it could not avoid "prompting worry over how they are represented" (Forbat and Henderson 2005, p. 1124). Therefore, they were allowed to determine which part of the transcripts they wished to be discarded. Here, none of them suggested a change. Rather, some of them added their emerging ideas in their transcripts. Finally, the interview recordings, the interview field notes, the interview transcripts and the reflexive accounts on the interviews were grouped together as another separate set.

Unlike the interview recordings, the observational audio-recordings were not transcribed. I read the observational field notes both in their written and typed versions twice while listening to the observational recordings. While cross-checking the audio files, I also jotted down any emerging ideas or reflections. Then the handwritten and typed field notes, the audio-recordings and the reflexive accounts on the observations were arranged in the same data set.

Following this, the three organised data sets were collated again into two major data sets. The first set represented the emic views (the participants' views) including the reflective writing data and the interview data. The second provided the etic views (my views as a researcher) comprising the observational data. With regard to the research questions, the first data set was analysed to answer the first and the second research questions while the second data set was analysed to answer the third research question.

Regarding the emic data, each participant's reflective writing data, interview recording, interview transcript, my interview field note, and my reflexive accounts on his/her writing and interviews were kept in a separate file and analysed separately. That is, I finished analysing the data from one participant before moving to another. In so doing, I could remind myself of the feelings towards that participant, and hence be aware of, and reflect on these properly. Eventually, there were 15 files in the emic data set for data analysis. Figure 4 shows the organisation of data for the data analysis.

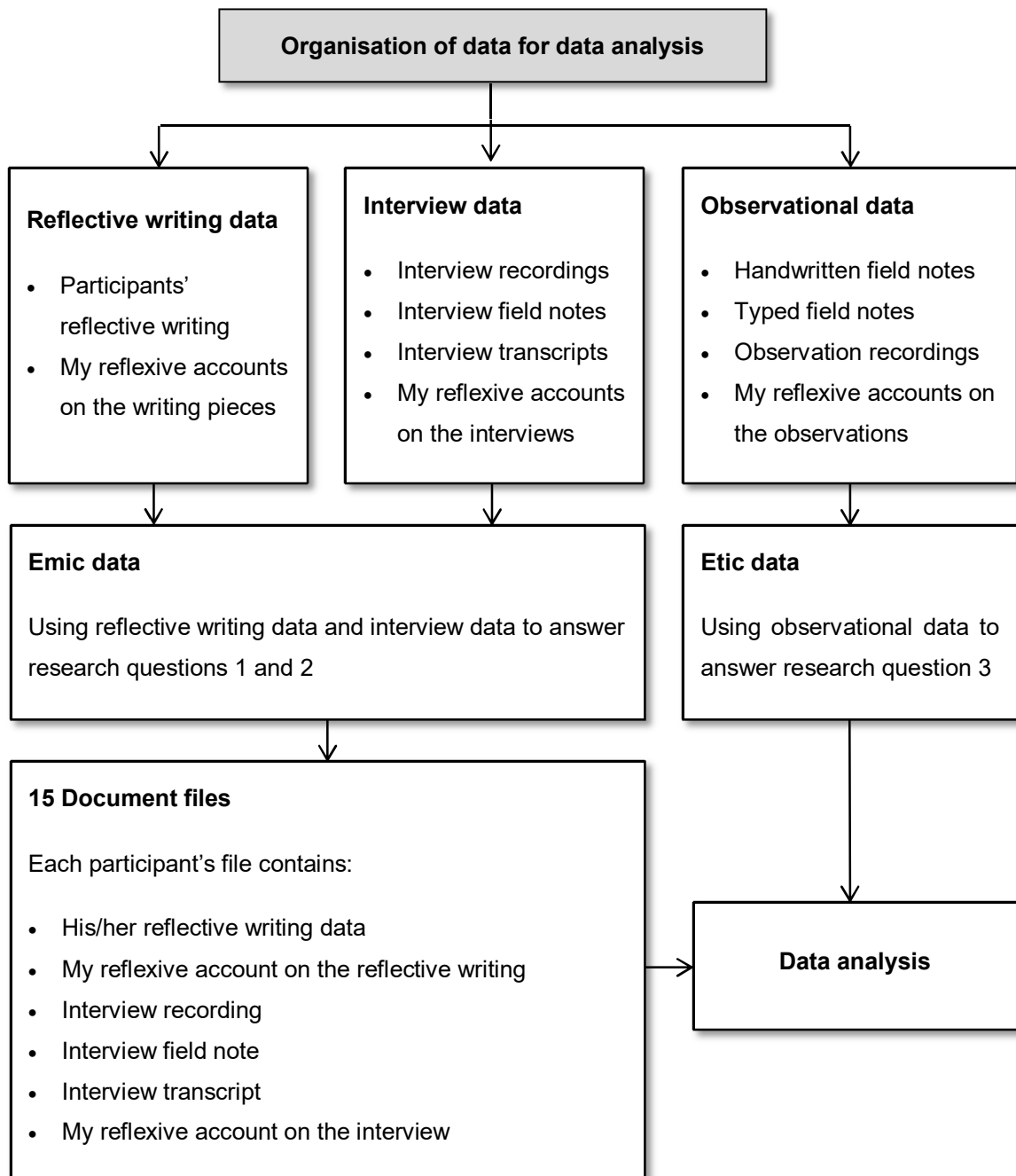


Figure 4: Organisation of the data for data analysis

3.9 Data Analysis

The data analysis in this study used both an inductive analysis strategy and a theoretical analysis framework. The emic data (reflective writing data and interview data for answering research questions 1 and 2) was analysed inductively while the etic data (observation data for answering research question 3) was analysed using both the inductive strategy and Bloom et al.'s (1956) taxonomy of the cognitive domain.

Analysis of the Emic Data

The emic data was analysed using a thematic analysis, which is “a method for identifying, analysing and reporting patterns (themes) within data” (Braun and Clarke 2006, p. 79). According to Braun and Clarke, this analysis is a reductionist method in that the large amount of data collected was distilled and put into meaningful patterns. Braun and Clarke also highlight the benefit of its flexibility. Because of this, the thematic analysis helped me tackle the complex nature of this ethnographic data and enabled me to find the emerging themes and develop them to present rich and deep descriptions of the findings.

Following Creswell (2013), the process of the data analysis in this study went through the following stages:

- a) familiarising myself with the data,
- b) generating codeable ideas,
- c) forming common codes into potential themes,
- d) going back and forth to the data for possible emerging themes,
- e) checking the themes against the data and the coded extracts,
- f) interpreting the themes, and
- g) describing the themes with their exemplifying quotes as research findings.

Before conducting the actual analysis, I read all the transcripts and reflexive accounts of all the participants before going deeper into details (Agar 2008). Subsequently, each participant’s writing and his/her interview transcript was put into a coding protocol consisting of two columns (see an example in Appendix E). The transcript appeared in the first column. I then interpreted “both implicit and explicit ideas” (Guest et al. 2012) in the transcripts. Asking myself “What is this expression an example of?” (Ryan and Bernard 2003, p. 87), I could come up with tentative codes. My reflective thought and the codes were noted down in the second column, and the tentative quotes were also highlighted. Throughout this process, I looked for not only repeated patterns of ideas, but also any disjunctions in their accounts (Silverman 2013). Notably, I developed the coding scheme with the research questions in mind. After that, the codes were compared and contrasted across all of the participants’ accounts. Multiple readings gave me the opportunity to discover new emerging codes (Braun and Clarke 2006; Creswell 2013; Guest et al. 2012; Silverman 2006, 2013). An example of an original interview account

during the coding process is in Appendix E, and I also translated this account into English, as shown in Appendix F. Moreover, Mann (2016) maintains that providing readers with a commentary on an interview is particularly useful, and I agree with this suggestion. A commentary on the interview excerpt is therefore presented in Appendix G.

After completing the coding process for all of the participants, the selected codes were put into tables accompanied by their supporting quotes from the transcripts (see an example in Appendix H). I then made a list of all of the codes and combined them into potential themes. The themes were “broad units of information that consist of several codes aggregated to form a common idea” (Creswell 2013, p. 186). Here, I used mind maps to help sort the codes into various themes. In this stage, some overlapping codes or themes were merged or made into subthemes while others that were irrelevant or ambiguous were removed so as to make each theme meaningful and distinct. The labels of the themes were either from the translation of the participants’ words themselves or were influenced by my understanding of my reading of the literature. An example of combining codes into themes is in Appendix I.

The reduction of the data into codes and themes using inductive reasoning was a repetitive process (Creswell 2013; Miles et al. 2014). Several times, I revisited the transcripts to articulate the codes or themes as well as to deductively verify the themes against the data. Although irrelevant data was removed during the data reduction, the original versions, including discarded material, were still systematically saved to serve as an audit trail and to allow cross-checking between the themes and the data. This data reduction was time-consuming but worth doing since such intensive engagement with the data greatly facilitated the thematic analysis process.

Subsequently, using peer-debriefing, I asked two Thai EFL university teachers at a government university in Thailand to review the meaningfulness of the themes and their harmony with their extracts. Using this technique to verify my objectivity increased the dependability of my study (Guest et al. 2012). The two Thai EFL university teachers made some changes to the names of the themes. I discussed their suggested themes and the previous ones with my supervisors in terms of word choices and their implicit meanings and then selected the most appropriate ones. Finally, this study had gained comprehensive themes for the next stage of data analysis.

The next phase was the interpretation of the themes. Here, I tried to go beyond the analysed data and make sense of the comprehensive themes and their related extracts so as to develop an understanding of their being representative of the complexity of the research topics under study.

Analysis of the Etic Data

The etic data, which was the observational audio-recordings, was not transcribed. I read the handwritten and typed field notes twice while listening to the observational recordings. In this phase, emerging ideas or reflections were jotted down. After cross-checking the audio files, I read the field notes and my reflexive accounts on the observations multiple times to familiarise myself with the data and their contexts. I also added my reflections every time while reading. Since what to observe had been established beforehand to serve the research questions, this probably restricted the emergence of new angles. However, I was continuously open-minded and did not overlook any new ideas that arose. Moreover, I returned many times to the audio-recordings to articulate some ideas or feelings that had occurred in the observed classes.

The observational data applied both an inductive analysis strategy and Bloom et al.'s (1956) taxonomy of the cognitive domain. Although this set of etic data was coded according to the framework, I also examined how they fitted in it or went against my intuitive ideas. This process involves the application of both deductive and inductive reasoning.

3.10 Presentation of the Findings

I presented the analysed data and exemplified some of the participants' quotes to counter my subjectivity during the data analysis (Creswell 2013) and to facilitate my readers' judgments in terms of the credibility of this study. Although the findings were analysed in Thai, I translated the selected quotes from the participants' accounts from Thai into English. I applied communicative translation to maintain contents and feelings (Newmark 1995) and meaning-based translation to render the naturalness of the translated language (Larson 1998). Afterwards, two Thai EFL university teachers, whose expertise was in translation studies, kindly helped me compare the translated excerpts in English with their original versions in Thai, identify any ambiguity of wording, and verify the extent to which the former was equivalent to the latter. While it

was not possible to reach a complete equivalence of these two versions, due to English and Thai cultural differences, it was expected that by doing this the content would be maintained as much as possible and hence the credibility of the study strengthened.

3.11 Criteria for Ensuring Research Rigour

Rigour in research is essential because without it “research is worthless, becomes fiction, and loses its unity” (Morse et al. 2002, p. 14). Nevertheless, qualitative research and quantitative research differ in terms of the nature of knowledge. Therefore, the strategies used for ensuring their rigour should not be the same. Lincoln and Guba (1985) propose a conception of trustworthiness to represent the criteria that suit the nature of qualitative research. For Lincoln and Guba, trustworthiness includes four criteria: credibility, confirmability, dependability, and transferability. These criteria are used to replace four positivist terms, namely, credibility for internal validity, confirmability for objectivity, dependability for reliability, and transferability for external validity. This qualitative study used multiple techniques to ensure its trustworthiness.

Credibility

Credibility is a way to prove that the implications of the gathered data are true according to the participants’ perspectives as well as to increase confidence in the truth of the research findings (Lincoln and Guba 1985). To fulfil this criterion, this study employed:

- a) purposeful sampling in selecting participants who were anticipated to provide rich and deep data,
- b) member checking (Lincoln and Guba 1985; Silverman 2013),
- c) a research diary throughout the research process,
- d) verbatim transcriptions of the interview data (Guest et al. 2012),
- e) peer-debriefing (Lincoln and Guba 1985) for reviewing reflective writing questions, interview questions, established themes and translated quotes,
- f) two pilot studies (Padgett 2008),

- g) methodological triangulation (Creswell 2013; Lincoln and Guba 1985; Merriam 1998; Miles et al. 2014),
- h) the establishment of good rapport with the participants (Arksey and Knight 1999),
- i) the first language in data collection,
- j) thick descriptions of justifications for all stages of the research process (Silverman 2006), and
- k) the participants' quotes when presenting the findings (Creswell 2013).

Confirmability

The nature of qualitative research made it impossible to completely eliminate my subjectivity from interfering in the study, although reflexivity was practised. Although etic perspectives are accepted in a qualitative study (Maanen 1979), emic perspectives should be more prioritised since this study attempted to understand the participants' views rather than my own views. In this study, emic data was collected to address the answers to the first and the second research questions while etic data was collected to address the answer to the third research question. To enhance confirmability in this study, ensuring that the emic data was indeed taken from the participants (Lincoln and Guba 1985), and not from me the researcher, the following two techniques were deployed: a research diary and an audit trail (Lincoln and Guba 1985). The audit trail is a careful and systematic collection of all the relevant documents either in written or audio form. Since new research designs can emerge and change all the time in qualitative research, the audit trail will provide justifications for the change. This would also benefit those interested in tracing back the process of this study.

Dependability

Dependability is concerned with the consistency of research findings over time (Lincoln and Guba 1985). That is to say, it involves the extent to which similar findings will be achieved if research is replicated with similar subjects in similar contexts (Creswell 2013). However, qualitative research is not designed for replication as it aims to present rich and descriptive data generated by participants in their particular contexts at particular points in time. Therefore, as Shenton (2004) argues, "the processes within the

study should be reported in detail, thereby enabling a future researcher to repeat the work, if not necessarily to gain the same results” (p. 71). In this study, I established dependability through:

- a) explicit descriptions of my role and status in the sites under study (Miles et al. 2014),
- b) peer-debriefing (Lincoln and Guba 1985) for reviewing reflective writing questions, interview questions, established themes and translated quotes,
- c) a research diary,
- d) an audit trail (Lincoln and Guba 1985),
- e) methodological triangulation (Lincoln and Guba 1985; Merriam 1998; Miles et al. 2014), and
- f) thick descriptions (Shenton 2004).

Regarding thick descriptions, I provided detailed descriptions of all phases of the research process to demonstrate the transparency of this study and to facilitate my readers who might desire to repeat it in their contexts. Aside from this, I have also presented in appendices essential documents, such as reflective writing questions, interview questions, and an example of coding process, to my readers.

Transferability

Transferability refers to the applicability of the research findings to new contexts and new participants (Lincoln and Guba 1985). This criterion is often questioned in qualitative research the purpose of which is to provide deep and rich context-bound information. However, the judgement about transferability is the responsibility of those interested in applying qualitative research findings, and the expected functions of qualitative researchers are only concerned with giving thick descriptions of the research process (Lincoln and Guba 1985), otherwise “it is difficult for the reader of the final account to determine the extent to which the overall findings ring true” (Shenton 2004, p. 69). Therefore, this study elucidated in detail the research process and the contexts under investigation in order to facilitate my readers’ judgements.

3.12 Ethical Considerations

Throughout the study, I followed the ethical guidelines of the British Educational Research Association (BERA) and the guidelines provided by School of Education, University of Stirling. I made an ethical decision to avoid any deception by disclosing myself as a researcher, an interviewer and a non-participant observer. Information about me and about this study was disclosed to the participants verbally and through written documents. Since this qualitative research involved human sensitivities, essential ethical concerns were taken into account “prior to conducting the study, at the beginning of the study, during data collection, in data analysis, in reporting the data, and in publishing a study” (Creswell 2013, p. 57).

To begin with, I first asked myself whether this study was worth doing in terms of its potential theoretical and practical contributions. After I was assured of its worthiness, I anticipated the various ethical issues and planned how to cope with them (Kvale and Brinkman 2009). I discussed the research project with my supervisors and informally contacted potential participants for the data collection. Subsequently, I submitted an ethical approval request to the Ethics Committee for Education at what was then the School of Education at the University of Stirling. After getting approval from this committee, I sent the participants an email with the following two documents attached:

- a) an information sheet describing my personal information, the research purposes, the data collection timeline, the research participants, the data collection procedure, offers of anonymity, offers of confidentiality, rights as research participants, uses of the project’s results, university authority contacts, and my own contact details (see Appendix J) and
- b) a consent form to sign if the participants agreed to participate in this study (see Appendix K).

In addition to this email, I called them using Line (a mobile social media application) to explain the information in the sheet again and provide them with the opportunity to ask for any clarification. Following this, I sent the information sheet and a letter of permission (see Appendix M) to their institutions. With the participants’ agreement and their sites’ permission, the data collection was undertaken following the research procedure.

Ethical concerns were also taken into account regarding the students in the observed classes. Although they were not the intended participants of this study, they were nevertheless in the settings being observed. Hence, securing their approval and ethical concerns was vital. I briefly informed them of the research project and their rights before observing any classes. Those willing to take part in the project were invited to sign a consent form (see Appendix L).

During the data collection, the participants were informed of the ethical issues each time before the data was collected. I respected the participants and their classrooms and tried to “disrupt as little as possible” (Creswell 2013, p. 55). Moreover, they had the right to withdraw from the study at any time for any or no reason; in this way, their generation of data was voluntary (Silverman 2006). Regarding reciprocity, I expressed my appreciation for the sacrifice of their time and effort by rewarding them with book vouchers. I told them that this was a way of showing my gratitude for their ‘*namchai*’, a Thai cultural word alluding to generosity in English.

Throughout the study, I promoted their ethical security by:

- a) replacing their identifiable data with pseudonyms,
- b) deleting some quotes that I considered likely to be attributable to specific participants,
- c) keeping their information confidential (Silverman 2006),
- d) avoiding revealing only favourable findings (Creswell 2013),
- e) reporting the findings honestly, and
- f) retaining their anonymity throughout the research process.

3.13 Summary

This chapter presented thus far details methodological components applied in this thesis. It is expected that my readers now understand the rationale for the selection of each component and how the study was undertaken. The next chapter will then report and discuss the findings for the first research question.

CHAPTER 4: THAI EFL UNIVERSITY TEACHERS’ CONCEPTIONS OF CRITICAL THINKING

4.1 Introduction

This chapter presents and discusses the findings for the first research question on how Thai EFL university teachers conceived of critical thinking. As the researcher, I must acknowledge that the interpretation of the data represented in the themes might be shaped by my personal, Thai historical and cultural experiences (Creswell 2013). Therefore, my readers have the right to interpret the themes differently. I used guidelines from Payutto (2003) to translate the participants’ Pali and Sanskrit terms into English. Some Thai terms and proverbs were romanised by using the Thai-English transcription system devised by the Royal Institute of Thailand, and their meanings were translated using my Thai cultural knowledge.

The literature presents various conceptions of critical thinking. Due to the intangibility of this term, I used direct and indirect questions in the participants’ reflective writing and interviews to elicit from them how they made sense about it. In the interviews, four participants admitted that they could not exactly define the term. However, using indirect questions and probes, I was able to elicit constructive data from all of them. In their accounts, three themes were identified: ‘Components of critical thinking’, ‘Importance of critical thinking’, and ‘Innateness and teachability of critical thinking’. Each theme has its sub-themes as illustrated in Figure 5. These themes will be described and discussed in this chapter.



Figure 5: Participants' conceptions of critical thinking

4.2 Components of Critical Thinking

The participants in this study understood critical thinking as having the following four components: cognitive skills, affective dispositions, goal-orientation, and morality.

4.2.1 Cognitive Skills

The participants believed critical thinking involved the use of cognitive skills. The skills they mentioned were interpretation, analysis, reasoning, and evaluation. Although some participants did not use these exact terms, they signified the meanings of these terms through the words they used.

The first cognitive skill is interpretation. Two participants believed critical thinkers tried to find meanings, particularly implicit meanings from the information they consumed:

something like reading between the lines... guess what is hidden...what is the real purpose of the author (Ratri)

Did he mean what he said? (Nattha)

Their views accord with those of a number of other scholars. For example, Pascarella and Terenzini (2005) claim that critical thinkers should be able to “interpret whether conclusions are warranted based on given data” (p.156). Brookfield (2012) argues that

critical thinkers interpret not only others' narratives but also their own thoughts and feelings. For Brookfield, interpretation involves the thinkers' metacognition too. In this study, although the participants did not mention such metacognition, one of them associated interpretation with other two aspects, namely, open-mindedness and background knowledge. This participant said the degree of critical thinkers' interpretations depended on the degree of their open-mindedness and background knowledge. The role of background knowledge that she claimed may account for the reason why there is a tendency for people taught with the same critical thinking pedagogies to interpret the same issue differently. Willingham (2007) expressed a similar conviction in his position paper, claiming that "Thought processes are intertwined with what is being thought about" (p. 10).

In addition, five participants considered critical thinking as involving analytical skills:

analyse the information before believing (Siri)

examine the received information in detail...analyse pros and cons (Ratri)

distinguish facts from opinions (Narin)

find causes and effects (Kamlai)

analyse the characteristics of underdeveloped countries (Ampai)

However, when asked to give examples of analysis activities, one of them could not do it. This may indicate two implications. First, she knew critical thinking was analytical thinking but probably might not know what analysis actually was. Second, as analysis deals with human cognition which is something internal, she might not be comfortable articulating it explicitly. The participants' notions on analysis as a cognitive skill applied by critical thinkers echo the consensus reached by scholars, as stated in The APA Delphi Report (Facione 1990). Those who also concurred with this view are Halpern (1998), Mayfield (1997), and Paul (1990).

Reasoning is another cognitive skill three participants considered as being part of critical thinking:

need to use logic (Ithi)

think of possible reasons before making a decision (Bancha)

justify it (Tawan)

Their notions are similarly noted by some scholars (e.g., Halpern 1998; Nickerson 1986; Paul 1990). Interestingly, one of the participants reiterated Peters' (2008) claim that reasoning could be shaped by cultural discourses:

People from different cultures may have a different set of reasoning. For example, in a Thai context, being obedient to parents is deemed appropriate. Many Thais use it as a reasoning standard when judging bad or good children. Therefore, if they see someone talking back to his/her parents, they tend to perceive him/her as a bad person. Such reasoning is a result of the Thai cultural virtue of obedience. (Bancha)

Four participants claimed that critical thinkers evaluated their thinking. They maintained that critical thinkers:

evaluate the credibility of the information source (Pa-det)

consider its reliability (Mali)

compare the analysed information with a standard...judge the goodness and appropriateness of the information (Siri)

weigh up the reliability of the information...rate its possibility in a percentage (Narin)

Evaluation as part of the critical thinking process is mentioned by Brookfield (2012) and Facione (1990). The participant (Narin)'s association of critical thinking with evaluation in a percentage is similar to Halpern's (1998) "calculating likelihoods" (p. 451) and Swartz and Perkins's (2016) "forecasting possibilities" (p. 2). The participant (Siri)'s view on using a standard in the evaluation stage of critical thinking is similarly noted by Bailin et al. (1999), Lipman (1988), and Mayfield (1997).

4.2.2 Affective Dispositions

The participants in this study pointed out the importance of affective dispositions in critical thinking. They mentioned four dispositional types: inquisitiveness, perseverance, open-mindedness, and confidence.

Four participants said critical thinkers were curious by nature and not easily deluded. Their notions are in line with Bailin et al.'s (1999) "an inquiring mind" (p. 294), Ennis's (1987) "try to be well informed" (p. 12) and Facione's (1990) "inquisitiveness with regard to a wide range of issues" (p. 25).

Moreover, four participants claimed that critical thinkers were disposed to persevere with critical thinking engagement from the very start to the end:

not lazy about thinking (Ampai)

patient to await their final verified thought (Ithi)

not give up easily despite meeting difficulties (Bancha)

wait until being able to make a good decision on it (Dara)

Their notions on perseverance accord with Facione's (1991) "persistent in seeking results which are as precise as the subject and circumstances of inquiry permit" (p. 14), Halpern's (1998) notion of effortful engagement, and Paul and Elder's (2002) notion of intellectual perseverance.

Critical thinkers, six participants said, embraced open-mindedness in four stages: firstly, through the realisation that all things could be perceived differently by different people; secondly, through the realisation that there was no bias-free information; thirdly, through the consideration of all possible dimensions; and fourthly, through accepting critical thinking ideas even though they might be contrary to their own personal satisfaction or produced by people they disliked or were biased towards. The fourth stage the participants mentioned implies a quality of detachment from self-satisfaction which is in accordance with Paul and Elder's (2002) statement that strong sense critical thinkers have the intellectual courage to challenge even their own ideas and beliefs and then accept the outcome from the challenge accordingly. Willingham (2007) similarly mentions critical thinkers' open-mindedness in accepting evidence that signifies that their ideas are ill-formulated.

One participant stated that open-mindedness lessened egocentricity. Nevertheless, she contended that many Thai teachers found it hard to attain:

It is not easy for them to have an open mind. They are likely to be self-centred because they regard themselves as more educated and having a higher status than those in other careers. (Wandi)

A tendency for Thai teachers to be egocentric may be explained by the high respect Thai culture gives to them. Although difficult to attain, all Thai teachers, the participant maintained, need to develop their open-mindedness. The need for such a development in teachers who teach critical thinking is similarly raised by Hager and Kaye (1992).

Another participant claimed that open-minded people had a propensity to have respect for others:

If we are open-minded to someone, we tend to see their hidden abilities and feelings. We will understand them and not look down on them or their ideas. It enables us to respect others' rights and wisdom. (Ithi)

The concept of respect for others in relation to critical thinking is highlighted in the literature, for example in Bailin et al.'s (1999) "respect for others in group inquiry and deliberation" (p. 295), Ennis's (1996) "Care about the dignity and worth of every person" (p. 171), and Paul and Elder's (2002) notion of intellectual humility. However, it should be noted that in the literature, open-mindedness and respect are referred to as two different entities. The participant's view on open-mindedness as generating respect may provide another interesting angle in the conceptions of critical thinking dispositions.

Another dispositional type mentioned by seven participants is confidence. They referred to three types of confidence: firstly, confidence in oneself, secondly, confidence in the virtues of critical thinking, and thirdly, confidence about displaying one's critical ideas even though they may be met with negative feedback and reactions. Interestingly, while the participants seem to perceive the first type of confidence as human self-esteem, some scholars address confidence in more specific terms. For example, Paul and Elder (2002) address intellectual confidence in reason while Facione (1990) mentions confidence in one's reasoning abilities. The third type of confidence they mentioned is relevant to Paul and Elder's (2002) view on intellectual courage. Paul and Elder believe that critical thinkers realise that their critical ideas can negatively affect others or themselves, but this does not deter them.

Moreover, according to the participants, there were two schools of thought regarding the expression of confidence about critical thinking. Some regarded critical thinkers' confidence as situated in their covert behaviour while others regarded it as something needing to be displayed. An example of a participant who advocated the latter was:

Critical thinking is a process plus presentation. It is not a complete criticality if students can think critically but are not confident enough to verbally express it. The presentation of their critical products provides the students with two benefits: firstly, they can listen to their own voices allowing them to monitor their own thinking, and secondly, others listening to their outputs may give constructive feedback to them. Presentation is a way to communicate our thoughts to others.
(Ratri)

While the participants' notions on overt confidence are in agreement with those of mainstream scholars, some participants' notions on covert confidence are consistent with that of Ennis (1996) who holds that dispositions can be "hidden qualities" (p. 166). In particular, the covert confidence the participants claimed can possibly be attributed to Thai cultural expectations of humility. In the Thai context, those expressing everything, including their actual abilities to others are likely to be perceived as being boastful. There are two Thai proverbs that summarise these cultural expectations: one is '*khom nai fak*' which describes people who are intelligent but will show their capabilities only when needed, and the other is '*nam ning lai luek*' which literally means still waters run deep. Both proverbs imply majestic silence which is believed to be a quality of a real sage, according to Thai cultural beliefs.

4.2.3 Goal-Orientation

Five participants believed that critical thinkers had a particular purpose in mind when thinking. Their responses include:

reach an appropriate solution (Pa-det)

make a decision (Narin)

decide whether to follow it or not (Mali)

make a good decision on it (Prani)

conclude if it is creditable (Kamlai)

Many scholars similarly regard goal-orientation as another component of critical thinking. Examples of these are: “goal-directed” (Halpern 1998, p. 450), “facilitates good judgment” (Lipman 1988, p. 39), and purposeful thinking (Paul 1990).

One participant claimed that goal-orientation differentiated critical thinking from intuitive thinking:

We engage in thinking all the time. Even when we are absent-minded, we are thinking about something. This kind of thinking takes place intuitively. But critical thinking is different because it involves having a set goal in mind. (Prani)

Her notion echoes that of Lipman (1988) who contends that critical thinking is not like ‘normal’ thinking in that the process of the former is more rigorous. Likewise, Paul (1990) perceives critical thinking as “disciplined thinking which exemplifies the perfections of thinking appropriate to a particular mode or domain of thought” (p. 51).

4.2.4 Morality

Seven participants mentioned two interwoven modes of thinking: critical thinking and moral thinking. They maintained that criticality without morality was worthless as it could be used for self-interest and taking advantage of others.

Their moral perceptions may be justified by Buddhism which is the national religion in Thailand and influences the lives and thoughts of Thai people in general (Adamson 2005; Baker 2008; Foley 2005; Kapur-Fic 1998; Komin 1990; Payutto 2007; Ratanakul 2010). They conceived of critical thinking from the position of their Buddhist cultural background. In the realm of critical thinking, criticality and morality as both ends for critical thinkers are also supported by Paul (1990) and Brookfield (2012).

One participant suggested using morality as a standard in a decision-making process:

After considering its credibility, we use a moral lens for decision-making. The information, although credible, should not be acted on if it is not morally acceptable. What is morally right will not cause any trouble or suffering to ourselves and others. (Siri)

The best-known dispositional standards for critical thinking in the literature are probably Paul and Elder's (2002) intellectual traits. Although morality is not explicitly stated in them, it is implied in two intellectual traits: intellectual integrity and intellectual fair-mindedness. Interestingly, while Paul and Elder's implied morality appears to be concerned with ethics, the sense of morality the participants mentioned also appears to be religiously relevant.

Another participant pointed to a tendency for morality to be viewed differently in different cultures:

Morality is culturally specific. Its definition is rather vague and not universal. A certain morality is formed and suitable for a certain culture. For example, in the Middle East, a man can marry a nine-year-old girl. This is legally and morally accepted in their society. Morality to them is a donation, and those donating will be highly admired. Of course, we may disagree with these views. We may think such a marriage is child abuse. As for the donation, we may believe in helping ourselves first rather than waiting to get help from others. So, it is just a different moral view. And we should be cautious not to judge what is different as something wrong. (Ratri)

Her caution is in line with Mulnix's (2012) argument that critical thinking should be concerned with how to think, not with morality that involves cultural narratives.

4.3 Importance of Critical Thinking

Although there seems to be no consensual definition of critical thinking, all scholars concur that it is important for people to have it. The participants in this study echoed this sentiment, identifying pragmatic merits from it in five spheres: everyday life, EFL learning, career, Thai culture, and Thai Buddhism.

4.3.1 Everyday Life

All participants believed critical thinking was important for everyday life in terms of problem-solving, awareness of bias and propaganda in technology and media, and happiness.

Ten participants stated that critical thinking made people critical problem-solvers capable of tackling micro- and macro- level problems effectively. The micro-level

problems they mentioned included learning problems, life problems, and family problems whereas the macro-level problems included social problems (i.e., crimes and drugs), economic problems, and natural resources and environmental problems. Critical thinking as a means of helping people solve problems is similarly noted by Bailin et al. (1999), Brookfield (2012), and Paul and Elder (2002).

Another participant added that critical thinking helped people not just solve problems but also lessen the likelihood of encountering them. He maintained that critical thinkers had fewer problems compared with others because their criticality helped them make right choices and see things in the proper perspective. His notion accords with Butler et al. (2017) who conducted a study with community adults and college students and revealed that the participants achieving high scores in a critical thinking test and an intelligence test reported fewer negative life events.

Five participants mentioned the importance of critical thinking in raising awareness of bias and propaganda in technology and media. One participant interestingly pointed out the news on the Rohingya (Stateless Muslim minority in Myanmar):

It helps us understand the surrounding information, acquire facts and be selective about them. Let me take the case of the Rohingya as an example. If we consume the news thoughtlessly, we may be trapped or deluded by what the media try to convince us. We will be victims easily. (Ratri)

Her notion indicates that news can sometimes be distorted for the sake of political interests, and that people must accordingly be critical consumers of information. Her account also implies that while the world progresses through technology, humans seem more fragile. This seems to further suggest that a refuge for humans these days and thereafter is critical thinking.

Two participants believed critical thinking brings happiness. One participant saw critical thinking as a way to generate happiness for both givers and takers:

A grandfather used his critical thinking abilities to solve community problems. His abilities give him a meaningful life and hence happiness. Those whom he helped are also happy because their problems are sorted out. (Ampai)

Her idea restates Paul's (1990) notion that critical thinkers can make their lives and the lives of others happy.

