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Faculty of Humanities and Social Sciences, Nakhon Ratchasima Rajabhat University 340 Suranaree Road, Nai Mueang Subdistrict, Mueang District, Nakhon Ratchasima 30000, Thailand Tel: 044-009009 ext. 3620, 3621
E-mail: njhss.journal@nrru.ac.th

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The current issue features articles that address significant topics in the fields of arts and humanities, education, education and innovation technology, language and literature and related disciplines. A total of five articles are presented, comprising two research articles and three academic articles. Each contribution offers valuable insights that advance academic development and support practical applications. **The first article** is “Study on Banknotes During the Reign of Rama IX of the Rattanakosin period in Thailand”. **The second article** is “Comparison of Chinese and Vietnamese food cultures”. **The third article** is “Research on Teacher Training Driven by The Standard”. **The fourth article** is “The Influence of Artificial Intelligence Technology Utilization and Personnel’s Knowledge and Competency in AI Applications on Work Performance in Local Administrative Organizations- A Case Study of Maha Sarakham Province”. **The fifth article** is “Using CLIL to Develop Pre-Service Teachers’ Readiness for EMI through a Classroom-Based Perspective”.

The editorial team of Nakhon Ratchasima Journal of Humanities and Social Sciences (NJHSS) would like to express our sincere gratitude to all of

authors for their contributions, as well as to the esteemed reviewers for their valuable guidance that help maintain the high quality and standard of our journal.

We sincerely hope that this issue will be beneficial to all readers and serve as an inspiration for further study and research in the future.

Thank you all for supporting our journal.

A handwritten signature in blue ink, appearing to be 'Teerawat Karnsopa', with a stylized flourish at the end.

(Dr. Teerawat Karnsopa)

Editor of Nakhon Ratchasima Journal of
Humanities and Social Sciences

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Study on Banknotes During the Reign of Rama IX of the Rattanakosin period in Thailand¹

Shuping Feng

Zhejiang Yuexiu University

Zhejiang Shaoxing, China

E-mail: fsp710@foxmail.com

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Abstract

This paper takes the banknotes in circulation during the reign of Rama IX of the Rattanakosin period in Thailand as the research object, and systematically explores the content and information presented on these banknotes. By carefully reading and summarizing Thai research results, useful viewpoints and methods are extracted, and then the information of banknotes in this period is collected, organized, screened and classified. With the support of Important people and social organizations, in-depth data mining and targeted research are carried out. The research was conducted using the following methods: literature review, physical collection and identification, content analysis, historical analysis, interdisciplinary research method, and inductive-deductive method. The nine sets of banknotes issued during the reign of King Bhumibol Adulyadej (King Rama IX) are different in content and cover a wide range. This research will be carried out

¹ This project is a scientific research project of Zhejiang Yuexiu University of Foreign Languages in 2023 (Project No.: N2023020).

from the following nine dimensions: (1) the history of Thai banknotes; (2) the reflection of language on banknotes; (3) the reflection of lifestyle on banknotes; (4) the presentation of traditional customs on banknotes; (5) the record of royal activities on banknotes; (6) the mark of Thai historical events on banknotes; (7) the integration of multi-ethnic languages on banknotes; (8) the presentation of architectural styles on banknotes; (9) the reflection of economic policies on banknotes. As a research topic for Thai majors, this study is helpful for in-depth understanding of Thai history, culture, economy and social phenomena, and at the same time innovates and enriches teaching content.

Keywords: Thai Banknotes, Rama IX of the Rattanakosin period in Thailand, Banknote Research, Thai History and Culture

Introduction

King Bhumibol Adulyadej was born on December 5, 1927, in Massachusetts, the United States (at that time, his father was studying medicine at Harvard University). He was the younger brother of King Ananda Mahidol (Rama VIII) of the former Rattanakosin period in Thailand. In 1933, he moved to Lausanne, Switzerland with his mother and later studied science at the University of Lausanne. He returned to Thailand in 1945. On June 9, 1946, after his elder brother King Ananda Mahidol was suddenly assassinated, he ascended the throne. His coronation ceremony was held in May 1950, and he became King Rama IX of the Rattanakosin period in Thailand. During his reign, he traveled to every corner of Thailand and was deeply loved by the Thai people. Starting from May 5, 1987, he was respectfully called “King Bhumibol the Great” by the Thai people. He passed

away at Siriraj Hospital in Bangkok on October 13, 2016; on May 5, 2019, he was officially posthumously honored as “Father King Bhumibol Adulyadej the Great”. King Bhumibol Adulyadej was the longest-reigning king in Thai history, with a reign of 70 years.

During the reign of King Rama IX (1927-2016) of the Rattanakosin period in Thailand, a total of nine sets of circulating currencies were issued. The designs of these banknotes are rich and colorful, covering a wide range of knowledge fields. The research on the content of banknotes during the reign of King Rama IX of the Rattanakosin period in Thailand aims to indepth explore and analyze various information presented on these banknotes, including historical events, economic conditions, social customs, traditional habits, royal culture, linguistic characteristics, architectural styles, festivals and celebrations, and ethnic integration. After consulting a large number of books, periodicals, newspapers and some well-known domestic literature websites, it is found that researchers in domestic universities and scientific research institutions have relatively low attention to the research on Thai banknotes, whether in the fields of history, culture, art or other fields. Except for Baidu Encyclopedia and some video social software which have simple introductions to the denomination, exchange rate and issuance history of Thai banknotes, there are very few studies published in the form of academic papers and monographs covering the origin, development and evolution, pattern implications and production technology of Thaibanknotes.

As a research topic for Thai majors, this study adopts a multidimensional perspective. By systematically sorting out the development context of Thailand in different historical periods, deeply analyzing the connotation and inheritance of its unique cultural symbols, and accurately analyzing the

current economic structure characteristics and social hot issues, it helps researchers and learners break through the limitations of single cognition and achieve in-depth understanding and three-dimensional grasp of Thai history, culture, economy and social phenomena. At the same time, the research results can also be transformed into vivid teaching cases and diverse materials, effectively innovating the teaching model of Thai majors, further enriching the curriculum content system, and providing strong support for the cultivation of Thai talents.

Research Objectives

This article takes the banknotes in circulation during the reign of Rama IX of the Rattanakosin period in Thailand as the research object, and systematically explores the content and information presented on these banknotes, Then extract the content related to the nine aspects of this study for research.

Research Questions

The study of the banknotes from the period of King Rama IX of the Rattanakosin period in Thailand aims to deeply explore and analyze the history of Thai banknotes, language, lifestyle, traditional customs, record of royal activities, Thai historical events, integration of multi-ethnic languages, architectural styles and economic policies presented on these banknotes.

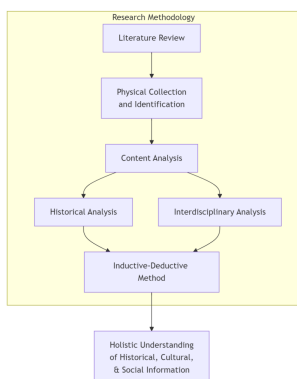
Research Scope

This article focuses on the banknotes circulated during the reign of King Rama IX (June 9, 1946 to October 13, 2016) in Rattanakosin period,

Thailand, and through banknote collection, information organization, and analysis and elaboration on them. The nine sets of banknotes issued during King Bhumibol's reign vary in content and cover a wide range of topics. This research will unfold from the following nine dimensions: (1) The history of Thai banknotes; (2) The representation of language on banknotes; (3) Reflections of lifestyle on banknotes; (4) The display of traditional customs on banknotes; (5) The record of royal activities on banknotes; (6) The imprint of historical events in Thailand on banknotes; (7) The fusion of multiculturalism in language on banknotes; (8) The architectural styles presented on banknotes; (9) The reflection of economic policies on banknotes.

Research Methodology

This study employed a comprehensive methodology, including literature review, physical collection, content analysis, historical analysis, interdisciplinary research, and inductive-deductive methods, to construct a multi-layered and systematic research framework. The aim is to holistically reveal the historical, cultural, and social information carried by the banknotes from the Rama IX of the Rattanakosin period in Thailand.



1. Literature Review

This study systematically consulted and analyzed books, journals, newspapers, and renowned academic databases related to Thai currency, history, and culture to survey existing research findings and adopt valuable perspectives and methodologies. Through this process, the literature review aims to establish a solid theoretical foundation and contextual support for the present research.

The landscape of research on Thai currency, particularly banknotes, reveals a clear pattern: a rich and authoritative body of Thai-language scholarship, a diverse and theory-oriented body of English-language studies, and a notable scarcity of systematic research within Chinese academia.

In Thailand, research in this field is extensive and systematic. The Bank of Thailand, as the issuing authority, provides the most fundamental and reliable sources through its official publications and museum archives. Works by Thai numismatists and professional societies further enrich this foundation, analyzing banknote designs from semiotic, artistic, and nation-building perspectives. These materials form a factual and interpretive groundwork for any in-depth study of Thai banknotes.

In English-language academia, the approach is broader and more theoretical. Standard numismatic references provide essential data for cataloging and verification, while scholars such as Maurizio Peleggi, in *Thailand: The Worldly Kingdom*, interpret currency through postcolonial and material culture frameworks. This corpus situates Thai banknotes within global and comparative contexts, offering valuable conceptual tools for analysis.

By contrast, the Chinese academic sphere demonstrates a significant research gap. Most discussions on Thai banknotes are found on non-

academic platforms such as Baidu Baike or collector forums, offering only basic information like denominations and exchange rates. Scholarly studies—such as monographs or theses—that take Thai banknotes as the primary research object are nearly absent. In particular, no systematic, multi-dimensional, and interdisciplinary cultural analysis exists regarding banknotes from a specific historical period such as the reign of King Rama IX.

In response, this study seeks to fill that gap. Building upon the robust Thai-language foundation and integrating English-language theoretical frameworks, it constructs a comprehensive analytical approach. The research systematically examines all circulating banknotes from the Rama IX period through a multi-dimensional lens encompassing monetary history, language, lifestyle, traditions, royal activities, historical events, ethnic integration, architectural styles, and economic policy. Ultimately, it aims to uncover the deep historical, cultural, and social meanings embedded in these “national visiting cards”, thereby enriching and advancing the study of Thai culture within Chinese academia.

2. Physical Collection and Identification

Multi-channel collection of banknote specimens or information: This includes acquiring physical banknotes or high-resolution image data from sources such as the Bank of Thailand, numismatic museums, antique markets, and private collectors.

Information screening and classification: Systematically organizing the content of the collected banknotes, filtering important information (e.g., content appearing ≥ 2 times), and classifying it according to pre-established research dimensions.

3. Content Analysis

Systematic categorization: Classifying the patterns, text, symbols, and other content on the banknotes into nine research dimensions (e.g., language, lifestyle, architectural style).

Frequency count and in-depth exploration: Conducting a thorough analysis of high-frequency content to unearth its underlying cultural, historical, or social significance.

4. Historical Analysis

Contextualizing the analysis within Thailand's historical background (e.g., Sukhothai period, various stages of the Bangkok Dynasty) to examine the historical events, economic policies, and royal activities reflected in the banknote designs, exploring the function and meaning of banknotes as historical artifacts.

5. Interdisciplinary Research Method

This study involves multiple academic disciplines, including:

Linguistics: Analyzing the use of Thai and other languages on the banknotes.

Cultural Anthropology: Exploring traditional customs, ethnic integration, and related content.

Art and Architecture: Studying the architectural styles and artistic representations on the banknotes.

Economics: Analyzing economic policies through banknote denominations, issuance contexts, etc.

6. Inductive-Deductive Method

Induction: Extracting common characteristics and patterns from the specific content of the banknotes.

Deduction: Applying the induced conclusions to the overall understanding of Thai history, culture, and social phenomena, thereby forming systematic research outcomes.

Research Results

This research will be conducted from the following nine aspects to expand the study of the circulating banknotes during the reign of King Rama IX of the Rattanakosin period in Thailand.

1. The History of Thai banknotes

Thailand has a long-standing history, and the use of its monetary system dates back equally far, tracing to the Sukhothai period and continuing to the present day. Even before Thailand's financial system officially issued other types of banknotes, currency already played a crucial role in circulation. Looking back, Thailand once adopted a unique form of currency—using seashells and coins cast in a shape similar to beetles as mediums of exchange for purchasing and trading goods. This practice was quite prevalent during the Sukhothai period and subsequent historical stages.

It was not until the reign of King Rama IV of the Rattanakosin period that Thailand's economic system developed and national trade expanded, leading to the emergence of the first banknote in the country's monetary system, known as “หม่าย” (pronounced “mai”). Later, during the reign of King Chulalongkorn (Rama V), there was a shortage of tin coins and copper coins. As Thailand's trade continued to grow, the demand for currency exchange became extremely high, resulting in a currency shortage. To address this issue and prevent people from suffering losses, King

Chulalongkorn ordered the creation of a low-denomination banknote for temporary use, thus giving birth to the banknote “อัฐกระดาด” (pronounced “at-kra-daan”).



Figure 1

Banknote หมาย². Adapted from *History and series of Thai banknotes*

[Photograph], by Bank of Thailand, n.d.



Figure 2

Banknote อัฐกระดาด³. Adapted from *History and series of Thai banknotes*

[Photograph], by Bank of Thailand, n.d.

However, this type of banknote was unpopular in daily life. The government then sought to reform the financial system, and at the same time, foreign trade flourished, further increasing the demand for currency. While the Thai government was considering solutions to the currency problem, foreign commercial banks were granted permission to open branches in Thailand. Three foreign commercial banks—the Hongkong and

² Came into use during the reign of King Rama IV, starting in 1853.

³ It began to be used during the reign of King Rama V in 1874.

Shanghai Banking Corporation, Standard Chartered Bank, and the Bank of Indochina—established branches in Thailand. They requested permission from the Thai government to use banknotes locally and issued banknotes in 8 denominations for circulation in 1897, 1898, and 1899 respectively. These banknotes were convenient for debt repayment between banks and customers as well as for daily transactions, and they remained in use for over 13 years. This helped people become more familiar with banknotes, so Thais referred to them as “bank notes” (literal translation of the local term for these banknotes), a name that persists to this day.



Figure 3

*Foreign banknotes used in Thailand*⁴. Adapted from *History and series of Thai banknotes* [Photograph], by Bank of Thailand, n.d.

With the further expansion of commercial trade, King Rama V hired the British company The De La Rue Company Limited to produce Thailand’s first official set of banknotes. He issued an order for these banknotes to be used nationwide on September 7, 1902. (Bank of Thailand, 2002) A total of 5 denominations were issued: 5 baht, 10 baht, 20 baht, 100 baht, and 1,000 baht. The use of banknotes has continued ever since, and to date, Thailand has issued a total of 17 series of Thai baht banknotes.

⁴ Foreign banknotes began to be used in Thailand in 1889.

The circulating banknotes issued during the reign of King Rama IX of Thailand's Rattanakosin period span from the 9th series to the 16th series. All banknotes are rectangular in shape, but their dimensions and colors vary by denomination. Starting from the 14th series, the color scheme for each denomination became standardized: green for 20 Baht, blue for 50 Baht, red for 100 Baht, purple for 500 Baht, and brown for 1000 Baht. The specific denominations for each series are as follows:

9th series: 50 Satang, 1 Baht, 5 Baht, 10 Baht, 20 Baht, 100 Baht.

10th series: 100 Baht.

11th series: 5 Baht, 10 Baht, 20 Baht, 100 Baht, 500 Baht.

12th series: 10 Baht, 20 Baht, 100 Baht.

13th series: 50 Baht, 500 Baht.

14th series: 100 Baht, 500 Baht, 1000 Baht.

15th series: 20 Baht, 50 Baht, 100 Baht, 500 Baht, 1000 Baht.

16th series: 20 Baht, 50 Baht, 100 Baht, 500 Baht, 1000 Baht.



Figure 4

*Thai baht banknotes*⁵. Adapted from *History and series of Thai banknotes* [Photograph], by Bank of Thailand, n.d.

⁵ The 20 to 1000 baht banknote prototypes from the 16th series during the reign of King Rama IX, each with its own issuance date.

2. The Reflection of Language on Banknotes

The Thai language began to be used during the reign of King Ramkhamhaeng the Great. The 3rd King of the Sukhothai Dynasty was the son of King Sri Indrathit, who reigned from 1822 to 1841. As a result, the territory of Sukhothai has expanded widely, making Sukhothai extremely prosperous. The economy and society create order and the people have a well-being.