Another participant deemed that critical thinking encouraged appreciative ways of thinking which helped people remain happy even in times of difficulty. Her notion reflects Payutto's (2007) Buddhist perspective that good Buddhists should appreciate what they have, not what they lose. This is a way, Payutto maintains, for them to happily live their worldly life. The participant's viewpoint appears to reflect a Buddhist spiritual perspective.

It should be noted that while Facione (1991) recognises that critical thinking may not ensure a happy life but can increase the chances of it, the participants saw it as a tool to create happiness right away. A likely explanation for this might be that Facione understands critical thinking as a tool to promote human success (such as: good careers, good education, wealth), and this contributes to human happiness. Happiness to Facione thus appears to be concerned with the future. However, the participants viewed it as a human power to create immediate happiness within without waiting for success to come or even in times of difficulty or failure. The participants' viewpoint on independent happiness as a result of critical thinking may add a spiritual dimension to the critical thinking literature.

4.3.2 EFL Learning

All participants pointed out the important role of critical thinking in the discipline of EFL. They saw it as fostering EFL students' development in seven aspects: learner autonomy, motivation for learning, reading comprehension, learning strategy, sociolinguistics, writing, and the evaluation of students' learning achievements.

Two participants noted that critical thinking enhanced autonomous learning. One of them explained:

Thai students usually experience a learning environment that is very teacher-centred. They depend on us teachers, waiting to be told so that they can repeat accordingly. If we cannot satisfy their needs, some will go to private tutorials which again make them depend on others. But students with critical thinking abilities are different. They naturally have autonomous learning behaviour. In my classes, when I assigned some work, those students rarely depended on me or

other classmates. They mostly took charge of the work. They approached me sometimes for suggestions. They knew how to use critical thinking as a strategy in their learning. (Ithi)

The participants' notions were in accordance with Paul and Elder's (2002) notion of intellectual autonomy. Critical thinking as a way of heightening students' learning autonomy is also mentioned by Lin and Mackay (2004).

Critical thinking, three participants said, also enhanced the motivation for learning. They argued that students with critical thinking abilities are naturally curious, and their motivation for learning was the result of their curiosity. This may imply that the curiosity of critical thinkers should engender in them intrinsic motivation rather than extrinsic motivation, and deep learning rather than surface learning.

Four participants stated that critical thinking facilitated English reading comprehension in terms of understanding the real intention of the texts' authors and of interpreting any hidden messages. One participant said the reading process was like thinking in that readers and thinkers needed to concentrate on the information presented, process it in a logical way, and apply background knowledge to comprehend it. Given this, he maintained, there was a tendency for critical thinking to enhance reading abilities and vice-versa. Critical thinking as enhancing reading is also claimed by Facione (1991).

Three participants believed critical thinking was a language learning strategy for EFL university students. For example, one participant said:

Students' critical thinking can be practised in a pronunciation course. We have them watch and listen to a conversation of English native speakers on a video and ask them to write down any pronunciation rules they discover. Working in groups, they then analyse the rules, try out the rules, and evaluate the possibility of their usage. After that, we have them compare their rules with the rules we present to them. Any similarities or differences can be discussed at this point. (Wandi)

Her account implies the plausibility for English and critical thinking to be developed in parallel.

An English sociolinguistics course, one participant claimed, gained benefits from critical thinking:

When teaching them English, we should activate them not only to pick up the language but also to learn about its sociocultural aspects. During my Master's studies, my teacher of sociolinguistics asked us to notice English in terms of shades of meaning and differences in English and Thai structures, and find if there were any sociocultural influences behind them. I remember she mentioned Saussure and gave the examples of 'sisters' and 'brothers'. We found that in the English cultural context, these words were used to signify gender and blood relationship while in the Thai context we could also use them to call other people without any blood relationship to refer to seniority. I think if Thai teachers have Thai students discover such things, they will be able to use criticality to facilitate their language learning. (Ratri)

Foley (2005) similarly points out the different sociolinguistic features between Thai and English, perceiving Thai as a language representing a hierarchical value while English an equality value. The participant's notion is also in agreement with that of Beebe (1980) who posits that a critical engagement in cultural examinations between different languages increases students' awareness of a style shift and consequently promotes language learning.

Two participants deemed critical thinking as enhancing writing in terms of its logical structure and creativity. Their views are in accordance with that of Olson (1984) who considers writing to be a kind of problem-solving activity in which writers have to communicate their logical ideas in a manageable and comprehensible way to readers. This may indicate that critical thoughts presented in a clear and well-organised way are likely to represent good writing. Therefore, students' writing can potentially be a way of evaluating their critical thinking.

One participant said students' critical thinking abilities can be used as an evaluation of students' learning achievement based on Bloom et al.'s taxonomy:

If students can think critically in their language classes, it means they can deal with the language on a meaning level. Based on Bloom's taxonomy, if they can think critically, we can assume that they have already mastered the lower levels of memorization, understanding, and evaluation. This can help us when evaluating their learning progress. (Nattha)

Her view on using Bloom et al.'s (1956) cognitive learning taxonomy to evaluate critical thinking reflects her belief that learning takes place in sequence. In other words, mastery of the three lower cognitive skills (i.e., knowledge, comprehension, and application) is demanded before the upper three (i.e., analysis, synthesis, and evaluation) can be acquired. The upper three cognitive skills have been noted by several scholars as being essential for the critical thinking process.

4.3.3 Career

Ten participants identified the importance of critical thinking in terms of job applications and job promotions. Examples of this from their accounts are:

Many reputable companies require their applicants to take a criticality exam as part of their recruitment. (Tawan)

Critical thinking is used as a criterion to evaluate people's performances when considering career promotion and salary increment. (Bancha)

The participants' notions accord with those of Chartrand et al. (2009) who mentioned recent research conducted by Pearson TalentLens and by academics that revealed that employees rated as having critical thinking skills were likely to be promoted within their organisation. Moreover, as Thai traditional workplaces are in a vertical structure in which subordinates have to work according to the orders of those superior to them (Fieg 1989; Holmes and Tangtongtavy 1995; Komin 1990), the participants' notions of the demand for critical thinking in certain careers may imply an increasing openness concerning staff's participation in such thinking, reflecting the changed social structure in the Thai workplace.

4.3.4 Thai Culture

One participant mentioned the merit of critical thinking in preserving Thai culture in the matter of good Thai manners:

Critical thinking helps Thais sustain the good Thai manners of being serene and mindful. Without this, we may be unaware of self-control and careless about our behaviour. We may do whatever we want and that can cause problems to ourselves and to others. But with criticality, we will think carefully before acting. (Pa-det)

The participant added that critical Thai people would be critically selective when adopting outsiders' cultures, resulting in the maintenance of a good Thai culture for the next Thai generation. His notion is interesting in that while some researchers report a mismatch between Thai culture and critical thinking (e.g., Kapur-Fic 1998; Prangpatanpon 1996; Thamraksa 2003; Wallace 2003), this participant saw a useful place for such thinking in Thai culture.

4.3.5 Thai Buddhism

One participant claimed that critical thinking enhanced two Buddhist teachings: mindfulness and discernment. These two doctrines, he maintained, enabled people to differentiate true or essential values from artificial values or defilements, to ponder affairs of life consciously, and to reach a justifiable and moral conclusion. In Buddhism, mindfulness and discernment are two qualities that should be paramount in human minds because human beings are their minds, and what they think guides their actions (Payutto 2007). The participant's notion of critical thinking as promoting Thai Buddhism seems to imply that critical thinking benefits Thais not only in the worldly dimension but also in the spiritual one.

Interestingly, while several scholars mentioned the important role of critical thinking in promoting good citizenship in a country, none of the participants in this study directly mentioned it. However, it was to some extent implied in their conceptions of morality. An example of this is: *What is morally right will not cause any trouble or suffering to ourselves and others (Siri)*. Thus, to the participants, morality possibly connotes citizen ethics, meaning that moral people may already be good citizens.

4.4 Innateness and Teachability of Critical Thinking

The participants in this study perceived critical thinking in terms of both innateness and teachability. The majority of them believed people were not born with criticality but that it needed to be inculcated and practised. They maintained that, given time and sufficient practice, critical thinking would become a habit. Their notions of its teachability are consistent with those of many other researchers. For example, Marin and Halpern (2011) argue that students' critical thinking can be developed, even though it may be a slow process for some. Zohar and Dori (2003) conducted four studies examining whether high-achieving and low-achieving science students would benefit

from the instruction of higher-order thinking skills and concluded that critical thinking is learnable by students of all academic ability levels.

However, one participant argued that critical thinking was a formed ability and a trait derived from a past life according to Buddhism:

Our present life is predestined by what we did in our previous life. That is, the good deeds we did in our last existence will reward us with happiness, wisdom, and prosperity while the sins we committed will give us the opposite. Some were born handicapped while others were not. Some were born rich while others were poor. Likewise, some were born with criticality while others were not. I think people's intellect including their thinking ability is not an exception to this concept. (Ampai)

At first glance, what she mentioned seems to represent many Buddhists' conception of *kamma*. However, Payutto (1997) claims that, according to Buddhism, *kamma* is only a factor in the whole cause-effect process, and humans can determine their lives through their own self-development and criticality.

Despite the different views on its heritage, all participants concurred that critical thinking was teachable, and that students should be nurtured with it from their youth onwards. For example, one participant said:

Parents should have their children practise critical thinking when they are very young. Elementary teachers should also instill it in their students. If we wait to cultivate it when they are grown up, their improper logic of thinking and negative attitudes towards it may be crystallised, and thereby hard to change. (Banacha)

His conviction shows the important role of home education and elementary education in cultivating critical thinking in students. The practicality of fostering it in young children is also supported by a number of scholars. For example, Brookfield (2012) insists that critical thinking "is not something that only happens when you reach a certain age" (p. 11). Willingham (2007) also expresses his opinion, saying that "It is a type of thought that even 3-year-olds can engage in" (p.10).

In a similar vein, another participant mentioned the possibility of teaching it to elementary students. She claimed that it helped them learn to be critical about themselves (their emotions and thinking) and others. She suggested that:

When handling crying elementary students, instead of saying such phrases as 'Stop crying!', 'Aren't you embarrassed?', or 'See! Your friends are looking', teachers should ask them such questions as 'Why are you crying?', 'What made you cry?', or 'What will you do to make yourself feel better?'. Or in a situation such as when the teachers do not want their children to play on a dirty swing, instead of warning them not to play on it, it is better to raise such questions as 'Do you think the swing is clean?', 'Which swing is better to play on?', 'If your hands get dirty and you use them to put food into your mouth, what can possibly happen?', and so on. (Kamlai)

From this excerpt, her suggested way of teaching thinking is exactly what Feuerstein (1980) calls a 'mediated learning experience'. Her examples of the discussion topics are simple yet personally relevant to the students. She mentioned the use of simple words, instead of academic or technical terms, when fostering the children's criticality. Such simplifications are in accordance with the sociocultural concept of the Zone of Proximal Development (ZPD). The questions she raised show ways to develop the students' critical thinking cognitions and dispositions: *Why are you crying?* (metacognitively monitoring their thoughts and feelings), *What will you do to make yourself feel better?* (exploring potential solutions and evaluating them themselves), *Which swing is better to play with?* (comparing and contrasting; inquisitiveness; prudence; open-mindedness), and *If your hands are dirty and you use them to put food into your mouth, what can possibly happen?* (using reasoning to make inferences). Her account clearly reinforces sociocultural theory and the teachability of critical thinking to young children.

Moreover, the participants also considered critical thinking to be essential for university students. One participant highlighted the need for it, arguing that university was the last educational checkpoint before students were launched into the real world of careers. Two participants suggested making critical thinking a compulsory subject for all first-year university students so that they would be equipped with critical thinking skills that could be beneficially applied in other courses. Their views on its explicit instruction are similarly to those advocated by Halpern (1999), Marin and Halpern (2011), and van

Gelder (2005). Critical thinking instruction in most Thai classrooms, one participant claimed, was made one of the course objectives, and its principles were expected to be taught explicitly alongside other course contents. However, she maintained that it was not concretely evaluated as a course assessment. This indicates that critical thinking instruction in the classes is merely an infusion and not an established part of the curriculum. Furthermore, as it was also claimed that critical thinking was not actually being evaluated in the assessment, this is probably the reason why researchers reported it as being overlooked in Thai classes.

4.5 Summary

In the present study, the participants who were Thai EFL university teachers conceived of critical thinking in terms of its components, its importance, and its innateness and teachability. Pertaining to its components, they understood critical thinking as involving cognitive skills, affective dispositions, goal-orientation, and morality. The former three aspects appear consistent with those stated by mainstream Western scholars while the last aspect seems to denote the influence of Thai Buddhism. The participants' linking of critical thinking with morality may indicate that critical thinking, although concerned in some aspects with universal conceptions, can be socioculturally driven (Atkinson 1997; Brookfield 2012; Egege and Kutieleh 2004; Fox 1994; Kumaravadivelu 2003).

The importance of critical thinking was evident to all the participants. This indicates that its importance is not exclusive to people in certain cultures. Despite this, people from different cultures may recognise it in slightly different ways. The participants in this study conceive of its importance in five dimensions: everyday life, EFL learning, career, Thai culture, and Thai Buddhism.

The participants believed critical thinking was important in everyday life. They held similar ideas about the importance of critical thinking in terms of problem-solving and of awareness of the bias and propaganda in technology and media compared with Western thoughts in the literature. However, their conceptions of critical thinking as bringing happiness seem to denote a feminine side. The feminine conceptions may be influenced by their Thai culture which Hofstede (1980) characterises as feminine. Femininity in relation to critical thinking may be a mutual aspect of Asian cultures. Howe (2004) conducted a comparative study to investigate Canadian and Japanese secondary teachers' conceptions of critical thinking and found that Canadian teachers

were likely to associate critical thinking with cognitive domain while Japanese teachers focused on its association with the affective domain.

Regarding the merits of critical thinking in the discipline of EFL, the participants stated that critical thinking benefits EFL learning in seven aspects: learner autonomy, the motivation for learning, reading comprehension, learning strategy, sociolinguistics learning, writing, and the evaluation of learning achievements. This wide range of applications for critical thinking indicates a good sign for critical thinking development to take place in Thai EFL classrooms.

Moreover, the participants reported the importance of critical thinking in careers in terms of recruitment and advancement. This implies not only a changed social structure in the Thai career context where more employees' ideas are now welcomed but also a need for university education to produce critical graduates for this changed career structure.

This study also provides interesting findings on the importance of critical thinking in preserving Thai culture and promoting Thai Buddhism. While a number of scholars perceive Thai culture, which is mainly Buddhist-based, as being potentially challenging to Thai students' critical thinking (e.g., Adamson 2005; Foley 2005; Wallace 2003), the participants on the other hand found their culture to be a decent and receptive environment for critical thinking. The participants' ideas here are in line with Hongladarom (1998) who points out the compatibility of critical thinking with Asian cultures, including that of Thailand.

In addition, among the participants there were two schools of thought regarding the innateness of critical thinking: the majority of them believed people were not born with it while one participant deemed it to be an innate quality derived from a previous life according to Buddhism. This participant's belief that critical thinking is innate is consistent with Payutto's (1997) explanation of *kamma* (a Buddhist cause-condition relationship). Nevertheless, Payutto maintains that although such relationship exists, it does not determine the whole life of an individual. As a result, the implication from a Buddhist perspective may be that critical thinking can be an innate ability, but it can also still be developed.

Despite the participants' different ideas about the innateness of critical thinking, all of them concurred that such thinking is teachable, and students should practise it from their youth. They also suggested a rigorous inculcation of critical thinking in university students as well as its explicit instruction in terms of a separate course for all first-year university students. Their suggestions may require university curriculum planners to reconsider critical thinking instruction which is currently delivered using an infusion method in most Thai university classrooms. The participants in this study had interesting ideas about the teachability of critical thinking, and the next chapter will present their perceptions of critical thinking development in their students. This will include how they viewed their students' current critical thinking abilities and the factors they perceived to affect the development of critical thinking in their students.

CHAPTER 5: THAI EFL UNIVERSITY TEACHERS’ PERCEPTIONS OF CRITICAL THINKING DEVELOPMENT IN THAI EFL UNIVERSITY STUDENTS

5.1 Introduction

This chapter presents and discusses the findings for the second research question on how Thai EFL university teachers perceived the development of critical thinking in their students. The data on these perceptions was collected by using reflective writing and interview methods. As previously stated (see Section 1.6), my ‘baggage’ (Scheurich 1995) was brought to the study, and my Thai cultural identity (Creswell 2013) could also influence the interpretations of the data and the formation of themes.

The data analysis developed two major themes, namely, ‘Thai EFL university students’ critical thinking’ and ‘Factors affecting critical thinking development in Thai EFL university students’. Notably, the participants shared their ideas on not only their own students but also Thai students in general. Likewise, in mentioning teachers, sometimes they referred to themselves as a teacher, and at other times to Thai teachers in general.

5.2 Thai EFL University Students’ Critical Thinking

The participants in this study perceived that their students’ critical thinking abilities varied. Five participants believed that while some Thai students lacked critical thinking, many had it and used it. However, they claimed that students’ observed behaviour could be shaped by Thai culture and Thai Buddhism, and such behaviour therefore was not always indicative of their possession or lack of critical thinking. Their perception appears consistent with Kim’s (2002) perspective that culture might affect students’ behaviour but might not lessen their internal qualities. Kim investigated the effects of talking on the thinking of East Asian Americans and European Americans. She found that talking reduced East Asian Americans’ performance more than that of European Americans and concluded that Asian cultures seem to be more attuned to silent thinking, as opposed to verbal thinking. The participants in the present study suggested that when examining Thai students’ critical thinking, it was important to consider two seemingly cultural-related issues, namely, passivity and reticence.

The first issue to be discussed is passivity. One participant pondering this issue, said that foreign teachers tended to interpret Thai students' passivity negatively:

We normally interpret our students' passivity as either demonstrating their own laziness or their respect for us. But foreign teachers merely considered it to be the former. They complained about this behaviour. Some Thai students are actually lazy, but we can find lazy students in all countries. It is not fair to say that Thai students are passive because they are lazy. Actually, I should say, while many Westerners seem astonished by Thais' passivity, not a few of us also feel astonished by their over-activeness. (Dara)

Dara's account indicates that Thai students' passivity has been interpreted by foreign teachers as showing a lack of learning responsibility while some Thai teachers understood it as a cultural consequence. Adamson (2005) also mentions that Thai students' passivity is a negative stereotype. Adamson examined teacher development in EFL in Thai and Japanese university contexts and concluded that it was crucial to raise foreign lecturers' awareness of their learners' behaviours which could be influenced by their local cultures. In the current study, as well as mentioning foreign teachers' perceptions of Thai students' passivity, Dara herself mentioned her perception of Westerners' over-activeness. This seems to imply that sometimes stereotyping can be practised by people either intentionally or unintentionally.

The second issue is reticence. It is interesting to note that those participants who shared the same Thai and southern Thai cultural background still interpreted their students' reticence differently. Some interpreted it as students' thinking while others viewed it as students' lack of concentration. However, most participants' perceptions regarding Thai students' silence were quite positive. They viewed it as a culturally appropriate display of obedience and respect. This implies that some students' classroom behaviour, despite potentially affecting teachers' instruction, is still acceptable as long as it is in accordance with the accepted Thai culture. Moreover, two participants believed that reserved students usually had better critical thinking abilities. For example, one participant said:

From my teaching experience, many quiet students have the abilities to think critically. They do not talk much in class. They like to sit quietly, listen and think. They will respond only when being asked. Even with less talk in class, they can

produce their critical ideas and articulate them systematically in their writing.
(Narin)

This participant's account has two interesting implications. First, silence in Thai classes can mean an internal cognitive engagement in learning. Critical thinking in such classes thus appears in the form of active listening. Second, Thai students' behaviour in class can be the result of their awareness of accepted Thai cultural discourses, such as obedience, respect or silence. They are aware of such discourses and behave accordingly. As expressed in the participant's account, reserved students express themselves critically in class when allowed by their teacher or in writing, behaviour which, according to their internalised values, was not against their accepted culture. By contrast, they seemed to limit their critical expressions that they deemed to be culturally unacceptable, such as expressing their ideas frankly or questioning teachers who were, according to Thai culture, valued as authorities and benefactors. In Thailand, culturally acceptable behaviour of individuals is very important and valued as "the essence of reality" (Mulder 1985, p. 170). There is a Thai proverb 'hua-lan nok kru' that refers to people being disobedient to their teachers, precursors or traditional teachings. These people are socially judged in a negative way: the metaphor of 'hua-lan' (bald people) is used to represent marginality compared to the majority unbald people. The participant's notion reflects Egege and Kutieleh's (2004) statement in their position paper that different cultures can have different styles of learning approaches and attitudes.

Cultural discourses are recognised not only by students but also by their teachers. One participant pointed out this issue:

I keep encouraging them to express themselves more. I know they can think critically about the topic being discussed. But they just smiled as if they were giving their support to my teaching. Getting such reactions day by day made me feel frustrated, and I went on teaching the same way: lecturing them. I did not want to use harsh words to blame them. I know they use silence to show their respect to me. Actually, these silent students were responsible and polite. They hardly cause any troubles. I cannot condemn them because of their reticence.
(Tawan)

This excerpt addresses two issues. First, the students feel their reticence is acceptable in class and so refuse to change their behaviour, continuing to be silent. Second, their

unchanged behaviour causes teachers' frustration since they feel that they cannot effect any change in their students' behaviour. The second point suggests that students' behaviour can affect teachers' cognitions and pedagogic practices.

Two participants stated that Thai students' reticence in class was because they regarded their teachers as their second parents whom they needed to pay respect and show obedience to. This indicates that students understand silence as a cultural means of showing respect and obedience to their teachers. The parental role played by Thai teachers is also mentioned by a number of scholars (e.g., Deveney 2005; Kapur-Fic 1998; Komin 1990; Thamraksa 2003). One participant associated this parental role with Buddhism:

Teachers are like students' parents who have good wishes for them. If students do not obey their teachers, they will be viewed as ungrateful. In Buddhism, ungrateful people rarely prosper in life. (Siri)

This participant seems to view silence as a Buddhist legacy. Nevertheless, Payutto (1992) has an opposite view, asserting that the Buddha encourages humans to be critical. Payutto's assertion indicates the promotion of critical obedience and critical respect in Buddhism.

Interestingly, three participants argued that their students' reticence had nothing to do with culture. They believed that it was due to students' concerns about academic scores. For example, one of them said:

I am always astounded to see my students exhibiting their critical thinking in posts or blogs in social media. They feel confident about doing so because they do not have to worry about academic scores. Some of their ideas expressed there are excellent and better than those of many adults. This may be because they can think and base their thinking on what they are interested in. Unlike in class, many students play safe when answering to their teachers' questions or taking a test with open-ended questions. They do not dare to analyse and use their criticality for fear that if their teachers are not satisfied with their answers, their scores will be reduced. So, what they usually do is just repeating what their teachers said to satisfy them. (Ithi)

These participants' notions are in line with those of Tsui (1996 cited in Kumaravadivelu 2003) who contended teachers viewed their students' reticence as being caused by such individual factors as low language learning achievement, a low level of confidence, and a fear of making mistakes. Kumaravadivelu points out that none of the teachers in Tsui's study referred to cultural factors. However, one of Tsui's non-cultural factors, namely the fear of making mistakes causing silence, was deemed to be culturally relevant by one participant in the present study. This participant said that students were reticent because they feared their mistakes would make them lose face, which is consistent with established understanding of Thai cultural values regarding ego orientation (Komin 1990).

In the present study, the participants expressed two different reactions to Thai students' reticence. The first group of the participants in fact advocated changing students' silent and reserved behaviour. This notion is in agreement with that of Lipman (1991), who believes that human interactions negotiate learning. The second group considered the students' silence as part of their cultural style of learning or even as one of their individual differences, and thus deserving understanding and respect. The implication from the participants in the second group may be that "Perhaps instead of trying to change their ways, colleges can learn to listen to their sound of silence" (Kim 2002, p. 840).

Although the participants thought that students' critical thinking expressions could be affected by their Thai culture, they all agreed that Thai students' critical thinking needed to be more developed. The factors influencing such development, as perceived by the participants, will be discussed in the next section.

5.3 Factors Affecting Critical Thinking Development in Thai EFL University Students

The analysis of the findings on the participants' perceived factors revealed the following three themes: education, socialisation, and technology, as shown in Figure 6. Although at a glance it seems predictable that cultural factors should fall into the socialisation theme, it should be acknowledged that all of the themes could also include seemingly non-cultural factors that are potentially underpinned by the culture itself.

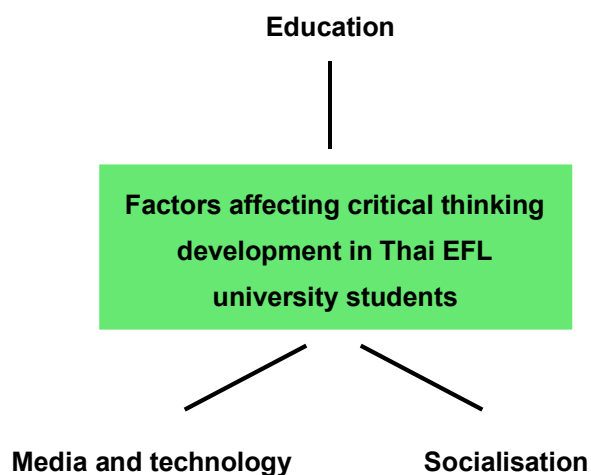


Figure 6: Factors affecting critical thinking development in Thai EFL university students

5.3.1 Education

The participants suggested several educational factors, and I classified the factors into the following four main categories: educational management, pedagogy, teacher, and student, as shown in Table 5.

Table 5: Participants’ perceptions of the educational factors that influence students’ critical thinking development

Educational management	Pedagogy	Teacher	Student
Time constraints	Teaching approach	Pleasant personality	Motivation
Large class size	Teaching strategies	Responsibility	Intelligence
Teaching workloads	Motivational strategies	Transferability	Peer pressure
	Learning activities	Morality	Language
	Classroom assessment	Criticality	competence
	Nature of a particular course	Lack of understanding	
		Beliefs	

Educational Management

The participants’ perceived educational management factors included time constraints, large class size, and teachers’ workloads.

Time Constraints: Ten participants voiced their desperation in teaching against time to cover the content stipulated in their course syllabuses. They claimed that such

constraints allowed no time for students to practise their critical thinking, although it was one of the course objectives. However, one participant described how she had used technology to tackle the restrictions and enhance her students' critical thinking practice:

My lecture is mainly based on the information from the book. I use PowerPoint presentations to present each chapter's main points, the details of which can be read and revised by the students after the classes. I prefer using some of my class time to give students some of the principles of language assessment and language skill testing and then get them to do practical activities such as looking at samples of badly written test items, making comments, using their logical reasoning skills, reflecting on what they have learned and suggesting changes to be made so that they are good language test items. (Ticha)

Her idea was similar to those of Gulek and Demirtas (2005) who studied the effect of participation in a laptop programme on student achievement and revealed that technology helped lessen students' dependence on teachers' lectures and increase students' critical thinking. The participants' claims that time constraints prevent critical thinking instruction, although the thinking is one of their course objectives, perhaps suggest two concerns. First, critical thinking is considered to be secondary in Thai EFL classrooms and is treated accordingly. Teachers will first teach what will be tested in exams before, if time allows, teaching and promoting critical thinking. Second, teachers may decide not to teach it, even as an embedded instruction, when confronted with time pressure. The second issue seems to echo Presseisen's (1989) notion that critical thinking as an embedded instruction depends significantly on teachers themselves.

Large Class Size: All participants thought that a large class was an undermining factor for students' critical thinking development. Nevertheless, three participants maintained that the teacher-centred approach was suitable in large classes as it enabled better control of the classes. For example, one of them said:

I prefer lecturing them. I know teaching them to think is important. But how can we teach 54 students to think in just 50 minutes? Impossible. Lecturing is good enough for such a class. It helps us run the class smoothly and control some students' disruptive classroom behaviour. Large classes of students need a teaching approach which is formal. Informal teaching, such as teaching thinking, does not suit the context. If we teach them informally, they will see us as friends

and won't respect us as their teachers. This can cause more disruptive behaviour.
(Narin)

According to Narin, there appear to be two implications. First, a class size can affect teachers' selection of the appropriate teaching approach. For Narin, a large class size lends itself more to the teacher-centredness. Second, the selection of how to teach is also determined by teachers' perceptions of the form of respect they expect from their students. A large class size may be the consequence of the Royal Thai Government's policy on the 9-year compulsory education and 15-year free basic education, resulting in more secondary graduates and hence more university students.

Many participants claimed that large class sizes remained unsolved but increasing. One of them said the number of students had increased each year, including those in teacher education programmes. She raised a concern that:

In teacher education, we accept too many students. When teaching, I found that some had proved unfit to be future teachers because of their lack of competencies and aptitudes. I am not biased. I am telling you the truth, the truth that all cannot be made teachers. How can we expect first-class products when we only have second-rate raw materials? (Ratri)

In her excerpt, Ratri attributes the lower quality of pre-service teachers to the large class sizes. It also implies that teacher education may produce a declining quality of teachers to society. This implication is in line with a statement in the Second 15-Year Long Range Plan on Higher Education of Thailand (2008-2022) (Commission on Higher Education 2008) that says that quality of secondary students entering university education has decreased as a consequence of the decreasing quality of their teachers.

Teaching Workload: Five participants maintained that their own excessive workload hindered their ability to cultivate their students' critical thinking development. One of them clarified that:

University teachers' work never ends. Each day I need to prepare teaching and do research at night. Sometimes, my nighttime was sacrificed for working on curriculum development. Besides, I need to plan for academic projects as part of the university's community services. These are all the things I am required to do if I want to pass an annual teacher performance evaluation. The university requires

teachers who are not only excellent in teaching but also productive in research. Even if we do well with both, we can fail the evaluation if we do not have any community projects or do not cooperate with other colleagues in developing the curriculum. (Dara)

Her account reveals Thai university teachers' tension resulting from their excessive workload. The conducting of research and the community services as part of university teachers' responsibilities are emphasised in Section 29 and Section 30 of the 1999 National Education Act (Office of the National Education Commission 2002). Although the promotion of both sections is recognised as being beneficial, the participants' view may imply that the Act demands more appropriate implementation.

Pedagogy

The various pedagogy-related factors the participants referred to were grouped into the following six categories: teaching approach, teaching strategies, motivational strategies, learning activities, classroom assessment, and the nature of a particular course.

Teaching Approach: All participants thought that the Thai traditional teacher-centred teaching approach hindered Thai students' critical thinking development. They pointed out that this approach did not encourage students' thinking but rather promoted rote-learning. Rote-learning in Thai classrooms may be a consequence of the traditional recitation used in the past for passing on wisdom from one generation to the other generation in Thailand. Back then, there were not many writing materials available, and most people were not literate. Reciting thus seemed to be the best way for the transmission of knowledge. In the past, people, especially children, were trained to be good at it so that they would be chosen to be the holders of the transmitted wisdom. To be a wisdom holder at that time conferred a high social status in which great respect was given. The importance of recitation is shown in the Thai well-known verse '*khwam cham di ni mak sang nak prat*', meaning that a good memory is a quality of a sage.

However, one participant stated that rote-learning weakened students' self-reliance:

We teach them to memorise, not to think. We, either subconsciously or consciously, encourage them to depend on others, waiting to be fed by their teachers. We forget to inculcate in them the fact that the most dependable person in their life is themselves. (Nattha)

As self-reliance is a precondition for critical thinking (Paul 1990), students' reduced self-reliance therefore affects their critical thinking development. Ampai's account also raises an interesting issue, namely, the way students learned was the way their teachers taught them to learn. Her notion accords with that of McPeck (1990).

However, another participant claimed that many Thai teachers preferred teacher-centredness. She maintained that the nature of this approach denoted teacher dependency that could result in teacher egocentricity:

This approach gives teachers extreme power: teachers as givers while students as receivers. Many teachers feel proud of their role and sometimes misconstrue it, believing that they are always right, and that the students should follow them. (Kamlai)

Her notion is in agreement with Thamraksa's (2003) opinion that Thai teachers' fear of change is a consequence of their fear of losing power and recognition. This implies that teachers' adherence to the teacher-centred approach can be a barrier for critical thinking development in their students.

One participant suggested combining the teacher-centred approach with the student-centred approach to enhance critical thinking development:

Using the teacher-centred approach, teachers explain the concepts of critical thinking and model how to think critically to students. After that, the student-centred approach will come into play. That is, the teachers have their students practise it and give them help, as appropriate. (Siri)

Nevertheless, what she claimed to be a combination was merely the implementation of student-centredness. She was probably mistaken, believing that in the student-centred approach, students did everything while teachers did nothing. As evidenced in the literature, this approach and critical thinking mutually support each other. Siri's view perhaps shows how teachers' misunderstanding of the approach can result in unsuccessful critical thinking instruction.