One of his important royal deeds that appears on the banknotes of King Rama IX is the invention of the Thai alphabet, the Thai script invented by King Ramkhamhaeng the Great. (Department of Fine Arts, 2017) The Thai alphabet invented by King Ramkhamhaeng the Great has a square shape, with 29 consonants and 21 vowels. Most of the words used for the inscription are in authentic Thai. There are other language words such as Khmer words. There are a few Pali and Sanskrit words mixed in. The inscription of the text, the inscription from left to right as it is now, without punctuation and without paragraphs. When a line ends in a letter, it may not end with a text or word. Vowels are written in front of the consonants, except for the vowel a, the vowel that is written as it is now.

King Ramkhamhaeng the Great was the first king of Thailand to be honored as “Maharaj” for his royal service to the country, gathering the kingdom of Siam into a wide unity, and also inventing Thai scripts, allowing Siam to accumulate knowledge in art, culture, and scholarship for more than 700 years.



Figure 5

*King Ramkhamhaeng and Thai language*⁶. Adapted from *History and series of Thai banknotes* [Photograph], by Bank of Thailand, n.d.

3. The Reflection of Lifestyle on Banknotes

The geographical picture of Thailand is a lowland with many important rivers flowing through it. Therefore, the lifestyle of Thai people is related to water. There is a saying, “In the water there are fish, in the field there is rice”. Living as a waterman It shows that the way of life is very important to water. Since the past, Thai people have had a way of life related to water, giving rise to small and large cultural groups scattered along various river basins. It is also a transportation route for food resources. The birthplace of arts and culture, traditions related to rivers, etc. The important water-related lifestyle that appears on banknotes is often related to water, divided into three aspects: agriculture, the royal project in Narathiwat Province and the Pasak Chonsit Dam, architecture and construction, the Rama VIII Bridge, and trade, the use of junk boats.

3.1 Agriculture

The government has a royal project to support the development of agriculture well, which is a special royal task of the King. Agriculture is an

⁶ The 20 Baht banknote from the 16th series, issued on November 2, 2012.

important way of life that appears on banknotes, as there is a royal title in the image of His Majesty the King. His Majesty King Bhumibol Adulyadej the Great, His Majesty the King and Queen Sirikit, while observing the construction of a weir and reservoir at Ban Bakong, Rueso District, Narathiwat Province, the banknote series 14 for 1,000 baht, as shown in the picture.



Figure 6

*Royal Initiative Projects in Narathiwat Province*⁷. Adapted from *History and series of Thai banknotes* [Photograph], by Bank of Thailand, n.d.

3.2 Architecture

The water-related architecture that appears on the banknote is the Rama VIII Bridge, which is the fifth longest single-pillar span bridge in the world and the 13th bridge over the Chao Phraya River. This will help drain cars on the King Pinklao Bridge and on the Krungthon Bridge, and can also reduce air pollution in the city. Maha Bhumibol Adulyadej the Great The purpose is to solve traffic problems between the Thonburi side and the Bangkok side.

The Rama VIII Bridge was built to solve traffic problems between the Thonburi side and the Bangkok side, to develop a water

⁷ The 14th series 1000 Thai Baht banknote, issued on June 30, 1982.

transportation model, a land road, as well as an important bridge across the Chao Phraya River. King Rama VIII appears on the banknotes of the reign of King Rama IX in the banknote series 14 for 1,000 baht as shown in the picture.



Figure 7

*The Rama VIII Bridge*⁸. Adapted from *History and series of Thai banknotes* [Photograph], by Bank of Thailand, n.d.

3.3 Trade

Another important way of life related to water that appears on King Rama IX's banknotes is the trade with foreign countries using junk boats in the King Rama III, King Rama III had a royal decree in the field of economic and trade that he was praised as a "tycoon".

With His Majesty the King, he has been able to do business since the reign of King Rama II, so that he has been praised by His Majesty the King as a "tycoon" because he is very proficient in trade with foreign countries, especially trade with China.

⁸ The 20 Baht note from the 15th series of Thai banknotes, issued on February 12, 2003.



Figure 8

*King Rama III used sailing vessels to trade with foreign countries*⁹. Adapted from *History and series of Thai banknotes* [Photograph], by Bank of Thailand, n.d.

Trade with foreign countries during the reign of King Rama III resulted in red bags, which was money that (Kanokphongchai, 2014) His Majesty the King was responsible for foreign affairs when he was in charge of the Port Department. Therefore, a large amount of income from trade was brought into the land. The “Red Bag Money” is money for use in times of emergency, so the red bag money given by the King plays an important role in helping the country when it is in difficulty. At the same time, the red bag silver showed the trading ability of King Rama III and the economic growth of Thai society in the early Rattanakosin period.

4. The Presentation of Traditional Customs on Banknotes

Thai traditions or traditions are a part of Thai culture, which have been practiced for generations and are accepted by the public. Thai tradition is the unity of the hearts of the entire Thai people. The traditions that appear on banknotes during the reign of King Rama IX include the tradition of

⁹ The 15th series 500 Thai Baht banknote was issued on January 24, 2001.

parading the blanket of the Lord Samut Chedi and the tradition of parading the blanket of the Lord of the Pathom Pagoda.

Phra Samut Chedi is located at Moo 3, Ban Chedi. The Samut Chedi is the identity of Samut Prasad Province and is of national importance. The tradition of the Blanket Procession of the Pagoda has 2 stages, (Chaipradittrak, 2013) namely participating in the merit of sewing the red cloth and the procession of the Blanket of the Pagoda. Most of them persuaded the male and female villagers to gather at the nineroom pavilion of the Wat Klang Worawihan Temple. The tradition of parading the blanket of the King of the Samut Pagoda is an ancient tradition and it is believed that this period is an opportunity for young people of Paknam to meet and start intimacy. Many couples in the past have known each other for the first time at this nine-room pavilion. This is one of the wisdom of the villagers that can be achieved without using modern science. For now, the method of hiring sewing has been used.

Phra Pathom Chedi is located in Phra Pathom Chedi Subdistrict, Mueang Nakhon Pathom District, Nakhon Pathom Province. The blanket parade will be done on the opening day of the worship of the Lord Pathom Pagoda. Before the opening ceremony, the temple will organize a procession of blankets to the Lord Pathom Pagoda, which believers will participate in the activity and donate money.



Figure 9

*Phra Pathom Chedi*¹⁰. Adapted from *History and series of Thai banknotes* [Photograph], by Bank of Thailand, n.d.

The tradition of parading the blanket of the Pathom Pagoda originated from the Buddhist belief that offering items and utensils to monks will get merit, especially the offering of the Priest Cloth, which is a garment for the monks, will get very high merit. Phra Pathom Pagoda is an important archaeological site that is believed to be the origin of Buddhism in Thailand. The procession of the blanket to the Lord Pathom Chedi has been an annual tradition of Wat Phra Pathom Chedi for a long time.

5. The Record of Royal Activities on Banknotes

The royal ceremony is a ceremony that is held only in relation to the monarch. Important royal ceremonies that appear on banknotes during the reign of King Rama IX include the Supphanhong Throne Boat and the Royal Transformation Ceremony of the Emerald King.

5.1 Supphanhong Throne Boat

The royal ceremonial boat is an art and culture of Thailand that has been used since ancient times in the royal ceremony. The Supphanhong ship that appears on the banknotes during the reign of King Rama IX is the Supphanhong Throne Ship. In the past, when the Thai monarch was warned, the royal procession would be carried out by a procession called the procession of the Yatra on the Chon Mark (by water). In French documents, it is recorded that the decoration of the ship was used in royal

¹⁰ The 100 Thai Baht banknote from the 9th series was issued in 1948.

ceremonies and the characteristics of the style related to the ship. It refers to the procession of boats held in the ancient times when the King carried out various events, both personally and ceremonially. It shows the uniqueness of Thai culture and tradition.



Figure 10

*Suphanhong Throne Boat*¹¹. Adapted from *History and series of Thai banknotes* [Photograph], by Bank of Thailand, n.d.

5.2 The Royal Costume Changing Ceremony

Buddha Mahamani Rattana Pramacorn or Emerald Buddha The Emerald Buddha is a sacred Buddha statue in the eyes of the Thai people, a great auspicious and truly the heart of Buddhists. It is very important for both the monarch and the people.

The tradition of the Emerald Crowning Ceremony has been a very important tradition for the monarch since the reign of King Rama I. Since then, it has been considered a royal tradition that all monarchs of the royal family will perform the Emerald Crowning Ceremony on the first day of every season every year.

6. The Imprint of Thai Historical Events on Banknotes

¹¹ The 10th series 100 Thai Baht banknote, issued on May 16, 1968.

The important events in Thai history that appear on the banknotes of King Rama IX are the royal deeds of King Rama V, King Junjomkut, including the abolition of slavery and education, and the establishment of Chulalongkorn University.

The slave tradition that existed in the Kingdom of Siam was a way of making policy documents and selling themselves voluntarily, not captive slaves, which was a serious oppression, but an obstacle to prosperity. There is one benefit and happiness of the public, which needs to be withdrawn. There should be no slavery tradition in this kingdom. Siam will be as complete as other countries. Chantarangsu. The monarch in the royal family. King Rama V.



Figure 11

*Abolition of slavery*¹². Adapted from *History and series of Thai banknotes* [Photograph], by Bank of Thailand, n.d.

The abolition of slavery aims to make Siam as complete as other countries and to give the people freedom and freedom. His Holiness saw slavery as an outdated thing that was not suitable for developed countries and encouraged the oppression and contempt of the Thai people themselves.

¹² The 100 Baht denomination of the 15th series Thai Baht banknote, issued on October 21, 2005.



Figure 12

The statues of Kings Rama V and Rama VI located within Chulalongkorn University¹³. Adapted from History and series of Thai banknotes

[Photograph], by Bank of Thailand, n.d.

In the past, educational institutions were limited to temples, and studying at temples was only for men. Until the reign of King Junjomkut, His Majesty the King reformed education, and he had a royal statement about education: “Learning in our country will be the first important thing that I will strive to organize for Charoen Jong (Department of Fine Arts, 2017)”. Currently, it is Chulalongkorn University.

7. The Integration of Multi-Ethnic Languages on Banknotes

Thailand has a diverse ethnic population, which makes Thai society rich in social and cultural diversity. The ethnic diversity prominently featured on the banknotes during the reign of King Rama IX includes two aspects: His Majesty King Ananda Mahidol, also known as King Rama VIII, visiting Sampheng, and His Majesty King Bhumibol Adulyadej, also known as King Rama IX, with Muslim people in the southern border region. King Ananda Mahidol, also known as King Rama VIII, was the 8th monarch of the Rattanakosin period, and he undertook significant royal duties, notably visiting Sampheng.

¹³ The Series 14 100 Thai Baht banknote was issued on September 29, 1994.

The royal deeds and important events of His Majesty King Rama VIII Ananda Mahidol that appear on the banknotes of the reign of King Rama IX are the Sampeng on May 3, 1946 to resolve the problem between the Thai people and the Chinese group in the Sampeng area. The royal duties and important events of His Majesty King Ananda Mahidol, Rama VIII, depicted on the banknotes of the reign of Rama IX include his visit to Sampheng on May 3, 1946, to resolve issues between Thai citizens and the Chinese community in the Sampheng area. During this visit, the Chinese citizens had the opportunity to greet him closely and showed their loyalty in receiving him. This visit strengthened the relationship between Thai and Chinese people. The important royal duties and events related to ethnic diversity attributed to His Majesty King Bhumibol Adulyadej, as illustrated in the banknotes of the reign of Rama IX, are compiled in his royal remarks (Vanikakul, 2011), “We will rule this land with righteousness for the benefit and happiness of the people of Siam”. This was said when he ascended to the throne, intending to govern the country by righteous means.



Figure 13

King Ananda Mahidol (King Rama VIII) notably visiting Sampheng¹⁴.

Adapted from *History and series of Thai banknotes* [Photograph], by Bank of Thailand, n.d.

¹⁴ The 20 Baht note from the 15th series of Thai banknotes, issued on February 12, 2003.

Muslims have played an important role in Thai society since the early Ayutthaya period, establishing connections with Thailand since that time. They have been involved in trade and religious dissemination, traveling by sea since the 7th century AD, and gradually expanding their roles into overseas trade in various lands. Muslims established significant settlements in Southeast Asia, thanks to the benevolence of the Thai monarchy. Muslims have continued their existence and have become a crucial part of Thai society. His Majesty the King expresses concern for the Muslim community in the south. The royal visit along with Her Majesty Queen Sirikit took place at Ban Bakong, Rueso District, Narathiwat Province, on September 22, 1984, to address daily life challenges so that they could continue living. His Late Majesty King Bhumibol Adulyadej, has provided Thai Muslim citizens with sources of livelihood, leading to progressive development for them, allowing Thai Muslim families to enhance their status and stability.

8. The Presentation of Architectural Styles on Banknotes

8.1 Ananta Samakhom Throne Hall

Ananta Samakhom Throne Hall is located behind the equestrian statue of King Chulalongkorn, on the eastern side of Amphorn Sathan Palace within Dusit Palace. Ananta Samakhom Throne Hall is an example of a building constructed in Western architectural style during the reign of King Rama V and is an important site in Thailand. King Rama V passed away before this throne hall was completed, and its construction was finished during the reign of King Rama VI. (Tantiwong, 1996) The distinctive feature of Ananta Samakhom Throne Hall is its large central dome, with six smaller domes surrounding it, totaling seven domes, which depict scenes from the reign of

King Phutthayotfa Chulalok to the reign of King Rama VI, comprising six paintings.



Figure 14

*Ananta Samakhom Throne Hall*¹⁵. Adapted from *History and series of Thai banknotes* [Photograph], by Bank of Thailand, n.d.

Ananta Samakhom Throne Hall has a history of over 100 years. It is the only marble throne hall in Thailand and is designed in a Western architectural style. It is an important location in Thailand. Currently, the Ananta Samakhom Throne Hall has been closed for renovation, and tourists cannot enter to view the interior since September 30, 2017.

8.2 Wat Phra Si Rattana Satsadaram

Wat Phra Si Rattana Satsadaram or Wat Phra Kaew is a temple that King Buddha Yodfa Chulaloke Maharaj commissioned to be built in the year 1825. It is the royal monastery of Thailand and does not have resident monks. Inside the main chapel, the Emerald Buddha is enshrined, which is an important Buddha statue of Thailand.

Wat Phra Si Rattana Satsadaram, commonly known as Wat Phra Kaew, is a temple commissioned by King Rama I in the year 1782. (Sakdisri, 2000) It is situated within the grounds of the Grand Palace, just like

¹⁵ The 100 Thai Baht banknote from the 9th series was issued in 1948.

Wat Phra Si Sanphet, which was a temple within the royal palace during the Ayutthaya period. The intention was to house the Emerald Buddha, the revered Buddha statue of the Kingdom of Siam. This temple does not have any resident monks because it comprises only the Buddha sanctuary, without a monastic area. The Ubosot (the hall for the monks' assembly) is located in the center of Wat Phra Si Rattana Satsadaram, surrounded by a glass wall and featuring eight pavilions for the display of sacred relics. King Rama I commissioned its construction in 1783 to house the Emerald Buddha, which he had brought from Vientiane in 1781. Inside the Ubosot resides the Emerald Buddha, an important statue of Thailand, which is green in color.



Figure 15

*Buddha Mahamani Rattana-pramakorn*¹⁶. Adapted from *History and series of Thai banknotes* [Photograph], by Bank of Thailand, n.d.

Wat Phra Si Rattana Satsadaram has a history of 242 years. This temple serves as a place for royal merit-making and conducts Buddhist ceremonies for the monarch, and it is a temple without resident monks. Currently, tourists can visit it, as shown in the image.

9. The Reflection of Economic Policies on Banknotes

Sufficiency economy plays a very important role for Thailand. Sufficiency economy is like the foundation of life; the foundation of the

¹⁶ The 100-baht banknote from the 11th series of Thai baht, issued on October 9, 1972.

stability of the nation, akin to the pillars that support a house. The stability of a building relies on its pillars, yet most people do not see the pillars and even forget about them. Sufficiency economy is like the foundation of life and the pillars of buildings, showing that sufficiency economy is extremely important for the Thai people.

The importance of a sufficiency economy is to know moderation, to be just right, to be reasonable, to build self-resilience, and to be self-reliant in 5 areas (Department of Religious Affairs, Ministry of Culture, 2008) which are: 1. Economic self-reliance 2. Social self-reliance (supporting each other) 3. Natural resource self-reliance (not destroying nature) 4. Technological self-reliance (being aware and mindful) 5. Mental self-reliance (morality, concentration, wisdom).

Currently, there are 4,741 projects stemming from the royal initiatives of His Majesty King Bhumibol Adulyadej Maharaj. Here are summaries of three well-known projects.

Discussion of Results

This study conducts a comprehensive and multi-faceted examination of the circulating banknotes issued during the reign of King Bhumibol Adulyadej (Rama IX) of Thailand (June 9, 1946 - October 13, 2016). It systematically investigates the rich historical, cultural, social, and economic information embedded within the designs of these nine banknote series.

The study addresses a noted gap in Chinese academia regarding in-depth research on Thai banknotes. It employs a multifaceted methodology, including literature review, physical collection, content analysis, historical

analysis, interdisciplinary research (spanning linguistics, cultural anthropology, art, architecture, and economics), and inductive-deductive methods.

The core analysis is structured around nine key dimensions:

1. History of Thai Banknotes: Traces the evolution from early forms like shell money and “หอย” to the first official series in 1902 and details the denominations of the nine series issued under Rama IX.

2. Language: Examines the depiction of the Thai script, invented by King Ramkhamhaeng, highlighting its significance as a national cultural symbol.

3. Lifestyle: Focuses on water-related lifestyles depicted on banknotes, including royal agricultural projects (e.g., in Narathiwat), architecture (Rama VIII Bridge), and trade (junk boats from King Rama III’s era).

4. Traditional Customs: Analyzes traditions like the blanket procession ceremonies for Phra Samut Chedi and Phra Pathom Chedi, linking them to Buddhist beliefs and community social structures.

5. Royal Activities: Highlights royal ceremonies featured on banknotes, such as the Supphanhong Throne Boat procession and the Royal Costume Changing Ceremony for the Emerald Buddha.

6. Historical Events: Discusses the commemoration of pivotal historical events, notably King Rama V’s abolition of slavery and his reforms in education leading to the establishment of Chulalongkorn University.

7. Multi-ethnic Integration: Explores themes of ethnic harmony, exemplified by King Rama VIII’s visit to Sampheng’s Chinese community and King Rama IX’s engagement with Muslim communities in southern Thailand.

8. Architectural Styles: Analyzes important buildings depicted, such as the Western-style Ananta Samakhom Throne Hall and the sacred Wat Phra Si Rattana Satsadaram (Temple of the Emerald Buddha).

9. Economic Policies: Discusses the reflection of the “Sufficiency Economy” philosophy, championed by King Rama IX, and its principles of moderation and self-reliance.

The study concludes that Thai banknotes from the Rama IX era serve as “national visiting cards”, encapsulating profound layers of Thai national identity, history, and culture. As a research topic for Thai language majors, it aims to enrich the curriculum, provide diverse teaching materials, and foster a deeper, multi-faceted understanding of Thailand. The author suggests that future research could be expanded to include commemorative banknotes and coins for a more complete picture.

Recommendations

Apart from the circulating banknotes during the reign of King Rama IX, there are also commemorative banknotes and coins, which will make the content even more complete.

References

Bank of Thailand. (2002). *100 years of Thai banknotes*. Bangkok Printing Company.

Bank of Thailand. (n.d.). *History and series of Thai banknotes* [Photograph].

Bank of Thailand. <https://www.bot.or.th/th/our-roles/banknotes/History-and-Series-of-Banknote-And-Commemorative/banknotes-series.html>

- Chaipradittrak, S. (2013). A Retrospective on the Red Cloth Draping Ceremony at Phra Samut Chedi. *Muang Boran Journal*, 39(3), 41.
- Department of Fine Arts. (2017). *The kings of Thailand*. Amarin Printing and Publishing Public Company Limited.
- Department of Religious Affairs, Ministry of Culture. (2008). *The unique religious patron, the lord who supports religion*. Agricultural Cooperative Printing House of Thailand Limited.
- Kanokphongchai, S. A. (2014). *Testimonies of old Bangkokians*. Chulalongkorn University Press.
- Sakdisri, N. (2000). *The Grand Palace and Wat Phra Si Rattana Satsadaram*. Amarin Printing and Publishing Public Company Limited.
- Tantiwong, U. (1996). The Anantasamakhom Throne Hall and the valuable history of its construction worthy of recording. *Silpakorn*, 39(5), 75.
- Vanikakul, M. (2011). *His Majesty King Bhumibol Adulyadej Mahidol the Great, Rama IX, of the Kingdom of Siam, Borommanakhobphit*. Amarin Printing and Publishing Public Company Limited.



Name: Shuping Feng

Highest Education: Master's Degree

Affiliation: Zhejiang Yuexiu University, China

Comparison of Chinese and Vietnamese food cultures

Yuxin Qiu¹ Ying Zhang²

Hangzhou Dianzi University¹⁻²

Zhejiang Hangzhou, China¹⁻²

E-mail: 1060768146@qq.com

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Abstract

As geographically adjacent countries with profound cultural ties, China and Vietnam share partially overlapping culinary traditions while exhibiting distinct culinary traits; however, existing academic literature lacks systematic comparative studies on their culinary cultures, leading to an incomplete understanding of their cross-cultural interactions in academia. This study adopts a cultural comparative approach—integrating systematic literature review, case study analysis, and cross-cultural comparison—to explore similarities and differences between Chinese and Vietnamese culinary cultures from three core dimensions: daily dining habits, festive culinary traditions, and dining etiquette. Key findings are as follows: for daily staples, Vietnamese phở typically features single-type meat toppings and lemon-infused broth, while China's Yunnan Crossing-the-Bridge Rice Noodles are characterized by diverse toppings and chili oil; for festive foods, Chinese zongzi focus on commemorating the patriotic poet Qu Yuan, whereas Vietnamese zongzi center on ancestor worship; for dining etiquette, China follows hierarchical seating arrangements, while Vietnam retains floor-sitting customs in traditional settings. This study enriches academic discourse in

Sino-Vietnamese cultural comparison and offers practical implications for cross-border tourism and catering cooperation.

Keywords: China-Vietnam, food culture, food habits, food etiquette

Introduction

China and Vietnam, neighbors since ancient times, have maintained frequent economic and cultural exchanges. The two nations share profound mutual influences in culture, language, and even dietary habits, with many similarities that often lead those unfamiliar with their culinary traditions to mistakenly assume Vietnamese eating patterns closely resemble those of Guangxi region in China. However, significant differences exist between the two regions. As food is considered fundamental to human sustenance, such misunderstandings inevitably hinder people-to-people interactions.

Therefore, studying the similarities and differences (Zhou, 2005, pp. 129-130) in Sino-Vietnamese dietary cultures holds substantial significance for enhancing mutual understanding and fostering bilateral exchanges. Zhou Hongfeng similarly noted in **Introduction to Cultural Communication Studies**: “With increasingly close Sino-Vietnamese exchanges, deeper mutual comprehension of each other’s dietary cultures would significantly boost people-to-people interactions”. Nevertheless, specialized literature comparing the two countries’ culinary traditions remains scarce. Existing works primarily touch upon these aspects during discussions of national conditions, as seen in Vietnam’s *National Conditions and Sino-Vietnamese Relations*, which briefly mentions dietary culture within its historical development analysis. This study specifically examines the similarities and differences in Sino-Vietnamese dining customs and etiquette, aiming to deepen mutual understanding of

each other's dietary practices and dining etiquette, thereby promoting greater respect for each other's preferences during social interactions.

For over two millennia, China and Vietnam have consistently maintained cross-border cultural and economic exchanges, with culinary culture serving as a vital medium for interaction. For instance, the spread of soy products (e.g., tofu) from China to Vietnam and the popularity of Vietnamese coffee in southern China both exemplify the mutual infiltration of the two nations' culinary traditions. However, against the backdrop of globalization, the traditional culinary cultures of both countries are undergoing transformations (such as the localization of foreign fast food), thus there is an urgent need to systematically organize and compare the intrinsic characteristics of their culinary cultures.

Existing studies on Sino-Vietnamese culinary cultures have two key limitations: First, most studies focus on single-country analyses (e.g., the regional diversity of Chinese cuisine or Vietnam's rice-centric dietary structure) and lack a cross-country comparative perspective; second, scattered comparative studies only cover border ethnic groups (e.g., the Zhuang ethnic group in China and the Tai ethnic group in Vietnam) and fail to address mainstream culinary cultures (such as national festive foods like mooncakes). This research gap hinders the academic community from gaining an in-depth understanding of how culinary culture shapes the cultural identities and cross-border interactions of the two countries.

Comparison of Chinese and Vietnamese food cultures

1 Characteristics of Chinese and Vietnamese food culture

1.1 Characteristics of Chinese food culture

China is a country with a long history. Since ancient times, clothing, food, housing and transportation have been the most important things for Chinese people. Food is an essential condition for survival and an important part of Chinese food culture (Wang & Wang, 1999, pp. 178-179). Food culture is the art of the Chinese nation, which is called “food culture and art”, occupying an important position in traditional Chinese culture.

Foreigners often marvel at Chinese cuisine’s ability to transcend flavor limitations by harmoniously blending “color, taste, and form”. This culinary artistry delivers holistic sensory delight through visual presentation, flavor profiles, and cultural resonance. The essence of Chinese culinary culture lies in its unparalleled diversity. China’s vast territory and abundant resources have fostered distinct regional cuisines shaped by varying climates, local produce, and customs. While all share (Zuo, 2013, pp. 1-10) the “Chinese Flavor Identifier, each region maintains unique characteristics—captured in the saying: “southern sweetness, northern saltiness, eastern spiciness, western sourness”. China’s spicy food preference is most prominent in southern regions bordering Vietnam (Sichuan, Yunnan, Guangxi), where high humidity (annual relative humidity 75%-85%, China Meteorological Administration, 2024) drives the demand for spicy dishes to promote sweating—this trait overlaps with Vietnam’s partial spicy preference but differs in seasoning (China uses chili oil, Vietnam uses fresh chili + lemon). In reality, the preference for spicy foods among people in these regions largely stems from their

relatively humid climate. Spicy and numbing dishes help stimulate sweating, which aids in detoxification. Shanxi's 'Xishan Sour' dietary trait (e.g., aged vinegar, sour soup noodles) is traditionally believed to improve appetite and digestion—local studies (Wang, 2021, p.56) show that the organic acids in sour foods can enhance calcium absorption efficiency by 12% (compared to non-sour diets), but there is no direct evidence that it 'prevents skeletal disorders'.

It can be seen that food varies greatly across China, and people in different regions have summed up their own food knowledge, which can help them better adapt to the local environment through food.

1.2 Characteristics of Vietnamese food culture

Vietnam, a friendly neighbor of China, also attaches great importance to food. In the long period of development, it has experienced many evolution and sedimentation, and finally formed its own characteristics of food culture.

The Vietnamese believe that spiritual activities can only be cultivated when material needs are met, hence the ancient proverb "Rice gives you a way forward" —a staple food and primary ingredient (He, 2006, pp. 289-292) in many other dishes. This traditional agricultural culture has been preserved for millennia in Vietnam. Additionally, the Vietnamese have a strong preference for foods made from crops like potatoes, cassava, and corn. Nutrition balance is considered paramount to their diet, with a saying describing their eating habits as resembling "heavenly bliss".

Compared to Chinese cuisine, Vietnamese food is generally lighter in flavor. This preference stems from Vietnam's humid climate south of the Tropic of Cancer. Vietnamese cooking emphasizes preserving the natural

freshness of ingredients, using minimal seasonings like green lemons, cilantro, and fish sauce, with most dishes prepared through boiling. While some baked or fried dishes are occasionally used, their flavors remain understated. Unlike Chinese dishes that often add spices like dried pepper or broad bean paste to enhance aroma during frying, Vietnamese chefs use fewer condiments to preserve authentic flavors. Additionally, Vietnamese people typically enjoy fruits as desserts after meals rather than sugary pastries. Ethnic minority groups in Vietnam maintain a lighter diet, primarily inhabiting high-altitude regions where sticky rice serves as the staple food, and cooking methods remain relatively simple.

Unlike Chinese cuisine, which predominantly uses red meats like pork, beef, and lamb, Vietnamese cooking features fish as its main ingredient. This dietary preference stems from Vietnam's geographical advantages: its extensive coastline and abundant waterways provide a rich variety of fish species. Consequently, numerous fish-based dishes have emerged, including signature dishes like Fish Rice, Sour Fish Soup, Fish Noodles, and Sticky Rice with Fish.

Vietnamese people also have a strong passion for alcohol, though their consumption is primarily reserved for festive occasions, family gatherings, and celebratory events. Their wine selection predominantly consists of white wines with alcohol content typically ranging between 30-45% ABV. In less formal daily settings, beer serves as a “thirst-quenching” beverage. During the sweltering summer months, they enjoy chilled beer, while in colder winters, they savor warm, freshly brewed baijiu (a traditional Vietnamese liquor). Additionally, tea and coffee hold equal significance in Vietnamese culture, with coffee being regarded as the “tea of the Chinese heart”. Due

to Vietnam's geographical advantages for coffee cultivation, the country ranks as the world's second-largest coffee producer. Beyond enjoying coffee, Vietnamese people take pride in crafting it themselves. Instead of using coffee machines, they prefer pouring thick layers of coffee grounds into hot water, watching the slowly dripping coffee through glass cups—a deliberate process that embodies their appreciation for the artistry behind coffee preparation.

Due to limited mutual understanding, there exist common misconceptions about each other's culinary traditions between Chinese and Vietnamese people. For instance, while many Vietnamese associate Chinese cuisine with spiciness and greasiness, the cuisine of the Wu-Yue region (ancient Vietnam) and Zhejiang cuisine are predominantly light and delicate. Many Vietnamese perceive Chinese and Vietnamese food as similar, yet in reality, Chinese cuisine is primarily characterized by diverse noodle dishes. Additionally, Chinese people have limited knowledge of Vietnamese food. Some lack awareness of contemporary Vietnam's development, mistakenly believing the country remains stuck in a backward 1990s era where three daily meals are difficult to maintain. However, in reality, major Vietnamese cities boast skyscrapers, thriving dining establishments, and sophisticated culinary traditions.

Therefore, it is crucial to further promote the exchange of culinary cultures between China and Vietnam. As food and cultural interactions between the two countries increase, tourism activities will also grow more frequent. This thriving tourism sector will significantly boost the catering industries in both nations. This virtuous cycle of development will create positive effects on cross-cultural culinary exchanges, not only strengthening

mutual understanding in food traditions but also driving economic growth for both countries.

Differences and similarities between Chinese and Vietnamese eating habits

Vietnam boasts two major plains: the Red River Plain and the Kiang Khoi River Plain. These fertile lands, abundant in rice cultivation. According to the Food and Agriculture Organization (FAO, 2024) data, Vietnam's rice exports reached 7.3 million metric tons in 2023, ranking second globally (after India), accounting for 15% of the world's total rice trade. China, with its strategic geographical location and vast land area, provides ideal conditions for rice farming. Rice has become a staple food in every Chinese household, playing a vital role in daily life. Both nations also produce wheat-based flour products and legumes. Therefore, our comparative analysis of dietary patterns between the two countries focuses on rice-based dishes, soybean products, and wheat-based flour foods.

1 The similarities and differences between the origin and development of Vietnamese rice noodles and Chinese rice noodles

As food and cultural exchanges between the two countries grow more frequent, tourism activities will also increase. The thriving tourism industry will further boost the development of catering industries in both regions. People in the border areas of northern Vietnam, which share borders with China's Yunnan and Guangxi provinces, exhibit certain similarities in dietary habits. Although these regions are geographically adjacent, they belong to two distinct ethnic groups, resulting in some differences in culinary culture.

The Vietnamese call rice noodles “national food”, which is the most distinctive rice product in Vietnam. Fan (2012, pp. 45-52) Rice noodles are one of the most common breakfast products in Vietnam. The Vietnamese are used to eating breakfast in restaurants, so there are many rice noodle restaurants on the streets of Vietnam.

On the Chinese side of the China-Vietnam border, especially in Yunnan Province, rice noodles are more common (Xu, 2005, pp. 88-92). For example, “Yunnan bridge rice noodles” has become world-famous. Rice noodles and rice vermicelli are similar in that they are both rice-based staple foods processed into strips, but they differ in specific tastes.

Due to the wide variety of rice noodle products in China, there are different ways to eat them. Here, we only compare Vietnamese rice noodles and Yunnan bridge rice noodles. Both Vietnamese rice noodles and Chinese bridge rice noodles are made of rice. Table 1 below compares bridge rice noodles and Vietnamese rice noodles.