Notwithstanding some weaknesses in the teacher-centred approach, one participant saw two features in it as being constructive to students' critical thinking development. The features were good listening skills and modesty. Her notion of good listening skills as

enhancing students' critical thinking is consistent with that of Browne and Keeley (2007). This participant further argued that students' modesty in the approach also helped:

Students learning through the teacher-centred approach are likely to be modest. Their modesty is beneficial to their critical thinking development. As we know, modest people will not overestimate themselves but realise that they could be wrong, and that their knowledge could just be a small piece of the countless amount of knowledge in the world. (Ampai)

The role of modesty, as mentioned by Ampai, is consistent with Paul and Elder's (2002) concept of intellectual humility. However, in the Thai context, there can be a clash between modesty and critical thinking. Modesty is a cultural value Thais are expected to practise through deliberating and not expressing much about their abilities. Those loudly articulating their critical ideas can be seen as being boastful. This issue may provide an impetus for Thai teachers to discover how to make best use of modesty, which seems, at first, to be a cultural constraint, to improve their cultivation of critical thinking in their students. All in all, this participant's perceived merits of the teacher-centred approach seems to show that such an approach may not be in opposition to Thai students' critical thinking development.

Teaching Strategies: The participants suggested six types of teaching strategies they considered to be effective for Thai students' critical thinking development. They were posing critical questions, activating students' metacognition, encouraging students to deal with negative reactions, encouraging students to perceive everything as text, modelling, and silence. In what follows, the participants' suggested teaching strategies are reported and discussed.

Posing Critical Questions

One participant put forward the strategy of posing critical questions:

Teachers should pose critical questions in class and also teach students how to form such questions themselves. The questions could be, for example, 'What does the author want from the readers?', 'How does this suggestion make a difference?', 'Why should I follow her advice?', and 'What will be the effect if I behave otherwise?'. (Ithi)

Ithi's idea is in accordance with Brookfield (2012), Browne and Keeley (2007), and Paul (1990). His suggested strategy possibly indicates that the types of questions teachers pose in class can determine their students' learning: either surface learning (rote learning) or deep learning (critical thinking).

Moreover, this participant further suggested that teachers should respond to students' questions in a critical manner to arouse their curiosity. Brookfield (2012) similarly stresses the importance of making such responses. However, given that Thai teachers are still expected to know best and provide only correct answers to their students (Loima and Vibulphol 2016), this strategy may be particularly challenging in Thai classroom contexts.

Activating Students' Metacognition

Four participants mentioned the merits of activating students' metacognition. One of them said:

They should encourage students not to cling to one-sided opinions, but instead to ask themselves such questions as 'Did I consider any reasonable alternatives?' and 'What if...?' as a way of monitoring their own thinking. (Prani)

Another participant claimed that teachers also needed to monitor their own thinking when teaching: whether they actually encouraged their students to think and if their prompting sufficed. For her, critical thinking development seems to require metacognition from both teachers and students. The participants' ideas on the role of metacognition in facilitating students' critical thinking are consistent with Paul (1990) who claims that critical thinking is "the art of thinking about your thinking" (p. 32) and Halpern (1998) who mentions metacognition as a part of her four-part model for enhancing critical thinking.

Drawing on his former experience as an MA student, one participant suggested promoting students' metacognition by using mind mapping:

I was taught to use mind mapping in a Master's course. It enabled me to see through my own thoughts and thus give abstractions a concrete form. As we usually take sides ourselves, mind mapping can make us surprised at how critical or uncritical we actually are. (Banacha)

His view is similar to van Gelder's (2005) suggested use of argument mapping to develop students' critical thinking.

Encouraging Students to Deal with Negative Reactions

Nine participants claimed that teaching students to think and express their ideas critically was rather sensitive in the Thai contexts. They said students' critical expressions might be acceptable only in certain classes. They maintained that when stepping out to the real world, these students might be viewed by others as being stubborn and disobedient. Negative reactions could also be found in university contexts. One participant said:

I usually teach my students to think critically and be confident about expressing themselves on the right things. But it seemed some of my colleagues were not satisfied with this. They condemned me for teaching the students to be aggressive. They told me what I did could lessen teachers' power in class, and hence the students would be harder to control. (Ratri)

The inconsistency across teachers can likely make students doubtful and uncertain whether critical thinking is actually good and is worth applying. As a result, critical thinking, although taught and practised rigorously in a particular class, might mean nothing to students when they leave that class.

Likewise, another participant claimed that students showing their critical thinking abilities could be marginalised in families, schools, and societies. He suggested that critical thinking instruction in Thailand should provide students with strategies that helped them tackle negative reactions from others. He adds that, in such a context, students needed to invest in mental strength, energy, and perseverance. His notion reflects two difficulties Thai students face, namely, struggling to develop their critical thinking abilities and dealing with the reactions from the mainstream population in Thailand where critical thinking is not valued as a social practice. Although some authorities (e.g., Adamson 2005; Foley 2005; Kapur-Fic 1998; Thamraksa 2003) argue that Thai culture is likely to impede critical thinking, students' strategic responses to Thai people's reactions to their outspoken critical practices have rarely been studied. The finding in this study may now draw attention to this area.

Encouraging Students to Perceive Everything as Text

One participant suggested encouraging students to view everything that surrounded them as text embedded with narratives. She described how she used this strategy in her language classes:

I like to start my classes by mentioning some interesting events and encouraging my students to discuss them. These can be world events, domestic news, or hot issues in society. In discussing them, students should be allowed to use Thai sometimes when they are unable to figure out the meaning of some English words. I also use code-switching to provide and explain to them new vocabulary items and idioms. I believe that their critical thinking skills will develop when we allow them to think freely and assure them that there is no right or wrong answer. What we teachers should do is just to be open to their interpretations and pose 'why' and 'how' questions. Doing this enables them to use reasoning to come up with their own convincing arguments. We should be careful not to judge their arguments as being right or wrong. What is important is to make sure that they understand the logic of thinking critically. When doing this activity, we have to be patient because some students might think we are not teaching them, but instead wasting their learning time by talking about something else. But this does not matter as long as we are conscious of what we are doing and that our students are learning. (Ratri)

Her notion is similar to Brookfield's statement (2015) that "Everyday communications are subject to a continuous and ever-present set of assumptions" (p. 48). This teaches students to be perceptive and able to practise their critical thinking everywhere and with everything in life. Moreover, the participant's idea about the merit of real life issues being discussed with students in class is compatible with Halpern (1998), who asserts that such discussion helps increase students' transference of critical thinking strategies outside the class.

From this participant's account, her idea of engaging students in thinking and coming up with their own convincing arguments accords with that of Bailin et al. (1999). The point she made on the students mistaking teaching thinking as their teacher teaching nothing may indicate that the students understand learning as an outcome, as opposed to a process. Brookfield (2012) similarly notes that teaching students to think instead of

directly feeding them knowledge can make them feel “cheated, lost, and confused” (p. 225).

Modelling

Six participants believed students needed to be given some examples from their teachers of how to think critically. Their notions of modelling appear similar to the ZPD concept in Vygotskian sociocultural theory. This modeling strategy, as used in critical thinking instruction, is also supported by several scholars (e.g., Brookfield 2012; Costa 2006; Facione 2000).

In addition, the participants said modelling should be followed up with opportunities for students to practise. van Gelder (2005) similarly claims that students should be given repetition and practice in different situations.

One participant added that teachers should model examples of both critical and uncritical thinking:

We should demonstrate examples of both critical and uncritical thinking, so that students can discover for themselves which is more useful. While modelling, we should ask them to participate as well. This will make them feel more engaged and hence increase their learning motivation. (Ticha)

Ticha’s idea on students practising critical thinking alongside their teachers’ modelling demonstrates the two distinct roles of these modelling strategies: firstly, giving students critical thinking explanations and examples, and secondly, setting a context for them to practise this way of the thinking.

Silence

One participant suggested using a silence teaching strategy to promote students’ critical thinking:

Silence in class is needed as it reduces distractions and helps students concentrate more on what they are thinking. (Siri)

Nevertheless, despite recommending this strategy, the participant felt that silence might be an unconventional teaching strategy in Thai classrooms where teachers’ voices are expected to be heard by students and others walking past the classrooms. She

maintained that silence in Thai classes normally meant students were taking exams, and if not, it could mean teachers were neglecting their teaching responsibilities. As a result, she said, several Thai teachers tended to project their voices so as to avoid any feeling of embarrassment or being blamed by others. Her notion that some Thai teachers would be embarrassed perhaps reflects these teachers' beliefs that teaching should be teacher-centred.

Motivational Strategies: Eight participants suggested the following three types of motivational strategies they deemed to be supportive of students' critical thinking development: positive reinforcement, sharing personal experience of engaging in critical thinking, and appreciation of students' participation.

Positive Reinforcement

Three participants said teachers should give encouraging feedback to students during critical thinking activities and also be aware of any action discouraging them. Such reinforcement, one participant maintained, could also be in nonverbal forms such as smiling or nodding their heads. She mentioned her own experience:

When I was studying in a Master's programme, I felt much more motivated to learn in a pronunciation course. I did not actually like pronunciation. But I did well in the course because I liked the teacher. She always responded to my participation with smiling, nodding her head and using encouraging words. Even just a one-word response such as 'good', 'right', or 'yes', I felt happy and enthusiastic to learn more. (Dara)

Another participant said positive reinforcement during critical thinking activities helped to form good attitudes in students towards the expression of criticality:

If we praise or positively respond to students who think critically or talk back to us, the rest of them will learn that doing so is acceptable or even good. Our consistency on such a practice will make them gradually perceive it as being a good culture of learning. Positive responses to students' critical thinking expressions also create a supportive and friendly classroom atmosphere, in which extroverted students who like to express their ideas would not be disliked by other classmates, and introverts themselves are more comfortable and confident about expressing their ideas. (Wandi)

This participant's ideas accord with Bailin et al. (1999) who mention the success of critical thinking instruction as a consequence of "providing an environment in which critical thinking is valued and students are encouraged and supported in their attempts to think critically" (p. 299).

Sharing Personal Experience of Critical Thinking Engagement

One participant mentioned the merit of sharing teachers' own personal experience of critical thinking engagement with their students. She argued that it made the students view critical thinking as something for them and worth doing because their teachers also did it. She described her experience of the sharing:

I told them about how I had used critical thinking to solve my financial problems during my studies. I first started by describing how I critically identified the problems and their root causes. I showed them how I listed potential solutions, considered their possibilities, and translated them into practice. While demonstrating these, I also asked them about possible consequences if I did not tackle the problems in a critical manner. They proposed different ideas such as 'I might have been in more debt.', 'I might not have been able to concentrate on my studies and therefore failed the exam.', 'I might have lost my interpersonal relationship with others because I was too worried about my own problems.', and so forth. After telling my story, I asked them to imagine themselves as being me in that situation and had them figure out how they would have tackled the problems.
(Siri)

Her notion is consistent with Brookfield's (2012) statement that teachers' personal examples of their critical thinking experience "set a tone of openness that significantly influences students' readiness to delve into their own assumptions" (p. 61).

Appreciation of Students' Participation

Two participants suggested teachers expressed their appreciation to students for their participation as knowledge generators during critical thinking activities. They claimed that doing so made students feel recognised, and thereby increased their motivation in participating in such activities again. The participants' ideas are interesting. The literature points out that many Thai students regard teachers as those who know best. It is thus possible to trace a tendency for Thai students to perceive their classmates' ideas

as not credible, when compared with those of their teachers. It should be noted that this strategy of teachers' appreciation of students' participation is rarely mentioned in the literature in Thai contexts. This is probably because in Thai teacher-centred classroom contexts, sharing the classroom stage with students can mean losing power. Thai teachers' fear of change as a result of distributing power to students in the student-centred approach is also mentioned by Thamraksa (2003).

Learning Activities: The participants proposed various critical thinking activities they judged to be useful and practical for Thai students, and I grouped them into the following three categories: using students' locality, cooperative learning, and exposure to critical thinkers. The activities suggested by the participants were the followings.

Using Students' Locality

Two participants suggested activities that were relevant to their students' locality as a means of arousing their interest. One participant shared his experience of using such an activity:

I assigned a writing topic for them to discuss. They were asked to take some pictures of a market near their place and then describe it. They could write anything they wanted such as how often they went there, what they bought from there, what kinds of goods were available, and what improvements the market needed. I encouraged them to use their real-life experience to develop their thinking and writing skills. I found that they liked this kind of activity. (Narin)

The other participant similarly said:

The topic for thinking practice can be something they are familiar with, such as something local like the nearby beach. They can work in groups, brainstorm, and discuss why the beach now is dirty and eroded. They may also do a field study, something like research-based learning: going to the beach, surveying it, and interviewing local people there. After that, we might ask them to present their work in front of the class with other audience members, including teachers, sharing opinions. (Nattha)

This participant added that teachers should encourage students to think critically on both local and global issues. She suggested that for some global events which seemed

distant for students, teachers might ask them to study more about these events before doing the thinking activities. In class, she maintained, the teachers had to make sure that their students had some knowledge of the topic before having them discuss it. She believed using local and global issues in critical thinking instruction cultivated students' criticality and general knowledge, both of which were important to university students.

The participants' perceptions clearly show the important role background knowledge plays in critical thinking. Such a role is also mentioned by other authorities, for example Bailin et al. (1999) who contend that background knowledge is one of the intellectual resources needed to be acquired by critical thinkers and Facione (1990) who points out the importance of domain-specific knowledge in the process of critical thinking.

Cooperative Learning

Five participants mentioned cooperative learning activities they had used in class to develop their students' critical thinking; these were creating picture books, doing research-based fieldwork, making teaching materials for primary school students, constructing classroom tests to evaluate school students in different levels, presenting particular topics in groups, and evaluating cartoon movies (as well as deciding for what age of the children the movies were suitable to and identifying how they could develop the children's learning). Their notions of cooperative learning as a means of enhancing students' critical thinking are in line with those of several researchers. For example, Gokhale (1995) conducted a study with 48 university students in the United States to examine the effectiveness of individualistic learning and collaborative learning and found that students learning through collaborative activities actually performed better in terms of their critical thinking abilities. Totten et al. (1991) argue that cooperative learning can promote students' learning autonomy and their critical thinking.

One participant justified why cooperative learning helped develop Thai students' critical thinking:

It lessens classroom competition and creates a friendly learning atmosphere. I think most Thai students like learning this way. In groups, they will be more confident and more willing to think critically and express their own critical ideas because they know that every group member will be responsible for any mistakes

that may occur. Aside from promoting critical thinking, cooperative learning also helps develop their social and working skills. (Dara)

Dara's idea is similar to the findings of Jantrasakul (2012) who investigated the effectiveness of critical-thinking-oriented EFL lessons with 37 first-year Thai EFL university students and found that in a less competitive classroom atmosphere, higher-achieving and lower-achieving students empowered one another in their learning.

Nevertheless, another participant said in group work activities, there was a tendency for Thai students to take sides, and that this could lead to biased thinking. She maintained that having different ideas from group members, especially those who were friends, could even be viewed as betrayal. She viewed this as the consequence of students' misconceptions of friendship as well as of the Thai cultural value set of face saving. A possible explanation could be that critical thinking focuses on doubting (Brookfield 2012). This characteristic seems to send out a negative sign to feminine friendship, especially in Thai culture, which Hofstede (1980) characterises as feminine. The participant's notion of students taking sides in group work activities implies that students do not always engage in such activities critically, and that group work activities, if not well-structured, may actually hamper students' critical thinking instead.

Exposure to Critical Thinkers

One participant suggested critical thinking activities that involved students in interacting with experts, experienced people or intellectuals of local or popular wisdom who already had criticality. She added that teachers could assign a task for students to discover critical thinkers surrounding them, learn their way of thinking, and apply it in their own lives. She mentioned the use of this strategy in her course:

In an English presentation course where students' critical thinking was one of the course objectives, I asked students to brainstorm in groups to discover critical thinkers in their communities and to go there to interview them. One group mentioned a grandfather of a group member. They showed his pictures to the class and started their presentation saying that 'A critical thinker is a happy person'. This made me astonished and so I asked them in what ways he was a happy person. They explained his qualities of being critical to himself and others such as living a very simple but conscious life free from any extravagancy, giving

advice to solve community problems, and being a spiritual refuge to others. They said criticality gave him a meaningful life and hence happiness. Those whom he helped were also happy because their problems were sorted out. It was interesting to see how they raised another merit of critical thinking that I had never thought about before. (Ampai)

Using real life case studies to promote students' critical thinking is also advocated by Brookfield (2012) and Halpern (1998).

Classroom Assessment: Two participants stated that most classroom assessments and national examinations in Thailand were objective tests. The tests, they claimed, hindered students' criticality development. One of them said:

In most Thai classrooms, students receive only ready-for-test knowledge to meet classroom or national assessment demands. I think most Thai teachers prefer objective tests to subjective tests. Imagine when you have to check the subjective tests of 60 students in a class, and you also have four more classes. I do not think you can mark the subjective tests of 300 students in each semester where there are at least two major exams, mid-term and final exams. (Narin)

Their concerns on the assessments perhaps reveal a contradiction between the promotion of critical thinking, as stated in the 1999 National Education Act (Office of the National Education Commission 2002), and its implementation. Although the Act advocates the cultivation of critical thinking and its transferability, classroom and national assessments appear to remain in the sphere of the teacher-centred approach. This participant's account also implies that objective tests suit large classes. However, Snyder and Snyder (2008) offer a different view, insisting that an objective multiple-choice test can also assess students' critical thinking. Snyder and Snyder's suggestion may indicate that a large class size and objective tests should not be impediments for students' critical thinking development.

The Nature of a Particular Course: Five participants considered the nature of a particular course as influencing students' critical thinking development. The courses they deemed conducive to the development were English speaking and listening, English reading, English speaking, English writing, English literature, English assessment and evaluation, and English for presentation. On the other hand, the courses

they perceived to be inhibitors of critical thinking included English grammar and English pronunciation. For example, one participant said:

I have no idea how we can have students think critically about the fixed grammatical rules or look at them in alternative ways. They are not experts and I am not too. How can we change the universal standardised forms of language?
(Pa-det)

Their ideas on these inhibitive courses contradict Dewey (1990 cited in McGregor 2007, p. 205) who claims that all courses are intellectual in nature, and that such intellectuality always offers room for students' inquiry and reflection.

Teacher

The teacher-related factors the participants mentioned included pleasant personality, responsibility, transfer of knowledge, morality, criticality, lack of understanding, and beliefs.

Pleasant Personality: Three participants said teachers' pleasant appearances and manners (i.e., courtesy, deliberation, affability, and self-restraint) had an impact on their own critical thinking instruction. One of them gave an example of dressing appropriately which she equated it with a good behaviour:

How can we teach them to think critically while we ourselves cannot be critical about the way we are dressing? Students expect us to dress modestly. If we are wearing too revealing clothes in a public place, not only our students but also other people will not respect us. If our students do not respect us, they tend not to be open and receptive to what we are teaching. (Ampai)

Their perceptions may be the result from the enforcement of the teaching ethic that requires Thai teachers to "Conduct themselves as a good role model for learners" (Teachers Council of Thailand 2005, n.p.). In addition, Thai society is a "presentational society" (Mulder 1985, p. 170). Thai teachers who are culturally valued as the representatives of goodness, resourcefulness, and appropriateness are thus expected to present themselves through their behaviour, appearances and manners.

Responsibility: One participant claimed that teachers' responsibilities affected their critical thinking instruction. She said that some teachers she knew neglected teaching

thinking because they perceived it as stealing their time and energy in doing other kinds of work:

They should not forget that their main responsibility is teaching, not doing research. And they should not focus too much on their executive work. Many teachers also do other business jobs to increase their incomes. I understand that teachers do not have much of salary, compared to those working in the private sector; so it is not wrong for them to work part time. But teaching should be their main priority, and they should not make their part-time job full-time. (Siri)

Furthermore, the participant, Siri, associated the responsibility with a merit, and the neglect of it as a sin according to Buddhism. She explained that teachers gained a merit in teaching critical thinking to students as this thinking would help the students survive in this complicated world while neglecting teaching critical thinking was perceived as a sin for their students would gain the opposite. Her association of this ethical issue with Buddhism is perhaps because the religion has a far-reaching influence over every aspect of Thai society and Thai cultural ideologies (Adamson 2005; Baker 2008; Foley 2005; Kapur-Fic 1998; Komin 1990; Payutto 2007).

Transfer of Knowledge: Nine participants said teachers' abilities in promoting the transfer of knowledge determined the effectiveness of their critical thinking instruction. They mentioned three aspects of teachers' abilities in the transfer of knowledge: explaining what the thinking was, giving students comprehensible examples, and using effective teaching materials to support their explanations. One participant said such abilities were both an art and science; that is, although it was taught in teacher education programmes, this did not guarantee all teachers could do it well. Nevertheless, he argued that it could be practised and improved, throughout teachers' years of teaching. Entwistle (2009) and Freeman and Richards (1993) similarly perceive teaching as a complex art.

Morality: Four participants said students were inclined to be more open to learning with moral teachers. The moral qualities they referred to included honesty, modesty, observing the five Buddhist precepts, forgiveness, sympathetic joy, forbearance, generosity, and selflessness. One participant mentioned 'giver' as the best word describing moral teachers. Being the giver, she explained, such teachers would not be selfish but rather would sacrifice themselves to their teaching without expecting

anything in return, forgive easily, and never feel envious when their students were more successful than them. Another participant similarly said:

Students perceive teachers with moral qualities as good role models. They will pay attention to what these teachers teach them. They know that the teachers' morality will guarantee that what has been taught is good and not harmful. I think if we want to make our students realise that critical thinking is good and worth applying in life, just get moral teachers to teach them. (Ampai)

Thai Buddhism from which Thai education is originated can likely be an explanation for the morality issue. These participants were the products of the Thai education system where teachers are valued as moral parents and representatives of morality (Deveney 2005; Kapur-Fic 1998). Accordingly, they did not exclude it from their perceptions of critical thinking instruction. Moral concepts are common not only in Thai teachers but also in Japanese teachers. Howe (2004) states that "The Japanese school curriculum emphasizes, in addition to course content, socialization, morality and behaviour rather than cognitive ability" (p. 521). Similarly, Ng (2001) claims that it is instilled in Asian children during their early socialisation to behave according to some moral criteria. This may reflect a mutual value of morality in Asian countries.

Criticality: Similar to Hager and Kaye (1992) and Paul (1990), four participants stated that teachers need to be critical thinkers first before teaching critical thinking to their students. One of them raised an issue concerning this:

Many teachers copy some learning content from the Internet without considering whether it is credible or not. They assume that everything online is true. They regard the Internet as an authority that they need to follow. I think teachers' lack of criticality should be a more serious concern than that of the students. (Ratri)

Ratri's view of teachers' lack of criticality should raise a concern about Thai education authorities. Moreover, since in most Thai classrooms students are largely dependent on their teachers, there may be a tendency for students to absorb their teachers' uncritical qualities.

Interestingly, another participant noted that teachers' self-perception of being critical thinkers could cause discriminatory attitudes among teachers. She explained that some teachers considering themselves to be critical thinkers thought that they were more

intelligent than and superior to other teachers whom they deemed as lacking critical thinking, and accordingly treated them in a humiliating way. Her notion has three implications. First, the inappropriate perception of critical thinking may lead to arrogance and self-centeredness. Second, some teachers may perceive lack of critical thinking as a mistake or guilt even with their colleagues. Third, an investigation into how critical thinkers should react to those whom they deem uncritical appears to be required. However, given that intellectual arrogance may be a hindrance to critical thinking (Paul and Elder 2002), it could be possible that the teachers with such arrogance are not truly the critical thinkers they consider themselves to be.

Lack of Understanding: Eight participants stated that the cultivation of critical thinking in Thai education was unsuccessful because most Thai teachers did not have sufficient conceptual and operational knowledge of critical thinking. Such a lack has also been mentioned by Black (2005), Lauer (2005), and Ruminiski and Hanks (1995).

One participant attributed this lack to the lack of equivalent terms for critical thinking in Thai. She mentioned two Thai interchangeable terms that defined critical thinking: '*kan khit choeng wiphak*' and '*kan khit yang mi wicharanayan*'. She considered them educationally technical and asserted that even some Thai university teachers could not articulate their meanings. According to Office of the Royal Society (2011), '*kan khit*' is a Thai noun alluding to the act of thinking, '*wiphak*' is a verb derived from Sanskrit alluding to examining and evaluating, '*wicharanayan*' is a noun derived from Pali and Sanskrit alluding to intellectual examining, and '*choeng*' and '*yang mi*' are both adverbs providing information about the characteristics of the nouns. Consequently, the first compound noun '*kan khit choeng wiphak*' means the thinking that uses examinations and evaluations while the second compound noun '*kan khit yang mi wicharanayan*' describes the thinking that involves an intellectual examination. Teachers' difficulties in understanding these terms might be because they are loanwords. Therefore, to the participant, unsuccessful development of critical thinking seems to be the result of a linguistic confusion.

This participant maintained that because of their sophistication, these terms were sometimes used for other purposes:

Critical thinking is a premium term in the Thai educational context. Those mentioning it as part of their teaching are admired as effective teachers or even

professional experts. So, if any teachers want their teaching to look great, they just simply say they employ it in their teaching, even if in reality they do not.
(Kamlai)

Kamlai's account presents an interesting angle on critical thinking perception among some Thai teachers. In contrast to the participant's perception, Brookfield (2012) notes that the English word 'critical' itself has negative meanings and connotations, such as seeking faults in others.

Another participant said critical thinking had negative connotations for Thai students who might feel it signified disrespect, distrustfulness, betrayal, or even sin. He therefore suggested using '*kan khit yang mi sati*' (thinking mindfully and metacognitively) instead, claiming that this conveyed a more positive meaning among Thais. *Sati* is a Buddhist concept generally valued by Thais as a path leading to peace and happiness. His proposed term again shows the prevalent influence of Buddhism.

Consistent with the finding in Buphate and Esteban (2018), three participants in the current study said that they themselves lacked knowledge of critical thinking and its pedagogies. They raised three issues that account for this lack: the intangibility of the term 'critical thinking' that made it hard to teach and evaluate in class, inadequate practices in their previous education, and insufficient supports from their institutions for teaching development. One of them stated that instead of making critical thinking a compulsory aim in the curriculum, education authorities should focus on ensuring teachers' readiness and development for teaching it. He believed forcing teachers who lacked knowledge of critical thinking to teach it to students was fruitless. The students, he maintained, would learn nothing or even be mistaught. The promotion of in-service teacher development and the requirement for critical thinking instruction in all educational programmes is actually underlined and reinforced in the 1999 National Education Act (Office of the National Education Commission 2002). However, the participants' views raise two topics of concern: the mismatch between the theory and practice of the Act and the lack of professional support to teachers in certain institutions. Nevertheless, it does not mean the promotion of critical thinking by the 1999 National Education Act was a complete failure. Although eight participants thought the unsuccessful practice of critical thinking was the result of teachers' insufficient understanding of the concept of critical thinking, all participants

nevertheless recognised the importance of the thinking. Their recognition of this shows that the Act was, to some extent, successful.

Beliefs: Ten participants iterated Borg's (2003) notion that teachers' beliefs guide the way they teach. They said critical thinking instruction in Thai education was not successful because Thai teachers believed it was time-consuming, energy-wasting, and so cognitively demanding that students might not be ready to learn. With reference to the latter point, one participant stated that only a few students in class were ready to learn critical thinking. He maintained that if teachers insisted on teaching it, it would not cater for the needs of the majority but only for those of the minority. Zohar et al. (2001) similarly mentioned teachers' beliefs on this matter. Using semi-structured interviews, Zohar et al. investigated how 40 Israeli secondary school teachers perceived the use of high-critical thinking activities in their classes and found that almost half of the teachers believed critical thinking was exclusive to high-achieving students. As a result, it can be said that, when confronted with time constraints and then unable to tailor their teaching to each student's need but only the needs of most students, some teachers may decide to assign less cognitively demanding thinking activities to all students for the sake of the majority. Nevertheless, there are also researchers who believe that critical thinking can be taught to everyone, irrespective of their intellectual capabilities (e.g., Halpern 1998; Marin and Halpern 2011; Paul and Elder 2002).

In addition, five participants claimed that teachers' hesitations in teaching critical thinking were because of their beliefs of how to teach which they based mainly on the Thai teacher-centredness approach. Interestingly, one participant said that he was not certain whether critical thinking was better than traditional teaching:

We are the products of Thai traditional upbringing and education. We are familiar with and comfortable to teach students the way we have been taught. Although critical thinking is good, I have no idea how traditional teaching can be bad since the good life I have now is a clear acknowledgement of what Thai traditional education gave me. (Narin)

Narin's account suggests that teachers' experiences as learners affected their teaching beliefs, and hence decisions made on their critical thinking instruction. The implication is consistent with that of Holt-Reynolds's (1992) study that revealed that pre-service teachers' experience as learners had a powerful effect on their beliefs.

Student

The student-related factors the participants mentioned fell into the following four categories: motivation, intelligence, peer pressure, and language competence.

Motivation: Four participants referred to two types of motivation that affected students' critical thinking development: motivation for learning in a particular course and motivation for learning critical thinking. The role of students' motivation in promoting their critical thinking abilities was similarly emphasised by a number of researchers. For example, Facione (2000) contends that motivation results in essential critical thinking dispositions. Turner (1995) claims that several studies pointed out a reciprocal relationship between motivation and higher-order thinking skills: the former promotes the latter and vice-versa.

Nevertheless, one participant expressed a different idea, saying that challenging activities, such as critical thinking activities, might not be workable for many Thai students who were accustomed to conventional classroom activities. Challenging activities, she maintained, might demotivate some Thai students instead. The justification is perhaps because Thai culture possesses a mid-level of uncertainty avoidance (Hofstede 1980). Most Thai students' risk aversion can also be explained by their early socialisation. They are encouraged to avoid making mistakes and have only good behaviour, good words, and good thinking. Although there is a Thai proverb '*phit pen kru*' meaning mistakes are teachers, this does not seem to teach Thais to take risks and learn. Rather, it seems to teach them to learn from the mistakes and be cautious not to make any of them again. This may imply that critical thinking that involves risk-taking in making mistakes probably makes some Thai students demotivated to learn or even stressed in learning it.

Another participant asserted that students' motivation could be enhanced through instruction and with teachers' support. Her notion implies a need for classroom socialisation in Thai contexts in which classrooms are expected to provide students with a new concept of intellectual risk-taking in thinking critically with teachers' scaffolded assistance coming into play.

Intelligence: Five participants associated intelligence with critical thinking. They believed high-achieving students did well in critical thinking. Their notions appear

inconsistent with the findings found in Stanovich and West (2008) which revealed that students' intelligence did not predict whether they would be critical thinkers.

Two participants said it was not intelligence but expertise that matters. One of them gave an example of uneducated Thai rice farmers who used Thai herbs to biologically control insects on their farms. He saw their critical thinking abilities as deriving from their familiarity with and expertise in their work. His notion may indicate that intelligence which is measured in formal education might not always be a facilitative indicator of criticality. Brookfield (2012) likewise claims that many intellectual students are still poor thinkers. The participant's viewpoint that the farmers' familiarity and expertise facilitated their critical thinking reflects the important role of background knowledge in critical thinking.

Peer Pressure: Two participants mentioned peer pressure factor. One of them said the majority of her students were against those trying to be critical thinkers in class:

In one of my classes, there was a student expressing her idea different from me. Then her classmates looked at one another making mocking faces. I noticed her turning pale and looking embarrassed. Although I tried to tackle the situation by praising her idea, other students did not seem to get it. However, there are also some students that like to express their opinions without caring about other classmates' responses. These students do not seem to care even when being laughed at. But it appears that these students seem to be excluded when working in groups. (Ampai)

Ampai's account indicates that critical thinking does not belong to the mainstream culture, and students sometimes use peer pressure as a tool to correct cultural deviance. Nevertheless, another participant connected peer pressure with a predatory nature of some humans:

*It reminded me of a theme in *Of Mice and Men*, a book assigned to students as extensive reading. The theme is the predatory nature of human existence. Humans like to hurt others who are weaker. That is why we have to be strong. Critical thinkers in the Thai context should also be strong; otherwise, their critical thinking expression will be a tool for others to hurt them. (Ratri)*

There can be two implications in her account. First, peer pressure as a result of critical thinking can be triggered by human nature. Second, critical thinkers should have a strong mind that is not subject to the world.

Language Competence: Eight participants referred to the factor of Thai/English language competence. One participant described how Thai language competence affected critical thinking:

If my students are good at Thai, they are likely to have a good thinking system too. Their language competence will help them reason, organise their ideas, process information, and present it systematically. Here, I mention Thai instead of English because I believe the first language has played a great role in their thinking development since they were born. They have been using it to interact with others. Such interaction shapes the way they think. And the ability to sequence their thought and rationale is transferable from Thai to English. (Prani)

Another participant explained the association between students' English language competence and their critical thinking abilities:

Students' English competence means something. It means they apply various knowledge resources and skills to achieve linguistic knowledge, communication skills, and thinking skills. It means they spend reasonable time in being exposed to the learning process, resulting in their reasonable viewpoints, background knowledge, and supportive learning dispositions; all of which are good sources for critical thinking. (Ratri)

Their views are in accordance with Kabilan (2000) who reviewed the literature on language learning and critical thinking and found a positive correlation between language competence and critical thinking. There are also other authorities endorsing such a view, such as Browne and Keeley (2007), Facione (1991) and Olson (1984).

One participant noted that English could be a barrier for Thai EFL students when dealing with critical thinking activities in their English classes. Because of such barrier, she maintained, the students could not convey their original ideas resulting in their seeming lack of critical thinking. A possible explanation for this may be cognitive load theory (Paas et al. 2003) which predicts that less effective learning will occur when students learn two or more things at the same time.

Another participant argued that English proficiency was not a problem for criticality practice in Thai EFL classrooms because most teachers used Thai when teaching.