Table 1

Comparison between Crossing bridge rice noodles and Vietnamese rice noodles

	Vietnamese rice noodles	crossing-the-bridge noodles
Make the ingredients	rice	rice
jardiniere	Pork, beef, fish and dog meat (a bowl of rice There is only one kind of meat in the flour), bean sprouts.	Chicken, quail eggs, tofu skin, leeks, bamboo shoots Ribs, coriander, pickled mustard, bacon, chrysanthemum and bean sprouts.
charge mixture	Different kinds of meat, with different soups and	Chili oil, vinegar, wild chili pepper, salt, chicken powder

	Vietnamese rice noodles	crossing-the-bridge noodles
Make the ingredients	rice	rice
	scallions Flower, pepper, lemon, salt, chicken powder (flavor Fresh) and cilantro.	(monosodium glutamate Chicken soup)

The two production processes are different. The rice noodle production process is: wash the rice, sprinkle salt, soak for about half a day, then cut into rice noodles, put the rice noodles into a large pot to evaporate into thin sheets, and finally cut into strips. The rice noodle production process is:

- 1) Soak the rice in cold water for 30 minutes, then crush it into rice noodles;
- 2) Mix the rice flour and water to make a sieve with a flat surface;
- 3) The mixture is extruded into an extruder and dried for 24 hours to produce semi-finished rice noodles. Unlike flat noodles, rice vermicelli features elongated, more elastic strands. Its rich toppings include various meat products and ingredients, creating a visually satisfying appearance. In contrast, Vietnamese noodles have simpler seasoning but contain substantial meat content per serving. The key difference lies in the broth: Crossing Bridge Rice Noodles feature pepper oil while regular rice noodles don't. Both use sour flavors-lemon for regular noodles and vinegar for Crossing Bridge. Their soups differ significantly: Regular noodles simmer for 8 hours using beef and fish bones, requiring careful skimming of impurities and floating grease during cooking to preserve authentic beef flavor. Crossing Bridge Rice Noodles are prepared by simmering chicken, aged duck, and pork bones over low heat

for over four hours, then seasoned with salt and five spices including five-spice powder and pepper.

2. Differences in the origin and preparation of zongzi between China and Vietnam

For both countries, zongzi plays a more important role in festivals, but there are big differences in the way it is eaten and how it is made (see table 2 below).

Table 2

Comparison of zongzi between Vietnam and China

	Chinese zongzi	Vietnamese zongzi
form	Triangular, columnar	Square, columnar
raw material	Rice, red bean paste, cured meat, red beans, red dates, salted eggs, eight treasures	Glutinous rice, mung beans, pork, pepper and salt
charge mixture	bamboo leaves	leaf of Japanese banana
Use festivals	the Dragon Boat Festival	the Spring Festival
implied meaning	show respect to Qu Yuan	Thank heaven and earth, parents, and worship ancestors

While both Chinese and Vietnamese zongzi are made from glutinous rice, they differ in several aspects. Chinese zongzi are wrapped in reed or bamboo leaves, primarily using sticky rice but with a variety of fillings. Most scholars interpret the symbolism of Chinese zongzi as a tribute to Qu Yuan, the patriotic poet who chose to drown himself with a stone tablet to preserve his integrity. To protect Qu Yuan's body from aquatic decomposition, people would throw zongzi into rivers to attract fish and shrimp. Vietnamese zongzi, wrapped in banana leaves, contain glutinous rice, mung beans, pork,

pepper, and salt. According to Vietnamese tradition, zongzi are shaped into square forms to symbolize earth, serving as offerings to ancestors and prayers for a bountiful harvest. The contrasting approaches reveal how zongzi hold profound significance for both nations. Whether representing heaven and earth through square-shaped designs or honoring Qu Yuan's legacy, these traditions demonstrate the "heavy responsibilities" placed on zongzi by their respective peoples. In essence, the same food embodies distinct worldviews and values across different regions.

3. Differences and similarities between Chinese and Vietnamese pastry making and its significance

3.1 Literature on Chinese Culinary Culture

Scholars have conducted extensive research on the diversity and cultural connotations of Chinese culinary culture. Wang and Wang (1999) proposed that Chinese cuisine emphasizes the "four beauties" of color, aroma, taste, and appearance, and attributed regional differences such as "southern sweetness and northern saltiness" to historical migrations and climatic conditions. Zuo (2013) further analyzed the soft power of Chinese culinary culture, noting that it achieves global dissemination through overseas Chinatowns. However, these studies focus exclusively on China itself and do not involve cross-border comparisons with Vietnam.

3.2 Literature on Vietnamese Culinary Culture

Research on Vietnamese culinary culture centers primarily on its agricultural roots and tropical characteristics. Nguyễn (2018) emphasized that Vietnam's "light and fresh" culinary style—such as its reliance on fish sauce and herbs—is an adaptation to the country's long coastline and hot climate. He (2006) pointed out the central position of rice in Vietnamese

culinary culture, describing it as “the foundation of national identity”. While these studies capture the uniqueness of Vietnamese cuisine, they lack a comparative perspective with Chinese culinary culture.

There are also various kinds of cakes in China, each with its own unique characteristics. However, due to the geographical restrictions and limited cake-making technology in Vietnam, there are relatively few kinds of cakes, but there are some traditional cakes, such as mooncakes.

Both China and Vietnam celebrate the Mid-Autumn Festival on August 15th, sharing similar rituals yet carrying distinct cultural significance. For Chinese families, this festival serves as a time for reunion beyond the Spring Festival. On this special night, relatives gather to enjoy traditional delicacies and admire the moon together. Even those far from home travel to distant places to gaze at the bright moon, expressing their longing for their hometowns. The traditions of eating mooncakes and moon-watching during the Mid-Autumn Festival have deep historical roots. As recorded in Tian Rucheng’s **West Lake Tour Notes**, “The 15th day of the eighth lunar month is called Mid-Autumn, when people exchange mooncakes symbolizing family reunion”. Additionally, many scholars believe that the custom of eating mooncakes originated from a late Yuan Dynasty uprising, where the tradition was established to commemorate the victory of the rebellion.

Vietnam’s Mid-Autumn Festival differs significantly from China’s. Falling on the 15th day of the lunar month, it is the most joyful time for children. Before the festival, adults purchase moon-viewing foods and toys to display for children during the evening celebrations. This tradition traces back to 1954 when President Ho Chi Minh wrote a poem expressing his

longing for children in the liberated South: “đến ngày nam bắc motif nha, cac chau xum xit thita vui long” (Only when the North and South reunite can all children be together – this is our greatest joy). That same year, Vietnamese leader Ho Chi Minh published an article titled “Telling Children Stories About the Mid-Autumn Festival”, which referenced the Chinese myth of Chang’e.

While Vietnam’s Mid-Autumn Festival has evolved from a family reunion celebration to a “Children’s Day”, children still revel in the festivities. Though kids play a central role, mooncake consumption remains a must. Since Chinese-style mooncakes were introduced to Vietnam, their preparation methods and flavors have seen significant improvements. Two distinct varieties exist: The “Banh nuong” (roasted mooncake), crafted following traditional Chinese recipes, closely resembles Guangdong-style mooncakes in both appearance and filling—featuring egg yolk and sausages, occasionally enhanced with Vietnamese specialties like coconut and lotus paste. The “banh deo” (soft mooncake) represents a homegrown innovation, using glutinous rice for the crust and preserved fruits as fillings, adapted to Vietnam’s tropical climate. This child-favorite naturally tops the popularity charts. Crafting these soft mooncakes demands specialized techniques: The filling is prepared year in advance using glutinous rice mixed with pomelo and lemon juices, then kneaded into dough, wrapped, and frozen. While store-bought versions are typically rectangular, roasted mooncakes are predominantly round—reflecting Vietnamese cultural traditions—hence the dual availability of both shapes in markets.

While the Mid-Autumn Festival has lost some of its former solemnity, people still eagerly anticipate its arrival. At the border between Heikou County in Yunnan Province and Vietnam’s ancient city, festive celebrations are bustling with activity, featuring shops selling traditional mooncakes from both countries. The festival day sees frequent exchanges between Chinese and Vietnamese citizens, particularly along the border where lively crowds create a vibrant atmosphere. Despite being separate nations, residents here recognize each other’s customs and culinary traditions during the Mid-Autumn Festival, demonstrating the cultural exchange between China and Vietnam has reached a significant level.

In 2023, the ‘China-Vietnam Culinary Festival’ (held in Nanning, China and Hanoi, Vietnam) attracted over 500,000 participants, with 30+ Vietnamese coffee brands and 50+ Chinese noodle brands signing cross-border cooperation agreements—this event boosted cross-border catering revenue by 35% compared to 2019 (China-Vietnam Cultural Exchange Center, 2024)”

“Chinese hot pot chains (e.g., Haidilao) in Ho Chi Minh City have adjusted their spice levels: the ‘mild spicy’ option accounts for 60% of orders (vs. 30% in China), and local ingredients (Vietnamese lemongrass, coconut milk) are added to adapt to local tastes (Li, 2023, p.78)

4. Similarities and differences in edible habits of soybean products between China and Vietnam

4.1 Tofu

As the most widely consumed soy product and a staple ingredient in Chinese cuisine, tofu has gained global recognition. Zhao (2010, pp. 66-70) The term “tofu” is even listed in English dictionaries. This ancient

food, with over 2,000 years of history, is typically made from high-protein legumes like soybeans and black beans. In Vietnam, tofu remains a staple in daily life despite its unassuming appearance. The most common preparation methods include baking and boiling, with deep-frying being particularly popular. While oil is used, this method preserves the tofu's natural flavor without additional seasoning. The golden crispy exterior contrasts with its delicate interior, which is marinated in fish sauce, lemon juice, and sea salt for a refreshing taste. Due to its affordability and simple production process, tofu has become a beloved choice in Vietnam. It's not only included in home recipes but also creatively adapted into innovative dishes like soy sauce-glazed shrimp tofu, fried tofu vermicelli, tofu hotpot, and even tofu-grilled meat.

4.2 Bean curd

In China, soy milk is more commonly associated with breakfast and is generally not consumed as a thirst-quenching beverage during summer. Chinese people are also less accustomed to drinking chilled soy milk (Huang, 2006, pp. 55-57). In Vietnam, however, there's a more distinctive version called "Nuoc **đ**au". During peak summer months, street vendors riding motorcycles with two insulated buckets filled with sweetened soybeans and ice can be seen everywhere. These items are remarkably affordable – a cup costs just 8,000 Vietnamese dong in central Hanoi. Vendors typically serve soy milk in disposable plastic or glass cups with a generous amount of cold water. The Vietnamese adore this "drink", with annual sales far exceeding those of milk and other beverages. While production methods for soy milk

remain largely identical between China and Vietnam, both countries have developed it into popular daily beverages enjoyed by their populations.

Differences and similarities between Chinese and Vietnamese food etiquette

1. The similarities and differences of Chinese and Vietnamese table manners

“Adapting to local customs” is the cornerstone of culinary culture and dining etiquette. Understanding others’ table manners not only demonstrates your politeness but also fosters a harmonious dining atmosphere. Conversely, failing to follow these customs can create awkward silences and misunderstandings that easily lead to conflicts. To truly embrace this principle, mastering proper dining etiquette is essential.

While China and Vietnam are close neighbors, their dining customs differ significantly. First, Chinese people place greater emphasis on ceremonial terms that denote social hierarchy and respect. When ordering, elders or guests are typically invited to choose first. However, diners should avoid being overly active during the process and refrain from ordering excessively expensive dishes. Chinese diners pay close attention to their manners and speech during meals, requiring constant awareness of their posture. Guests should greet each other politely and eat with courtesy. They prefer slow, deliberate eating. In contrast, Vietnamese dining etiquette emphasizes proper sequence: younger family members must invite elders to join before using utensils. Regarding seating arrangements, Vietnamese traditionally sit on mats placed on the floor, with a round iron plate at the center where everyone gathers around while sitting cross-legged. This poses

challenges for Chinese diners accustomed to seated dining. Additionally, while Chinese people stack food higher than bowls to show hospitality, Vietnamese consider this disrespectful practice, reserved only for ancestral worship ceremonies.

In conclusion, while China and Vietnam share many similarities in culinary traditions, there are also significant differences. Without thorough understanding, these cultural disparities could lead to misunderstandings, awkward situations, or even conflicts. Therefore, both nations should actively promote cultural exchanges in the food industry, recognize their unique dietary heritage, and foster comprehensive interactions. This approach will help people from both countries better understand each other's customs and appreciate each other's local culture.

2. The similarities and differences between Chinese and Vietnamese tea etiquette

China's tea culture is profound and extensive, profoundly influencing nations like Vietnam. Vietnam shares similar tea traditions with China, as most tea varieties and utensils were initially introduced from the Chinese mainland. For many Chinese people, tea drinking has become an art deeply rooted in daily life, resulting in uniquely crafted tea ware. Chinese tea sets not only serve practical purposes but also demonstrate exquisite craftsmanship, embodying both aesthetic value and decorative significance (Yang, 1983, pp. 241-243). The symbolic meanings of Chinese and Vietnamese tea ware differ across historical periods. In Lu Yu's "Classic of Tea", ancient tea utensils encompassed all tea-related tools for harvesting, processing, and consumption. Today, however, tea ware extends beyond mere brewing vessels. Among Chinese cultural treasures, the Yixing clay teapot stands as

one of the most renowned. To connoisseurs, these purple-glazed ceramic teapots integrate philosophical wisdom, the spirit of tea culture, and natural rhythms into sublime artistry. For tea enthusiasts, the act of sipping from these vessels brings inner peace, comfort, and a sense of transcendence.

To truly understand Vietnam's tea-drinking traditions, one must examine the cultural significance of the Chinese character "tea". In Vietnamese, the word "tea" has two pronunciations: "tra" and "che". The pronunciation of "tra" mirrors its Chinese counterpart, which explains why Vietnamese speakers commonly use the Chinese term for tea (Wu, 2001, pp. 65-66). The "che" variant, however, is a purely Vietnamese word or an indigenous vocabulary element (Wang, 1993, pp. 178-179). Currently, Vietnamese people primarily use two methods for tea preparation: the "dian cha" (steeping method) and the "chong cha" (brewing method).

In China and Vietnam, tea is a cherished tradition. When guests arrive, locals brew a cup to show hospitality. More importantly, both commoners and affluent families regard tea as a social pastime. The two nations also enjoy tea as a post-meal beverage that enhances social interactions. Through tea, people find common ground for conversation and discover its profound cultural significance through savoring the beverage.

While China and Vietnam share many similarities with tea, there are notable differences. The most obvious distinction lies in their preferred varieties. China's vast territory boasts a diverse array of teas, including rare specialties like Yunnan Pu' er, Wuyi Mountain Dahongpao, and West Lake Longjing. In Vietnam, lotus tea remains the most beloved beverage, particularly popular in Hanoi. This traditional drink carries special significance, being exclusively enjoyed by closest companions. Additionally, tea-drinking

customs differ between the two cultures. For Chinese people, savoring fragrant tea leaves evokes warmth and intimacy; whereas in Vietnam, where temperatures remain consistently high year-round, people prefer cool tea over scalding hot brews.

While both nations enjoy tea at home, residents frequently venture out to savor it, though their tea-drinking habits differ markedly. In the past, Chinese people would often visit teahouses during leisure time, enjoying tea while watching operas or movies. Today, however, they prefer entertainment venues like mahjong parlors. Unlike China, Vietnam features roadside tea stalls along highways where passersby pause to sip tea, especially during summer. These stalls are often surrounded by motorcycle riders sharing their beverages, alongside snacks like coconut candy and peanut candies.

Conclusion

For cross-border tourism: Scenic spots in Guangxi (e.g., Guilin) and Vietnam (e.g., Halong Bay) could set up ‘food culture explanation boards’—e.g., comparing the differences between Guilin rice noodles and Vietnamese phở, and explaining the cultural meanings of zongzi. This would reduce cultural misunderstandings and enhance tourists’ experience”

“For people-to-people diplomacy: The two countries could launch a ‘Sino-Vietnamese Culinary Exchange Program’—inviting chefs to collaborate on fusion dishes (e.g., ‘phở-style Crossing-the-Bridge Rice Noodles’) and hold joint food exhibitions. This would use food as a medium to strengthen bilateral cultural bonds”

In summary, China and Vietnam share many commonalities in culinary culture, such as using rice as the staple food, pursuing delicious flavors through color, aroma, and taste, and skillfully utilizing various natural ingredients. However, there are also significant differences in dietary preferences and dining habits between the two countries, which stem not only from geographical and climatic variations but more profoundly from differing cultural traditions. Understanding and respecting each other's culinary cultures can not only boost the development of their respective catering industries, but more importantly, enhance people-to-people friendship and cultural exchanges between the two nations. As times progress, cultural and economic exchanges between China and Vietnam will become increasingly frequent and profound, with culinary cultural exchanges being an indispensable component. Through studying these cultural differences, we can better promote mutual development.