5.3.2 Socialisation

All participants agreed that Thai socialisation shaped with Thai culture and Thai Buddhism influenced Thai students’ critical thinking. They mentioned that Thai culture and Thai Buddhism could be both facilitative and inhibitory factors, as shown in Figure 7.

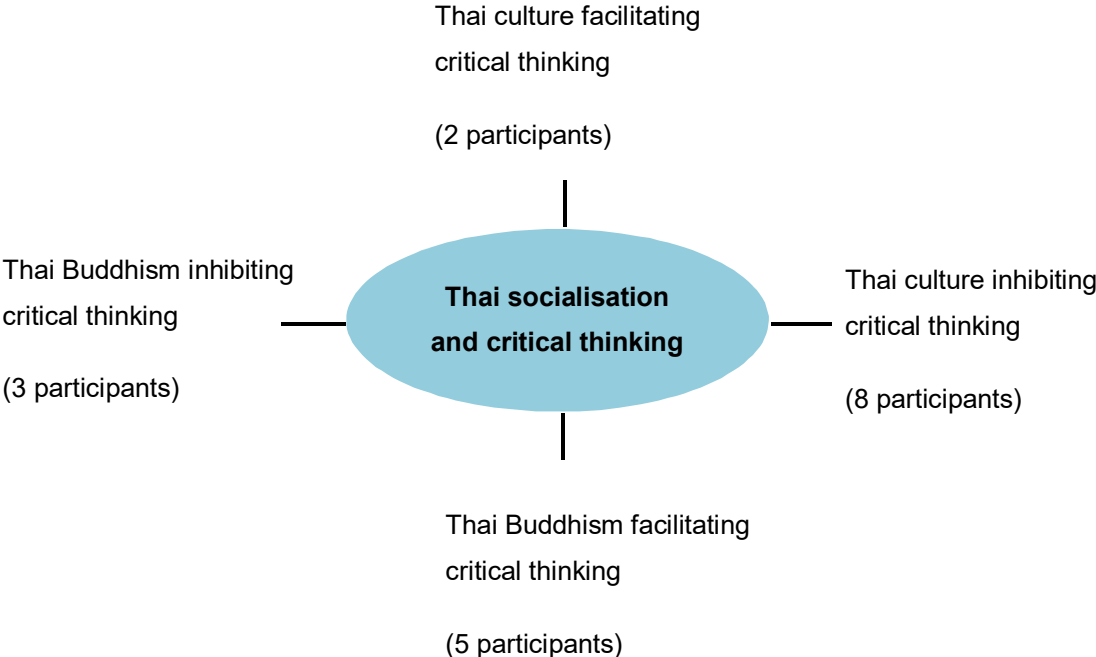


Figure 7: Thai socialisation and critical thinking

Thai Culture Facilitating Critical Thinking

Two participants perceived three Thai cultural aspects as promoting critical thinking development in Thai students. The aspects were being good listeners, being considerate of others, and having respects for adults and authorities.

One participant said Thai students were good listeners. She believed this quality led to open-mindedness, which was important for critical thinkers. She maintained that being good listeners was a mark of being well-brought up from family. This shows a Thai cultural virtue of listening and family responsibility in instilling the virtue in their children. However, good listeners in the Thai context are usually construed as obedient

and submissive listeners. Paul and Elder (2002) similarly point out that students in general do not engage in listening actively and critically. However, the participant's notion is interesting and should suggest how Thai teachers can make use of this cultural strength to benefit their students' critical thinking development.

Another participant raised the Thai virtue of being considerate of others:

Considerate students will not be self-centred. They care about others' feelings and ideas. They will be more open and looking at things from others' perspectives.
(Ampai)

Her view is consistent with Paul and Elder's (2002) notion of intellectual empathy. Nevertheless, being considerate or '*krengchai*' in Thai contexts is likely to indicate conformity rather than honest and direct expressions of ideas. Therefore, this participant's view on '*krengchai*' as facilitating critical thinking perhaps suggests another angle for viewing this Thai cultural virtue in the realm of critical thinking.

Regarding respects for adults and authorities, while other participants considered it as an inhibitor, one participant saw its merit. She said it kept students on track and prevented them from getting lost in life. In classrooms, she maintained, students respecting teachers were likely to be open to the teachers' critical thinking instruction. Despite recognising the merits of respecting adults and authorities, this participant also suggested critical respect. Her idea is in agreement with those of Brookfield (2012) who claims that humans are not critical by nature and can sometimes be a bad influence on others and suggest dealing with them and their products in a critical manner.

Thai Culture Inhibiting Critical Thinking

Eight participants mentioned some Thai cultural aspects they deemed to be impeding critical thinking. Their ideas fell into two Thai cultural categories, namely, authoritarian hierarchy and motivation for being different.

Authoritarian Hierarchy: Eight participants said that a sense of hierarchy in Thai society prevented students from fully engaging in critical thinking. The hierarchy, they maintained, created social values such as obedience, silence, and respects for authorities. They described authorities in the Thai context as benefactors (such as: parents, teachers, relatives) or someone older, richer, more powerful, more educated, or

more influential. They claimed that the social values influenced all social units from the family unit to the national unit. Their notions on Thai hierarchy impeding Thais' critical thinking accord with those of Kapur-Fic (1998).

One participant said families were responsible to instill the values in their children:

Thai families are expected to foster Thai social values in their children. If the children behave otherwise, people will not blame them but their families. Very often, we hear the question 'Didn't your parents ever teach you not to do that?'. (Ampai)

Her notion indicates that Thai culture expects families to shoulder the role of value orientation, and children are expected to behave according to their parents' wishes (Kapur-Fic 1998).

Another participant said that arguing with people older was considered to be inappropriate in Thai culture as it signifies disrespect, humiliation or poor manners. She added that this lessened Thai people's confidence:

We are taught since we were young to be obedient. Traditional Thai people equate obedience with goodness. If we do not follow what have been told by our parents or someone older, others will think we are stubborn. We are expected to follow people who are older as they have more experience than us. Sometimes this lessens our confidence. We are not confident because we think we are still young, and there are many experienced people who know better than us. I think this is the reason why most Thai students are shy and not confident about articulating their ideas. This does not happen only with our students but general Thai teachers. At conferences, we rarely see Thai teachers expressing their ideas in public. (Wandi)

Similarly, one participant mentioned a Thai proverb that seems to encapsulate the cultural issue of obedience: '*doen tam phuyai ma mai kat*' which literally means if you walk behind adults, a dog will not bite you. This proverb reflects the virtue of seniority and suggests those younger should follow those older to avoid any problems or harms. However, there are also some Thai proverbs that encourage Thai people's criticality. For example, '*phok hin di kwa phok nun*', which literally means carrying stones is better than carrying cotton wools. It teaches Thais not to be credulous, but instead to be

determined, reasonable, and critical. Another Thai proverb advocating criticality is ‘*ya hai khai ma son ta-pai*’ meaning that we should not let others lead us by the nose.

Thai students have been socialised to adhere to social values both at home and through their surroundings. Two participants mentioned how the government incorporated Thai values in children’s mottos for them to recite and follow. One of them thought that students’ lack of criticality was not their fault, but probably was because of their socialisation process:

We should not say it is the students’ weakness. It is probably true that many Thai students are blindly obedient, but the way they are is because we all make it so. They have grown up with the values and been socialised to follow them. Even we teachers have also been through this process since we were young. We were taught to obey our teachers and try not to argue with them if we would like to succeed in life. (Ithi)

This shows that intellectual conformity (Paul and Elder 2002) seems to be promoted in the Thai context.

Another participant said the mottos were beneficial in that they acted as a shelter protecting students from moral wrongdoings. Nevertheless, she admitted that the mottos were likely to produce good followers rather than good thinkers. Her view accords with Brookfield’s (2012) argument that authorities without goodwill and moral minds can persuade their subordinates to do vicious things. In Buddhism, the Kalama Sutta doctrine similarly guides Buddhists not to believe in anything easily, including their masters or authorities.

Motivation for Being Different: Motivation for being different is important because critical thinking demands one’s dispositions to think otherwise: outside a framework of traditional concepts or ideologies. In this study, four participants said Thai students lack such motivation. Their notions echo those of Hallinger and Kantamara (2000) who claim that Thais in general stick to their familiar and accepted practices. Paul and Elder (2002) also mention this issue, asserting that critical thinking will not occur if people only think within their familiar and accepted angles.

One participant said students thinking differently in class could be perceived in negative ways:

Many teachers and others in general tend to view students who ask many questions and think differently as trolls who usually make themselves problematical. In class, other classmates may look at these students as clowns or those trying to show off or get attentions from others. (Ticha)

In addition, the participants said doing something different from others or precursors could be considered to be a sin according to Buddhism. This perspective represents a clash between promotion of critical thinking and a Buddhist moral issue. Nevertheless, Buddhism is a religion that promotes people's motivation for being different. The history of the Buddha (Kapur-Fic 1998) shows that he himself is an obvious example of those daring to be different, especially in his time when conventional practices had to be strongly adhered to.

One participant said those putting forward different ideas, particularly political ideas were asked to meet government officers for attitude adaptation. Because of this, she maintained, most Thais preferred to follow the mainstream or the authorities to avoid problems. The irony here is that the government strongly channels critical thinking promotion in educational spheres, but their actual practice is mismatched.

Another participant related low motivation for being different to the Thai value called 'sa-bai' which can be translated as 'easy-going', 'never mind', or 'detached' in English:

Thai people in general love sa-bai. They are likely to let things go and avoid conflicts. Many like to deal with anything with 'whatever'. They do not want to turn anything into serious matters. They seem content with what they have. (Narin)

A possible reason for Thais' sa-bai is their flexibility and adjustment orientation (Komin 1990). Another justification may be found in the Thai aphorism 'nai nam mi pla nai na mi khao' which literally means there are abundant fish in the water and rice in the paddy fields, describing Thailand as a land of milk and honey. The geographical background, especially in the past, perhaps resulted in the Thai people of the old days encountering little struggle and thereby having easy-going attitudes to life. Such attitudes may have been passed on to the next generations of Thais, including those of today.

Another participant claimed that low motivation for being different was caused by patronage. She said many Thais took advantage of others to benefit their clique, and this made other Thais frustrated to think or act differently since they realised that no matter how hard they tried, without patronage connections and support, their voices would not be heard. The participant's notion accords with that of Kapur-Fic (1998) who states that in Thailand people's abilities are less important than their social connections with patrons because they are able to use such connections to help them move to a higher status.

Thai Buddhism Facilitating Critical Thinking

Five participants believed some aspects in Buddhism facilitated critical thinking development. They mentioned self-refuge, *sati* (Pali, mindfulness and metacognition), *ariya-sacca* (Pali, the fourfold noble truth), and *Kalama Sutta* (a Buddhist doctrine that encourages Buddhists to enquire and reflect so as to accomplish discernment).

Self-refuge: One participant considered Buddhist self-refuge as a crucial quality of critical thinkers. His view is in accordance with that of Kumaravadivelu (2003) who associates Buddhist self-refuge with critical thinking. In the realm of critical thinking, self-refuge can be associated with self-reliance, a dispositional feature Paul (1990) asserts that it is essential for critical thinkers.

Sati: Three participants said Buddhist *sati* promoted critical thinking. One participant said:

People with sati are aware of their own bias and that of others. If we want to be critical thinkers, we should always practise it. If we let our minds be thoughtless, we tend to be careless, and this prevents us from criticality. (Ampai)

Another participant claimed that critical thinkers applied *sati* in every step of the critical thinking process:

Critical thinkers use it for not believing in anything easily, for diagnosing biased arguments of ourselves and others, and for making a decision whether it is beneficial to express their critical ideas or not. (Narin)

This participant added that critical thinking and *sati* complemented each other. He explained that *sati* encouraged people to have a concentrated mind to observe their

existing thoughts and emotions so as to realise their own bias and separate it from facts. When being used during a critical thinking process, he maintained, *sati* should then be expected to be practised and heightened.

Ariya-sacca: One participant considered *ariya-sacca* as a way assisting people to deal with matters in life critically:

Ariya-sacca enables us to raise such questions as 'What is really the problem?', 'What is its root cause?', and 'How can we solve it?'. This is a logical way of thinking. (Pa-det)

His notion is in line with Payutto's (1993) view that the doctrine offers a method for problem-solving by using a scientific logical analysis.

Kalama Sutta: Two participants stated that *Kalama Sutta* promotes critical thinking. For example, one of them said:

The doctrine teaches us to be prudent and use our internal wisdom to ponder and judge things by ourselves. However, not many Thai students of today have heard of it. I think the doctrine should be brought back into Thai education. (Narin)

From Narin's account, *Kalama Sutta* appears to be relevant to the Buddhist self-refuge, and hence to dispositional self-reliance in critical thinking. Aside from implying critical thinking in Buddhism, Narin's notion also suggests using the doctrine in the current Thai education.

Thai Buddhism Inhibiting Criticality

Three participants mentioned two Buddhist beliefs that they considered impeditive to students' criticality development, namely, they were expressing gratitude to their parents and benefactors, and kammic force.

Expressing Gratitude to Parents and Benefactors: Two participants said Thai students had been instilled with the value of showing gratitude to their parents and benefactors through respect and obedience. They maintained that other behaviour, such as talking back to them or giving different ideas, could be considered as a sin according to Buddhism. Payutto (1997) has the same idea. The participants' idea that conformity to parents is a way of showing gratitude and doing otherwise as a sin may be explained by

the fact that talking back or expressing opposing ideas to them can make them unhappy or suffering from feeling unloved and disrespected. How Thai Buddhists should practise critical thinking, especially in the family context, is therefore an interesting but controversial issue.

Kammic Force: One participant referred to Buddhist kammic force as a hindrance of critical thinking, arguing that many Thais viewed everything as being predestined by *kamma* (Pali, deeds which can be merits or demerits), and hence uncontrollable:

Many believe everything they deserve in this life is the consequence of their deeds in their previous life. Holding this belief, they seem satisfied with what they have, accept what they are faced with, and avoid overthinking things too much. They like to let things be unguided and run their course. Even in an unsatisfying situation, they tend to accept it and do not attempt to change it for the better. (Ithi)

Ithi's notion shows an influence of the psychological function of religion on critical thinking in the Thai context. *Kamma* causing Thai people's lack of critical thinking is similarly mentioned by Adamson (2005).

5.3.3 Media and Technology

Eight participants said media and technology caused three consequences that they considered to influence students' critical thinking. These consequences were social mainstream, learning, and de-learning.

Social Mainstream

Three participants stated that adherence to social mainstream hindered critical thinking of people nowadays. One of them claimed that there is a strong tendency for the young, who have limited life experience, to be deluded by it:

Many young people readily but blindly follow the mainstream. That is why we have a newly coined word 'Ting' for obsessive followers. They share links on their Facebook timeline without considering whether their sources are credible or not. Sometimes they give their opinions about the contents in the links using only emotions and without thinking thoroughly. (Mali)

This participant added that although sharing or expressing false ideas might not be illegal in Thailand, it was obviously immoral:

If what we share or how our ideas are expressed towards others is not based on the truth but on our own satisfaction and causing others' emotional suffering, this creates sin. And according to the kammic cycle, we will be paid back for what we did. We will feel distressed by the retribution. Someday we will unavoidably be treated the way we did to others. (Mali)

This again demonstrates the Buddhist influence on Thai people's thought and how uncritical deeds raise a religious moral issue.

Another participant claimed that not only the young but also their parents could be mainstream slaves. This use of the term 'slave' is interesting. It may indicate that although physical slavery was abolished in Thailand over a hundred years ago, people of the 21st century can be mental slaves because of their lack of criticality. Moreover, the participant's view that students' parents are also addicted to social mainstream seems to suggest that cultivation of critical thinking should be provided to people of all ages.

Interestingly, one of them argued that it was not media and technology, but social media that hindered students' critical thinking:

I cannot really say that technology lessens students' critical thinking. Actually, the era when Thais seemed to have criticality was the time when the country started to embrace the Internet. Back then, most Thais got excited about using it as a learning tool to enter the world of knowledge. But more recently when social media spread, people have been likely to use these to follow the social mainstream. They forward and share information without considering if it is credible or not. They even copy others' sayings without giving credit to them. They completely lose their identity. (Ratri)

Ratri's notion implies that technology itself is not an evil entity, but its inappropriate use is. Moreover, her view that lack of critical thinking could cause identity loss may add a point in the argument for the appropriate teaching of critical thinking in Thai students.

Learning

Four participants perceived media and technology as learning facilitators and learning sources for critical thinking. One of them said:

They can use technology to search for more information to verify the validity and credibility of what they were questioning. (Bancho)

The participants' views are consistent with those of Brookfield (2015) who sees social media as a tool that empowers students, especially introverted students, to actively engage in critical thinking practices. Similarly, Gulek and Demirtas (2005) investigated the effect of participation in a laptop programme on student achievement and revealed that technology applied in teaching increased students' concentration.

De-learning

Two participants claimed that instant accessibility of information and knowledge in media and technology made students expect instant success. Such attitudes, they maintained, lessened students' efforts in learning and thinking. For example, one participant claimed:

When I gave my students assignments, many of them copied from the Internet because they thought it was an easy and quick way to have their work done. Technology makes them prefer instant success. It turns them into the idle: less learning and less thinking. (Narin)

Their notions echo Carlson's (2005) view that millennials who are students in the 21st century lack patience and tend to expect instant results. However, the participants' view that students are learning less appears to contrast with Carlson's contention that although millennial students tend to lack patience, they are smarter, particularly in learning multitasks concurrently through media and technology.

5.4 Summary

The findings concerning the participants' perceptions of critical thinking development in their students revealed the following two major themes: 'Thai EFL university students' critical thinking' and 'Factors affecting critical thinking development in Thai EFL university students'.

The first theme reveals that Thai culture manifests itself in Thai students' critical thinking expressions. That is, the participants believed that many Thai students could think critically but might not express it since they were aware of Thai cultural expectations. A likely implication of this finding can be that critical thinking abilities are universal whereas critical thinking expressions are cultural. This finding reinforces Davidson (1998) who holds that people of all cultures are socialised with critical thinking, but the degree of their critical thinking expression can be influenced by their own cultures.

The second theme involves the three main factors the participants regarded as affecting students' critical thinking development. These factors are education, socialisation, and media and technology.

The educational factors include educational management, pedagogy, teacher, and student. The multidimensional factors indicate that students' critical thinking development needs cooperation from all concerned, namely, education authorities, curriculum planners, teachers, and students themselves. These findings reinforce Kumaravadivelu's (2003) notion that Asian students' lack of critical thinking should not merely be ascribed to Asian culture since other educational factors also play significant roles.

The socialisation factors were grouped into the following four categories: Thai culture facilitating and inhibiting critical thinking and Thai Buddhism facilitating and inhibiting critical thinking. It should be noted that for investigating the socialisation factors, I did not use direct or guided questions to elicit the participants' perceptions of how Thai culture and Thai Buddhism influenced critical thinking. Instead, I used general questions to ask them, such as 'What affects your students' critical thinking development?' and 'Why do you think your students lack critical thinking abilities?', and continued using probes when met with ambiguity or interesting information. Consequently, the ideas about Thai culture and Thai Buddhism were authentic. This echoes Komin's (1990) view that Buddhism influences the minds and characters of Thai people in general, although they may or may not realise it. The socialisation factors identified also indicate that critical thinking is culturally (Atkinson 1997; Fox 1994) and religiously relevant (Adamson 2005).

The media and technology factors identified were regarded by the participants as causing social mainstream, learning, and de-learning; all of which have had an impact on students' critical thinking development. The findings indicate that media and technology can work both ways: used appropriately, they can promote people's critical thinking while used inappropriately they will generate the opposite.

Notably, the findings from the second research question addressed the gaps between the theory and the actual practice of critical thinking promotion, resulting in university teachers' workload tension, teacher-centred assessments, and teachers' lack of understanding of critical thinking and its pedagogies. The participants also offered various learning strategies for Thai students, some of which reflected current situations of critical thinking in Thailand. For example, the strategy of dealing with negative reactions students may meet when expressing their critical ideas indicates that critical thinking may not be an accepted practice in the Thai mainstream. In addition, the participants mentioned some aspects of Thai culture and Thai Buddhism they felt supported critical thinking development. This may suggest that critical thinking in Thailand can be developed by applying a relativist perspective: using such aspects to enhance the development of critical thinking in Thai students.

Another interesting point to note is that in the current study, the participants admitted that unsuccessful development of critical thinking in students was also caused by teachers' own lack of understanding of critical thinking and its pedagogy. Given that in the Thai society where teachers are revered as knowing best and viewed as a "righteous guru" (Thamraksa 2003, p. 62), it was rather surprising that the participants who were Thai teachers admitted that they did not know best. Such honesty and intellectual courage should be marked. The finding of the issue should be a message that Thai education policy makers should take into account and act upon.

The findings discussed in the preceding chapter were on the participants' conceptions of critical thinking, and the findings discussed in the present chapter were on their perceptions of critical thinking development in their students. The next chapter will report and discuss the findings on how the participants' conceptions and perceptions relate to their pedagogic practices.

CHAPTER 6: CRITICAL THINKING PEDAGOGIC PRACTICES OF THAI EFL UNIVERSITY TEACHERS

6.1 Introduction

This chapter presents and discusses the findings for the third research question on the extent to which Thai EFL university teachers' conceptions of critical thinking and their perceptions of critical thinking development in their students relate to their pedagogic practices. The findings were collected by using a non-participant classroom observation. Each participant was observed once in class. Because of this, it could be possible that a longitudinal research repeating this study using repeated observations would generate different results. Moreover, it should be reiterated that the observational data was etic data: what I saw and recorded from my observations. In this chapter, before the relationships between Thai EFL university teachers' critical thinking cognitions and their pedagogic practices, which were the findings for the third research question, would be discussed, classroom characteristics will be first described so as to give my readers a clear picture of the classes being observed.

6.2 Classroom Characteristics

The classroom characteristics in the observed classes will be presented in the following five topics: classroom layout, teaching and learning styles, peer support, students' classroom behaviour, and classroom activities.

6.2.1 Classroom Layout

I first sketched a map of the classroom seating arrangement of each observed class. Although the classroom details varied across classes, all shared the same format, namely, a high-density seating arrangement facing the whiteboard. Such a seating arrangement might be determined by the large class size, especially where limited space needs to be efficiently managed to accommodate all students.

Despite accommodation being adequate, the seating arrangement in the observed classes nevertheless had some drawbacks. It was difficult for the teachers to walk to their students individually, particularly if they were back-row students. Therefore, most teacher-student interactions in the classes were in the form of whole class participation.

When doing group work activities, it was sometimes rather awkward for the students to sit together in their own groups. It was also difficult for the teachers to walk around the classroom to monitor the progress of each group. If the teachers insisted on doing this, the students would help clear a way for the teachers to walk through. But this caused noise distraction and disturbance to other groups of students who were trying to concentrate on their work.

This seating arrangement seemed to be conducive to teacher-dependency; hence the teacher-centred approach. This shows that the seating arrangement resulting from a large class size affect the teachers' teaching approach. It also shows that educational factors are interrelated, and that one educational problem, if not sorted out, is therefore likely to generate other problems.

6.2.2 Teaching and Learning Styles

The teaching approach largely found in the classes was teacher-centred. Thai was mostly used as the instructional medium rather than English. When using English, the teachers usually followed it with the Thai translation. The use of Thai translation may imply the following three issues: the teachers' lack of confidence about the students' English competency, their lack of confidence about their own English communication skills, or even their kindness in helping the students better understand their communicated messages. The last implication may associate with the role of Thai teachers as Thai students' second parents (see Teachers' Roles in Section 2.73).

In class, the teachers gave students minimal reinforcements and feedback. This may be due to time pressure. Under such pressure, some teachers gave immediate answers when they asked students referential questions which are acknowledged as being effective in enhancing higher-order thinking skills (Nunan 1987). However, display questions in the observed classes also appeared to be useful in helping the teachers control the contents to be taught (Suter 2001) and to finish them within the limited time. Display questions are concerned with surface learning and referential questions with deep learning. Given that critical thinking is recognised as deep learning in the literature, it could then be possible to conclude that this thinking was not largely promoted in the classes.

When taking notes, most students ask their teachers whether what they were teaching would be tested in the exams. If so, the students appeared to note it down attentively. If

not, very few of them did it. Their extrinsic motivation for learning which is examination-driven appears consistent with Komin's (1990) statement that Thai people in general learn not for the sake of learning, but rather for "climbing up the social ladder" (p. 226). Interestingly, the examination-driven value is also adhered to by Japanese students. McVeigh (2002) revealed that most Japanese students study for the sake of "filling the exam sheets, filling out forms and proving to the authorities that one has persevered through the ordeal of ingesting large amounts of data" (p. 96).

Possibly because of time constraints and large class sizes, the teachers usually posed questions to the whole class. When the teachers asked for volunteers to answer the questions, not many students responded. Instead, most of them would avoid eye contacts with the teachers, thus indicating an indirect sign of refusal. Few of the students came up with ideas to challenge their teachers. When given opportunities to ask questions, the students usually did so in terms of requesting more explanations about what they did not understand.

6.2.3 Peer Support

One striking feature of the observed classes was peer support. In the classes, when some students did not seem to understand the lectures, they asked their classmates nearby. When the teachers noticed this and asked if they needed any more explanations, the students simply gave a polite refusal and pretended that they had understood it. When the teachers nominated individual students to answer their questions, other classmates usually helped give the answers to the nominated students by whispering, miming or giving quiet hints. The peers did this even if sometimes they were not asked for help. At the end of the classes, almost all of the teachers invited questions from the students with the majority of them further insisting that questions could also be asked after class or outside the classroom. It appeared that right after the class ended, some students '*pai pen phuean*' (accompanying their friends) approached the teachers to ask them some questions. The peer support found indicates that students appear comfortable to learn when having their friends around. The fact that the students felt more comfortable asking friends instead of their teachers when faced with unclear information may imply a high power distance in class, resulting in few interactions between teachers and students taking place. Such a power distance was also demonstrated when some

students, accompanied by their friends, approached their teachers after class. The act of accompanying may be a way of lessening the distance between them and their teachers.

6.2.4 Students' Classroom Behaviour

In general, the majority of the students in all of the observed classes were well-behaved. This was probably because it was only a one-time observation, and the teachers might tell them in advance about my presence. Nevertheless, some disruptive classroom behaviour was also found. This includes late attendance, doing homework while the teachers were lecturing, using cellphones under their tables, and chatting with their friends. Although this behaviour was not directly linked to the students' critical thinking development, it can still create a disconnection between the teachers and them, and thereby indirectly affect it. In the classes, most teachers seemed to ignore such behaviour. This is possibly because they might view it as being only trivial and not disturbing others and their teaching, or they were perhaps under time pressure and did not want to waste their time disciplining the disruptive students.

Interestingly, there were two forms of Thai cultural classroom behaviour engaged in by the students, namely, '*wai*' and silence. In Thailand, *wai* is a Thai traditional greeting, showing respect for others with the gesture of putting the two palms together and slightly bowing one's head. When Thai students perform *wai* to Thai teachers, in particular, the tips of the two thumbs touch the nose. Interestingly, in the English classes where the students were expected to practise English culture of greeting by using English expressions, almost all of the students in the classes performed *wai* to the teachers after the English greetings. Moreover, they also performed *wai* after submitting their work to the teachers or on receiving anything from them. The performance of *wai* denotes the students' Thai cultural identity. Moreover, as *wai* is a way to show respect for someone older in Thai society, students' *wai* may also reflect their cultural adherence to seniority as well as to the power distance in class. Concerning silence, most students silently listened to their teachers with few interruptions. Silence was also expected when the students did group work activities. In some classes, however, although the students were encouraged to provide opinions in groups, sometimes they were admonished by the teachers for being noisy. The students were expected to talk quietly and to stick to the topics under discussion.

6.2.5 Classroom Activities

Lecturing was the main activity in the observed classes. In addition to the lecture, there were three other types of classroom activities, namely, individual work, pair work, and group work. Individual work was frequently in the form of giving textbook assignments to the students. The teachers then presented the answers to them either by writing on the board or using the PowerPoint followed by short discussions.

Pair/group work was usually done after the lecture had been given. Before having the students do these activities, the teachers explained to them what they had to do and gave them some examples. During pair/group work activities, the students used English, Thai, and the Thai southern dialect for communication. The use of Thai and the Thai southern dialect shows that in an English language class, students' local identity cannot be separated from their learning of English. Some students who were reserved and silent when being in the whole class seemed to dominate their peers when working in their groups. In other words, these students seemed introverted in front of their teachers, but extroverted with their group members. They took on the roles of group leaders, explaining and expressing ideas. In contrast, some students who were extroverted in the whole class appeared to be silent when doing group work activities. Still, this was not always the case as there were also a number of silent students who remained silent and talkative students who still kept talking in their groups. This confirms the participants' notion that students' actual abilities should not be judged by their observed behaviour. When the students had finished their pair/group work, they submitted it to their teachers. In some classes, the students were asked to present their pair/group work in front of the class, followed by feedback from their classmates and their teachers. After the presentation, not many of the students in the audience raised questions for the group presenters. Almost all of the questions posed and the feedback given were from the teachers themselves.

The fifteen observed classes included several courses, such as a general English course, a translation course, a speaking course, a grammar course, a writing course, a children's literature course, etc. Hence, the classroom activities across the classes varied according to the nature of each particular course. The following are examples of the various activities and their associations with the development of cognitive abilities based on

Bloom et al.'s (1956) taxonomy of the cognitive domain (see the explanation of this taxonomy in Section 2.4.1).

Identifying the Meanings of English Terms

All of the observed classes did this type of activity. For example, Extract 1 below was taken from Mali's writing class.

Extract 1

T: It's on page 75. Persuasive...what does it mean?

Ss: *kan nomnao chai* [Persuasive]

T: Yes, *kan nomnao chai*. Is it a verb?

Ss: (Silence)

T: It's not a verb. It's an adjective. *man pen adjective na* [It is an adjective.]

From this extract, Mali asked her students to identify the meaning of the term 'persuasive' in their writing course books. The students responded to her in Thai. They were unresponsive when having no idea about the answer. As can be seen, Mali quite promptly gave the answer to them, followed by its Thai translation. Mali explained in a follow-up discussion that despite realising the benefits of teaching students to think, she needed to feed them with knowledge, instead of allowing them to think and discover the knowledge themselves, because of their poor English language proficiency. Two implications arise here. First, teachers' confidence about students' English language ability can determine their decision-making concerning their pedagogic approach. Second, teachers' low level of confidence about their students' English language ability can be an impeding factor for the teaching of critical thinking, regardless of their perception of the benefits of this kind of thinking.

Extract 2, taken from Tawan's speaking class, is similar to Extract 1 in terms of the way the teachers ask their students to identify the meanings of English terms.

Extract 2

T: He is pessimistic. Yes, he is. What does pessimistic mean?

Ss: (Silence)

T: Can you guess? *dao du si* [Please guess.]

Ss: (Silence)

T: It means not optimistic. It means we look at things in negative ways.

From this extract, Tawan had his students read a conversation in their worksheet and elicited from them the meaning of the term ‘pessimistic’. Similar to Mali (in Extract 1), Tawan seemed intolerant of ambiguity. Jumping to the answer, he did not give his students hints or encourage them to try to guess the meaning of the word. Silence here could then be interpreted as the students assuming that their teacher would finally give answers, and that they were not truly expected to respond. As a consequence of this, there may be a tendency for the students to opt out and maintain this learning style in other classes. It also seems to reinforce students’ notion that their teachers know best, therefore reinforcing teacher-centredness. Nevertheless, in a follow-up discussion, he mentioned his tension at having to rush through his teaching as there were only a few weeks left before the midterm exam. This possibly explained why he used the method of teaching as demonstrated in the extract above.

Nevertheless, Extract 3, taken from Narin’s vocabulary class, displays a different way in which the teacher asked his students to do this type of activity.

Extract 3

T: Don’t open your dictionary. Just see the context around. So, longing is...?

Ss: (Silence)

T: Why can’t you remember? I taught you this in the last class. *luem mod laew* [You have already forgotten it.] *khuen khru mod laew mai* [Do you return all of what you learned to me?]

Ss: (Laughing)

S: *khwam cham san kha a-chan* [I have a short memory, teacher.]

T: Do you have a goldfish memory?

Ss: (Laughing)

S: *plae wa tong kan mai kha a-chan* [Does it mean wanting, teacher?]

T: Yes. *nai long taeng pra-yok ma si* [Can you form sentences using this word?]

S: *phuak rao longing thi cha mi khwam suk* [We have a longing for happiness.]

T: English please, OK?

Ss: (Silence)

T: Just try. You can try. Don't worry. Just try.

S: I longing happiness.

T: longing *pen* noun *rue pen* verb *na* [Is longing a noun or a verb?]

Ss: Adjective? Noun? Verb?

T: OK, look at this sentence.

Teacher wrote 'We all have a longing for love.' on the board.

T: OK, so what part of speech? *du si wa man tham na thi a-rai* [Consider its function.]

Ss: Adjective? Noun?

T: *yu lang* article *a tong pen* noun *si* [It follows the article 'a', so it should be a noun] OK, everyone *tang ma khon la prayok* [Everyone, please form your own sentence.]

From this extract, instead of immediately telling the meaning of the term 'longing', Narin asked his students to use contexts to guess it. Moreover, the extract shows that Narin reacted to his students' silence using his sense of humour, joking with them by saying 'Do you return all of what you learnt to me?' and 'Do you have a goldfish memory?'. My fieldnotes indicate that this created a relaxed classroom atmosphere. In spite of the many Thai interactions in his class, Narin still nevertheless encouraged his students to use English (i.e., English please, OK? Just try. You can try. Don't worry. Just try.).

From these examples, the teachers' questions were display questions that seemed to assist them to control their lessons to be taught (Suter 2001). Such questions required the students' ability to recall their knowledge about English vocabulary and therefore promoted the students' cognition at a knowledge level according to Bloom et al.'s (1956) taxonomy of the cognitive domain.

Reading

In reading activities, the students were asked to read texts, summarise what they know from the texts, identify the main ideas and supporting details, and sometimes identify the authors' purposes. In some classes, the reading activities ended with a whole class discussion to elicit possible answers. Examples of the activities are below.

Extract 4

T: Can you summarise it for me?

Ss: (Silence)

T: Do you know 'summarise'? What does it mean? Do you know its meaning?

Ss: *sa-rup kha/khrap* [Summarise]

T: Yes, tell me about the story in short. *sa-rup ruang ma si khue a-arai* [Please summarise this story.]

S: Junk food not good.

T: Yes, junk food is not good.

S: In American they like junk food.

S: Junk food in America.

S: America people eat junk food.

T: You mean many people in America or many American people like to eat junk food?

Ss: Yes

T: Is it a good eating habit?

Ss: No

T: Why not?

S: Junk food have many calories can be sick.

T: Yes, eating too many calories per day can make us sick. What kinds of sickness can we get? Think about them and write them down in your paper. I will give you 5 minutes. Write them in English, OK?

Extract 4 was taken from Kamlai's reading class. From this extract, Kamlai asked her students to summarise a reading text. She sometimes corrected her students' grammatical mistakes by saying the correct forms of grammar, rather than telling the students directly that they were making mistakes. Such a teacher correcting her students' responses has two interesting implications. First, she was listening attentively to their utterances. Second, as a teacher, in addition to the emphasis on learning contents, she also took into account the accuracy of the language. According to my fieldnotes, her grammatical correction did not seem to hamper the students' confidence in interacting with her. She did it naturally with her smiles. This further implies that teachers' smiles could play a role in creating friendly classroom atmospheres and

vibrant classroom interactions, and that in such atmospheres there is a tendency for students' language accuracy and fluency to be developed in tandem. In a follow-up discussion, she herself addressed the necessity of correcting her students' grammatical mistakes, believing that it was an opportunity for them to notice their own mistakes, the opportunity which they might only be able to have in their classroom. Interestingly, from this example, although the question 'What kinds of sickness can we get?' appeared to be a display question, it, to some extent, encouraged the students to think for themselves. Although Nunan (1987) postulates that referential questions can trigger students' higher-order thinking skills, such a finding suggests that display questions that are usually assumed to be ones that seek answers already known by teachers could also trigger students' own thinking.

Extract 5, taken from Bancha's reading class, shows how he asked his students to identify the writer's intention implied in a reading text.

Extract 5

T: What is the writer's intention?

Ss: (Silence)

T: What is her goal for writing this?

Ss: (Silence)

T: What does she want to tell us? Do you know that?

Ss: (Silence)

T: So, she thinks where we should seek happiness?

S: In myself

T: Yes, her intention...what she wants to tell us is that we should seek happiness within and it does not depend on the things we have.

From this extract, he posed the question 'What is the writer's intention?' to his students. When getting no response from them, he rephrased the question to 'What is her goal for writing this?' and 'What does she want to tell us?' to help them. According to my fieldnotes, not only did Bancha's rephrasing strategy simplify the question and aid his students' understanding, but it also seemed to be a way to encourage them to speak up. In a follow-up discussion, he said that in EFL classes, teachers needed to elaborate, explain, and make sure that their students understand the contents delivered. He

maintained that students needed adequate inputs before being able to produce the language, and so it was sensible to have more teacher-talking-time than student-talking-time. Two implications can be drawn from this. First, teacher talking is essential in such classes. Second, there is a need for teachers to seek the equilibrium between teacher-talking-time and student-talking-time, which will most benefit students in terms of their learning and the development of their thinking.

All in all, the reading activities done in these observed classes appeared to promote the students' cognition at knowledge, comprehension, and analysis levels, according to Bloom et al.'s (1956) taxonomy of the cognitive domain. That is to say, at the knowledge level, the students needed to recall their knowledge about English vocabulary when reading. At the comprehension level, they needed to summarise what they knew about the reading texts, identify the main ideas and supporting details, and identify the authors' purposes. At the analysis level, they needed to find evidence of the authors' purposes.

Translating Sentences or Texts

This type of activity was found not only in a translation class but also in other classes. The students were assigned to translate sentences or texts either individually or in groups, sometimes followed by a whole class discussion. For example, in Extract 6, taken from Pa-det's reading class, he asked his students to translate a sentence in a reading text.

Extract 6

T: What is it? The major roads were flooded by downpours last week. What is it? *plae dai wa a-arai* [How can we translate this sentence?]

Ss: (Silence)

T: Anyone? Please.

S: downpours *khue a-rai khrap* [What does downpours mean?]

T: Anyone knows? You know what flood means? Right?

Ss: Yes

T: If you know what flood means, you can guess what downpours mean. *long thai du si* [Please guess.]

Ss: *fon tok kha/khrap* [Raining]

T: OK. Raining. It means a lot of raining. OK, so what does the sentence mean?
Translate it. *plae ma* [Translate it.]

Pa-det explained in a follow-up discussion that, in addition to teaching his students reading strategies, he sometimes asked them to translate some sentences taken from reading texts. He claimed that it assisted them in terms of developing their reading comprehension and translation skills.

Another example is Extract 7 which was taken from Dara's translation class. From this extract, Dara asked her students to translate an English sentence into Thai.

Extract 7

T: *plae wa a-rai* [How can we translate it?]

S: *nakrian tuk khon thong sai uniform* [All students are requested to wear uniforms.]

T: *chai tae yang mai dai plae university na* [That's right. But you have not translated the word 'university' yet.]

Ss: *nakrian tuk khon thong sai khueng tangkhai tam rabiab mahawitayalai* [All students are requested to wear university uniforms.]

T: University uniforms. University functions as ...?

Ss: Adjective.

T: Yes, it is a noun but functions as an adjective. *waela ti rao plae roa plae chak lang* [When we translate it, we have to translate backwards.]

As can be seen, she taught them not only translation strategies but also grammatical rules. She said in a follow-up discussion that in such a class, she also had to elicit grammatical knowledge from her students, and their translation abilities depended vastly on their grammatical knowledge.

In these activities, the students' cognitions seemed to be promoted in terms of their knowledge level (recalling knowledge about vocabulary) and their comprehension level (translating sentences and texts that are intelligible to them), according to Bloom et al.'s (1956) taxonomy of the cognitive domain.

Writing Paragraphs or Essays

Writing activities were done in three classes. Prior to having students write their assignments, the teachers elaborated the main writing structure including the

introduction, the body, and the conclusion. This type of activity was then assigned to students as homework. However, in class the teachers elicited some ideas from the students on the topics to be written about. The extracts from the three classes are as follows.

Extract 8

T: Do you know how technology can affect your life?

S: Better life.

T: Yes. How better? Anyone?

S: We can go anywhere we want.

T: Good. What about you, (the name of one student)?

S: I can call people who live so far.

T: Talking with those living so far?

S: Such as phoning them.

T: That's right. Do you think it has only positive effects?

Ss: (Silence)

T: Yes or no?

Ss: No

T: If no, any problems from the technology? Any negative results from the technology? *phon sia la mi a-rai bang* [What are the negative results caused by technology?]

Ss: (Silence)

T: You can speak Thai.

S: *tam hai khon khi-kiat kha* [It makes people idle.]

T: Right. Why do you think so? *tam mai khit bap nan* [Why do you think so?]

S: *khon sa-bai mak kheun kha* [People's life is more convenient.]

Extract 8 was taken from Ratri's writing class. The extract displays Ratri's attempt to elicit ideas from her students on the writing topic 'How does technology influence your life?'. From this extract, Ratri asked further questions, building upon the students' responses. Based on my fieldnotes, this class stimulated the students' thinking as they needed to work on understanding the teacher's messages conveyed and the questions

raised by their teacher and come up with some ideas to interact with her. In a follow-up discussion, she claimed that if time sufficed, in some writing classes, she would also ask her students to work in groups, brainstorming their ideas on the topic to be written. This activity, she maintained, gave them an opportunity to express and justify their ideas. She said that the discussions would be particularly meaningful when they generated opposing ideas, challenged one another, and established new schemata. Through schemata confirming and changing, she maintained, the students' critical thinking development was encouraged and enhanced. She added that her students were also allowed to use Thai to articulate their ideas and therefore increase reciprocal interactions. To her, it seems that the use of EFL students' mother tongue plays a vital role in developing her students' critical thinking.

In another writing class taught by Ithi, he and his students talked about the topic 'What did you do last weekend?', as shown in Extract 9.

Extract 9

T: Last weekend you slept all day?

S: *non mai lap ma lai khuen laew kha a-chan* [I have not been able to sleep well for many nights.]

T: What happened to you?

S: Stressed many stories

T: Do you mean you feel stressed from many things? Yes, it can be a symptom of stress. Everyone, can you tell me how we can reduce our stress?

Ss: (Silence)

T: What can we do to feel relaxed, less stressed?

S: Exercise.

T: Good. Exercising is good. Why does exercising help? How can it be helpful?

S: Because we tired and we forget to stress.

T: Anyone else?

S: Because umm... *lang san* adrenaline *khrap* [Adrenaline release]

T: Adrenaline or endorphins I am not sure. *long pert ha dusi nai mue thue na* [Can you look for information on this on your mobile phones?]

This extract shows that in the discussion over the topic to be written about, Ithi asked further questions, based on his students' responses, to activate their thinking. When he was not sure about the information a student had given in the discussion, he asked them to check it on the Internet on their mobile phones. This implies that in some moments in class, both teachers and students are in a mutual process of learning together. In a follow-up discussion, he claimed that the discussion on the topic prior to writing about it was crucial as it helped them think critically and figure out supporting ideas for their writing. It was also a way, he maintained, for him to see their various subjective preferences, and therefore come to know and understand them better. This suggests another interesting benefit of developing students' critical thinking in the classroom, a situation from which both teachers and students can gain.

In Ampai's writing class, as demonstrated in Extract 10, she elicited from her students some benefits of wearing uniforms, before assigning them to write on the topic 'Why should we or why should we not wear uniforms?'

Extract 10

T: *teenee ko list wa mee kho di yangrai* [You can then make a list of its advantages.] *mee mai* [Are there any benefits?]

S: *prayat walae krap a-chan* [It can save time.]

T: OK. Saving time. Time saving.

S: Unity

S: Save money.

S: *pen suan nueng khong mahalai kha* [Being part of the university]

T: Yes. Now, use mind mapping to link your ideas before writing.

Based on my fieldnotes, Ampai assigned a writing task for her students to work on in pairs. The students were asked to submit, in addition to their writing, their mind-mapping demonstrating their ideas for their writing. When asked in a follow-up discussion, she said that looking at the students' mind mapping would help her see how they had developed their writing based on their thoughts. van Gelder (2005) advocates using such mapping in cultivating students' writing, clarifying that "When arguments are presented in diagrammatic form, students are better able to follow extended critical thinking procedures" (p. 45). Given this, it could be claimed that Ampai's strategy of

using mind mapping in her writing class could develop her students' own critical thinking.

In these writing activities, the students' cognitions seemed to be promoted in terms of their knowledge level (recalling knowledge about vocabulary), their comprehension level (explaining how technology has an effect on their lives in a writing assessment on the topic of 'How does technology influence your life?'), their application level (applying the main writing structure of an introduction, a body, and a conclusion in writing), their analysis level (comparing and contrasting in a writing assignment answering the question 'Why or why should we not wear uniforms?'), their synthesis level (providing solutions or suggestions supporting their writing), and their evaluation level (presenting opinions to support their judgment in the assignment of 'Why should we or why should we not wear uniforms?'), according to Bloom et al.'s (1956) taxonomy of the cognitive domain.

Role-playing

In Tawan's speaking class, his students did role playing activities. Although it seemed relevant to their speaking practice, it was actually rote-learning. The students repeated the same patterns that were in their books, changing only names and places. Their role plays appeared mechanical and predictable. However, my fieldnotes show that many students seemed to like this activity. They tried to recite the patterns until they could remember all of them and then confidently performed their roles. An extract from this activity is below.

Extract 11

T: Who wants to try?

Ss: (Silence)

T: Anyone?

Ss: (Silence)

T: (Teacher looking at a list of students' numbers on a sheet and calling a student by using her student's number). Do you want to try?

S: *dai kha* [Yes, I do.]

T: Another one? *khrai di* [Who should be that one?]

Ss: (Silence)

T: OK, (Teacher calling a student by using her student number). *ther pen Della na lae eak khon pen Martin* [Could you play Della and could another one play Martin?]

In this class, Tawan nominated a pair of students to practise a conversation as an example before asking the rest of the students to practise it with their partners. In a follow-up discussion, I asked him about the use of this nomination. Tawan clarified that it was his technique to deal with his students' silence. He claimed that even telling them he was going to nominate them to speak, although he did not actually intend to do so, could make them more alert and engaged. He added that in speaking activities, it was quite difficult for his students to produce English output due to their lack of vocabulary and grammatical knowledge. When asked about integrating critical thinking into his speaking class, he claimed that his students might be able to think critically about a specific matter in Thai but might find it hard to express it in English. This suggests that the development of critical thinking in EFL speaking classes could be hampered by students' English language barriers.

This type of activity appeared to promote the students' knowledge level (recalling knowledge about English vocabulary), according to Bloom et al.'s (1956) taxonomy of the cognitive domain.

Forming Sentences Using the Grammar Rules Provided

This activity was found in almost every class. The teachers wrote grammar rules on the whiteboards and asked the students to form their own sentences. However, in some classes, the teachers wrote sentences and then had the students identify the embedded grammar rules. The teaching of grammar in the observed classes was then in the form of both deductive and inductive approaches. The use of the deductive approach for grammar instruction can be found in Extract 12, which was taken from Siri's grammar class.

Extract 12

Teacher writing 'Subject + have/has + V.3' on the board

T: What tense is it?

Ss: Present perfect

T: How do we use it?

S: *hatkan tang tae a-dit chon thueng patchuban kha* [For an event that happened in the past and continues until now]

T: *chen* [For example]

S: *hai yok tuayang prayok rue kha* [Do you want us to give you sentence examples?]

T: Yes.

S: I have done my homework.

T: Yes.

Ss: (Silence)

T: OK. Now, write three sentences using this form. And change the sentences to be questions.

S: Yes-no questions or wh-questions, teacher?

T: Yes-no questions.

From this extract, Siri wrote the structure of the present perfect on the board and asked the students to form their own sentences using this structure and then change them to be questions. In a follow-up discussion, she claimed that she found asking the students to practise forming sentences using a given grammatical structure was a logical and concrete way of teaching grammar. She admitted that although encouraging the students to discover grammar rules and make conclusions themselves was useful, it was not truly practical due to time restrictions. This indicates that teachers' decisions on students' knowledge acquisition could be dictated by contextual factors, such as time pressure, rather than on their own cognitions.

Extract 13 shows how Pa-det taught his students a grammar rule in his reading class inductively.

Extract 13

T: And many films were made here.

T: Notice the pattern. *sangkat du* [Notice it.] Is it active or passive voice?

Ss: Passive

T: Why passive?

S: *mai dai tham ang mi khon tham hai kha* [They were made. Someone made them.]

S: film *thuk kratham film tham tua-ang mai dai kha* [The films were made. They could not make themselves.]

T: *laew* passive voice *mi rup prayok yang-ngai* [What is the structure of passive voice?]

Ss: *prathan buak* verb to be *buak* verb *chong sam* [Subject + V.be + V.3]

T: *ti ni tang ma khon la prayok* [Form one sentence by using the pattern.]

From this extract, Pa-det taught the passive voice to his students inductively, encouraging them to notice the grammatical pattern and come up with the rule themselves. Through this inductive approach, the students could think and verify their thinking which is a way, to some degree, to promote their critical thinking. In a follow-up discussion, he said his reading class was like an integrated learning class where he tried to seek opportunities to develop his students' various English skills, such as pronunciation, writing, translation, and reading. He claimed that by so doing, the students would get the utmost benefits from learning English. To him, English classes should not focus on segregated language skills. In addition, he stated that grammar played a role in every English learning course. He claimed that when he found interesting sentence structures in reading passages, he would ask his students to underline them and practise forming their own sentences using these structures. For curiosity's sake, I asked him if such integration wasted his teaching time. He clarified that although the pace of learning had already been established according to the syllabus, marrying other learning skills in his reading class did not affect his fixed classroom timeline. He said that such teaching, on the contrary, made students' learning smoother as all that was provided for them was relevant and within the context, and thereby meaningful. His notion suggests that grafting other language skills onto a course bearing a discrete language skill title could be useful and even practical. Moreover, he claimed that the students liked such integrated learning and expressed their feelings in the teacher evaluation system. He said that as this satisfied the students' preferences and as their feedback in the teacher evaluation system was used for teacher promotion, he had decided to continue this way of teaching. The implication could be that the system can have such an impact on teachers' pedagogies that teachers might have to decide to teach according to students' learning preferences. This implies the latent power of students in the classroom. This implication seems particularly interesting in the Thai

education context where so many classes remain teacher-centred and teachers exercise seemingly absolute power.

According to Bloom et al.'s (1956) taxonomy of the cognitive domain, this type of activity seemed to promote the students' cognition in terms of their knowledge level (recalling knowledge about English vocabulary) and their application level (applying grammar rules to form new sentences). In some classes where grammatical features were taught inductively, the students' analytical skills were also activated. In such classes, it could be claimed that their analysis level was also cultivated.

Discussing a Particular Topic

In his vocabulary class, Narin suggested a topic about a nearby highway for his students to discuss. They were allowed to prepare their ideas by writing them down before the discussion. The whole class discussion was started by eliciting their ideas on the pros and cons of highway construction. During the discussion activity, sometimes the students were allowed to speak Thai to clarify any ideas that they could not fully express in English. Extract 14 was taken from this class.

Extract 14

T: Does it help? *chuai mai nai rueng* traffic jam [Does it help us in terms of reducing the traffic jam?] What about the advantages and disadvantages of it?

S: The cars is run so fast.

T: So, it is a disadvantage. Many cars run faster. Why do you think they run faster?

Ss: (Silence)

T: Hey. It is 10% classroom participation. Please.

Ss: (Silence)

T: *phut thai dai na* [You can speak Thai.]

S: *khao aow fai daeng ok kha a-chan rot loei wing kan rew* [The traffic light has been removed, so the cars run so fast.]

S: *pra-mat mak khuen khrap* (Thai, meaning 'They are more careless.')

From this extract, Narin did not pinpoint the student's grammatical mistake but rather acknowledged the student's idea, making it visible to their classmates and encouraging other students to build upon it. He also used tactics to motivate the students to

participate: reminding them of 10% classroom participation and allowing them to speak Thai. In a follow-up discussion, Narin said that he could give an opportunity to the students to discuss and think only when he had finished most of the contents prescribed in the syllabus. His remark indicates that the time issue is still a key factor affecting teachers' pedagogic practices and that critical thinking may be a second priority in the syllabus.

This type of activity, based on Bloom et al's (1965) taxonomy of the cognitive domain, appeared to promote students' knowledge level (recalling knowledge about English vocabulary), comprehension level (understanding the pros and cons of highway construction), and analysis level (identifying the pros and cons of highway construction).

Identifying Grammatical Errors

In some classes, the teachers asked their students to identify grammatical errors either in their textbook assignments or on worksheets. After finishing the tasks, the students were encouraged to present their answers with the teachers telling them whether they were right or wrong. Examples of this activity type are as follows.

Extract 15

T: You found that?

S: I was boring.

T: How should we correct it?

Ss: Bored

Extract 15 was taken from Siri's grammar class. From this extract, Siri gave the students a handout on the use of adjectives ending with '-ed' and '-ing'. After that, she had them identify errors in the use of these adjectives. In a follow-up discussion, Siri mentioned how this activity helped the students remember the correct grammatical forms more easily.

Another example is shown in Extract 16, which was taken from Mali's writing class.

Extract 16

T: Is that correct? *prayok ni thuk* [Is this sentence correct?]

Ss: *phit kha/khrap* [It is incorrect.]

T: *phit tong nai* [Which part is incorrect?]

S: On television, not in television

Mali explained in a follow-up discussion that she usually took some sentences from the students' writing and had them identify the grammatical errors in them. She said that this activity should be part of a writing course because the students would be able to see their errors as well as other classmates' errors, some of which might be the consequences of mother tongue interference. This, she maintained, would help them overcome fossilised errors and be more careful in their future writing.

This type of activity, based on Bloom et al's (1965) taxonomy of the cognitive domain, seemed to promote the students' knowledge level (recalling knowledge about English vocabulary) and their application level (applying grammatical knowledge to identify grammatical errors).

Evaluating Items in Secondary School Tests

In Ticha's language assessment and evaluation class, she showed her students examples of test items. Working in groups, they were then asked to examine whether the items were well or badly written, and to criticise and correct them. The following is an extract from this activity.

Extract 17

T: *kho ni ok mai* [Does this item seem OK?]

S: *yak pai samrap dek mo nueng khrap* [It is too difficult for Mathayom One student.]

S: *mi khamtop thuk song kho kha* [There are two correct answers.]

T: *nai bok khru si wa yak kern yang-ngai lae thuk song kho yang-ngai* [Tell me why you think it is too difficult and what the two correct answers are.]

Based on my fieldnotes, Thai was mainly used in this class. Ticha clarified in a follow-up discussion that Thai was allowed to be used as it would not obstruct the students' ideas when evaluating the tests. However, she maintained that English was also used and practised as in their examinations the students were required to use the language to evaluate given tests.

This type of activity seemed to promote the students' knowledge level (recalling knowledge about English vocabulary), comprehension level (recognising errors in items on secondary school tests), and evaluation (evaluating items in the tests), according to Bloom et al.'s (1956) taxonomy of the cognitive domain.

The classroom activities in the observed classes and their association with Bloom et al.'s taxonomy of the cognitive domain are summarised in the following table.

Table 6: Summary of activities in the observed classes and their associations with the development of cognitive abilities based on Bloom et al.'s (1956) taxonomy

Activities	Analysis by using Bloom et al.'s (1956) taxonomy
Identifying the meanings of English terms	<i>Knowledge</i> : recalling knowledge about English vocabulary
Reading	<i>Knowledge</i> : recalling knowledge about English vocabulary <i>Comprehension</i> : summarising what they know about the reading texts, identifying the main ideas and supporting details, identifying the authors' purposes <i>Analysis</i> : finding evidence of the authors' purposes
Translating sentences or texts	<i>Knowledge</i> : recalling knowledge about English vocabulary <i>Comprehension</i> : translating sentences and texts that are intelligible to them
Writing paragraphs or essays	<i>Knowledge</i> : recalling knowledge about English vocabulary <i>Comprehension</i> : explaining how technology has an effect on their lives in a writing assessment of 'How does technology influence your life?' <i>Application</i> : applying the main writing structure of an introduction, a body, and a conclusion in writing <i>Analysis</i> : comparing and contrasting in a writing assignment answering the question 'Why or why should we not wear uniforms?' <i>Synthesis</i> : providing solutions or suggestions supporting their writing <i>Evaluation</i> : presenting opinions to support their judgment in the assignment of 'Why should we or why should we not wear uniforms?'
Role-playing	<i>Knowledge</i> : recalling knowledge about English vocabulary

Forming sentences using the grammar rules provided	<i>Knowledge</i> : recalling knowledge about English vocabulary <i>Application</i> : applying grammar rules to form new sentences <i>Analysis</i> : identifying grammar rules in sentences
Discussing particular topics	<i>Knowledge</i> : recalling knowledge about English vocabulary <i>Comprehension</i> : understanding the pros and cons of highway construction <i>Analysis</i> : identifying pros and cons of highway construction
Identifying grammatical errors	<i>Knowledge</i> : recalling knowledge about English vocabulary <i>Application</i> : applying grammatical knowledge to identify grammatical errors
Evaluating items in secondary school tests	<i>Knowledge</i> : recalling knowledge about English vocabulary <i>Comprehension</i> : recognising errors in items on secondary school tests <i>Evaluation</i> : evaluating items in the tests

As shown in Table 6 above, all the activities done in the classes reached the knowledge level as the students learning in these English courses had to recall at least their basic knowledge of English as well as other relevant information when engaging in learning. A certain activity can involve different cognitive levels. For example, in reading activities where the students were asked to identify the authors' purposes, they had to recall their knowledge of vocabulary items when reading the text and expressing their ideas (knowledge), to understand what the authors were communicating to them (comprehension), and to seek evidence of the authors' purposes (analysis).

As thinking is a covert cognitive process, levels in the taxonomy, although ranked sequentially, may be overlapped or interwoven, and their order may not be fixed. For example, in a certain writing task, students may evaluate their existing ideas (evaluation) before creating new ideas or meanings to be included in their writing (synthesis). It can also be possible that in translation, students may need to analyse the writers' purposes in the texts (analysis) before being able to understand and translate them into Thai or English (comprehension). This is in accordance with Paul's (1990) notion that critical thinking should not be viewed as a list of skills performed in a sequential order.

Moreover, in the Thai classroom context, which is largely dominated by the teacher-centred approach, two levels in the taxonomy appear to serve this approach, namely, knowledge and comprehension. Despite time constraints, large class sizes, and the traditional teaching approach, the teachers in the observed classes attempted to develop their students' critical thinking by assigning activities that engaged students in developing three upper cognitive levels, namely application, analysis, and evaluation, all of which are considered as involving critical thinking. However, such activities were usually assigned to the students as homework.

6.3 Relationships between Thai EFL University Teachers' Critical Thinking Cognitions and their Pedagogic Practices

In the current study, the data on the participants' cognitions (conceptions of critical thinking and perceptions of students' critical thinking development) was gleaned by using the reflective writing and the interviews while the data on their pedagogic practices was gleaned by using the non-participant classroom observations. Nonetheless, after each observation, an informal follow-up discussion was preset. It should be noted that such discussions proved beneficial as it not only elicited additional data from the participants but also provided them with the opportunity to justify their teaching. Given the fact that it was informal, usually taking place in front of the classrooms or at university cafés, the participants seemed more relaxed, compared with their previous interviews. Their feeling of being more relaxed could also be attributed to the fact that the discussion denoted the end of the data collection, meaning that we had spent a reasonable time on our interactions, hence increasing trust and intimacy.

The analysis of the findings on the participants' pedagogic practices clearly supports Borg (2003), who claims that teachers' cognitions as well as other contextual factors influence their teaching practices, and that the factors and their practices can indeed contribute to their cognitions. The following sub-sections will explain these.

6.3.1 Teachers' Cognitions Influencing their Pedagogic Practices

The participants' critical thinking cognitions, namely their conceptions of critical thinking (see Chapter 4) and their perceptions of students' critical thinking development (see Chapter 5), were applied to their teaching.

Conceptions of Critical Thinking

Realising the importance of critical thinking development in their students, a number of the participants cultivated this type of thinking in their class. Cognitive skills favourable to critical thinking were also promoted, as shown in the activities that involved the development of the upper three cognitive levels, according to Bloom et al.'s (1956) taxonomy (see Table 6).

The students' critical thinking dispositions were enhanced in some activities by the teachers acknowledging their ideas. Such acknowledgement indicates the teachers' open-mindedness as well as their endeavours to promote their students' open-mindedness, showing them that constructive knowledge does not need to be generated from teachers only but can be from their peers too. Moreover, it is considered to be a way to boost the confidence of those expressing the ideas and inspire confidence in other students to do the same.

Another practice found in the observed classes was concerned with the participants' cognitions of morality. Morality was largely implicated in their teaching. Some participants used moral discipline in response to some students' inappropriate and disruptive behaviour, such as disciplining students who talked to each other impolitely in class. By infusing morality into their teaching, the participants sometimes encouraged their students to be diligent, punctual, responsible, frugal, and honest. Morality also played a role in the students' critical thinking development in the observed class: when students expressed their ideas, some participants asked them whether these were morally good. An obvious example was in Ratri's class where she asked her students to write about the topic 'How does technology influence your life?' A student asked her how an effect could be judged as being a pro or a con. Ratri clarified that it depended on the angle from which we looked at it but any arguments should be both convincing and morally acceptable. In a follow-up discussion, she made a point that although pushing the students' boundaries was pivotal, their imagination and thinking had to be within a moral Thai frame. A short discussion in Mali's class could also be another example. In this class, the teacher gave the students a selection of their English writing errors and had them identify and correct them. One of the sentences, 'I saw foreigners collected trashes [sic] in the beach.' was further discussed in terms of moral values. The teacher asked the students whether they, as Thais, did any selfless acts for their country. This

discussion helped them reflect not only on their moral acts but also on evaluating whether these acts were moral. In reminding them of their past moral deeds, they could be motivated to repeat these worthy actions. In the process of evaluating their moral actions, they could also practise thinking critically. Therefore, it could be claimed that even such a short discussion can promote both their criticality and morality.

Perceptions of Students' Critical Thinking Development

In the observed classes, the participants' perceptions of their students' critical thinking development were also translated into practice. For example, when met with the students' reticence, the participants did not condemn them for this but rather used tactics to encourage them to speak up, such as making them feel more relaxed by joking with them, nominating them individually, and using the 10% participation grade to persuade them. The silence in class did not seem to jeopardise the classroom learning atmospheres. In the participants' follow-up discussions, none of them mentioned the students' reticence. An implication could be that the participants might not view it as being a problem. This was in line with the participants' perceptions, as expressed in their reflective writing and in the interview data, that Thai students' silence could be interpreted as a culturally apt way for them to express their respect for and obedience to their teachers. Nevertheless, as the participants sometimes tackled their students' silence by allowing them to speak Thai when expressing their ideas, the silence in the observed class could also be interpreted as being due to the students' own low-level of confidence about using English. Moreover, as mentioned elsewhere in this chapter, I also interpreted the students' silence in the observed classes as being the result of their perceptions of learning, assuming that their teachers would eventually provide them with the correct answers and so they remained silently waiting for these.

In some classes, the participants deliberately based classroom discussions on their students' ideas and responded positively to their answers. Such practices are compatible with their perceptions of using the appreciation of students' participation as a motivational strategy to encourage them to engage in critical thinking. Nevertheless, it should be noted that despite the participants' endeavours, silence in the classroom for the most part reigned and the participants themselves had to resort to being more directive.

The participants' perceptions on using the students' locality to promote their students' critical thinking was found in an observed class. The participant (Narin) had his students discuss the pros and cons of a nearby highway construction. Nevertheless, there was a mismatch. In their reflective writing and interviews, the participants claimed that this strategy could provoke students' interests. However, based on my fieldnotes, Narin's class seemed to run passively with little participation from the students and with Narin's tactic of using 10% classroom participation to encourage them to speak. My fieldnotes also indicate that I was surprised at this as I myself believed that using a topic relevant to the students and respecting their contribution should have made them more engaged and should have promoted healthy classroom discussions. The participant, Narin, himself seemed to be liked by his students. Then, when allowed to speak Thai, the students' participation increased. This suggests that students' language abilities may play a more critical role in the development of critical thinking in them in their language classes, despite the existence of other facilitative factors, such as teachers' pleasant personalities or relevant critical thinking activities. In the observed classes, the participants' concerns about their students' dearth of English competency and proficiency resulted in a variety of strategies being used, such as feeding the students with knowledge, promptly giving them the answers, using English in class followed by its Thai translation, simplifying and rephrasing the questions asked, and using rote-learning in a speaking class rather than having them construct knowledge and produce language output by themselves.

The consistencies between the participants' critical thinking cognitions and their pedagogic practices, as elaborated so far, seem to indicate that their reflective writing and interview data used for eliciting their cognitions are sufficiently detailed.

However, despite these consistencies, the observational data uncovered some inconsistencies. For example, some participants mentioned in their reflective writing and interviews that positive reinforcements were vital in class. Yet in their teaching they rarely gave such reinforcements to their students. This may be justified by the time constraints they were under, having to rush their students through the classroom contents according to the syllabus. Another discrepancy was concerned with their cognitions of teacher-centredness. Based on their cognitions identified from their reflective writing and interview data, they believed that the teacher-centred approach

hindered critical thinking development in their students, but they nevertheless still used it in their classes. Their proposed teaching strategies to develop students' critical thinking, as in their reflective writing and interviews, were also rare in the observed classes. Such incompatibilities suggest that their cognitions and chances to put them into practice in class are not the same thing. What seemed to modify their cognitions could be attributed to contextual factors in class (Borg 2003). The following section discusses how these factors affect their cognitions as well as their pedagogic practices.

6.3.2 Contextual Factors Influencing Teachers' Pedagogic Practices

In their reflective writing and interviews, the participants referred to some contextual factors they considered affected their students' critical thinking development, namely, time constraints and large class sizes.

The participants' perceptions of time restriction being an impeditive factor for their students' development of critical thinking were in line with what happened in the observed classes. In practice, despite their knowledge and endorsement of critical thinking as expressed in the reflective writing and interview data, the participants decided to teach according to their course syllabus, rather than integrate critical thinking into their teaching. Most of the participants then clarified this anomaly in their follow-up discussions, saying that it was due to time factors. This indicates that time is a primary consideration for them, and in a well-intentioned attempt to optimise their teaching, they tend to be more concerned about learning products rather than the learning process itself. Another implication could be that although made a part of a course syllabus, critical thinking in English classes may be considered to be a separate entity, one that needs to be taught differently from other course contents. This emphasises the need for language teachers to blend language enrichment and critical thinking enrichment together in their classes.