References

- Fan, H. (2012). Dietary culture of Zhuang and Thai ethnic groups in China, Vietnam, Laos and Thailand. *Journal of Guangxi Normal University for Nationalities*, (8), 45–52.
- He, H. (2006). *Chinese and foreign food culture*. Peking University Press.
- Huang, J. (2006). On Vietnamese cuisine. *Southeast Asia Window*, (24), 55–57.
- Li, W. (2023). Cross-cultural Adaptation of Chinese Hot Pot Chains in Vietnam: A Case Study of Haidilao in Ho Chi Minh City. *Journal of Asian Business Strategies*, 15(3), 78–95.

- Nguyễn, T. V. (2018). Vietnamese Culinary Culture: Adaptation to Tropical Climate and Coastal Geography (in Vietnamese). *Hanoi Journal of Social Sciences*, 12(4), 30–45.
- Wang, J. (2021). Nutritional Analysis of Sour Foods in Chinese Cuisine: Focus on Calcium Absorption. *Journal of Food Science and Nutrition*, 28(2), 56–72.
- Wang, M., & Wang, Z. (1999). *Ancient Chinese food*. Shaanxi People's Publishing House.
- Wang, R. (1993). *Diet and China*. People's Publishing House.
- Wu, D. (2001). *Vietnam faith and faith culture*. Social Sciences Press.
- Xu, W. (2005). Aesthetic taste in Chinese food culture. *Journal of Art College of Inner Mongolia University*, (16), 88–92.
- Yang, W. (1983). *Chinese food folklore*. China Outlook Publishing House.
- Zhao, W. (2010). Foreign studies on Chinese food culture. *Journal of Culinary Science, Yangzhou University*, (12), 66–70.
- Zhou, H. (2005). *General theory of cultural communication*. China Textile Publishing House.
- Zuo, D. (2013). Discussion on improving the soft power of Chinese food culture. *Journal of Huaihai Institute of Technology (Humanities and Social Sciences)*, (4), 1–10.



Name: Yuxin Qiu

Highest Education: Bachelor's Degree in Teaching
Chinese to Speakers of Other Languages

Affiliation: Hangzhou Dianzi University, China



Name: Dr. Ying Zhang

Highest Education: Doctor of Linguistics and
Applied Linguistics

Affiliation: Hangzhou Dianzi University

Research on Teacher Training Driven by The Standard

Wenqi Shang

Nakhon Ratchasima Rajabhat University

Nakhon Ratchasima, Thailand

E-mail: resure538@gmail.com

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Abstract

The revision of the International Chinese Teacher Professional Competency Standard has further elucidated the multifarious professional capabilities demanded of international Chinese teachers. It has also accentuated the core orientation and practical trajectory of the international Chinese education discipline's development. In the context of the ever-evolving teaching requirements and the rapid advancement of technology, contemporary international Chinese teachers are in urgent need of enhancing their multi-dimensional professional qualities to address the increasingly intricate educational and teaching challenges. This research has identified several practical obstacles in the current training process of international Chinese teachers. These include relatively weak professional capabilities, unresolved issues in the disciplinary foundation, and the lack of connection between teaching and research. Through a comparative analysis of different versions of the International Chinese Teacher Professional Competency Standard, the following findings can be summarized. Firstly, all versions emphasize the systematic cultivation of teachers' professional capabilities. Notably, the latest version of the standard has stipulated more comprehensive

and diverse ability requirements for teachers. Secondly, International Chinese Teachers should actively engage in professional development training and constantly keep abreast of the latest developments and trends in the discipline. Thirdly, it is imperative to promote the profound integration of teaching and research to facilitate teachers' professional growth and the concurrent enhancement of their self-worth in practice.

Keywords: International Chinese Teacher Professional Competency Standard, International Chinese Teachers, Professional ability training, Integration of teaching and research

Introduction

The International Professional Competence Standard for Chinese Teachers is the first group standard in the field of international Chinese education and was released by the World Chinese Language Teaching Association on August 26, 2022. (Ding, 2024) International Chinese teachers play an important role in both Chinese teaching and scientific research. They are a key part of teaching and the focus of scientific research. It can be said that the quality of international Chinese teacher training directly affects the development of international Chinese education. Therefore, the professional abilities that international Chinese teachers should possess should also keep pace with the times and deserve in-depth study. The formulation of relevant international standard for Chinese teachers has gone through a complex and long process, from the 2007 version of the International Standard for Chinese Teachers (hereinafter referred to as the 2007 Standard) to the 2012 version of the International Standard for Chinese Teachers (hereinafter referred to as the 2012 Standard), and then to the International Professional Competency

Standard for Chinese Teachers (hereinafter referred to as the Standard), which shows the importance that the academic community attaches to teacher research. By studying various versions of the Standard and combining with the current research status of international Chinese teachers, we discovered the dimensional changes in the professional abilities of international Chinese teachers under different eras, and also provided a powerful reference for scientific and systematic teacher training.

New Changes in Teacher Competency Orientation in the Standard

From 2007 to 2022, over 15 years, the three editions of the Standard have progressively updated and expanded the scope of teacher competencies. In summary, while the 2007 Standard served as the pioneering work, it laid a solid foundation for subsequent versions. The 2012 Standard were more comprehensive, but the discipline's development at the time was not rapid. Compared to the previous two editions, the Standard are not only more standardized but also provide a deeper description of the competency orientation for international Chinese language teachers. If the 2007 and 2012 Standard can be seen as action guides, then the Standard serve as an action blueprint. The deeper significance of an action blueprint compared to an action guide lies in its highest standard and highest level. That is, it defines what kind of international Chinese language teachers the field of international Chinese education needs and how to cultivate high-level international Chinese language teachers. Beyond teaching competencies, international Chinese language teachers also require more professional skills to find and realize their life ideals within international Chinese education.

1. The Standard Place Greater Emphasis on Teacher Professional Development

In the field of international Chinese education, educational practice is the soil for testing teaching theories. Theories from other fields, such as linguistics and pedagogy, must undergo “international Chinese education adaptation” before they can be applied. As the main actors in educational practice, international Chinese language teachers bear the mission of applying theories to practice and then identifying and solving problems. It can be said that the development of the international Chinese education field relies on the valuable experience gained from the educational practices of a broad range of international Chinese language teachers, which in turn leads to theoretical and conceptual progress.

How international Chinese language teachers can achieve personal and disciplinary development through educational practice was already reflected in the 2007 “Standard”: International Chinese language teachers should understand the meaning of professional development and be able to achieve self-directed professional development. The 2012 “Standard” further expanded this to “Teachers should possess self-development awareness and be able to set long-term and short-term professional development goals”. In the “Standard”, this is divided into two first-level indicators, “Professional Practice” and “Professional Development”, with a total of six second-level indicators, providing comprehensive guidance for the professional development direction of international Chinese language teachers and offering instructive significance for reasonable career planning.

For example, the Standard describe teacher professional development as follows:

1.1 Ability to participate in professional development-related activities such as training, lectures, and academic conferences to deepen understanding of international Chinese education and improve teaching capabilities.

1.2 Ability to master basic methods of educational research and possess fundamental action research skills to promote continuous professional development.

1.3 Ability to understand the content, needs, and direction of professional development for international Chinese language teachers.

1.4 Ability to understand the stages of an international Chinese language teacher's career and have a preliminary plan for professional development.

The formulation of the Standard requires collective effort and must be based on actual conditions. Currently, most international Chinese language teachers come from educational backgrounds such as Chinese language and literature or linguistics, and the integrated bachelor's-master's-doctoral degree system in international Chinese education has only recently been established. What is lacking is not researchers but researchers with a background in international Chinese education. If an international Chinese language teacher can follow the professional development guidelines in the Standard to seek both societal and self-cultivation, even without a background in international Chinese education, they can align their career aspirations and self-worth with international Chinese education during the cultivation process. The emphasis on teacher professional development has shown an upward trend across the three editions, and the Standard incorporate the strengths of all. Therefore, for international Chinese language teachers,

studying the Standard and finding a path to achieve their professional development and career planning is highly important.

2. The Standard Guide Research on Disciplinary Issues

In the Standard, the first-level indicator “professional knowledge” includes four second-level indicators: educational knowledge, Chinese and linguistics knowledge, knowledge of Chinese culture and China’s national conditions, and second language acquisition knowledge.

In the field of international Chinese education, language teaching comes first, and the teaching of cultural factors must serve language teaching (Liu, 2000, p. 19) Most current graduates of international Chinese education programs, who are likely to become future international Chinese teachers, adhere to the principle of “language first, culture supplement” regarding the relationship between language teaching and cultural teaching. In the Standard, Chinese culture and national conditions knowledge are listed together with Chinese and linguistics knowledge under the “professional knowledge” indicator. The implication is that the relationship between language teaching and cultural teaching should be rethought. In fact, cultural factor teaching and cultural teaching cannot be regarded as the same concept. The former refers to treating culture as one of many teaching factors, listed in the same dimension as phonetics, vocabulary, and grammar teaching. The latter refers to treating culture as a separate section, making choices in cultural content according to teaching needs and students’ interests, and is parallel to language teaching.

In previous classrooms, most approaches focused on integrating language instruction with cultural factors. However, for current disciplines, research is needed to explore the appropriate integration of language and

culture instruction. While both approaches are present in international Chinese classrooms, most international Chinese teachers may struggle to articulate the precise impact of cultural instruction on language proficiency. Therefore, international Chinese teachers need to reconsider the relationship between language and culture instruction, conduct purposeful design and exploration in their teaching, and develop a tailored model for integrating language and culture instruction based on the relevant guidelines and guidance in the “Chinese Culture and Knowledge of China’s National Conditions” and “Intercultural Communication” sections of The Standard.

The Standard Guide International Chinese Teachers to Combine Teaching with Research

Among teachers, teaching materials, and teaching methods, teachers are at the core (Cui, 2010, pp. 73-81). International Chinese teachers must learn and teach, and more importantly, they must be able to independently research problems encountered in teaching. Teaching theory is not always smooth sailing in teaching practice. Different teachers may adopt different approaches to problems, such as letting them go or delving into them. The former will probably find it difficult to make progress in their career development, while the latter may develop into research-oriented teachers as their research methods continue to mature with the continuous resolution of problems. Based on this, The Standard advocate accelerates the transformation from teaching-oriented teachers to research-oriented teachers, grasping the core position of teachers, and strengthening teachers’ scientific research awareness.

1. The importance of combining teaching and research for international Chinese teachers

In the field of international Chinese education, the foundation of discipline construction is the construction of the teaching staff. Among the current international Chinese teachers, some teachers only stay at the level of teaching in their careers. When they encounter problems that they cannot solve, they do not seek to fully understand them, or even passively slack off. Some teachers can study and research the problems and errors that arise while teaching and use this to promote teaching practice. Some of them can become excellent teachers and famous teachers. Some teachers can devote their great enthusiasm to teaching, not only to doing their best in teaching but also to using theories such as second language acquisition theory and linguistics theory to carry out Chinese ontology research for teaching (Li & Guan, 2019, pp. 19-27).

It's easy to see that if international Chinese teachers only lecture, their career prospects and the advancement of their discipline are far from sufficient. While teachers need to interact with students through the teaching materials in the classroom to ensure effective learning, this is merely the most basic aspect of their duties. If we crudely divide the responsibilities of international Chinese teachers into three areas: instruction, personal development, and academic advancement, this only fulfills one-third of their responsibilities. Without the awareness and ability to integrate teaching and research, teachers will struggle to fulfill their responsibilities to themselves and the discipline, and their teaching itself may also struggle to achieve significant progress.

2. The Standard guidance on integrating teaching and research among international Chinese teachers

Under the first-level indicators of “Professional Practice” and “Professional Development” in the Standard, there is a clear statement that international Chinese teachers should combine teaching and research.

First, the secondary indicator “Learning Assessment and Feedback” under Professional Practice requires teachers to select multiple assessment methods appropriate to the teaching objectives to evaluate learners’ Chinese language learning outcomes. They should diagnose learners’ needs from the assessment results and provide feedback and suggestions. In conventional classrooms, test papers are the most common assessment method. However, these tests do not cover, or rarely cover, oral communication, and are often subject to reliability and validity issues. The testing methods are often single-minded and lack objectivity. Some tests are even individually designed by teachers, significantly reducing their effectiveness in assessing students. International Chinese teachers should utilize the multiple assessment methods outlined in The Standard, incorporating the evolving discipline theory, the deepening of second language acquisition theory, and the deepening of research on the Chinese language itself, to provide a three-dimensional, rather than a flat, assessment of learners.

Secondly, the secondary indicators of professional development, “Teaching Reflection” and “Professional Development Planning”, require teachers to integrate reflection throughout the entire process of international Chinese education and professional development. Teachers should use a variety of reflection and self-evaluation methods, which should then be applied in practice. Teachers should also participate in academic activities

such as academic lectures and conferences to enrich themselves, master basic research methods in education and teaching, and promote the sustainable development of their profession. While there are methods for teaching, there is no fixed method for teaching. Experienced teachers are still classified as lecturers. The days of using one or a few teaching methods to teach well are over. While the discipline requires craftsmen, it also needs scholars. The importance of reflection in The Standard emphasizes that those who aspire to become excellent international Chinese teachers can, through continuous self-enrichment, absorbing cutting-edge theoretical developments, and researching teaching issues, rationally combine teaching and research, become research-oriented teachers and scholars in the field of international Chinese education.

The significance of the Standard for cultivating the professional competence of international Chinese teachers

Since the 2019 International Conference on Chinese Language Education, international Chinese language education has entered a new stage (Zhang, 2023, pp. 33-41). Research on existing problems in the field of international Chinese language education has become increasingly broad and in-depth. The new version of The Standard not only puts forward new requirements for the professional competence of international Chinese language teachers but also strengthens the Standard system in the field of international Chinese language education.

1. Indicators of Professional Competence of International Chinese Teachers

The Standard refine and sublimate the five modules of language knowledge and skills, culture and communication, second language acquisition and learning strategies, teaching methods, and comprehensive quality of teachers in the 2012 Standard into five first-level indicators: professional concepts, professional knowledge, professional skills, professional practice, and professional development (Ye, 2023, pp. 27-32). Compared with the 2012 Standard, the five first-level indicators condensed in The Standard are more normative, general, and comprehensive. From the perspective of the depth of professional ability and the length of career development, and from the perspective of the profession and the individual teacher, combined with the development and changes of the discipline, the abilities that international Chinese teachers should possess are clarified from multiple angles and in all aspects. The proposal of the above five indicators is not only based on the consideration of discipline needs but also fully considers the connection with the Standard of various countries (Feng et al., 2023, pp. 20-26), which also makes The Standard more international. The development of international Chinese education has been more important to “go global” and to establish a consensus and exemplary standard worldwide, which will help promote the better development of the internationalization process of international Chinese education.

2. Refining the concepts and abilities necessary for teaching practice

2.1 Professional Philosophy: The Spiritual Pillar and Professional Ethics

The “Professional Philosophy” indicator delineates the ethical foundation and core attitudes that international Chinese language teachers should uphold throughout their careers. It serves as the spiritual pillar of professional behavior and consists of three dimensions: educational mission, professional ethics & cross-cultural respect, and sustainable development awareness. In recent years, Confucius Institutes and other international Chinese language institutions have incorporated “Professional Philosophy” as a core component of pre-service training. For example, at the Confucius Institute of Mahasarakham University in Thailand, a module on professional ethics and cultural sensitivity emphasizes adapting teaching strategies according to learners’ L1 and cultural background, closely aligning with the Standard.

2.2 Professional Knowledge: Building a Cross-Disciplinary Theoretical System

The “Professional Knowledge” indicator emphasizes the core theoretical and disciplinary knowledge that international Chinese language teachers should master prior to assignment, including linguistic foundations, educational theory, cross-cultural communication, and second language acquisition (SLA) theory. Research shows that teachers well-versed in SLA theory are better equipped to address L1 transfer phenomena in the classroom (Feng, 2020). In addition, educational psychology provides a scientific basis for designing curriculum objectives and evaluating learning outcomes. The Standard stress the transferability of knowledge: teachers must not only understand theory but also apply it effectively in instructional contexts.