The systemic problem of large class sizes, mentioned by the participants as hindering students' critical thinking development, was also found in the observed classes. With so many students in class, their interactions with their teachers were invariably in the form of whole class participation. It was therefore difficult for the participants to monitor their students' critical thinking development individually. Such large class sizes were also conducive to a teacher-centred approach as opposed to a student-centred one. Given that the latter approach, according to the literature, facilitates students'

development of critical thinking, it remains a challenge as to how teachers of large classes could cultivate such thinking in their classes.

In addition, I found that other contextual factors, ones that were not mentioned in the participants' reflective writing and interviews, could affect the students' critical thinking development too. In most of the universities under investigation, the students did not have their own permanent classrooms. Instead, they had to move to another classroom for another subject. It seemed that in some classes there were not sufficient chairs for them, so some of them needed to look for chairs in another room and move them to their present classes. In a number of classes, the computers and overhead projectors appeared to be out-of-order. As a consequence of this, the participants needed to seek assistance from technicians who stayed in their offices. These two contextual factors wasted classroom instruction time and possibly affected teachers' teaching, including their teaching of critical thinking. However, apart from these seemingly inhibitive factors, I did notice a facilitative contextual factor in the classes, namely, peer support. This kind of support appeared to generate a friendly classroom environment that, to some extent, may help facilitate critical thinking instruction.

6.3.3 Teachers' Pedagogic Practices Contributing to their Cognitions

The observational data from this study indicates that there was a tendency for the participants' teaching practices to shape their cognitions. Some participants expressed in their reflective writing and interview accounts that they favoured the teacher-centred approach as it helped them run their large classes more smoothly. Their notions were confirmed in the class observations. This indicates that teachers' psychological processes and physical processes are interrelated. It also implies that such cognitions, derived from their teaching practices, are likely to situate strongly for they are experience-based beliefs.

Nevertheless, this study acknowledged that teachers' cognitions are complex and therefore cannot be entirely reflected in their teaching. Moreover, given that each participant was observed once, in his/her observed class, he/she might have had to teach according to what was prescribed in the course syllabus, and critical thinking may have been specified to be taught in other classes, which were not observed. A word of caution is therefore necessary here for the observational data was derived from one-time observation for each participant.

The findings on the participants' pedagogic practices indicate that their cognitions seemed to be compromised to meet their classrooms' contextual demands. In relation to students' critical thinking development, such demands suggest that each context may need critical thinking pedagogies that suit them, either by generating new pragmatic teaching methods or by a fine-tuning of other methods from other settings to align to students' needs and contextual demands. One final implication is therefore that teachers should not stop thinking critically about how they could make their teaching within these contexts better promote their students' learning.

6.4 Summary

My analysis of the observational data developed two topics to be discussed, namely, classroom characteristics and the relationships between Thai EFL university teachers' critical thinking cognitions and their pedagogic practices.

The classroom characteristics were presented in the following ways: classroom layout, teaching and learning styles, peer support, classroom behaviour, and classroom activities.

The classroom layout showed that not only were the classes being observed large classes but they also had a high-density seating arrangement. Such a layout appeared to affect the teaching and learning styles. In such classes, teacher-student interactions were mostly in the form of whole class participation. Teacher-centredness dominated. It was interesting to note that in the English learning classes, the participants used Thai as the medium of instruction more than English. When using English, the participants usually followed it with a Thai translation. There were minimal reinforcements and feedback given to the students. The participants mainly posed display questions as opposed to referential ones. Most of the students in the classes appeared to have an extrinsic motivation for learning, namely exam-driven. Peer support was evident in various forms, mainly feminine and collectivist, a phenomenon that could be explained by Thai culture which Hofstede (1980) describes as being highly feminine and highly collectivist.

Regarding the students' classroom behaviour, most of the students were well-behaved, although some disruptive classroom behaviour was also found. Interestingly, there were two types of Thai cultural behaviour in the classes; these were *wai* and silence. This

suggests that learning and culture cannot be separated. Even in EFL classes, students were engaged not only in the culture of the target language but also in their own local culture. In the observed classes, lecturing was the main form of teaching. The activities assigned to the students varied across the courses. Despite the inhibiting factors encountered in class, attempts were made by the participants to develop the students' critical thinking by engaging the students in activities that promoted the three upper cognitive levels, namely, application, analysis, and evaluation, according to Bloom et al.'s (1956) taxonomy of the cognitive domain.

The second topic, the relationships between Thai EFL university teachers' critical thinking cognitions and their pedagogic practices, addressed the answer to the third research question. The findings reinforced Borg's (2003) notion, revealing that the participants' cognitions in terms of their conceptions of critical thinking and perceptions of their students' critical thinking development clearly influenced their teaching, although their teaching itself could also be affected by other contextual factors. Moreover, there was also a tendency for the participants' teaching experience to also affect their cognitions.

The next chapter will conclude the findings for all three research questions and will address the theoretical contribution, the methodological contribution, the practical implications, the pedagogical implications, the research limitations, and the recommendations for future research.

CHAPTER 7: CONCLUSIONS, CONTRIBUTIONS, LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

7.1 Introduction

This final chapter initially summarises my theoretical assumptions, the research questions, the methodology used, and the main findings. I then elaborate the theoretical contribution, methodological contribution, practical implications, and pedagogical implications of this research. I go on to address the limitations of this study and provide recommendations for future research. A short concluding statement marks the end of this chapter and of the dissertation.

7.2 Summary of the Research

This study investigated Thai EFL university teachers' critical thinking cognitions and pedagogic practices. My own viewpoint with reference to the study topic has been that critical thinking is culturally dependent. As a result, the theoretical framework underpinning this position involves sociocultural and relativist assumptions. To carry out this investigation, the following three research questions were posted:

1. How do Thai EFL university teachers conceive of critical thinking?
2. How do Thai EFL university teachers perceive the development of critical thinking in their students?
3. To what extent do Thai EFL university teachers' conceptions of critical thinking and perceptions of their students' critical thinking development relate to their actual pedagogic practices?

This study maintained an ontological stance towards diverse realities and an epistemological stance towards learning from these diversities by getting close to them. These two philosophical stances suggested the use of ethnography as the research strategy. The participants were 15 Thai EFL university teachers in 4 universities in South Thailand. The data was collected sequentially, using methodological triangulation that included reflective writing, semi-structured interviews, and non-participant classroom observations. Both the reflective writing and the interview data were

analysed, using thematic analysis while the analysis of the observational data used both inductive analysis and Bloom et al.'s (1956) taxonomy. The key findings for the three research questions were as follows:

Research Question 1: How do Thai EFL university teachers conceive of critical thinking?

The analysis of the reflective writing and the interview data revealed that the participants conceived of critical thinking as an integration of the following four components: cognitive skills, affective dispositions, goal-orientation, and morality. The participants saw this type of thinking as benefiting their students in five distinct domains, namely, everyday life, EFL learning, career, Thai culture, and Thai Buddhism. Fourteen participants believed critical thinking was not an innate ability while one participant advocated the innateness of critical thinking. Despite their different opinions on this innateness issue, all the participants concurred that all students should be taught and actively encouraged to think critically.

Research Question 2: How do Thai EFL university teachers perceive the development of critical thinking in their students?

The analysis of the reflective writing and the interview data revealed that the participants perceived their students' critical thinking abilities to be varied. They claimed that Thai culture could affect students' critical thinking, particularly their expression of this kind of thinking. Because of this, they felt that students' passivity and silence, which could be associated with Thai cultural values, needed to be considered when judging students' criticality. For example, some of them said that some students' reticence did not always mean they could not think critically, but it could be a cultural way for them to show respect for their teachers. Moreover, the participants highlighted the three main factors they considered to have influences on their students' critical thinking; these were education, socialization, and media and technology.

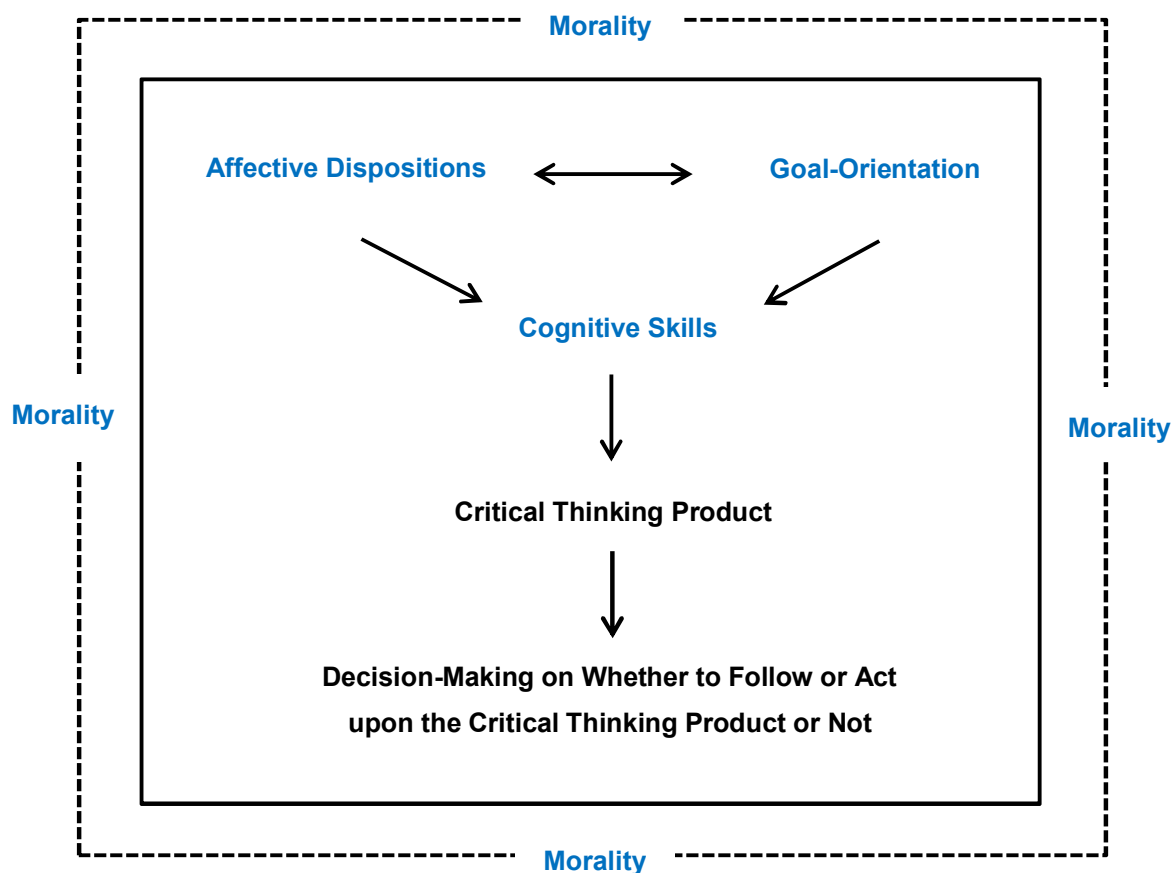
Research Question 3: To what extent do Thai EFL university teachers' conceptions and perceptions relate to their pedagogic practices?

The analysis of the observational data revealed that both the participants' conceptions of critical thinking and their perceptions of their students' critical thinking development, as

well as other factors, influenced their own teaching. The participants' own teaching experience also tended to affect their own cognitions.

7.3 Theoretical Contribution

The participants in this study saw critical thinking as involving the following four components: cognitive skills, affective dispositions, goal-orientation, and morality. These findings gave rise to a model of the critical thinking process. Figure 8 below shows the model.



*** Morality here is based on the concept that 'What is morally right will not cause any trouble or suffering to ourselves and to others' (From Siri, a participant in this study).

Figure 8: Model of the critical thinking process derived from the findings from this study

In daily life, we are surrounded by both moral and immoral behaviour. Due to illusions, we may mistake immoral behaviour for moral behaviour and vice-versa. Therefore, we cannot choose to think critically only about moral things and to reject thinking critically

about immoral matters. This suggests that all seemingly moral and immoral issues should be subject to our critical thinking processes.

This model, based on the findings from this study, shows the components of critical thinking. The three vital components of critical thinking, namely, cognitive skills, affective dispositions, and goal-orientation, that have been identified through this research appear in line with those mentioned in the mainstream literature of critical thinking (see Sections 2.2, 2.2.1, 2.2.2 for further explanations) whilst the morality component seems to denote the uniqueness of the Thai educational context, which is permeated by Thai Buddhism. Although the inclusion of morality in critical thinking has also been advocated by scholars, such as Paul (1990) and Brookfield (2012), they did not clearly identify the role it might play in the actual critical thinking process. Influenced by the participants' remarks on the role of morality in critical thinking, this model suggests that morality could be used as a framework of critical thinking in the Thai context, a process in which critical thinkers reflexively engage throughout the thinking process. However, as Mulnix (2012) claims, morality can involve one's subjectivity, feelings, and culture. Therefore, morality could have different perspectives in different cultures. Although this study maintains a relativist perspective in its attempt to understand Thai EFL university teachers' critical thinking cognitions and pedagogic practices (see Section 1.3), I would also argue that universal concepts about morality can nevertheless be understood by people, irrespective of their cultural origins. In this study, one participant (Siri) interestingly mentioned a simple yet clear concept of morality that seems to be endorsed by people across cultures: '*What is morally right will not cause any trouble or suffering to ourselves and to others*'. This study has adopted this seemingly universal concept of morality in this model.

To start the process, it is claimed that people engage in critical thinking when their affective dispositions incline them to do so. With such dispositions, they are likely to set themselves a mental goal to engage in critical thinking and accordingly use cognitive skills in their critical thinking processes. Nevertheless, as illustrated by the two-headed arrow in Figure 8, we can be goal-oriented first before being disposed to think critically and engage fully in the whole critical thinking process. The one-sided arrows from affective dispositions and goal-orientation to cognitive skills suggest the importance of the first two: namely, without feeling disposed to think and/or having a goal in mind, we

may decide not to engage in critical thinking, although our cognitive skills are suited to this type of thinking. It should be noted that while engaging in this process, we should simultaneously reflect on what underlines our thinking in relation to morality: asking ourselves whether what we are thinking about is moral. Once such critical thinking is achieved, however, it generally does not end there. The following question is raised: should one pursue it or not? Morality then plays a role again in this decision-making phase. If the thinking is critically considered as being not morally good, it will be rejected. On the other hand, if it is the opposite, it will be accepted. As a result of these, critical thinkers become not only critical but also moral individuals.

This model was generated from the findings derived from the Thai context. By using this model, one should expect critical thinking development in Thai students to be fruitful and productive, enhancing not only the students' intellectual capabilities but also their moral development. It can be argued that other similar contexts could benefit from adopting such a model. Nevertheless, it should be made clear that this model is not only intended to expand the existing literature but also one that should be open to challenge. Only through questioning and challenging this model will practical ways for developing critical thinking in students be found.

7.4 Methodological Contribution

Previous studies investigating critical thinking in the Thai EFL university context used various research methods for their data collection. For example, Nanni and Wilkinson (2014) used Facione's Holistic Critical Thinking Scoring Rubric to assess Thai EFL university students' critical thinking. Jantrasakul (2012) used classroom observations, task sheets, writing assignments, and tests to assess the effectiveness of critical thinking-based EFL lessons. Dumteeb (2009) used classroom observations, questionnaires, focus group interviews, individual interviews with teachers, and document analysis to examine the questions and questioning techniques Thai EFL university teachers used to promote their students' critical thinking. Buphate and Esteban (2018) used questionnaires to study the attitudes of Thai EFL students and of Thai EFL teachers towards critical thinking.

This study used methodological triangulation to collect the data on the critical thinking cognitions and pedagogic practices of Thai EFL university teachers. The three methods in this triangulation involved reflective writing, semi-structured interviews, and non-

participant classroom observations. As shown in the literature review, two methods, namely, interviews and observations, have been used in the critical thinking research in the Thai EFL context. However, it seems that reflective writing was not as popular as the other two methods. I would therefore like to address its strength and weakness of the reflective writing method I found in this study for the benefit of other researchers interested in using it in their future research.

Reflective writing was shown to be beneficial in this study as it allowed the participants private time to reflect on their own thoughts and accordingly to be able to provide their reflective responses. They could work on it at anytime and anyplace they wished. In this way, it could be expected that their anxiety would be reduced, their concentrations on writing would be enhanced, both of which could mean that informative data would be produced. In addition, I also noticed that some seemingly reticent interviewees, those not so productive in articulating their ideas in their interviews, provided a lot of data in their reflective writing.

Nevertheless, there could be a pitfall when using this method; namely, its potential to produce inauthentic data. As shown in Section 3.4, one participant in the second pilot admitted that she had done an Internet search for information on the topics on which she was expected to reflect and write accordingly. Moreover, after interviewing the participants, as well as asking them to comment on their interviews, I also asked them about the use of reflective writing. Nine participants said they had found it useful, but two participants said they had found it hard to write and preferred being interviewed instead. The implication here is that reflective writing should not be used alone but be used in combination with other methods and with an awareness that participants may consult and be influenced by other sources.

In this study, semi-structured interviews and non-participant classroom observations compensated for the potential drawback of using reflective writing. Moreover, such writing was useful not only as a research method for collecting the data but also as an interview prompt.

7.5 Practical Implications

This study found seven practical implications for critical thinking development in Thai EFL classrooms and Thai society as a whole. These were critical thinking instruction,

classroom strategies, evaluation, Thai culture and Thai Buddhism, teachers, students, and governmental/educational authorities. These implications were based on the research findings.

7.5.1 Critical Thinking Instruction

This study suggests that Thai culture and Thai Buddhism can affect Thai students' expressions of critical thinking. This should make teachers, especially foreign teachers, aware that Thai students' learning of critical thinking cannot be separated from their sociocultural influences. Despite such influences, critical thinking instruction is still essential for all students at all levels. Like the participants, I also see the merits of starting fostering it in elementary students in class and in their playtime. Developing good attitudes towards critical thinking in young students, in particular, may need to be emphasised. As Hudgins et al. (1989) state, "the end goal for teaching children to become critical thinkers is the development of a disposition to do so" (p. 329).

Nourishing Thai elementary students' critical thinking can be done, for example, by using Thai traditional folktales that themselves normally involve Thai cultural beliefs, values, wisdom, and morality. Such integration gives rise to multidimensional and meaningful learning. The story telling may end by encouraging students to think about what the folktales have given them and asking them to imagine themselves as the characters in the stories and think about what they would do in certain situations. This is a way to enhance their imaginations and abilities to think 'out-of-the box', both of which are essential elements in critical thinking.

In Thai university education, a mixed approach for critical thinking development (Ennis 1989) may be useful. A special course covering the general but explicit principles of critical thinking, as outlined by Ennis, should be provided to all first-year university students. Thai university students need such explicit instruction because expecting teachers to infuse critical thinking in their courses within the restricted time available may be unrealistic. There appears to be a need for this course because, as the participants in this study claimed, critical thinking tends not to be socially practised in Thai students' daily life. However, ideally an infusion approach to critical thinking should run parallel to explicit instruction. Students require substantial practice to transform themselves into critical thinkers (Halpern 1998; van Gelder 2005). Unless teachers have them rigorously practise it, students may wrongly perceive that critical

thinking is not important for them to practise and master. Both types of instruction should aim at promoting not only critical thinking skills but also critical thinking dispositions (Facione 1990). Prior to teaching, teachers should explain to their students the reasons why it is important to learn to think critically and the types of learning they will be engaging in, since students may need and appreciate concrete evidence that they are being taught something (Thamraksa 2003), or they may simply need to know what they are learning and how it can benefit them.

In this study, the participants pointed out how critical thinking could be promoted in English courses. However, based on cognitive load theory (Paas et al. 2003), Thai EFL students may experience difficulty in learning both English and critical thinking at the same time. Therefore, an emphasis on content orientation and the occasional use of Thai (Jantrasakul 2012) can perhaps help lessen their potential cognitive overload. Nevertheless, as one participant claimed that many Thai EFL teachers tended to use Thai in their English classes, this may imply that while developing students' critical thinking, the students' English language proficiency should also be strengthened.

Some participants saw some teacher-centred features as being constructive to Thai students' critical thinking development. Nevertheless, teachers should still be aware that there are also other features impeding it. Teachers therefore need to examine these impediments to critical thinking and attempt to remove them. In Thailand, where critical thinking is not a social practice, the classroom, which is another social unit, should be seen as a setting for the socialisation of students and ideally for their immersion in critical thinking culture. Such socialisation should instil in them the values of critical thinking and should affect their individual behaviour as well as the collective classroom behaviour. The development of critical thinking through classroom socialisation should express optimism, given that human socialisation can occur throughout life (Kapur-Fic 1998).

However, classroom socialisation may not be an easy task. This is because most Thai classrooms tend to maintain a conventional approach and etiquette while critical thinking appears to promote teachers and students to do otherwise. It can be even more challenging when the changes in thinking being promoted run counter to long-held cultural rules and conventions that have been accepted and passed on from generation to generation. Teachers should at first develop their critical thinking and pedagogies

promoting that thinking. Then they should gently but continuously effect changes in their classes by making their students more aware of the pragmatic benefits of critical thinking, integrating it in their lessons, critically drawing out and demonstrating the strengths of each approach (teacher-centred or student-centred), and explaining how it can benefit their students. Notwithstanding the need for gradual change, I still contend that teachers should not dismiss using a rehearsal strategy. It should be undertaken in conjunction with the promotion of critical thinking. Repetition is still essential inasmuch as many examinations in Thai mainstream education largely assess students' memorised knowledge.

Silence in Thai classrooms can be positive, meaning that thinking is taking place, respect is being shown, or a particular style of learning is being practised. However, learning styles among students sharing the same culture can vary. There are indeed some Thai students whose styles of thinking involve social interactions with others, especially with their teachers. I therefore suggest that students' silence should still be respected but applied appropriately so that it does not prevent students, accustomed to different learning styles, from having opportunities to learn in their preferred manner.

Critical thinking development needs the enhancement of students' learning autonomy. To achieve such autonomy requires the cooperation of both teachers and students. Teachers should first recognise the importance of autonomous learning and of being autonomous learners if they are to be able to successfully develop the learning autonomy of their students. For students, they need to feel confident about detaching themselves from their teachers. As reported by the participants, most Thai students regard their teachers as those knowing best and thus attach themselves to them. To lessen such dependence, teachers should gradually detach themselves from their students by giving them autonomous critical tasks that progressively increase in complexity to develop their confidence to be autonomous.

In addition, as the problem of large class sizes cannot be solved overnight, a teacher-centred approach to such large classes is still needed. Thai teachers perhaps instead need to devise strategies that critically engage students in their classes and to deliberately add thinking activities to supplement their lectures. Examples of such strategies are critical engagement in writing (van Gelder 2005), flipped learning

(DeRuisseau 2016), and the use of technology, as claimed by one participant in this study.

7.5.2 Classroom Strategies

The participants suggested useful teaching strategies and motivational strategies for enhancing Thai students' critical thinking. These strategies involved giving students two types of support, namely, cognitive support and mental support. Notably, these strategies are not restricted only to the realm of EFL but could also be useful in other disciplines.

Although the research widely endorses a heuristic teaching strategy for developing students' critical thinking, a modelling strategy is nevertheless essential (Brookfield 2012), particularly for Thais whose everyday life does not seem to possess a critical thinking culture. During the modelling, teachers should invite students' participation, thereby encouraging them to be more engaged and more motivated to learn. Teachers should explain to them from the very beginning that mistakes are part of the learning process and should therefore be welcomed. As a result, students should be able to appreciate a variety of viewpoints and even perceive mistakes as being trivial. This is a way to overcome their risk-aversion. Moreover, as mentioned by Brookfield (2012) and also by the participants in this study, the sharing of teachers' personal experience is advantageous. It gives a convincing message about the merit of critical thinking, helps create an informal and friendly classroom atmosphere, and lessens the existing power distance between teachers and students. In addition, as suggested by the participants, local and global topics should be addressed in classroom discussions to increase students' criticality and general knowledge. Teachers' verbal and non-verbal reinforcements during critical thinking activities, the participants claimed, were particularly valuable. However, these reinforcements should be sincere, genuine, and consistent.

The participants' notions on the irrelevance of intelligence in critical thinking support the notion of the learnability of critical thinking outside the classroom. That is to say, it can be acquired through the diverse methods of daily learning, such as memorisation, observation, practice, and trial and error. These methods can lead to a true education, one that is more authentic and life-changing than merely a formal one. It is therefore

useful to reexamine the extent to which the real-life learning strategies employed by uneducated critical thinkers can be applied in formal classroom teaching.

Notably, all strategies should be aimed at enhancing the transference of critical thinking into new contexts. Teachers may start by getting students to practise their criticality in simple situations before moving to more complicated ones. They should also consider the need for their students to be given ample opportunities to practise critical thinking. This will increase the students' confidence in the practicality of thinking across situations. Enhanced confidence will then increase the likelihood of students' applying critical thinking outside the classroom where the information could be more complex, multi-layered, and multifactor-related.

7.5.3 Evaluation

Students' critical thinking could be evaluated by using their writing. Thai teachers may find such evaluation practical, particularly for those Thai students whom the participants deemed to be more comfortable expressing themselves in writing. Snyder and Snyder's (2008) objective multiple-choice test can be useful for large class size evaluation. Although such a test seems to be easier for teachers to check students' answers, they may nevertheless have to invest more time and energy in constructing it.

Moreover, as Carlson (2005) points out in his position paper that millennial students are smarter and better at learning multitasking concurrently through their experience with media and technology, this may mean that using traditional teaching assessment may not be truly practical for evaluating their actual abilities. Teachers unaware of students' multitasking abilities may perceive them as being less motivated or even undervalue the students' abilities. Alternative ways of evaluating students' criticality through technology are therefore needed.

7.5.4 Thai Culture and Thai Buddhism

The findings of this study showed that critical thinking is already present in some aspects of Thai culture and Thai Buddhism. Nevertheless, it may not yet be fully appreciated in Thai society; the recognition and practice of critical thinking in Buddhism, in particular, may be restricted to the religious sphere. Therefore, as Hongladarom (1998) suggests, it is the time for Thais to ponder how they can bring

Buddhist criticality into everyday life and put it on an equal putting to other cultural virtues.

Thais who realise that critical thinking is not a Western product but is actually part of their own rich cultural heritage may be more open to it. This realisation perhaps lessens their feeling of inferiority in having to follow Westerners who are the outsiders and seem superior. This is all about power relations. Thais in general have “a deep sense of independence, pride and dignity” (Komin 1990, p. 133). Although Thais are usually claimed by some Western scholars as being submissive (Kapur-Fic 1998), they are so only in some aspects. Certain fundamental cultural entities, such as patriotism, are firmly rooted in the Thai soul. Thais’ “independent souls” (Phillips 1965, p. 60) and patriotism are strong possibly because Thailand has never been colonised by any Western countries. This may be the reason why encouraging Thais to develop critical thinking, which they may consider to be a Western product, is not as successful as it should be. However, given that “all learning is basically psychological” (Kirtikara 1997, p. 95), emphasising the association between critical thinking and Thai culture can make the development of Thai people’s critical thinking possible.

In relation to the cultural factors the participants perceived to be inhibitive, this may give Thais reasons to re-examine their culture more thoroughly in order to see whether some cultural aspects need to be changed. Culture by its very nature is subject to change and it constantly adapts in response to the context and time. Change is therefore necessary when the time comes; otherwise it will be “frozen” (Hongladarom 1998, n.p.) and accordingly unpractical. Most Thais are imbued with the Buddhist concept of impermanence. Because of this, change should be regarded as normal by the majority of them. It is not a kind of degeneration but rather an adaptation that enables members of the Thai culture to live harmoniously with modernisation and in a world where the culture of critical thinking is obviously demanded (Witte 2000).

The participants’ notions concerning inhibitive Buddhist factors should encourage Thai Buddhists to investigate whether these factors do impede their critical thinking. Although most Thai people are Buddhists, they may not thoroughly understand Buddhist doctrines (Komin 1990). Despite this lack of understanding, Komin maintains that many Thais seem to view Buddhism as an explanation for everything. The investigation of seemingly impeditive Buddhist factors should not be viewed as an

insult or a sign of disrespect. The Buddha himself asserts that humans have the right to question, especially something unquestioned. Therefore, Buddhist teachings are not to go unchallenged. But, rather, they “are things to see, not just to believe” (Payutto 2007, pp. 128-129). According to Payutto, the Buddha sees his teachings as being derived from the time-tested laws of nature and encourages people to experiment with them themselves.

However, this does not mean all Thai cultural aspects need to change. Some good features must be maintained while others that seemingly hinder criticality need to be suitably adapted. For example, as one participant mentioned, students’ great respect for teachers is likely to make them treasure the knowledge the teachers give them. But respect should nevertheless be practised appropriately so that it will not impede students’ criticality. Another example is showing gratitude to parents through respect and obedience; this is a very sensitive issue in Thai contexts. Expressing opposing ideas to parents may make them unhappy or suffer from feeling unloved and disrespected, which, as one participant claimed, can be a sin according to Buddhism. I would suggest students choose their own strategies to present their critical ideas to their parents in a polite and respectful manner. In a case where parents are very conservative and completely refuse to accept any different ideas from their children, it would seem to be appropriate to be silent sometimes. Although one participant asserted that critical thought that was not expressed was not critical thinking, the Thai proverb ‘*phut pai song phai bia, ning sia tamlueng thong*’ (‘Speech is silver, silence is golden.’) is still useful in some situations. Each family is individual and unique. As can often be seen on the news nowadays, tragedy can be caused by Thai family members, especially the elderly who feel offended by how their children talk and behave to them. It is therefore important that the Thai classroom socialisation of critical thinking should provide students with the following three essentials: critical thinking abilities and dispositions, psychological courage to fight against their own deep-seated socialised beliefs and mainstream resistance, and abilities to think about the most suitable time and place for expressing their critical ideas. As one participant mentioned the attitude adaptation by the government, this reinforces the need of the third essential, the one that would help Thais to think about the time and place before expressing their critical ideas that may then cause them problems or harm. This is not intellectual cowardice. Critical thinkers should be critical themselves about how and when to express their criticality. There is a

well-known Thai verse '*ru raksa tua rot pen yot di*', stating that nothing is better than knowing how to protect oneself from harm and thus survive. It does not teach us Thais to be coward and to avoid problems, but rather how to survive in a complex world, full of people with immeasurably deep minds.

Therefore, Thai proverbs are not worthless. They are embedded with local knowledge and wisdom. Although some participants thought some proverbs impeded critical thinking, there are nevertheless other proverbs that promote it (see the discussion of Thai proverbs in Chapter 5, 'Thai Culture Inhibiting Critical Thinking'). Moreover, some seemingly inhibitive proverbs, such as '*phut pai song phai bia, ning sia tamlueng thong*' ('Speech is silver, silence is golden.'), when applied appropriately, can be useful in some situations. However, proverbs are constructed from people's conceptions at certain times, so their virtues might not be practical at other times. They should be treated as lessons given by people from other generations, and hence can be reflected on, questioned, and selectively applied.

7.5.5 Teachers

The literature shows that critical thinking involves careful and valid reasoning which is likely to be against human nature. Teachers should be aware of this and should not expect instant success or, on the other hand, hastily assume that their critical thinking instruction has been ineffective. Particularly, in the Thai context where critical thinking is not a social practice (Thamraksa 2003) and hence not acquired "through the pores" (Atkinson 1997, p. 73), it is highly possible that Thai students will improve slowly.

Enhancing teachers' abilities in transferring critical thinking knowledge needs to be part of their professional development. Although teaching experience helps, novice teachers can also invest in it. Aside from learning about it in teacher education programmes, they can practise it in their everyday teaching, noticing their own strengths and weaknesses for their own further improvement. They can discuss it with their colleagues, especially those who have had greater teaching experiences. However, as one participant said, teaching is also an art, and so it may be useful to discuss critical thinking with novice teachers or even with students.

Moreover, to teach critical thinking well, teachers' thirst for knowledge is significant. Encouraging such a thirst is not supposed to reinforce the concept of teachers' knowing

everything, according to the teacher-centred approach, but is more concerned with having something to discuss with students. When met with unanswered questions, teachers should admit their own frustration to their students and learn from the students' suggestions so that question-and-answer sessions would be more meaningful. Teachers should also tell students that they will find out more about the things that they do not know and discuss these with the students in subsequent classes. Teachers' expressed honesty may give a positive signal to students that teachers do not always know best but that they never cease learning. Students should be influenced by their teachers' humility and continuous learning. Teachers' thirst for knowledge should also include their "reflection on both research evidence and personal experience" (Entwistle 2009, p. 7) for this can improve their quality of teaching.

In the observed classes, the fact that the students did not give feedback to their classmates' presentations (see Section 6.2.5) was probably because they did not know how to do it. Teachers then need to teach students what aspects of classroom presentations they should focus on and what kind of questions or comments they should raise. Teachers should also encourage students to realise that feedback is another crucial means of learning not only for the presenters but also for their classmates and teachers.

Teachers should give their classroom stage to their students. Although it is hard to achieve power symmetry in classrooms heavily influenced by Thai culture, contributing power to students are still needed, as effective critical thinking instruction requires students who have been empowered to take charge of their own learning and thinking. In the Thai context, giving students a classroom stage is also advocated in Buddhism. From a Buddhist perspective, a good teacher "encourages and praises his students' goodness and abilities and allows their full expression" (Payutto 2007, p. 65). This implies that the voices heard in class should mostly be those of students.

Thai teachers' open-mindedness should give students the right to ask questions and to challenge the answers. Their open-mindedness can help establish trust between students and themselves, resulting in increasing classroom participation. However, when challenged by students, teachers should also bear in mind that students are challenging their ideas, not them as a person. Teachers' open-mindedness can be developed using the Thai concept of '*metta*' (Pali, unconditional goodwill). Teachers with *metta* will always wish their students a good and happy life. If they realise that critical thinking

can help students achieve such a life, they should accordingly be willing to be open-minded to critical thinking instruction.

University teachers in teacher education programmes should also be aware that their students tend to teach in the way they have been taught. If teachers invest in teaching critical thinking and remain committed to it, their students will gain not only critical thinking skills but will also learn how to teach it. Such instruction then becomes a worthy investment both for now and for the future.

7.5.6 Students

One of the challenges in developing Thai students' critical thinking is probably about changing their attitudes towards being a good student. As the participants claimed, most Thai students tend to underestimate themselves, believing that their teachers know better than them, and hence the teachers remain unchallenged. Most Thai students fear that asking teachers questions might give the impression they are stupid, have not been paying attention in class, are questioning their teachers' knowledgeability and resourcefulness, showing disrespect, being arrogant, or looking for attention from others. In changing such perceptions, teachers can make students aware that asking is actually a means of learning. It should in fact be treated as a way of paying respect to their teachers. After all, one only asks about something when one is genuinely interested in it. Students' questions posed in class should signify that they are truly interested in what their teachers are teaching them. Apart from asking questions, respect for teachers can be expressed in many forms such as being attentive in class, being responsible students, obeying classroom rules, and avoiding disruptive classroom behaviour.

7.5.7 Governmental/ Educational Authorities

Although the Ministry of Education of Thailand declared its intention to promote Thai students' critical thinking in the 1999 National Education Act, several authorities (e.g., Hallinger and Lee 2011, Kantamara *et al.* 2006, Thamraksa 2003) have noted that it has not yet been successfully implemented. The mismatch between this act and its implementation suggest that without effective integration and implementation, well-intentioned and well-formulated policies promulgated by the Ministry may be doomed. Nevertheless, in this study, all the participants showed they were aware of the importance of critical thinking in diverse aspects (see Section 4.3). This at least shows

the Ministry's success in promoting the importance of critical thinking in the Thai educational mainstream. However, the participants reported on teachers' lack of understanding of critical thinking. Two implications arise. First, the Ministry should have gauged Thai teachers' readiness for teaching critical thinking before requiring them to teach it and expecting their students to learn it. Second, the promotion of critical thinking in Thai educational settings has been carried out superficially, not in depth. In other words, the crunch will come when teachers realise critical thinking is important but do not know how to teach it. We may already have reached this point: it is time for the Ministry to re-interpret the directions it issued for the initial promotion of critical thinking.

One possible cause for the original misdirection may be the confusion in the act itself. In this act, Thai students were encouraged to develop their critical thinking while maintaining their Thai-ness. Thai teachers may be confused about how to act when the core concepts of both do not seem to be consistent. The results in this study indeed indicate such confusion. Traditional Thai cultural values involve obedience and conformity whilst the critical thinking ideology promotes the opposite. Kaur et al. (2016) argue that the inclusion of Thai-ness in the act was because several Thai authorities attributed severe problems in Thailand, such as cultural demolition, urbanisation, and environmental destruction to the adoption of Western knowledge, technology, and culture, thereby suggesting using Thai indigenous knowledge and Thai-ness to solve the problems and remedy the country. Nevertheless, Kaur et al. contend that the Thai-ness ideology fosters dated values and deters critical thinking. In this study, however, the participants perceived some aspects of Thai culture and Thai Buddhism as actually encouraging critical thinking. To reiterate, this study therefore suggests that to maintain the Thai-ness in a way that does not hinder critical thinking development, the Thai authorities need to investigate such aspects and other Thai-relevant aspects that foster critical thinking and integrate them into the Thai mainstream education.

The educational management factors mentioned by the participants in this study also imply that educational reforms devised by outsiders, such as curriculum planners, policy makers, and teacher educators, tend to cause problems rather than promote development. Consequently, in order for successful learning and teaching to take place,

the perspectives of insiders, namely teachers, are crucial as they are the ones who know most about the positive and negative circumstances in their own settings. This study supports the need for teachers' voices in educational development, including critical thinking development, to be heard and carefully listened to. Notably, it is not only about the Ministry' open-mindedness in paying more attention to teachers but also about the teachers' own courage to be open to the development of their critical thinking knowledge and pedagogies and to grasp the opportunity to participate in realising the policies provided by the Ministry.

The Ministry of Education needs to consider teachers' workloads. Thai university teachers are required to do many things at the same time, and this may distract them from their actual role of teaching. However, being able to do multiple tasks concurrently is a useful professional skill, one that may bear fruit, providing professional and personal rewards, throughout life.

In addition, this study has revealed that there is a demand for training workshops to equip in-service teachers at all educational levels with critical thinking knowledge, pedagogies, and assessments. These professional developments should transform the teachers into both critical thinkers and critical teachers. In addition, the participants noted that the Internet, used critically, could help students' learning. Therefore, there appears to be a need for training workshops on Internet use to be provided for teachers. These workshops should address the following three aspects: Internet literacy, the critical use of the Internet in daily life, and the pedagogic use of the Internet to supplement critical thinking instruction. Apart from these workshops, the relevant Thai educational authorities should disseminate critical thinking knowledge and its pedagogies through videos, books and leaflets and distribute them to teachers who may need concrete models to learn from.

As evidenced in the literature and in this study, teachers' criticality is essential, and therefore educational institutions at all levels should make critical thinking assessment an entry requirement for teachers' recruitment. Moreover, in-service teachers should also be subject to regular evaluation of their critical thinking so that they can be made more fully aware of their critical thinking abilities.

In university contexts, as mentioned earlier, critical thinking should be a mandatory course for first-year university students. However, educational or university authorities

need to make sure that the teachers assigned to teach such courses are also critical thinkers themselves and have sufficient knowledge of critical thinking and its pedagogies. In other courses in which critical thinking is one of the course objectives, critical thinking should be made an integral part of the course assessment, such as assessing critical thinking as part of the midterm or final exams. This is a way of ensuring a clear direction for critical thinking development in classes. It could also be effective to make critical thinking assessment a compulsory part of the exit exam required of university students before granting them a degree. It is hoped that such an exam would result in positive washback as students would then be more motivated to practise their critical thinking abilities in order to pass this exam.

As the participants pointed out, there is a connection between critical thinking and morality, and morality itself has been proven to be a strong and desirable virtue in Thai societies; its importance should therefore be reflected in educational contexts. Morality tests should be incorporated in both admission and exit exams for university students of all disciplines.

Each institution may find it useful to set up their own critical thinking centre. Such a centre should provide learning materials, information, and facilities that can help develop criticality in both teachers and students. As one participant mentioned, university teachers have the responsibility to provide academic information and knowledge to communities; it may therefore be in their interest to run projects on critical thinking promotion for the people in their communities.

One participant suggested substituting '*kan khit yang mi sati*' (thinking mindfully and metacognitively) for '*kan khit choeng wiphak*' (thinking that uses examinations and evaluations) and '*kan khit yang mi wicharanayan*' (thinking that involves an intellectual examination) to take account of critical thinking in Thai contexts. Thai authorities may find this interesting, given that *sati* conveys positive and familiar meanings to Thai people in general. Such positive connotation and familiarity may result in Thais' perceiving that such thinking is attainable and hence being more open to practising it.

The promotion of critical thinking should not be restricted simply to educational contexts but should be available to Thai society as a whole. The government should establish a national department responsible for cultivating Thais' critical thinking. This programme could take the form of social campaigns on media, such as films, television

presentations, radio channels, and leaflets, all accessible to the general public. It is even more useful for the government to include criticality as another virtue in children's slogans for Children's Day. The cultivation of critical thinking should be made a priority on the national agenda with the aim to make Thai society a 'critical thinking-based society'.

7.6 Pedagogic Implications

The findings in this study have pedagogic implications for critical thinking development in Thai EFL contexts. The following two types of creation encapsulate such implications: a workshop for in-service Thai EFL teachers and suggested activities for Thai EFL university students.

7.6.1 Workshop for In-Service Thai EFL Teachers

The participants in this study perceived teachers' lack of knowledge on critical thinking and its pedagogies as an impeding factor for students' critical thinking development and suggested the teachers should be firstly equipped with these, ensuring that they are ready for the development. This study therefore proposes a workshop, based on its findings.

Prospective Participants

Thai EFL teachers at primary, secondary, and tertiary levels

Workshop Objectives

This two-day workshop will enable teachers to:

- a) describe what critical thinking is, its components, and its process,
- b) distinguish critical thinking from uncritical thinking,
- c) understand the importance of critical thinking,
- d) apply their gained knowledge of critical thinking to their daily life,
- e) describe the characteristics of critical thinking pedagogies,
- f) identify their roles in critical thinking instruction,
- g) identify strategies that can be used to promote their students' critical thinking,

- h) be aware of Thai cultural aspects that can support or suppress students' critical thinking development, and
- i) design critical thinking activities for their language classes.

Sequence of Activities

The workshop involves four major sessions: conceptual knowledge of critical thinking, critical thinking pedagogies, cultural awareness in relation to critical thinking, and designs of critical thinking activities. In what follows, the tentative schedule of the workshop is presented.

<p>Day 1 Morning Session</p> <p><i>Session 1: Conceptual Knowledge of Critical Thinking</i></p> <ul style="list-style-type: none"> - Components of critical thinking and its process - Benefits of critical thinking 	<p>Day 2 Morning Session</p> <p><i>Session 3: Cultural Awareness in Relation to Critical Thinking</i></p> <ul style="list-style-type: none"> - Thai cultural virtues translated into Thai classroom settings - Thai cultural virtues that can pose challenges in critical thinking instruction
<p>Day 1 Afternoon Session</p> <p><i>Session 2: Critical Thinking Pedagogies</i></p> <ul style="list-style-type: none"> - Teachers' roles - Pedagogic approaches and strategies - Types of questions posed in class - Learning activities 	<p>Day 2 Afternoon Session</p> <p><i>Session 4: Designs of Critical Thinking Activities</i></p> <ul style="list-style-type: none"> - Creating activities that involve both English and critical thinking enrichment - Presenting critical thinking activities to workshop audience

It should be noted that a PowerPoint presentation is mainly used in all sessions. Throughout these sessions, as well as providing the teachers with knowledge and information concerning critical thinking, their schemata are also elicited to increase their participation, and hence their mental and cognitive engagement. All sessions end with questions and answers. This is not only to give the teachers an opportunity to

discuss unclear points but also to establish a way to get them to reflect on the information they obtain, a way which, to some extent, helps exercise their criticality.

Day 1 Morning Session

Session 1: Conceptual Knowledge of Critical Thinking

This session presents and discusses the following two topics: components of critical thinking and its process and benefits of this type of thinking.

The first topic is concerned with the components of critical thinking and its process. The workshop employs the model derived from the findings in this study (see Section 7.3). Through this, the critical thinking presented to them includes four aspects, namely, cognitive skills, affective dispositions, goal-orientation, and morality. As the morality issue is still being debated in the literature of critical thinking, inviting the teachers to discuss it may result in interesting angles constructive to critical thinking development, particularly in the Thai context. The example questions used to elicit the teachers' knowledge on critical thinking components and its process are as follows:

- a) What are the characteristics of critical thinkers?
- b) How can you differentiate critical thinking from uncritical thinking?
- c) Can you give examples of situations in which you use your critical thinking in your daily life?
- d) Can you identify possible problems caused by moral indoctrination?
- e) Can you give examples of moral behaviour and immoral behaviour?

The second topic focuses on the benefits of critical thinking. Before presenting the merits of critical thinking mentioned in the mainstream literature, the teachers are asked to draw from them some potential benefits they could find. As the present study revealed an interesting finding regarding the importance of critical thinking in the dimensions of Thai culture and Thai Buddhism, the teachers in the workshop should be encouraged to think about the importance of such thinking in every facet of life, particularly in some seemingly mundane areas that may have been overlooked by them. By raising the teachers' awareness of the merits of critical thinking, it is expected that their positive attitudes toward this type of thinking will be enhanced.

After the presentation of the conceptual knowledge of critical thinking, the teachers then evaluate the given real life situational information using their critical thinking skills.

Day 1 Afternoon Session

Session 2: Critical Thinking Pedagogies

This session sequentially presents and discusses these topics: teachers' roles, pedagogic approaches and strategies, types of questions posed in class, and learning activities.

The first topic begins by asking the teachers about the roles they consider adopting to facilitate critical thinking development in their students. They are then asked to compare the roles they mentioned with those stated in the literature and also with those found in this study. The findings in the present study suggested the following three main roles for the teachers: facilitators, directors, and motivators. That is to say, the participants in this study perceived that their students' critical thinking could be effectively developed by using a student-centred approach, thus signifying that teachers should be acting as facilitators. They nevertheless claimed that some features of a teacher-centred approach were advantageous, especially in the Thai educational context. The implication then is that teachers should sometimes be directive in their students' learning of critical thinking. In addition, the participants' suggested motivational strategies for fostering their students' critical thinking indicate their role as the students' motivators.

The presentation subsequently moves to the second topic: pedagogic approaches and strategies facilitative to students' critical thinking development. The findings in this study indicate that both student-centred and teacher-centred approaches contain their own features that promote students' critical thinking. The teachers in the workshop are asked to brainstorm the pros and cons of using each approach to benefit their critical thinking instruction. Following this is a discussion of the strategies used to promote this type of thinking. Again, such strategies are taken from the literature as well as from the findings in this study. The strategies suggested by the participants in the current study encompass two dimensional strategies: teaching and motivational strategies. The teaching strategies they mentioned involve posing critical questions, activating students' metacognition, encouraging students to deal with negative reactions, encouraging students to perceive everything as text, modelling, and silence. The motivational

strategies they suggested were positive reinforcement, sharing personal experience of engaging in critical thinking, and appreciation of students' participation.

Regarding the third topic, the types of questions posed in class to activate students' critical thinking, the literature states that such questions should encourage students' thought provoking responses. Nunan (1987) argues that in English language classes, referential questions (questions seeking answers unknown by teachers and frequently in the form of WH questions) are more effective in promoting students' higher-order thinking skills, compared to display questions (questions seeking answers known by teachers). Nevertheless, a finding derived from the observations in this study indicates that display questions could also be used to trigger students' critical thinking. Another interesting finding in this study was that the way teachers respond to their students' questions could stimulate the students' curiosity, a dispositional aspect essential for critical thinking. Therefore, the topic to be discussed in this part is concerned with how teachers should raise questions and respond to students' questions to cultivate their students' critical thinking.

The last topic in Session 2 is about learning activities for developing students' critical thinking. The teachers discuss activities mentioned in the literature as well as activities suggested by the participants in this study (i.e., use of students' locality, use of cooperative learning, and exposure to critical thinkers). The discussion also extends to examining some pedagogic concepts that underpin critical thinking activities.

Notably, in this session, it is crucial to make clear to the teachers that when learning a language, students need to use various learning strategies, including both lower-order and higher-order thinking skills. Therefore, as language teachers, they should not prioritise certain strategies and subvert others, but rather draw their students' attention to them as a whole. Each strategy benefits students' learning in its own way.

Day 2 Morning Session

Session 3: Cultural Awareness in Relation to Critical Thinking

As claimed in the literature and shown in this study, critical thinking can be socio-culturally and religiously relevant, and so it is important for teachers to be aware of this and find ways to deal with it judiciously. This session begins by eliciting from the teachers Thai cultural virtues they think are translated in Thai classroom settings and is

followed by a presentation of the virtues stated in the literature and those derived from the findings in this study (i.e., modesty, respect, silence, and obedience). Afterwards, Thai cultural virtues that can pose challenges in critical thinking instruction will be discussed in groups. Examples of the topics in the group discussion are given below:

- a) When is it right to challenge teachers in class?
- b) What kind of students' behaviour is considered to be appropriate or inappropriate in class?
- c) What are the signs of students' respect or disrespect in class?
- d) What are strategies used for helping Thai students deal with mainstream resistances when they express their critical ideas?
- e) How do they deal with Thai students' cultural modesty and enable them to show their full potential in terms of their criticality?
- f) How can they develop students' critical thinking while preserving Thai identity at the same time?

All groups finally present their work, interchanging ideas and getting feedback from one another.

Day 2 Afternoon Session

Session 4: Designs of Critical Thinking Activities

In this session, with given course books, the teachers brainstorm their ideas in groups designing activities that demand critical thinking. As EFL teachers, the activities they devise should enrich the students in terms of their English and critical thinking. After finishing, they will share their work with the audience in the workshop where healthy discussions and constructive feedback are encouraged.

This study suggests that it should not be assumed that teachers' knowledge and understanding of critical thinking and its pedagogies are complete after only one two-day workshop. They should perceive critical thinking as an integral part of their long-time professional development. Another suggestion is that this workshop could be made part of a research project. In this way, what is found in the workshop (e.g., teachers'

wishes, their existing cognitions of teaching, critical thinking, and critical thinking pedagogies, their perceptions of students' critical thinking development, and their predictions of such development) will be further researched. Such workshop is clearly worth holding as it not only provides knowledge on critical thinking and its pedagogies to teachers but also can give rise to new investigations and therefore extend the existing literature.

7.6.2 Suggested Activities for Thai EFL Students

The findings in this study provide some practical ideas for designing and arranging critical thinking activities. In this study, the participants' perceptions of students' critical thinking development were focused on their Thai EFL university students. The following five suggested activities are considered to be suitable for this group of students.

Activity 1: Evaluating English Cartoon Films

A teacher selects English cartoon films for his/her students to watch and discuss. This group work activity is assigned for the students to do outside the classroom time. The students watch English cartoon films in groups and analyse such issues as plots, characters, for what age of the children the movies are appropriate, and how the cartoons develop children's learning. They are also asked to create different endings and provide justifications for their alternatives. Then each group presents their work to the class.

Activity 2: Identifying Critical Thinkers

This activity begins with a teacher presenting and discussing conceptions of critical thinking with students in class, and this is followed up by the students applying what they have learned to undertake fieldwork: finding and interviewing critical thinkers in their communities. It is important to ensure that they understand such conceptions and are able to identify the characteristics of critical thinkers as this will facilitate their fieldwork investigation. The students need to plan what they will do in their fieldwork (e.g., arranging dates and times, preparing interview questions, and assigning specific responsibilities to each group member). They are also asked to reflect on the fieldwork process they take part in: from prior to carrying out the fieldwork until completing it. Such reflections can be, for example, on the problems they encountered, how their

attitudes, opinions, and knowledge of certain matters developed along the way, and what they learned and what they lost. Their English presentations could therefore involve both the information about the critical thinkers they obtained from their fieldwork and their own reflections on it.

Activity 3: Developing Tourist Attractions

In this group-work activity, students do a fieldwork study, examining their nearby tourist attractions, interviewing local people and staff there, and presenting such information in class. Before going to their selected places, a teacher has his/her students brainstorm issues to be investigated in the places. These can be, for example, their location, their history, the numbers of tourists each year, linguistic landscapes, strengths and weaknesses of the places, problems the places encounter, solutions to the problems, and directions for development. Similar to Activity 2, the students are asked to jot down their reflections when going through the activity. After completing the fieldwork, they then present their work and their reflections to the class in English.

Activity 4: Analysing English TV Commercials

This activity focuses on raising students' critical thinking awareness when receiving information from media and technology. A teacher prepares TV commercials taken from YouTube for his/her students to analyse and identify the propaganda peddled by them. Then the students work on banned TV commercials, analysing why they were banned and giving their own ideas on whether they should or should not have been banned or not. This activity can be done either in groups or as a whole class.

Activity 5: Think and Write

This activity can be done in an English writing class. Prior to the students' writing, there are three tasks for a teacher to do: discussing with his/her students the writing structure (i.e., introduction, body, and conclusion), brainstorming ideas relevant to the assigned writing topic, and having the students use mind-mapping to visualise their thoughts on what they will write. On finishing their writing, the students submit their writing work and their mind-mapping notes to their teachers.

Rationales for the Suggested Activities

These five activities are derived from the suggested ideas and shared experience of the participants in the current study. As can be seen, these activities potentially develop the students' multidimensional and meaningful learning, involving a whole spectrum of invaluable skills from English language, critical thinking, creative thinking, teamwork, communication, problem-solving to presentation. Moreover, in some activities (i.e., Activities 1-3) in which the students are required to work outside the classroom time, their autonomous learning is also, to some extent, encouraged.

Activities involving fieldwork studies (i.e., Activities 2-3) in the students' communities are considered to be community-based learning. The fact that the students can use their communities as learning sources may increase their motivation for enduring learning. Moreover, through these fieldwork studies, they may realise that learning is not restricted only to their classrooms. Such experience-based learning may suggest new strategies they can adopt, such as thinking, trial and error, problem-solving, and testing hypotheses or assumptions. Through such activities, we can say that they engage in profound learning, as opposed to mere surface learning. In addition, in Activity 3 in particular, the students have an opportunity to propose their own ideas for solving the problems found in tourist attractions and for developing such places. In thinking about helping others or about public matters, it is hoped that the students' public minds and citizenship will be activated.

As some of the suggested activities include English presentations, it is expected that they can enhance not only their English-speaking skills but also their ability to make use of technology for their presentations (e.g., PowerPoint, the Internet, and online clips) can also be enhanced. To improve their presentation skills, the students may be able learn from influential English talk shows, such as Ted Talks, where they can acquire not only authentic English but also presentational techniques that can make their own presentation more interesting or even powerful. Nevertheless, the students should also be encouraged to view such shows critically and not simply imitate them. They should analyse the strengths and weaknesses of the shows, reflect on them, and then critically select aspects of them that they can adopt and use in their own presentations.

Although such activities seem to rely considerably on students' autonomous learning, the teacher also needs to prepare thoroughly for such a project. For example, in Activity

1, the teacher needs to select English cartoons for the students to watch and discuss. In Activity 2, the teacher needs to prepare their teaching and learning materials on critical thinking for the students. For the activities where the students are required to do fieldwork studies, the teacher also must assist them to brainstorm ideas about what they should do. Besides good preparation for teaching, the teacher also needs to act as his/her students' helper, one that they can approach and seek advice and assistance from. Therefore, in all of these proposed activities, the teacher roles are not diminished but instead may take a different form from that usually found in more traditional teaching.

In traditional classrooms where somewhat cramped classroom seating prevails and could prevent students from doing lively group work activities and/or obstruct teachers from embarking on critical thinking instruction, asking the students to work in groups outside the class, as suggested in the activities above, may to some extent help solve the problems. This shows that students' critical thinking development and cooperative learning promotion can be practically done, despite the time pressures in class. Teachers, however, will still have to arrange classroom time for their students to present their group work, an opportunity for the students to express themselves linguistically, creatively and critically and a chance for the teachers to observe and monitor their students' learning.

7.7 Limitations of the Research

On reflecting on how this study had been conducted, I felt some limitations needed to be addressed. The first limitation was that I was using some participants with whom I had had a pre-existing relationship, either as colleagues or as former students. Although measures were taken to lessen the potential effects from these relationships, it was not possible to completely eliminate them. Such relationships, to some extent, might affect the data collected in the study. Moreover, as an insider, familiar with the context being investigated, there may have been other cultural influences that I myself have overlooked because of my familiarity with them.

Regarding the limitations of the methods used, I realise that using reflective writing may result in a certain inauthenticity in the participants' ideas. Although an interview was used to double-check this, it is possible that some inauthenticity could still remain. However, as one participant in the first pilot study said, people can have different ways of expressing themselves. As the methods used here required both writing and speaking

skills, the individual differences in the communication preferences of the participants were at least respected. Another method, a one-time observation, that was used can also cause reactivity. This is because the participants and their students might perform in a way they thought I wanted to see. I must therefore acknowledge this potential flaw in my data collection.

Nevertheless, despite the said limitations, it is confidently assumed that the findings of this study are robust enough to contribute to the development of critical thinking in Thai EFL educational contexts and other similar contexts.

7.8 Recommendations for Future Research

This study of the ‘Critical thinking cognitions and pedagogic practices of Thai EFL university teachers’ applied a qualitative research design to gather the data through the use of methodological triangulation which included reflective writing, semi-structure interviews, and one-time non-participant classroom observations for each participant. Researchers wishing to build on this research may find it interesting to conduct a longitudinal study using a mixed research design that includes both qualitative and quantitative research methods.

The participants in this study were in-service teachers. Further studies could be done by recruiting retired Thai EFL university teachers. These teachers will have had considerable exposure to the Thai educational context. Given this, their experiences may raise interesting points that the current Thai educational authorities have perhaps overlooked when planning the policies for developing Thai students’ critical thinking. Moreover, it is important that further research explores the critical thinking cognitions and practices of not only Thai EFL university teachers but also of foreign teachers teaching critical thinking in Thai EFL classes. This is because other cultural issues that seem familiar and thus invisible to Thais may appear more noticeable to foreigners.

Since the literature consulted in this study as well as the study findings themselves suggest that critical thinking can be cultural thinking, I would like to suggest that two types of comparative studies be conducted on the topic of the current study. First, Thai EFL university teachers from different regions in Thailand could be used as participants so as to see the extent to which their cognitions and practices with reference to critical thinking are influenced by their national or regional culture. Second, EFL university

teachers from different countries, particularly between Western and Asian countries, should also be involved and their views of the topic examined.

In addition, as evidenced in the literature, critical thinking is also context-specific. Studies conducted involving university teachers in other disciplines could also be useful as teachers in certain fields could have interesting cognitions and practices that are unique to their subjects they are teaching.

From the findings of this study, I found certain emerging issues that could merit further research. The participants in this study conceived of critical thinking as having a strong moral component. I should first acknowledge that this came from my participants, but I sense that it may be typical of Thai EFL university teachers. However, further research can examine whether this issue is applicable in other Buddhist-influenced countries, such as Cambodia, Myanmar, or Bhutan.

Future research could also verify the effectiveness of the participants' suggested strategies (teaching strategies and motivational strategies) and learning activities in Thai EFL classroom settings. One of their proposed strategies to deal with the unique situation of critical thinking in Thai contexts was one to tackle negative reactions from others. Interested researchers might like to conduct a research project on this issue in which teachers' and students' opinions could be explored. This strategy appears to be constructive so long as Thai society cannot be immediately transformed into the critical thinking-based society. Moreover, one participant raised the issue on a possible discrimination between teachers with critical thinking and teachers without it; an investigation into how critical thinkers should react to those whom they deem uncritical could be interesting. Lastly, the participants' views on the social exclusion of students who like to express their ideas in class may call for research examining students' opinions on this issue.

7.9 Concluding Statement

This PhD journey provided me with valuable lessons for my professional and personal life. Doing this thesis, I researched not only the participants' critical thinking cognitions and practices but also my own critical thinking development in trying to be a critical researcher and a critical individual. Moreover, throughout this study, I have learned, practised, and undertaken rigorous research; it has been an invaluable learning process,

one that has enabled me to grow and will in time allow me to help others in the academic world. My personal life has also been enriched by this PhD experience, as I have learned to overcome my weaknesses. I have become more patient and persistent, someone who is not likely to give up easily, qualities that hopefully will enable me to become a better person.

The findings in this study clearly provide evidence for optimism concerning critical thinking development in Thai students and even in the Thai population as a whole. The development of critical thinking in students is like building a house. To build a strong house, it is important to use strong bricks. Teachers can be seen as these bricks and should be strengthened in their capacities, ready for the house construction. Nevertheless, the house itself cannot be successfully built from bricks alone because it also requires other building materials. This needs responses from all those concerned about critical thinking development.

Moreover, where the house is located is equally important for it will have a positive impact on the construction of the house and make such a house not only sturdy but also enjoyable to live in. Similarly, the development of critical thinking should take into account the local culture of where the development takes place and also use some of the cultural aspects attributed to critical thinking to enhance this burgeoning. Given that Thai culture and Thai Buddhism themselves share some attributes with critical thinking, it can be expected that the development of critical thinking in Thailand is indeed a viable project, a realisable dream.

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APPENDICES

Appendix A: Reflective Writing Questions

English Version

1. What are the problems found when teaching Thai students?
2. What are the qualities of a good student?
3. What are the qualities of a good teacher?
4. What do people do when they think critically?
5. To what extent and in what ways is critical thinking important?
6. Are critical thinking and English language teaching related to each other? Why do you think they are/are not? Please explain and give some examples.
7. Are your students critical thinkers? Why do you think they are/are not? Please explain and give some examples.
8. What are the factors you consider to affect the development of critical thinking in your students?
9. How can critical thinking be developed in the Thai classroom setting?

Thai Version

1. ปัญหาที่พบในการสอนผู้เรียนชาวไทยมีปัญหาใดบ้าง
2. ผู้เรียนที่ดีควรมีลักษณะอย่างไร
3. ผู้สอนที่ดีควรมีลักษณะอย่างไร
4. ผู้ที่คิดอย่างมีวิจารณญาณมีลักษณะอย่างไร
5. การคิดอย่างมีวิจารณญาณมีความสำคัญมากน้อยเพียงใด และสำคัญในด้านใดบ้าง
6. การคิดอย่างมีวิจารณญาณและการสอนภาษาอังกฤษมีความสอดคล้องกันหรือไม่ เหตุใดท่านจึงคิดเช่นนั้น กรุณาอธิบายและยกตัวอย่าง
7. ผู้เรียนของท่านเป็นผู้คิดอย่างมีวิจารณญาณหรือไม่ เหตุใดท่านจึงคิดเช่นนั้น กรุณาอธิบายและยกตัวอย่าง
8. ปัจจัยใดบ้างที่ท่านคิดว่ามีผลต่อการพัฒนาการคิดอย่างมีวิจารณญาณ ของผู้เรียน
9. การคิดอย่างมีวิจารณญาณสามารถพัฒนาในชั้นเรียนในบริบทไทยได้อย่างไร

Appendix B: Interview Questions

English Version

1. What is the most suitable learning method for Thai students in the Thai setting?
2. How do your students learn? Is it different from the way you learn?
3. What do you think you know about critical thinking and what do you not know?
4. What types of activities do you arrange in class?
5. What are the characteristics of critical thinking enhancement activities?
6. Have you given your students critical thinking activities in class? If so, please give some examples of the activities. If not, why?
7. If you have your students practise critical thinking in class, will you continue doing so in the future? Please explain why.
8. Do you think you yourself are a critical thinker? What makes you think you are/you are not?
9. Have you practised your critical thinking in your previous educational courses?

Thai Version

1. วิธีการเรียนที่เหมาะสมที่สุดสำหรับผู้เรียนชาวไทยในบริบทไทยคือวิธีการเรียนแบบใด
2. ผู้เรียนของท่านมีวิธีการเรียนรู้อย่างไรและแตกต่างจากวิธีการเรียนรู้ ของตัวท่านเองหรือไม่
3. ท่านรู้อะไรบ้างที่เกี่ยวกับการคิดอย่างมีวิจารณญาณและมีสิ่งใด บ้างที่ท่านยังไม่รู้
4. กิจกรรมในชั้นเรียนของท่านมีกิจกรรมใดบ้าง
5. กิจกรรมที่ส่งเสริมการคิดอย่างมีวิจารณญาณมีลักษณะอย่างไร
6. ท่านเคยให้ผู้เรียนทำกิจกรรมที่เกี่ยวกับการคิดอย่างมีวิจารณญาณใน ชั้นเรียน หรือไม่ ถ้าใช่ กรุณายกตัวอย่าง ถ้าไม่ กรุณาอธิบาย
7. หากท่านเคยให้ผู้เรียนได้ฝึกการคิดอย่างมีวิจารณญาณในชั้นเรียน ท่านจะจัดให้ผู้เรียนได้ฝึกฝน อีกในอนาคตหรือไม่ กรุณาอธิบาย
8. ท่านคิดว่าท่านคือผู้ที่คิดอย่างมีวิจารณญาณใช่หรือไม่ ทำไมท่านจึงคิดเช่นนั้น
9. ท่านเคยฝึกการคิดอย่างมีวิจารณญาณในรายวิชาต่างๆที่ท่านเคยเรียนมาหรือไม่

Appendix C: Observation Guide

1. A map of the classroom
2. Verbal behaviour and interactions
 - Who dominates the class?
 - Who initiates interactions?
 - What language is spoken?
3. Physical behaviour and gestures
 - Eye contact
 - Classroom behaviour
4. Classroom activities
5. Teachers' roles
6. Students' roles
7. Extroverted students and introverted students
8. Learning atmosphere

Appendix D: Example of Field Note Written

5 Sept 2016 (Wed: 9:10-11) → 2nd

space b/w. the desks = too dense, crowded. SS came to class early & very few decided to sit at the front. 11's 12's 13's. They seem to have their permanent location for sitting → class started quite late. T is waiting for more SS to come. Teases Thai & Eng. (mostly Thai) she spent a time disciplining SS.