2.3 Professional Skills: Core Teaching Competencies

The “Professional Skills” indicator specifies operational competencies required in instructional practice, structured across international, Chinese language, and educational dimensions. For instance, in Northeast Thailand, teachers employ a three-stage “contrast—imitation—correction” approach to improve students’ tonal accuracy. Such strategic competencies exemplify the core professional skills advocated by the Standard.

2.4 Professional Practice: Systematic Implementation of Instruction

The “Professional Practice” indicator encompasses teacher behaviors throughout the instructional process, including curriculum design, classroom implementation, learner assessment, and reflective practice. It emphasizes rational use and differentiated allocation of instructional resources and employs a multi-dimensional assessment system. A 2023 survey by the China Foreign Language Education Research Center found that approximately 76% of teachers still primarily rely on written tests, with oral and cultural task assessments covering less than 40%. The Standard’ multi-dimensional assessment approach provides a more authentic reflection of learners’ abilities.

2.5 Professional Development: Integrating Teaching and Research

The “Professional Development” indicator emphasizes sustained professional growth, integrating reflective teaching with research activities to achieve a “teaching-as-research” model. Teachers should conduct action research, case studies, and surveys to refine instructional strategies, maintaining personal growth portfolios documenting reflections and research outcomes. According to Li (2019), only about 15% of international Chinese language teachers systematically conduct teaching research and produce research

outputs. The Standard provide theoretical guidance for transitioning from teaching-oriented to research-oriented roles.

3. Establishing a methodological system for the accreditation of international Chinese language teachers

The Standard defines “international Chinese teachers” in the third section, “Terms and Definitions”: all teachers worldwide who teach Chinese as a second language (World Association of Chinese Language Teaching, 2022). In other words, whether they are from China or from other countries, they are all international Chinese teachers in terms of professional characterization. This definition was not included in the 2012 Standard and is another manifestation of The Standard’s innovative nature. Appendix A of The Standard lists the Standard for the Grading and Recognition of Professional Competencies of International Chinese Teachers, which provides a more detailed and comprehensive recognition Standard for teachers at the three levels of competence: elementary, intermediate, and advanced.

In the existing international Chinese teacher certificate examination, the written test is entirely objective and is divided into three parts: basic knowledge, application ability, and comprehensive quality. There is no elementary, intermediate, or advanced level division, and there is only a passing score of 90 points. The current international Chinese teacher certificate system has three problems: no subdivision of certificate categories, a single certificate examination question type, and a lack of timeliness in certificate management (Zhao & Huang, 2019, pp. 131-133). In the Standard, the grading standard for international Chinese teachers are divided.

Appendix A of the Standard introduces a three-tier classification: junior teachers with basic instructional competence, intermediate teachers

in professional growth stages, and senior teachers capable of mentoring others and conducting research. This classification reflects teachers’ professional development pathways and provides a formal framework for training and assessment.

First, teachers are divided into three levels: beginner, intermediate, and advanced. The “Certification Standard” describes the positioning of beginner, intermediate, and advanced teachers as shown in the table below. These three-level classification Standard also clarify the basic path of teacher development.

Table 1
International Chinese Teacher Grading Competency Table

Teacher Level	Positioning Description
Junior Teacher	Mainly qualified international Chinese novice teachers
Intermediate Teacher	Mainly mature teachers with rich practical experience and in the stage of professional and career development
Senior Teacher	On the basis of the first two, research-oriented and expert teachers who have the experience and ability to guide other teachers

Secondly, teachers are evaluated across five modules: professional philosophy, professional knowledge, professional skills, professional practice, and professional development. This emphasizes the professional competences that teachers should possess while also providing corresponding evaluation criteria, truly integrating theory and practice.

Conclusion

The Professional Competence Standard for International Chinese Teachers reflect the trend of international Chinese education transitioning from experience-based to standardized and research-oriented development. Teachers should follow these Standard, base their practice on teaching experience, and enhance their research competencies to achieve both professional growth and disciplinary development. Future research directions include empirical studies, localization of the Standard, and the development of teacher support systems to promote sustainable teacher development and the long-term advancement of the discipline.

The Standard for the Professional Competence of International Chinese Teachers not only define the competency orientation of international Chinese teachers in the new era of international Chinese education but also encompass pressing research issues within the discipline. Their development and updating underwent a lengthy process, and it's no exaggeration to call them gems. Research on The Standard within the field is still relatively limited, and many of their implications have been poorly implemented. For international Chinese teachers and those in aspiring positions, careful study and reflection on The Standard are invaluable. This article has only scratched the surface of The Standard's emphasis on teacher care and disciplinary awareness. Much remains to be explored in these two areas. Deepening relevant research and proposing new approaches will be beneficial for international Chinese education. For international Chinese teachers, this will not only hone their research skills but also unlock cutting-

edge theories and deepen their passion, enthusiasm, and dedication to international Chinese education.

References

- China Foreign Language Education Research Center. (2023). *Survey report on the current status of international Chinese teacher assessment*. China Foreign Language Education Research Center.
- Cui, X. (2010). The core and foundation of the “three teachings” issue in Chinese international education. *World Chinese Teaching*, 24(1), 73–81.
- Ding, A. (2024). International Chinese teacher professional competence standard promotes teachers’ professional development: Value, path and strategy. *Journal of Guizhou Normal University (Social Science Edition)*, 2024(3), 63–73.
- Feng, L., Jiang, N., & Ye, Y. (2023). Characteristics and application analysis of the professional competence standard for international Chinese teachers. *International Chinese Education*, 8(1), 20–26.
- Feng, X. (2020). Application of second language acquisition theory in international Chinese classrooms. *Chinese Foreign Language*, 17(3), 23–36.
- Li, Q. (2019). Teaching research and professional development of international Chinese language teachers. *World Chinese Language Teaching*, 33(4), 56–72.
- Li, Q., & Guan, L. (2019). Teachers, craftsmen and scholars of teaching Chinese as a foreign language. *International Chinese Education*, 4(1), 19–27.

Liu, X. (2000). *Introduction to teaching Chinese as a foreign language*.

Beijing Language and Culture University Press.

World Association of Chinese Language Teaching. (2022). *Professional competency standard for international Chinese teachers*. Peking University Press.

Ye, J. (2023). Teacher standard help teachers' professional development: On the service function of the international Chinese teacher professional competency standard. *International Chinese Education*, 8(1), 27–32.

Zhang, X. (2023). Some thoughts on the application and development of the professional competency standard for international Chinese teachers. *International Chinese Education*, 8(1), 33–41.

Zhao, L., & Huang, G. (2019). Research on the certification system for international Chinese teachers: Issues and strategies. *Chinese Character Culture*, 2019(13), 131–133.



Name: Wenqi Shang

Highest Education: Bachelor of Arts (English)

Affiliation: Nakhon Ratchasima Rajabhat University,
Thailand

The Influence of Artificial Intelligence Technology Utilization and Personnel's Knowledge and Competency in AI Applications on Work Performance in Local Administrative Organizations: A Case Study of Maha Sarakham Province

Ntapat Worapongpat

Eastern Institute of Technology Suvarnabhumi

Chonburi, Thailand

E-mail: dr.thiwat@gmail.com

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Abstract

This research aimed to (1) examine the influence of Artificial Intelligence (AI) technology utilization on personnel's knowledge and competency in AI applications within local administrative organizations in Maha Sarakham Province, (2) investigate the effect of professional competence on personnel's knowledge and competency in AI applications, and (3) analyze the combined influence of AI technology utilization and professional competence on the work performance of local administrative personnel. A quantitative research design was employed using an online questionnaire distributed to 365 personnel from various local administrative organizations in Maha Sarakham Province. Data were analyzed using descriptive statistics—frequency, percentage, mean, and standard deviation—and inferential statistics through Multiple

Regression Analysis (MRA). The results indicated that AI technology utilization had a significant positive effect on personnel's knowledge and competency in AI applications ($\beta = 0.19$, $p < 0.01$), while professional competence also showed a significant effect ($\beta = 0.21$, $p < 0.01$). Furthermore, the combined influence of AI technology utilization and professional competence demonstrated a statistically significant positive impact on overall work performance ($\beta = 0.45$, $p < 0.001$). These findings highlight the importance of integrating AI adoption with personnel competency development to enhance organizational efficiency and service delivery within local administrative organizations.

Keywords: Artificial Intelligence Technology, Knowledge and Competency, Professional Competence, Local Administrative Organizations, Work Performance

Introduction

In the era of digital transformation, artificial intelligence (AI) has emerged as a transformative force reshaping organizational practices and decision-making processes across sectors worldwide, particularly within public administration (Johnson et al., 2022). In Thailand, the government has actively implemented the Digital Government Policy to promote the integration of digital technologies in public service delivery, with the goal of enhancing administrative efficiency and transparency (Khaenamkhaew et al., 2023). Consequently, the adoption of AI in local administrative organizations (LAOs) has become a crucial mechanism for modernizing local governance and improving service quality (Kinder et al., 2023). Local administrative organizations are at the forefront of Thailand's public service system, responsible for community welfare, infrastructure development, and local economic growth (Worapongpat, 2025e). However, the increasing volume of data, complex

operational procedures, and the demand for timely service delivery have imposed significant administrative burdens (Murire, 2024). AI technologies possess strong potential to mitigate these challenges by automating repetitive tasks, improving data accuracy, and enhancing service efficiency (Nua-amnat et al., 2021).

Despite these opportunities, the success of AI adoption in the public sector depends not only on technological availability but also on human readiness and competency (Worapongpat, 2025d). Personnel must possess adequate knowledge, digital literacy, and professional competence to effectively utilize AI tools (Parycek et al., 2024). Prior studies have highlighted that human factors—particularly knowledge and competency in AI applications—serve as key determinants of organizational performance (Worapongpat, 2025c). However, most existing research focuses on the adoption of AI technologies in national-level agencies or the private sector, leaving a notable research gap concerning how AI utilization and personnel competence interact to influence work performance in local administrative organizations, especially within the Thai context (Saman Siri Charoensuk, 2022). Maha Sarakham Province, a prominent educational and administrative center in the lower northeastern region of Thailand, provides an ideal setting for this investigation (Worapongpat, 2025b). Its diverse local administrative organizations, including provincial, municipal, and subdistrict entities, operate under varying responsibilities and complexities (Sirisawat & Chaiya, 2025). Exploring AI integration in this context can generate valuable insights for improving local governance across the nation (Yigitcanlar et al., 2024).

Therefore, this study aims to address the identified research gap by examining the influence of AI technology utilization and personnel's professional

competence on their knowledge and competency in AI applications, as well as the combined effect of these factors on work performance among local administrative personnel in Maha Sarakham Province. The findings are expected to contribute to both theoretical and practical advancements by informing future AI policy development, personnel training programs, and strategic technology implementation in local administrative organizations

Research Objectives

1. To examine the influence of AI technology utilization on personnel's knowledge and competency in AI applications within local administrative organizations in Maha Sarakham Province.
2. To determine the influence of professional competence on personnel's knowledge and competency in AI applications.
3. To analyze the combined and mediating effects of AI technology utilization and professional competence on work performance, through personnel's knowledge and competency in AI applications.

Research Scope

1. Concepts and Relevant Theories

1.1 Artificial Intelligence (AI)

Artificial intelligence (AI) refers to technological systems capable of performing tasks that require human-like reasoning, learning, and decision-making (Yigitcanlar et al., 2023). In public administration, AI is applied to data analysis, automated service responses, decision support, and workflow optimization, thereby improving accuracy and reducing administrative burden (Sinjindawong et al., 2023).

1.2 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) explains how individuals adopt and use technology based on two perceptions: perceived usefulness and perceived ease of use (Thirawan, 2025; Worapongpat et al., 2024). This model underpins the present study in explaining how personnel perceive and utilize AI technologies in their work processes (Worapongpat, 2025a).

1.3 Digital Transformation Theory

Digital transformation theory emphasizes that organizational change is not driven by technology alone but by the integration of human competence, leadership, and innovation capacity (Worapongpat et al., 2025). Personnel readiness and professional competence are key success factors for leveraging technology to improve organizational performance (Vatamanu & Tofan, 2025).

2. Research Scope

This study focuses on personnel in local administrative organizations (LAOs) across Maha Sarakham Province, including the Provincial Administrative Organization, city and subdistrict municipalities, and subdistrict administrative organizations. The scope covers:

Content scope: Relationships among AI utilization, professional competence, AI-related knowledge and competency, and work performance.

Area scope: Maha Sarakham Province, Thailand.

Population scope: Government officials and staff working in LAOs.

Time scope: Fiscal year 2025.

3. Conceptual Framework

Independent Variables (IVs): AI Technology Utilization and Professional Competence

Mediating Variable (MV): Knowledge and Competency in AI Applications

Dependent Variable (DV): Work Performance

Research Methodology

1. Population and Sample

The population of this study comprised personnel employed in local administrative organizations (LAOs) across Maha Sarakham Province, Thailand. These included the Provincial Administrative Organization, municipalities, and subdistrict administrative organizations (SAOs).

The study targeted officials and staff directly responsible for administrative management and public service delivery. The sample size was determined using Yamane's (1967) formula, with a 95 % confidence level and a 5 % margin of error, resulting in a required sample of 360 respondents. To ensure representativeness, simple random sampling was applied based on the proportion of personnel in each LAO.

2. Research Instruments

A structured questionnaire was used as the main instrument for quantitative data collection. Its design was directly aligned with the research objectives and conceptual framework.

2.1 Questionnaire Structure

The questionnaire consisted of five sections: General Information – demographic data such as gender, age, education level, work experience, and position.

AI Technology Utilization – 15 items on the extent of AI use in work processes (e.g., data analysis, automated workflows, decision-support tools).

Professional Competence – 15 items assessing professional knowledge, skills, and adaptability in AI-related tasks.

Knowledge and Competency in AI Applications – 15 items evaluating understanding and practical ability to apply AI in organizational operations.

Work Performance – 20 items measuring efficiency, accuracy, timeliness, and service quality.

All items (Sections 2–5) used a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).

2.2 Instrument Development and Validation

1) Item generation was based on prior studies and theoretical foundations, including the Technology Acceptance Model (TAM) and Digital Transformation Theory

2) Content validity was evaluated by three experts in public administration and digital governance. The Item-Objective Congruence (IOC) index for all items ranged between 0.80 and 1.00, exceeding the acceptable threshold.

3) Pilot testing was conducted with 30 LAO personnel from a neighboring province.

4) Reliability analysis using Cronbach's Alpha demonstrated high internal consistency across all constructs:

Table 1

Reliability Analysis of Research Instruments

Construct	Number of Items	Cronbach's α	Reliability Level
AI Technology Utilization	15	0.91	Excellent
Professional Competence	15	0.89	High
Knowledge & Competency in AI Applications	15	0.90	Excellent
Work Performance	20	0.92	Excellent

3. Data Collection

Data were collected via an online questionnaire distributed through the official communication channels of each LAO between May and July 2025. Participation was voluntary and anonymous. A total of 365 valid responses were obtained and used for analysis.

4. Data Analysis

Quantitative data were analyzed using Ready-made program

Descriptive statistics (frequency, percentage, mean, and standard deviation) summarized demographic and key variable characteristics.

Inferential statistics, specifically Multiple Regression Analysis (MRA), tested the hypothesized relationships among variables.

Model 1: Influence of AI technology utilization and professional competence on knowledge and competency.

Model 2: Combined effects of AI utilization, professional competence, and knowledge and competency on work performance.

Assumption tests for multicollinearity, normality, and autocorrelation were performed to ensure model validity.

5. Ethical Considerations

All participants were informed about the study objectives, and confidentiality was guaranteed. The research followed academic ethics guidelines approved by the Research Ethics Committee of Mahasarakham University

6. Expected Application of Findings

This study is expected to provide empirical evidence demonstrating how AI utilization enhances local government performance by improving accuracy, speed, and service quality. Furthermore, the findings will guide capacity-building programs, emphasizing AI training and professional development for local personnel; and Policy frameworks that support AI implementation and digital transformation in local administrative organizations.

Research Results

1. Descriptive Analysis

1.1 AI Technology Utilization

The overall mean score for AI technology utilization among personnel was 3.89 (S.D. = 0.31), indicating a high level of AI use. Respondents reported particularly strong skills in using AI software and applications ($\bar{x}$ = 3.92) and AI network utilization ($\bar{x}$ = 3.96). This shows that most personnel actively employ AI tools in routine administrative and data-driven tasks.

1.2 Professional Competence (Digital AI Skills)

The average score for professional competence was 3.85 (S.D. = 0.34), a high level. Personnel demonstrated solid knowledge and understanding

of AI technology ($\bar{x} = 3.85$) and effective application of AI in work tasks ($\bar{x} = 3.90$). These results suggest that LAO staff are well-prepared to integrate AI into their operational responsibilities.

1.3 Knowledge and Competency in AI Applications

The mean score for knowledge and competency was 3.92 (S.D. = 0.34), at a high level. Respondents scored highest in fundamental knowledge of AI ($\bar{x} = 4.01$). Personnel have adequate conceptual and applied knowledge for AI utilization.

1.4 Work Performance

Work performance was rated at a high level overall ($\bar{x} = 3.92$, S.D. = 0.30). The highest-rated aspect was efficiency of public service delivery ($\bar{x} = 3.95$), followed closely by user satisfaction ($\bar{x} = 3.93$). This implies that AI adoption may already be contributing to more efficient and user-friendly local services.

2. Inferential Analysis

2.1 Objective 1 – Influence of AI Technology Utilization on Knowledge and Competency

Table 2

Results of Multiple Regression Analysis for the Influence of AI Technology Utilization on Knowledge and Competency in AI Applications

Variable	B	β	t	Sig.
Constant	2.045	–	6.534	0.000 **
AI Technology Utilization	0.189	0.123	2.673	0.008 **

AI technology utilization has a significant positive effect on personnel's knowledge and competency in AI applications ($\beta = 0.123$, $p < 0.01$). This indicates that the more frequently personnel use AI tools in their daily tasks, the greater their AI-related knowledge and skill development.

2.2 Objective 2 – Influence of Professional Competence on Knowledge and Competency

Table 3

Results of Multiple Regression Analysis for the Influence of Professional Competence on Knowledge and Competency in AI Applications

Variable	B	β	t	Sig.
Constant	0.711	–	3.493	0.001 **
Professional Competence	0.213	0.225	5.618	0.000 **

Professional competence significantly predicts knowledge and competency in AI applications ($\beta = 0.225$, $p < 0.001$). Personnel with stronger digital and analytical abilities tend to learn and apply AI technologies more effectively.

2.3 Objective 3 – Combined Influence on Work Performance

Table 4

Results of Multiple Regression Analysis for the Combined Influence of AI Technology Utilization, Professional Competence, and Knowledge & Competency in AI Applications on Work Performance

Independent Variable	B	β	t	Sig.
Constant	1.373	–	5.044	0.000 **
AI Technology Utilization	0.109	0.077	1.771	0.077

Independent Variable	B	β	t	Sig.
Professional Competence	0.244	0.257	4.816	0.000 **
Knowledge & Competency in AI Applications	0.517	0.433	8.013	0.000 **

Both professional competence and knowledge & competency in AI applications have statistically significant positive effects on work performance ($\beta = 0.257$ and 0.433 , respectively; $p < 0.001$).

Although AI technology utilization alone did not reach statistical significance ($p = 0.077$), its indirect influence through enhanced knowledge and competency is evident.

3. Summary of Hypothesis Testing

Table 5

Summary of Hypothesis Testing Results

Hypothesis	Statement	Result
H1	AI technology utilization $\rightarrow$ knowledge & competency	Supported ($p < 0.01$)
H2	Professional competence $\rightarrow$ knowledge & competency	Supported ($p < 0.001$)
H3	AI utilization + professional competence $\rightarrow$ work performance (direct & indirect)	Partially supported (mediated by knowledge & competency)

4. Key Findings in Relation to AI Performance Improvement

4.1 AI enhances knowledge flow and operational learning. Routine use of AI systems leads to experiential learning, allowing personnel to refine technical and analytical competencies.

4.2 Professional competence is the main driver of performance gains. Personnel who possess critical thinking and digital problem-solving abilities translate AI utilization into tangible productivity improvements.

4.3 Knowledge and competency act as a bridge. AI tools alone do not automatically improve efficiency; human capability to interpret and apply AI outputs determines performance success.

5. Implications for Capacity Building and Policy

5.1 Capacity-building programs should emphasize AI literacy, data analytics, and problem-solving skills to strengthen personnel's ability to use AI effectively.

5.2 Local government AI policy should focus on continuous professional development, resource allocation for AI systems, and integration of AI into performance-based management frameworks

Discussion of Results

Objective 1: Influence of AI Technology Utilization on Knowledge and Competency in AI Applications The analysis revealed that AI technology utilization had a statistically significant positive effect on personnel's knowledge and competency in AI applications ($\beta = 0.123$, $p < 0.01$). This result confirms that the more personnel engage with AI systems in their daily operations, the more proficient they become in understanding and applying such technologies. From the perspective of the Technology Acceptance Model (Budhwar et al., 2022), this finding reflects that increased perceived usefulness and ease of use of AI tools promote continuous adoption and learning behavior. As personnel repeatedly interact with AI applications, they develop stronger digital literacy and problem-solving abilities. This finding is

consistent with prior research indicating that AI adoption enhances operational efficiency and accelerates learning processes within organizations (Butt, 2023).highlighted that technological engagement stimulates knowledge acquisition and the ability to innovate in task performance.Interpretation: AI adoption not only improves technical efficiency but also acts as a practical learning mechanism that strengthens personnel competency an essential driver of sustainable digital transformation in local governance.

Objective 2: Influence of Professional Competence on Knowledge and Competency in AI Applications. The study found that professional competence significantly and positively influenced personnel's knowledge and competency in AI applications ($\beta = 0.225$, $p < 0.001$). Personnel who possessed strong analytical, cognitive, and technical skills exhibited greater adaptability and effectiveness in using AI systems.This aligns with Digital Transformation The theory posits that organizational innovation depends on both technological readiness and human capability (Butsara Phon Phuangpanya, 2024). Moreover, the Human Capital Theory supports that accumulated professional knowledge and digital literacy are key predictors of performance and innovation (Campion et al., 2022). Consistent with the findings of Chantarasombat (2021), personnel with high professional competence are more likely to effectively apply technology to improve organizational performance and innovation outcomes. are better positioned to integrate AI tools into their workflow, enhance decision-making, and ensure accuracy in service delivery. Interpretation: Competent personnel act as catalysts for successful AI adoption. Their proficiency transforms technology from a passive tool into an active enabler of knowledge creation and organizational improvement.

Objective 3: Combined Influence of AI Technology Utilization and Professional Competence on Work Performance. Results demonstrated that both AI technology utilization and professional competence jointly influenced work performance, with knowledge and competency in AI applications serving as a mediating variable ($\beta = 0.433$, $p < 0.001$). While AI utilization alone did not have a significant direct effect ($p = 0.077$), it indirectly improved performance through enhanced knowledge and competency. This supports the Digital Transformation Model, which emphasizes that technology alone does not generate performance improvement unless supported by skilled human capital and effective knowledge application (Chompotjananan & Vichit-Vadanan, 2022). AI acts as an enabler, while human expertise and competency determine the magnitude of performance outcomes. These findings are in line with those of Gqamane and Taylor (2013), who identified managerial support and human capability as critical drivers of successful technology implementation. Competency development as key factors linking technology implementation to work efficiency. The combination of AI utilization and professional competence therefore forms a dual mechanism—technological and human that drives improved efficiency, accuracy, and service quality in local administrative organizations. Interpretation: The results confirm a partial mediation effect, where personnel competency bridges the relationship between AI use and work performance, highlighting that human readiness determines the real value of AI investments.

Recommendations

1. Practical Recommendations

1.1 Based on Objective 1 – AI Technology Utilization and Personnel Competency

Since AI technology utilization showed a significant positive influence on personnel's knowledge and competency, local administrative organizations (LAOs) and related agencies should:

1) Provide continuous AI training and professional development programs.

Training should emphasize hands-on use of AI systems for data analysis, service automation, and decision support to strengthen personnel's digital capability.

2) Encourage managerial engagement and motivation mechanisms.

Executives should act as digital transformation leaders by fostering innovation-friendly environments, recognizing exemplary AI users, and linking AI utilization to performance appraisal systems.

3) Enhance digital and IT infrastructure.

Stable networks, data-security systems, and cloud-based AI platforms are essential for enabling personnel to apply AI tools effectively in their daily work.

1.2 Based on Objective 2 – Professional Competence and AI Utilization

Given that professional competence significantly affects personnel's ability to use AI, local agencies should:

1) Promote continuous learning and upskilling.

Develop structured career-development pathways focusing on AI literacy, data analytics, and digital problem-solving.

2) Create knowledge-sharing mechanisms.

Establish communities of practice, workshops, or online knowledge hubs for personnel to exchange AI experiences and success stories.

3) Integrate AI competency into human-resource management.

Incorporate AI-related skill standards into recruitment, performance evaluation, and promotion criteria to institutionalize digital professionalism.

1.3 Based on Objective 3 – Combined Influence on Work Performance

As both AI utilization and professional competence jointly enhance work performance through knowledge and competency, agencies should:

1) Adopt an integrated capacity-building model.

Combine technical AI training with leadership, change management, and ethical-AI awareness programs.

2) Develop local AI policy frameworks.

Establish guidelines for AI governance, data ethics, and resource allocation tailored to the local administrative context.

3) Use AI for evidence-based management.

Implement AI dashboards or analytics systems to monitor public-service efficiency, resource utilization, and citizen satisfaction.

2. Recommendations for Future Research

2.1 Explore contextual barriers and enablers of AI adoption in local government, such as organizational culture, leadership style, or budget allocation.

2.2 Examine the long-term impacts of AI implementation on administrative efficiency, transparency, and citizen service satisfaction at different administrative levels.

2.3 Develop localized frameworks or standards for AI implementation within LAOs that incorporate governance, ethics, and workforce-competency dimensions.

2.4 Investigate mediating or moderating roles of organizational factors such as digital leadership, organizational learning culture, or innovation climate on the relationship between AI use and work performance.

2.5 Conduct comparative studies between provinces or between Thailand and other ASEAN countries to identify best practices and policy implications for digital government development.

References

- Budhwar, P., Malik, A., De Silva, M. T., & Thevisuthan, P. (2022). Artificial intelligence—challenges and opportunities for international HRM: A review and research agenda. *The International Journal of Human Resource Management*, 33(6), 1065–1097.
<https://doi.org/10.1080/09585192.2021.2007695>
- Butsara Phon Phuangpanya. (2024). Relational leadership of local administrators in the 21st century. *Journal of Interdisciplinary Social Development*, 2(5), 30–43.
-

- Butt, J. S. (2023). The impact of artificial intelligence (AI) on the efficiency of administrative decision making, including ethical & legal considerations, and comparative study about countries already incorporating AI for administrative decisions. *Acta Universitatis Danubius. Juridica*, 19(3), 7–25.
- Campion, A., Gasco-Hernandez, M., Jankin Mikhaylov, S., & Esteve, M. (2022). Overcoming the challenges of collaboratively adopting artificial intelligence in the public sector. *Social Science Computer Review*, 40(2), 462–477. <https://doi.org/10.1177/08944393211017542>
- Chantarasombat, C. (2021). Collaboration for relieving poverty, social development and community well-being in Maha Sarakham Province, Thailand. *Multicultural Education*, 7(7), 1–10.
- Chompotjananan, B., & Vichit-Vadakan, J. (2022). Transforming villages into “wisdom” villages: A descriptive analysis. *Journal of Public and Private Management*, 29(1), 5–15.
- Gqamane, Z., & Taylor, J. D. (2013). Capacity building for effective local government leadership and governance. *Journal of Public Administration*, 48(SI-1), 824–842. <https://journals.co.za/doi/abs/10.10520/EJC149784>
- Johnson, B. A., Coggburn, J. D., & Llorens, J. J. (2022). Artificial intelligence and public human resource management: Questions for research and practice. *Public Personnel Management*, 51(4), 538–562.
- Khaenamkhaew, D., Onjun, P., Damrongwattana, J., & Prathum, B. (2023). The participation of community leaders for sustainable tourism development: A case study in Phipun District, Nakhon Si

- Thammarat Province, Thailand. *Cogent Social Sciences*, 9(1), 2229172.
- Kinder, T., Stenvall, J., Koskimies, E., Webb, H., & Janenova, S. (2023). Local public services and the ethical deployment of artificial intelligence. *Government Information Quarterly*, 40(4), 101865.
- Murire, O. T. (2024). Artificial intelligence and its role in shaping organizational work practices and culture. *Administrative Sciences*, 14(12), 316. <https://doi.org/10.3390/admsci14120316>
- Nua-amnat, R., Brahmakappa, A., Pumturian, S., & Soonthondachar, J. (2021). The development of knowledge and elements of creative community “Smart Community” of communities in Thai society. *Journal of Arts Management*, 5(3), 559–573.
- Parycek, P., Schmid, V., & Novak, A. S. (2024). Artificial intelligence (AI) and automation in administrative procedures: Potentials, limitations, and framework conditions. *Journal of the Knowledge Economy*, 15(2), 8390–8415. <https://doi.org/10.1007/s13132-023-01693-5>
- Saman Siri Charoensuk. (2022). Leadership and conflict management. *Journal of Academic Research*, 5(6), 301–316.
- Sinjindawong, S., Nuchniyom, R., & Pakakaew, K. (2023). Proposed policy for developing social innovations to create value for the aging. *Kasetsart Journal of Social Sciences*, 44(2), 615–622. <https://doi.org/10.34044/j.kjss.2023.44.2.14>
- Sirisawat, K., & Chaiya, C. (2025). Sustainable smart cities through collaborative governance: The role of transformative leadership. *Journal of Public Administration, Public Affairs, and Management*, 23(1), 137–178.
-

- Thirawan, R. (2025). The management of innovation in the public sector to enhance effective and sustainable public services. *Journal of Public and Private Issues*, 2(3), 185–196.
- Vatamanu, A. F., & Tofan, M. (2025). Integrating artificial intelligence into public administration: Challenges and vulnerabilities. *Administrative Sciences*, 15(4), 149. <https://doi.org/10.3390/admsci15040149>
- Worapongpat, N. (2025a). Mindfulness in the use of artificial intelligence for learning among graduate students in private universities in Bangkok, Thailand. *Asian Education and Learning Review*, 3(2), 1–11.
- Worapongpat, N. (2025b). Digital skills of administrators in the 21st century and their relationship with the performance of local government employees in Mueang District, Maha Sarakham Province. *Journal of Humanities and Social Sciences, University of Phayao*, 13(1), 96–108.
- Worapongpat, N. (2025c). The desired leadership qualities of administrators influencing the development of a learning innovation organization for the development of local personnel in Mueang District, Mahasarakham Province. *Kasetsart Journal of Political Science and Public Administration*, 3(1), 1–32.
- Worapongpat, N. (2025d). The role of leadership based on the ESG framework in influencing the performance efficiency of local employees: A case study of Mueang District, Maha Sarakham Province. *Journal of Public and Private Issues*, 2(3), 147–158.
- Worapongpat, N. (2025e). Reducing the digital divide and promoting access to public services for the elderly in local administrative

organizations of Mueang District, Maha Sarakham Province. *Journal of Public and Private Issues*, 2(4), 232–241.

Worapongpat, N., Dookarn, S., Boonmee, K., Thavisin, N., & Chanphong, S. (2025). The mindfulness in the use of artificial intelligence (AI) and its impact on learning for graduate students at private universities in Thailand. *Journal of Intellect Education*, 4(1), 97–109.

Worapongpat, N., Thavisin, N., & Viphoouparakhot, B. (2024). Study on the application of wireless communication technology in digital communities in Guangdong. *Journal of Public and Private Issues*, 1(5), 230–242.