- Eng → in form of classroom lang. → in group 1st lesson
- Classroom atmosphere → rather formal → most class → memorising ans.
- In class does not check pronunciation last week → whole class participation → run quickly
- In role play activities SS memorise what to role play first → memorising not natural speaking in front of class
- T asks for volunteers → seem to be a lot of fun for them → but then memorising activity
- Good because talk about correct their pronun. mistakes, so SS can practise & learn pronunciation rules. 10's 11's 12's 13's = more 10's 11's 12's 13's
- Activities ① check ans. for exercises → T. controls class
- ② speaking practices
- ③ → 10's 11's SS are more confident when being in groups - when T have them work in groups, 10's 11's 12's 13's → what this represent? → risk aversion? Again 10's 11's 12's 13's → exam-driven? 10's 11's 12's 13's
- original T. drawing quite 10's 11's 12's 13's seem 10's 11's 12's 13's being loved by their classmates
- 10's 11's 12's 13's → awkward for discussing in groups.

moving desks for T → 10's 11's 12's 13's } difficult to monitor the groups
 10's 11's 12's 13's

Appendix E: Example of Coding Process (Original Version)

ผู้วิจัย: อันนี้คือที่หมายถึงว่าอาจเป็นปัจจัย คือยังงี้ละ คือที่ส่งผลต่อการพัฒนาการคิดของเด็กด้วยใช่ไหมคะ

วาทรี: จริงๆแล้วปัจจัยอะไรทุกอย่างในชีวิตที่เกี่ยวกับ critical thinking ทั้งหมดแหละ ถ้าให้เริ่มค้นจริงๆ ก็เริ่มตั้งแต่เด็กโตมาอย่างไรถูกเลี้ยงดูมาอย่างไรด้วย มัน ironic หน้าที่ไทยเราเป็นเมืองพุทธ → ศาสนา → sociocult. norm / relativism แล้วพระพุทธรเจ้าสอนให้เราไม่เชื่ออะไรง่ายๆ แต่ที่เห็นคนไทยเราส่วนใหญ่เราก็มักพร้อมที่จะเชื่ออะไรง่ายๆ

ผู้วิจัย: พระพุทธรเจ้าใช่ไหมคะ

วาทรี: ใช่ๆ จำได้ไหมคำสอนเรื่อง กาลามสูตร

ผู้วิจัย: อ้อๆคะ จำได้ๆคะ กาลามสูตร

วาทรี: คำสอนนั้นใช่ไหม พักใจมาสอนเด็กด้วยนะ พี่ว่ามี practical ไหม

ผู้วิจัย: โห น่าสนใจคะ พี่สอนกาลามสูตรในห้องด้วยหรือคะ

วาทรี: คือพี่ไม่ได้สอนแบบได้ๆอะว่านี่เธอ วันนี้จะสอนพวกเราเรื่องกาลามสูตรนะ แบบนี้ไม่ใช่ ไม่ใช่แบบนี้จะ พี่จะสอดแทรกแนวคิดเข้าไปมากกว่า กาลามสูตรก็คือ critical thinking นี่แหละ มันคล้ายกัน

ผู้วิจัย: มันคล้ายกันยังไงคะ

วาทรี: ก็เหมือนกับว่า เช่นว่า ยังงี้ละ แล้วคือเวลาพี่สอน พี่ก็บอกเด็กไปด้วยว่า พวกเธอค้นคว้าเพิ่มเติมด้วยนะ อย่าเชื่อครหมุด มันก็เหมือนคำสอนพระพุทธรเจ้าแหละหน้าที่ว่าอย่าเชื่ออะไรง่ายๆ เพราะว่าครูบอก ก็คือให้ครูบอกก็อย่าไปเชื่อก่อน มันก็เหมือนเป็นการบอกให้เด็กกล้าที่จะคิดอะไรที่ต่างออกไป ไม่ใช่ว่าครูบอกอะไรเชื่อหมด

ผู้วิจัย: แล้วเด็กทำตามไหมคะ

วาทรี: อันนี้ก็ไม่รู้จริงๆคะว่าทำหรือเปล่า แต่เด็กไม่ค่อยกล้า challenge พี่ในห้องนะ

ผู้วิจัย: คือเด็กค่อนข้างรู้เรื่องการวางตัวในชั้นเรียนกับครูด้วย มันเป็นเรื่องที่เรียกว่าอะไรนะ hierarchy ใช่ไหม นั่นแหละ เด็กก็จะเป็นแบบนั้น คือลือตามแบบนั้น เป็นแบบนั้นมาก

ผู้วิจัย: แล้วพี่คิดว่าเหมือนเรื่อง hierarchy คือมันมีผลตีผลเสียกับการเรียนรู้ของเด็กยังไงคะ

วาทรี: มีนะ มันมีผลไม่ใช่แต่กับเด็ก แต่กับครด้วย** เหมือนเวลาที่พี่สอนใช่ไหม คือพี่สอนตลอดแหละเรื่อง เหมือนเวลาที่พี่สอนใช่ไหม คือพี่สอนตลอดแหละเรื่อง บอกเด็กให้มั่นใจกันหน่อย อะอะไรที่ถูกต้องแล้วถ้ามั่นใจว่าใช่ ก็แสดงความเห็นมา แต่เหมือนกับว่ายังงี้ละเพื่อนพี่บางคนก็บ่นนะ ว่าไปสอนอะไรแบบนั้นเด็กมันก็ก้าวร้าวสิ แบบว่าเอ็ดนะเด็ก คือเค้ามองว่าถ้าพี่สอนแบบนั้น เหมือนทำให้ power ของครูลดลงแล้วที่นี้จะคุมเด็กยาก

ผู้วิจัย: อันนี้คือที่หมายถึงว่าอาจเป็นปัจจัย คือยังงี้ละ คือที่ส่งผลต่อการพัฒนาการคิดของเด็กด้วยใช่ไหมคะ

วาทรี: จริงๆแล้วปัจจัยอะไรทุกอย่างในชีวิตที่เกี่ยวกับ critical thinking ทั้งหมดแหละ ถ้าให้เริ่มค้นจริงๆ ก็เริ่มตั้งแต่เด็กโตมาอย่างไรถูกเลี้ยงดูมาอย่างไรด้วย มัน ironic หน้าที่ไทยเราเป็นเมืองพุทธ → ศาสนา → sociocult. norm / relativism แล้วพระพุทธรเจ้าสอนให้เราไม่เชื่ออะไรง่ายๆ แต่ที่เห็นคนไทยเราส่วนใหญ่เราก็มักพร้อมที่จะเชื่ออะไรง่ายๆ

ผู้วิจัย: พระพุทธรเจ้าใช่ไหมคะ

วาทรี: ใช่ๆ จำได้ไหมคำสอนเรื่อง กาลามสูตร

ผู้วิจัย: อ้อๆคะ จำได้ๆคะ กาลามสูตร

วาทรี: คำสอนนั้นใช่ไหม พักใจมาสอนเด็กด้วยนะ พี่ว่ามี practical ไหม

ผู้วิจัย: โห น่าสนใจคะ พี่สอนกาลามสูตรในห้องด้วยหรือคะ

วาทรี: คือพี่ไม่ได้สอนแบบได้ๆอะว่านี่เธอ วันนี้จะสอนพวกเราเรื่องกาลามสูตรนะ แบบนี้ไม่ใช่ ไม่ใช่แบบนี้จะ พี่จะสอดแทรกแนวคิดเข้าไปมากกว่า กาลามสูตรก็คือ critical thinking นี่แหละ มันคล้ายกัน

ผู้วิจัย: มันคล้ายกันยังไงคะ

วาทรี: ก็เหมือนกับว่า เช่นว่า ยังงี้ละ แล้วคือเวลาพี่สอน พี่ก็บอกเด็กไปด้วยว่า พวกเธอค้นคว้าเพิ่มเติมด้วยนะ อย่าเชื่อครหมุด มันก็เหมือนคำสอนพระพุทธรเจ้าแหละหน้าที่ว่าอย่าเชื่ออะไรง่ายๆ เพราะว่าครูบอก ก็คือให้ครูบอกก็อย่าไปเชื่อก่อน มันก็เหมือนเป็นการบอกให้เด็กกล้าที่จะคิดอะไรที่ต่างออกไป ไม่ใช่ว่าครูบอกอะไรเชื่อหมด

ผู้วิจัย: แล้วเด็กทำตามไหมคะ

วาทรี: อันนี้ก็ไม่รู้จริงๆคะว่าทำหรือเปล่า แต่เด็กไม่ค่อยกล้า challenge พี่ในห้องนะ

ผู้วิจัย: คือเด็กค่อนข้างรู้เรื่องการวางตัวในชั้นเรียนกับครูด้วย มันเป็นเรื่องที่เรียกว่าอะไรนะ hierarchy ใช่ไหม นั่นแหละ เด็กก็จะเป็นแบบนั้น คือลือตามแบบนั้น เป็นแบบนั้นมาก

ผู้วิจัย: แล้วพี่คิดว่าเหมือนเรื่อง hierarchy คือมันมีผลตีผลเสียกับการเรียนรู้ของเด็กยังไงคะ

วาทรี: มีนะ มันมีผลไม่ใช่แต่กับเด็ก แต่กับครด้วย** เหมือนเวลาที่พี่สอนใช่ไหม คือพี่สอนตลอดแหละเรื่อง เหมือนเวลาที่พี่สอนใช่ไหม คือพี่สอนตลอดแหละเรื่อง บอกเด็กให้มั่นใจกันหน่อย อะอะไรที่ถูกต้องแล้วถ้ามั่นใจว่าใช่ ก็แสดงความเห็นมา แต่เหมือนกับว่ายังงี้ละเพื่อนพี่บางคนก็บ่นนะ ว่าไปสอนอะไรแบบนั้นเด็กมันก็ก้าวร้าวสิ แบบว่าเอ็ดนะเด็ก คือเค้ามองว่าถ้าพี่สอนแบบนั้น เหมือนทำให้ power ของครูลดลงแล้วที่นี้จะคุมเด็กยาก

Appendix F: Example of Coding Process (English Version)

<p>The researcher: Do you mean that it is the factor affecting the development of their thinking?</p> <p>Ratri: I think actually all the factors in their lives can affect their critical thinking. This should start with how they have been nurtured since they were young. The irony is that Buddhism is the national religion of Thailand, and our Lord Buddha teaches us not to believe in anything easily. Nevertheless, the majority of Thais are ready do otherwise.</p> <p>The researcher: The Buddha?</p> <p>Ratri: Right. Do you remember the Kalama Sutta?</p> <p>The researcher: I see. The Kalama Sutta.</p> <p>Ratri: Yes. I teach my students the doctrine. I think it is practical.</p> <p>The researcher: Oh, it is interesting. Have you taught this to your students? How did you teach it?</p> <p>Ratri: I have not taught it explicitly. But instead I apply some concepts of the doctrine to my teaching. I think it is quite similar to critical thinking.</p> <p>The researcher: How are they similar?</p> <p>Ratri: Whenever I taught them something, I also told them they should study more about the topic and should not believe everything I told them. It is similar to one piece of advice in the Kalama Sutra, asking us not to believe it simply because it comes from our teachers. It is a means of encouraging students to be bold enough to think differently.</p> <p>The researcher: And did your students follow your advice?</p> <p>Ratri: I have no idea actually. They rarely challenge my ideas in class. As you know, the sense of hierarchy is so strong here.</p> <p>The researcher: Do you think such a sense facilitates or hinders your students' learning?</p> <p>Ratri: Actually, it affects both students and teachers. I usually teach my students to think critically and be confident about expressing themselves what they consider to be the right things. But it seemed some of my colleagues were not satisfied with this. They condemned me for teaching the students to be aggressive. They told me what I did could lessen teachers' power in class, and hence the students would be harder to control.</p>	
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Appendix G: Commentary on the Interview Excerpt

It should be first noted that in the actual analysis process, the data was analysed in Thai. However, I translated the original Thai version of the interview excerpt in Appendix E into English, as shown in Appendix F.

In Appendix E, there are two columns with the participant's transcript in the first column and my own codeable ideas being expected to be in the second column. Nevertheless, coding is an active process. When I immersed myself in the data, my thoughts sometimes flowed fluently, and I then recorded them in the second column. As a result, my thoughts were recorded in the second column while the codes were placed on the left of the first column. I then realised that even in the coding process, things might not go as planned. As can also be seen, I used both English and Thai when involved in this process so that the recording of fluent thoughts and codes would not be impeded due to a language barrier.

At first glance, as seen in the interview account (see Appendices E and F), it seems that I talked less, compared to the interviewee. This seems to imply that I was a good listener. However, when going back to listen to the audio-recording of this excerpt, I found that sometimes I asked further questions rather too quickly. In some sentences, I felt that if I had given her more time, she might have added something more, an idea that could have been interesting. I tried to figure out why I had acted in this way and found that I had done so to show my interest in what she had said and also to avoid any awkward moments I thought could have occurred. What I have learned here is that I now need to be silent sometimes and to be aware of and control the pace at which I speak. Interestingly, when examining the conversations between myself and the interviewees, I did not notice this particular point. This was possibly because I had used a transcribing service, and this might have made me unaware of how I should have been more consciously reflexive about it. It is therefore a good idea for researchers using any transcribing service to be reflexive whenever cross-checking written transcripts with their audio data. The reflexive practice in this process will enable them to see their strengths and pitfalls as interviewers more clearly. In my study, I must admit that, although I tried to be reflexive in every step of the research process, I was not reflexive in the data cross-checking stage.

In the beginning of the interview extract (see Appendices E and F), I paraphrased what she had said before. This was done deliberately to check whether I had fully understood what she had been trying to convey. In this study, I also found another advantage of paraphrasing; it can be a psychological way of sending a message to the interviewee that I was carefully listening to her. This also seemed to inspire her to explain more and unexpectedly led to another topic (on culture) to discuss.

As can be seen in the interview excerpt (see Appendices E and F), the role of culture was revealed to be quite prominent. There are two points to be addressed here.

First, this participant mentioned Buddhism and Thai hierarchy, both of which she perceived to have an influence on students' critical thinking. She referred to them without being prompted by my questions. I then followed up her responses by asking more questions and probing somewhat deeper. Her mentioning of Buddhism and Thai hierarchy, both of which are considered to be part of Thai culture, indicates that, as a teacher, she realised that culture could affect students' learning. Another implication is that an interview, at some moments and to some extent, could be interviewee-led. By empowering her to share her stories, the power relations between us seemed to become more fluid, moving back and forth and producing particular interesting data.

Second, it seems that in our conversation, she also used a Thai southern word 'ใ้ฉฉ' (circled in the green highlighted passage in Appendix E), meaning being arrogant, which was understood by me because I am also a southerner. This reinforces the practicality of using the theoretical framework of this study. In this case, shared linguistic identity between myself and the participant was advantageous.

In addition, after each interview, with the audio-recorder being switched-off, I asked each participant to give me some comments about their interview. The participant, as shown in Appendices E and F, said that when discussing critical thinking with me, she actually came to realise the importance of this way of thinking. She admitted that she knew how important it was but, due to her own busy schedule and excessive workload, she sometimes overlooked it. Other participants in this study said how much they had gained from their interviews. For example, one participant said that in the interview, she could fully express her ideas and feelings, and this even enabled her to understand more clearly the position she was taking as a teacher, what she really wanted from being a

teacher, and in fact how far her present stance was from the one she wished to adopt. It seems that the interviewing process gave her time and an opportunity to reflect on herself as a teacher. Another participant said that having been interviewed inspired him to do his own research on a topic concerning teachers' teaching styles, and he even also asked me to be one of his potential participants. This demonstrates how an interview method can also be used as a tool for enhancing professional connections. One participant said that she had taken part in this study because she herself planned to do a PhD, and she wanted to observe how I carried out an interview in my PhD study so that she could learn from it. It is possible that in some cases participants come to the research interview with certain agendas and, if so, the interview could be a win-win situation, mutually profitable for both researchers and their participants.

The interviews in this study provided opportunities not only for the participants to reflect on their own teaching but also for me to reflect on myself as a Thai person. When I decided to do this research in the Thai context, I thought that there might be some participants talking about Buddhism, and I was right. Most participants referred to it. At first, I felt a bit worried about mentioning it in my work as I personally believed that religion was something sacred and hence untouchable. Nevertheless, the fact that the participant (see Appendices E and F) said that Buddhism was practical changed my mind. Moreover, when the participants in this study referred to some Buddhist doctrines, it seemed I was already familiar with them. However, when asking myself what they really were, I got stuck and then realised that I was only born Buddhist but in fact rarely understood its doctrines. Having analysed the participants' data on Buddhism and having read extensively for the literature review, I discovered an extra advantage of doing research in my own Thai setting, namely, it gave me a better understanding of my own religion and generated an interest in learning more about it. This also enabled me to understand my own roots, and thereby myself much better. This study allowed me to uncover not only the "invisibility of everyday life" (Erickson 1990, p. 92) of the participants, but also that of myself as a researcher.

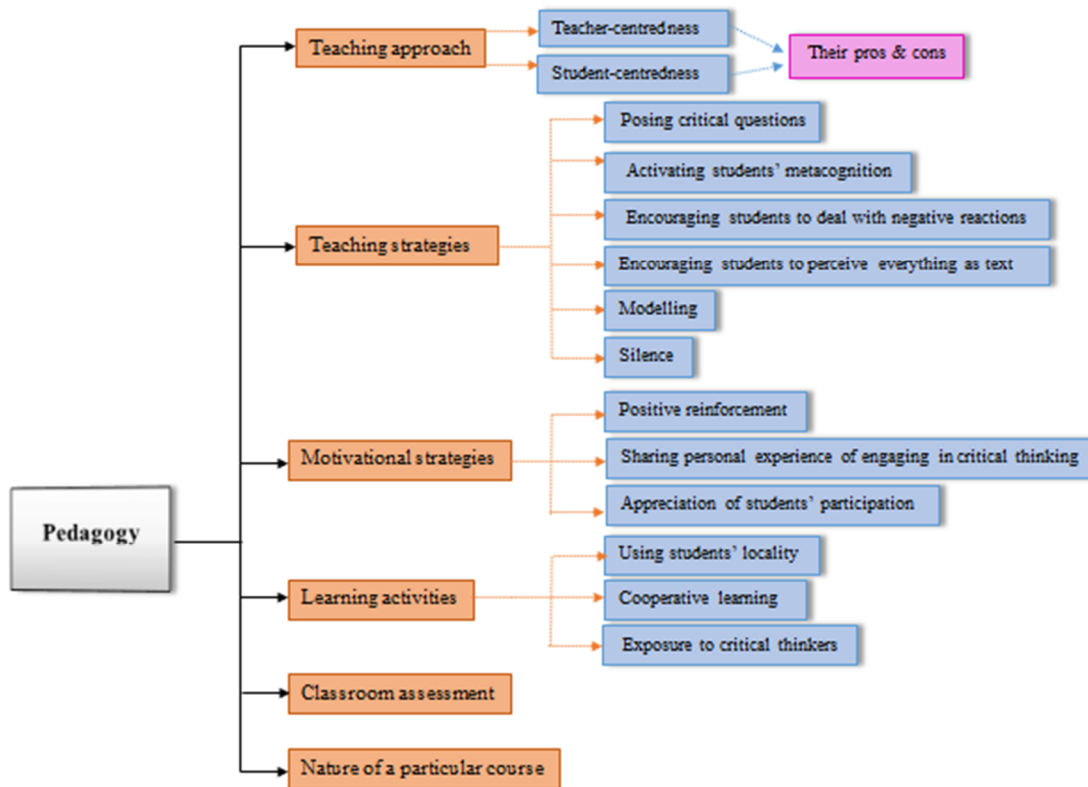
Appendix H: Example of Codes and their Supporting Quotes

Codes	Quotes
Time constraints	<ul style="list-style-type: none"> - Teach against time. (Siri) - Make the best use of time to give students as much input as we can and use assessment tests that save time and are the most convenient for us and for them. (Ithi) - If we teach other content beyond the course syllabus, we will not be able to cover the course content specified in the syllabus. (Kamlai) - No time. I have a lot of things to do in class. (Tawan) - Having them do group work activities in class will waste my teaching time. (Pa-det) - Whole-class interaction can save time. (Kamlai) - Sometimes, I am nervous. I have to be constantly aware of time, asking myself if I can cover the prescribed content in class. (Mali) - Impossible to have all students in class practise thinking in their classroom time. (Bancha) - With such time pressure, teachers prefer feeding knowledge to students. (Dara) - Because of time limitations, my lecture is based mainly on the information from the book. I use PowerPoint presentations to present each chapter's main points, the details of which can be read and revised by the students after the classes. I prefer using some of my class time to give students some of the principles of language assessment and language skill testing and then get them to do practical activities such as looking at samples of badly written test items, making comments, using their logical reasoning skills, reflecting on what they have learned and suggesting changes to be made so that they are good language test items. (Ticha) - We do not have enough time. If we cannot cover the content that we are required to teach, students may not have sufficient knowledge to pass exams. (Narin)
Teaching strategies	<ul style="list-style-type: none"> - One strategy could be that teachers ask themselves if the development of critical thinking in their students in class is sufficient. (Ratri) - Teachers need to have strategies to promote students' critical thinking. (Tawan) - I was taught to use mind mapping in a Master's course. It enabled me to see through my own thoughts and thus give abstractions a concrete form. As we usually take sides ourselves, mind mapping can make us surprised at how critical or uncritical we actually are. (Bancha)

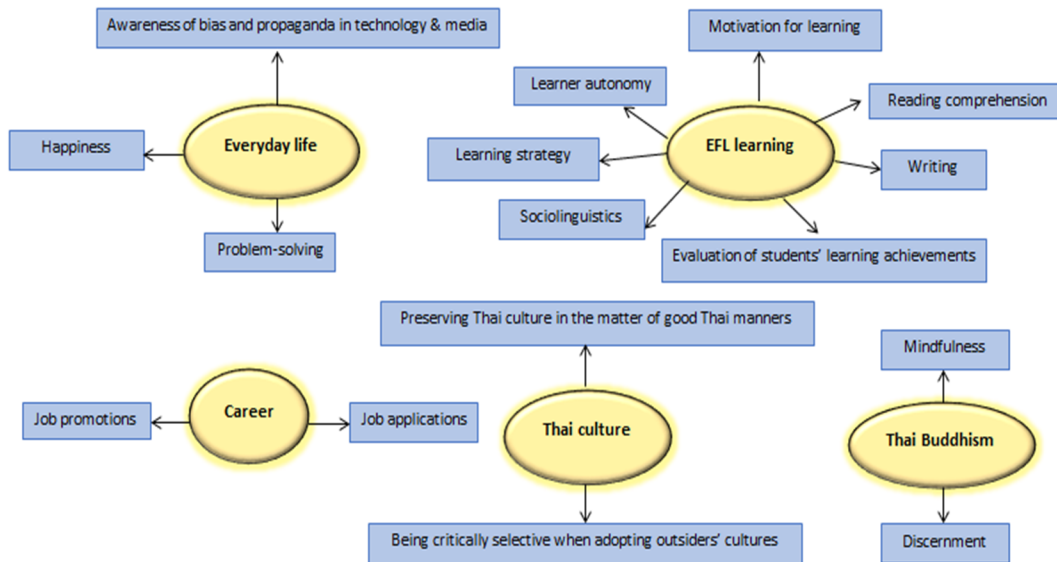
Codes	Quotes
	<ul style="list-style-type: none"> - Practice is important for students' critical thinking development. (Dara) - We should have and use appropriate strategies to promote our students' thinking. We need to know how to pose questions and encourage our students to respond. It is important to make them motivated to think and not feel stressed when they are obliged to respond to our questions. Students sometimes feel motivated to think but are shy and demotivated to express their critical thoughts. Critical thinking is a process plus presentation. It is not a complete criticality if students can think critically but are not confident enough to verbally express it. The presentation of their critical products provides the students with two benefits: firstly, they can listen to their own voices allowing them to monitor their own thinking, and secondly, others listening to their outputs may give constructive feedback to them. Presentation is a way to communicate our thoughts to others. (Ratri) - They should encourage students not to cling to one-sided opinions, but instead to ask themselves such questions as 'Did I consider any reasonable alternatives?' and 'What if...?' as a way of monitoring their own thinking. (Prani) - Teachers should pose critical questions in class and also teach students how to form such questions themselves. The questions could be, for example, 'What does the author want from the readers?', 'How does this suggestion make a difference?', 'Why should I follow her advice?', and 'What will be the effect if I behave otherwise?'. (Ithi) - Teachers should respond to students' questions in a critical manner to arouse their curiosity. Questions and responses should provoke more questions. This is the cycle of learning. (Ithi) - Students who express their critical ideas may meet with negative reactions from others, especially in a Thai context. So, we should give them strategies that help them respond according to such reactions. (Narin) - We should give students time to think. I think silence in class sometimes works as it reduces distractions and helps them concentrate more on what they are thinking. (Siri) - Successful critical thinking development in students depends on their teachers' teaching strategies. (Pa-det) - We should demonstrate examples of both critical and uncritical thinking, so that students can discover for themselves which is more useful. While modelling, we should ask them to participate as well. This will make them feel more engaged and hence increase their learning motivation. (Ticha)

Codes	Quotes
	<ul style="list-style-type: none"> - We should ask them to practise outside the classroom and have them discuss the consequences of thinking critically. We need to follow up their critical thinking practices. (Mali) - It is good to encourage students to perceive everything as text embedded with narratives. I like to start my classes by mentioning some interesting events and encouraging my students to discuss them. These can be world events, domestic news, or hot issues in society. In discussing them, students should be allowed to use Thai sometimes when they are unable to figure out some English words. I also use code-switching to provide and explain to them new vocabulary items and idioms. I believe that their critical thinking skills will develop when we allow them to think freely and assure them that there is no right or wrong answer. What we teachers should do is just to be open to their interpretations and pose 'why' and 'how' questions. Doing this enables them to use reasoning to come up with their own convincing arguments. We should be careful not to judge their arguments as being right or wrong. What is important is to make sure that they understand the logic of thinking critically. When doing this activity, we have to be patient because some students might think we are not teaching them, but instead wasting their learning time by talking about something else. But this does not matter as long as we are conscious of what we are doing and that our students are learning. (Ratri)
Students' motivation	<ul style="list-style-type: none"> - Many students learn just to pass an exam. They do not learn for the sake of learning or for self-development. (Ticha) - They do not like the course and, as a result, they then pay little attention in class. (Ratri) - Students do not concentrate on their studies because there are so many things that are more interesting to them. They have so many distractions nowadays, especially with all the Internet possibilities. (Ratri) - I could say they are too lazy to think. But they can actually do it if we do force them. They lack the motivation to think for themselves. They are used to having others, especially adults, think for them. (Ratri) - They are less motivated to think as they may feel that thinking is too hard or have negative perceptions about learning to think. (Ratri) - It is about not only teachers' motivation for teaching but also students' motivation for learning. (Nattha) - Many students have low motivation when it comes to learning. (Siri) - Many students are capable of thinking and even thinking well, but they may lack motivation for doing so. (Siri)

Appendix I: Example of Combining Codes into Themes



Importance of Critical Thinking



Appendix J: Information Sheet



Critical Thinking Cognitions and Pedagogic Practices of Thai EFL University Teachers

Researcher's Information

My name is Supanan Prommak. I am a full-time PhD student at the University of Stirling in the School of Social Sciences in Scotland, UK. I have been granted a full scholarship from the Office of the Higher Education Commission under the Royal Thai Government for my PhD study.

Research Purpose

This project examines Thai EFL university teachers' critical thinking cognitions and pedagogic practices

Timeline

Data collection process of this project will start in July 2016 and end in December 2016.

Research Participants

The participants in the project are Thai EFL university teachers in teacher education programs.

Data Collection Procedure

The participants will be asked to follow three steps of the data collection procedure. Firstly, they will be asked to write and answer some questions. Secondly, they will be asked to bring their textbook used in class to discuss in an interview. As well as the textbook, their reflective writing will also be used as an interview prompt. The interview will be audio-recorded. Lastly, each of the participants will be observed once in class using an audio-recorder.

Offers of Anonymity

I, as the researcher, will make every attempt to anonymise the participants' data during the transcription and analysis stages. When discussing the data analysis with my supervisors, they will only see anonymised excerpts of data. In addition, during the reporting and dissemination of the findings, great care will be taken to ensure that the names of the participants and their sites are completely anonymised, and that their assigned aliases and any quotes or excerpts from the collected data will not be able to be attributed to any of them.

Offers of Confidentiality

I, as the researcher, will make every attempt to promote the confidentiality by following three methods. First, I will conduct thorough anonymisation of the data during the data collection and data analysis stages and ensure that any reports or disseminations generated from the project will not be able to be attributed to the participants and their sites. Second, all electronic data as well as original recordings will be kept secure in the University's server with password protection only accessible by the researcher. Third, hand-written materials will be kept secure in a locked cabinet on campus only accessible by the researcher.

Rights as Research Participants

As the research participants, they have the rights on the four issues: the right to their own safety, the right as voluntary research participants to withdraw from the study at any time for any or no reason, the right to seek independent advice and guidance should any problems arise throughout the research process, and the right to complain if they have any concerns about the research process.

Ethics Committee Review

The current project has been approved by the Ethics Committee for Education at the School of Social Sciences at the University of Stirling.

Uses of the Project's Results

The findings of this project will be reported in the researcher's thesis. They may also be presented in academic journals or at conferences.

Any Complaints on the Project

If the participants have any questions or complaints about the project, please contact either of these persons.

1. Dr. Edward Moran, Senior Lecturer,
School of Social Sciences, University of Stirling
Email: edward.moran@stir.ac.uk
2. Dr. David Bowker, Lecturer,
School of Social Sciences, University of Stirling
Email: david.bowker@stir.ac.uk

Researcher's Contact

Supanan Prommak, PhD Research Student, University of Stirling
Tel: 07478530935, 0991989598
Email: supananprommak@stir.ac.uk

Thank you for reading this information

Appendix K: Consent Form for Participants (Teachers)



Critical Thinking Cognitions and Pedagogic Practices of Thai EFL University Teachers

Consent Form

I confirm that I have read the information sheet, had the opportunity to consider the information and asked questions on what I did not understand. I also confirm that I understood the information sheet. My understanding includes the following issues.

- I understand that my participation is voluntary, so I can withdraw from the study at any time for any or no reason.
- I understand my own rights as the research participant.
- I understand that I am asked to take part in three steps of the data collection process: reflective writing, a semi-structured interview, and a non-participant classroom observation.
- I understand that during writing and interview steps, if I do not feel comfortable answering some questions, I can skip them.
- I understand that the observation and the interview will be audio-recorded.
- I understand that the researcher will make every attempt to promote my confidentiality and anonymity.
- I understand that the findings of this project will be reported in the researcher's thesis and published in journals or presented at conferences with preservation of anonymity.

Therefore, I agree to take part in this project.

Name of Participant

Date

Signature

Please sign and scan this form and return it to supanan.prommak@stir.ac.uk
The participant should keep the original form.

Appendix L: Consent Form for Students



Hello students!

Who am I?

My name is Supanan Prommak. You can also call me 'Ajarn Mook'. I am studying in a PhD programme at the University of Stirling in Scotland, UK.

What am I going to do today?

I am going to observe your class, and the observed data will be used in my PhD research project.

What is my PhD research project about?

My research is on critical thinking viewed by Thai university teachers teaching English.

What do I want you to do?

Just be relaxed and act normally. I will just sit quietly and will not bother your class. My observation WILL NOT affect your grade in any way. However, if you would like to share with me about your study or anything, you can come to me after your class.

What do I need from you?

During the observation, I need to audio-record your class. So, I need your permission to do so because your voices might be recorded.

What will I do with the observed data and recordings?

I will use the data for my study. Most importantly, I can assure that your information and what will be observed and recorded will be kept secure and secret. No one can know who you are when I am using them.

How can you trust me?

I am funded a full scholarship from the Royal Thai government for my PhD study. I will try my very best to be honest to you and to my country. Before coming here, the University of Stirling allowed me to collect the data. It was permitted by the committee of School of Social Sciences. However, if you have any questions, you can contact my supervisors.

1. Dr. Edward Moran, Senior Lecturer, School of Social Sciences,
University of Stirling, Stirling FK9 4LA, Scotland, UK
Email: edward.moran@stir.ac.uk
2. Dr. David Bowker, Lecturer, School of Social Sciences,
University of Stirling, Stirling FK9 4LA, Scotland, UK
Email: david.bowker@stir.ac.uk

How can you contact me?

My email address is supanan.prommak@stir.ac.uk.

You can also call me at 07478530935, 0991989598.

Thank you very much for reading this information.

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Finally, you can decide whether you wish to be in class during the observation.

_____ Yes, I would love to be in class during the observation.

_____ No, I do not want to be in class during the observation.

Name of Participant

Date

Signature

Appendix M: Letter of Permission



Supanan Prommak
PhD Research Student
School of Social Sciences
University of Stirling
FK9 4LA, Scotland, UK
Tel: 07478530935, 0991989598
Email: supanan.prommak@stir.ac.uk

July 1, 2016

Dear _____

I am a full-time PhD student at University of Stirling in Scotland, UK. I am undertaking a research entitled 'Thai EFL University Teachers' Critical Thinking Cognitions and Pedagogic Practices'.

Prior to conducting this study, I need your consent to approach two teachers: (names of the teachers) within your faculty to take part in the study. These teachers will be asked to take part in the data collection process using three research methods: reflective writing, a semi-structured interview, and a non-participant classroom observation. I also attach the information sheet to this letter. The sheet includes information about my research.

I can assure you that I will make every effort to ensure the study does not disrupt the working environment or student lectures in any way, and any data collected will remain anonymised and confidential. I have gained ethical approval for the study from the Ethics Committee for Education at the School of Social Sciences at the University of Stirling.

Yours Sincerely,

Supanan Prommak