Yigitcanlar, T., Agdas, D., & Degirmenci, K. (2023). Artificial intelligence in local governments: Perceptions of city managers on prospects, constraints and choices. *AI & Society*, 38(3), 1135–1150.
<https://doi.org/10.1007/s00146-022-01438-5>

Yigitcanlar, T., David, A., Li, W., Fookes, C., Bibri, S. E., & Ye, X. (2024). Unlocking artificial intelligence adoption in local governments: Best practice lessons from real-world implementations. *Smart Cities*, 7(4), 1576–1625. <https://doi.org/10.3390/smartcities7040079>



Name: Asst. Prof. Dr.Ntapat Worapongpat

Highest Education: Doctor of Philosophy
(Administration and Development)

Affiliation: Eastern Institute of Technology
Suvarnabhumi

Using CLIL to Develop Pre-Service Teachers' Readiness for EMI through a Classroom-Based Perspective

Rattanyu Wongsasawat^{1*} Waewalee Waewchimplee²

Jatupon Phulakor³

Nakhon Ratchasima Rajabhat University

Nakhon Ratchasima, Thailand

E-mail: Rattanyu.w@nrru.ac.th; Waewalee.w@nrru.ac.th

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Abstract

This classroom-based reflective article examines how Content and Language Integrated Learning (CLIL) can develop pre-service teachers' readiness for English-medium instruction (EMI) in a regional Thai university context. Drawing on the author's nine-and-a-half years of bilingual primary teaching and subsequent instruction of an English for Teaching course at Nakhon Ratchasima Rajabhat University (NRRU), the study integrates practical accounts with learner feedback from two groups. Primary-level data were collected from 57 former students who studied English, science, and mathematics through English in a CLIL-based program, while higher education data were gathered from course evaluations by 23 pre-service teachers. The findings reveal that CLIL-supported lessons promoted engagement, routine English use, and academic vocabulary retention among primary learners, although some found content learning in English challenging. At the university level, pre-service teachers reported high satisfaction with scaffolding, active

learning, and microteaching, leading to increased confidence and improved lesson design for EMI. The study highlights key challenges, such as aligning language and content objectives and sustaining motivation, while recommending CLIL as an effective strategy for bridging the policy-practice gap and advancing Sustainable Development Goal 4 on equitable education.

Keywords: CLIL, English-medium instruction, pre-service teachers, classroom-based reflection, SDG 4

Introduction

In recent years, English as a Medium of Instruction (EMI) has received growing attention within Thailand's teacher education sector, in line with regional integration, internationalization policies, and the national push for English proficiency. While many Thai universities have introduced EMI courses or programs, the challenge of preparing future teachers to deliver content effectively in English persists, particularly outside elite institutions (Suksakorn, 2020; Prabjandee & Fang, 2021). At Nakhon Ratchasima Rajabhat University (NRRU), where most pre-service teachers come from non-urban backgrounds, these challenges are compounded by limited access to EMI models, native-speaking mentors, or English-rich learning environments.

A promising pedagogical response to this challenge has been identified in Content and Language Integrated Learning (CLIL), a dual-focused approach that integrates subject content instruction with systematic language development (Coyle et al., 2010). Increasing recognition has been given to CLIL in Thai teacher education as a tool to enhance both content pedagogy and academic English use, particularly for English majors who may later be expected to teach non-English subjects such as science,

mathematics, or health in English-medium classrooms. Unlike traditional EMI, which may not support students' linguistic needs, CLIL is designed to scaffold both content learning and language development, making it more adaptable to diverse Thai classrooms (Charunsri & Sripicharn, 2023; Ruiz-Cecilia et al., 2023).

At NRRU, a course titled English for Teaching was introduced as a capacity-building platform to prepare pre-service teachers for real-world EMI contexts. The design of the course was informed by more than nine years of bilingual primary teaching experience in English, mathematics, and science. CLIL principles were adopted to train students in lesson planning, classroom English use, and content-language integration. This context is particularly significant because many graduates are expected to teach in rural or regular-track schools where parents cannot afford expensive English Programs (EP) and where equity of access is a concern aligned with Sustainable Development Goal 4 (SDG 4): Ensure inclusive and equitable quality education for all (UNESCO, 2017).

This article presents a classroom-based reflection on the application of CLIL principles within the English for Teaching course at NRRU. It examines how CLIL can be used to enhance the pedagogical readiness of pre-service teachers to teach non-English subjects through English, particularly in under-resourced Thai classrooms. The aim is to support EMI implementation and to promote educational equity by equipping future teachers with tools to make English-medium instruction accessible beyond elite bilingual programs.

Theoretical Framework and Related Literature

This section presents the theoretical underpinnings and key concepts relevant to the implementation of Content and Language Integrated Learning (CLIL) within teacher education in Thailand, particularly in the context of preparing pre-service teachers at Nakhon Ratchasima Rajabhat University (NRRU) for English-medium instruction (EMI). It begins by outlining the role of EMI in Thai education and its challenges, then introduces CLIL as a pedagogical response. The section concludes by linking CLIL implementation to Sustainable Development Goal 4 (SDG 4), emphasizing the potential of this approach to promote equitable access to quality education through English.

1. English as a Medium of Instruction (EMI) in Thai Teacher Education

English as a Medium of Instruction (EMI) refers to the use of English to teach academic subjects in countries where English is not the native language (Macaro, 2018). In Thailand, EMI has been adopted in various forms across educational levels, from basic education to higher education, particularly in bilingual programs (e.g., EP/MEP) and international curricula (Galloway et al., 2017; Suksakorn, 2020). The policy behind EMI is to enhance English proficiency and global competitiveness. However, the widespread adoption of EMI has also revealed significant disparities between students in English programs and those in regular programs, raising concerns about equitable access to high-quality education (Prabjandee & Nilpirom, 2022).

Global trends indicate that EMI is becoming a key feature of higher education systems worldwide. In European countries like Spain, Italy,

and the Netherlands, EMI is used in universities to prepare students for globalized workplaces (Lasagabaster, 2011; Macaro, 2018). These countries often combine EMI with a focus on content mastery to improve both academic knowledge and language proficiency. However, research shows that EMI implementation has been more successful in wealthier, urban-centered institutions, creating gaps in access for students in rural or under-resourced areas (Galloway et al., 2017; Wichairat, 2019).

In East Asia, countries like China, Japan, and South Korea have increasingly integrated EMI in response to the demand for international competitiveness and English proficiency. Yet, EMI faces challenges in these regions due to the limited English proficiency of students and the lack of adequately trained teachers to deliver content effectively in English (Galloway et al., 2017). These challenges are similar to those in Thailand, where rural areas and regional universities face additional barriers to EMI implementation due to a lack of exposure to English-rich environments and native-speaking mentors.

2. Content and Language Integrated Learning

Content and Language Integrated Learning (CLIL) offers a promising alternative to traditional EMI, focusing on the simultaneous development of language and content knowledge. As defined by Coyle et al. (2010), CLIL is a dual-focused educational approach that uses an additional language to teach both subject content and language. Unlike traditional EMI, which often prioritizes content delivery in English, CLIL explicitly integrates language development through content-based tasks, scaffolding, and purposeful interaction (Coyle et al., 2010).

Globally, CLIL has gained widespread recognition as a pedagogical approach that facilitates language learning in a more engaging and contextually relevant manner. In Europe, particularly in countries like Spain, Finland, and Estonia, CLIL has been successfully implemented in schools to teach subjects such as science, history, and geography through English (Mehisto et al., 2008). Studies have shown that CLIL not only enhances students' academic knowledge but also improves their language proficiency, cognitive skills, and intercultural awareness (Coyle et al., 2010). For example, in Finland, CLIL has been shown to positively impact both language acquisition and content learning, with students outperforming their peers in traditional language classes (Wichairat, 2019).

In contrast to the challenges faced by EMI in many non-native English-speaking countries, CLIL's dual focus on language and content makes it particularly suitable for contexts where students' English proficiency may be emerging. In Italy, CLIL is widely used in secondary education, with research indicating that it helps students develop a deeper understanding of academic content while simultaneously improving their language skills (Lasagabaster, 2011). Furthermore, the flexibility of CLIL allows for its adaptation in a variety of classroom settings, making it an ideal model for regions with diverse linguistic backgrounds, such as Thailand.

However, challenges persist in the implementation of CLIL, particularly in terms of teacher training. In countries like Thailand, there is a lack of systematic CLIL training in teacher preparation programs, particularly in regional universities (Prabjandee & Nilpirom, 2022). While many teachers are expected to deliver content in English, few are equipped with the necessary pedagogical tools to support both language development and

content mastery in EMI contexts (Charunsri & Sripicharn, 2023). This highlights the need for comprehensive teacher training programs that integrate CLIL into pre-service curricula.

3. CLIL in Thai Higher Education and Teacher Preparation

The adoption of CLIL in Thailand's higher education system is still in its early stages, but there are promising outcomes. Studies have shown that CLIL can enhance Thai students' academic English, content knowledge, and confidence when implemented effectively (Wichairat, 2019; Ruiz-Cecilia et al., 2023). Charunsri and Sripicharn (2023) conducted an intervention study with pre-service English teachers and found that CLIL training significantly improved their understanding of CLIL pedagogy, lesson design, and teaching confidence.

However, challenges remain in the widespread implementation of CLIL in teacher education. Pre-service teachers often struggle to integrate language objectives into content lessons and report low confidence in their English proficiency (Tachaiyaphum & Sukying, 2017). In many Thai universities, particularly in regional institutions like NRRU, there is limited exposure to CLIL-based teaching methods, resulting in gaps in teacher preparation for EMI (Prabjandee & Nilpirom, 2022).

4. Linking CLIL to SDG 4: Equity in Education

The integration of CLIL into teacher education aligns with global education goals, particularly Sustainable Development Goal 4 (SDG 4): Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (UNESCO, 2017). In Thailand, the disparity between urban and rural schools, particularly in access to EMI and English programs, has raised concerns about equity in education (Prabjandee &

Nilpirom, 2022). By equipping pre-service teachers with CLIL-based pedagogical tools, universities like NRRU can help reduce these inequities by enabling teachers to deliver content in English in mainstream classrooms, thereby making English-medium instruction more accessible to students from diverse backgrounds.

The inclusion of CLIL in teacher education programs at regional universities can serve as a mechanism for promoting SDG 4. By preparing teachers to teach both content and language in English, CLIL has the potential to democratize access to English-rich learning environments, benefiting students who may not otherwise have the opportunity to study in bilingual programs (Charunsri & Sripicharn, 2023; Ruiz-Cecilia et al., 2023).

Classroom-Based Reflection and Application of CLIL

1. Bilingual Primary Teaching Experience

The implementation of CLIL was first carried out during a nine-and-a-half-year period of teaching at a bilingual primary school in Thailand. In this context, English was employed as the medium of instruction across several subjects, including English, science, and mathematics. The immersive environment provided insights into how young learners interact with subject content delivered through a second language, particularly when supported by appropriate instructional strategies.

In science lessons, hands-on experiments were conducted using simplified English instructions to make abstract concepts more accessible. For example, the solar system was taught through a group quiz game in which students collaborated to answer true-or-false questions, justified their responses, and applied academic vocabulary such as orbit, planet, and

sunlight in full sentences. In this way, all four dimensions of the CLIL framework were integrated: Content (astronomy), Communication (explaining planetary motion), Cognition (analyzing and classifying), and Culture (relating to local beliefs about celestial phenomena).

In mathematics classes, visual aids and pair work were employed to support comprehension. During geometry lessons, students measured angles using protractors and articulated their reasoning in English. Sentence starters such as “This is an acute angle because...” (Student A, Interview, March 17, 2025) or “The measurement from the baseline is...” (Student A, Interview, March 17, 2025) were provided as scaffolds, enabling the development of both conceptual understanding and academic language use.

In English lessons, real-life communication scenarios such as small talk, role plays, and storytelling were incorporated. Learners engaged in conversations about weekend activities and created stories based on vocabulary themes. These communicative tasks prepared students for more structured reading and writing lessons while supporting their confidence in language production.

Overall, the long-term application of CLIL in this primary context demonstrated that it is not only feasible but also highly effective for young learners in mainstream, non-elite schools. With careful scaffolding and contextually relevant tasks, academic content was made accessible while communicative competence was simultaneously developed. These experiences later informed work in teacher education, where CLIL principles were adapted for pre-service teacher preparation.

2. Implementing CLIL in the English for Teaching Course at NRRU

Following the transition to higher education, CLIL principles were applied in a university-level course entitled English for Teaching, which was designed for pre-service English teachers. The course functioned as a bridge between language pedagogy and subject-matter instruction, intending to prepare student teachers to deliver content-based lessons in English across various disciplines, including science, health, and mathematics.

In the course, the fundamentals of CLIL were introduced and practiced through a sequence of assignments. Dual objectives (language and content) were set, appropriate materials were selected, and lesson plans fostering both subject comprehension and English use were designed. In one group project, a lesson on healthy eating was prepared using real food items, interactive visuals, and structured peer conversations to convey nutrition concepts in English.

To facilitate this process, tools such as content-language objective templates, sentence frames, and peer feedback protocols were provided. KWL (Know–Want to Know–Learned) charts were also employed to guide reflection on subject knowledge and language goals. Considerations of classroom diversity, differentiation, and inclusion were emphasized, aligning with both CLIL pedagogy and the principles of SDG 4: quality and equitable education.

Although initial anxiety regarding English fluency was reported by many students, repeated practice and collaborative lesson design helped to build confidence. By the conclusion of the course, most participants were able to deliver short, coherent, and engaging lessons in English. Through this process, professional identity was reshaped from being solely language

instructors to becoming subject educators who employ English as a tool for meaningful learning.

3. Learner Reflections and Observed Outcomes

The data analysis was conducted on two distinct learner groups: (1) primary school students who participated in a CLIL-based intensive program for English, science, and mathematics, and (2) pre-service teachers enrolled in the English for Teaching course at Nakhon Ratchasima Rajabhat University (NRRU). The feedback from these two groups offers a nuanced understanding of the effectiveness of CLIL in fostering readiness for English-medium instruction (EMI).

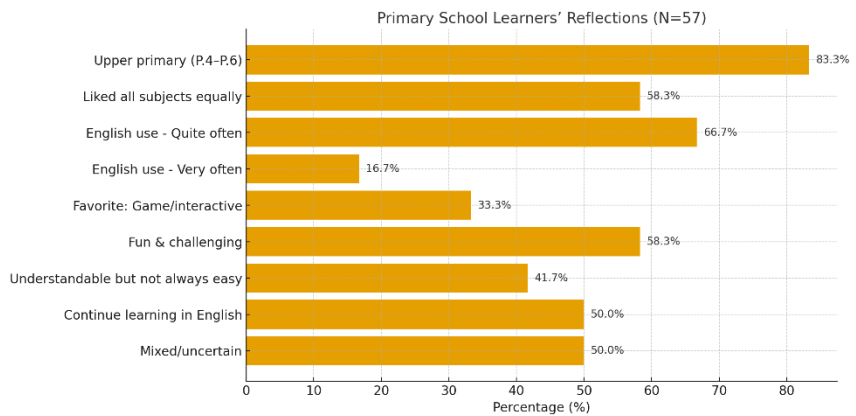


Figure 1

Primary School Learners' Reflections (N = 57)

Primary School Learners Analysis of Feedback. A total of 57 former primary school students, now in upper primary (P.4–P.6) or early secondary school, responded to a brief reflective questionnaire administered on August 2, 2025. The analysis of this data provides insights into their

engagement with CLIL-based instruction and its impact on their English proficiency and subject knowledge.

3.1 Content Engagement and Language Use

The majority (83.3%) of respondents indicated they had been in upper primary grades (P.4–P.6) during the CLIL instruction, with 58.3% of students reporting equal engagement across all subjects when taught in English. This suggests that CLIL promoted balanced subject engagement, allowing students to integrate learning in both English and content areas. Additionally, 66.7% of students reported using English “quite often”, and 16.7% reported using it “very often”, indicating that frequent language use was incorporated into daily learning activities.

Students noted recalling phrases like “I like grape” (Student A, Interview, August 2, 2025) and “solar system” (Student B, Interview, August 2, 2025), highlighting vocabulary retention, which was notably linked to game-based activities. Over 33% of students specifically cited games and interactive activities as their favorite aspects of lessons, demonstrating that CLIL’s active learning strategies increased their motivation to engage with content in English.

3.2 Challenges and Comprehension Issues

While 58.3% of students described the experience as “fun and challenging”, 41.7% noted that content learning in English was “understandable but not always easy”. This aligns with existing research on the challenges of learning complex content in a second language, where scaffolding strategies are critical (Coyle et al., 2010). The data suggest that while students enjoyed the content, some still found it difficult to fully grasp the academic subject matter in English without additional linguistic support.

3.3 Future Learning Intentions

The mixed responses regarding future learning intentions, with 50% expressing a desire to continue learning in English, suggest both positive engagement and the need for sustained linguistic support. This emphasizes the necessity of continued scaffolding in EMI contexts to maintain motivation and engagement over time (Lasagabaster, 2011).

Table 1

Teaching Evaluation Results from the English for Teaching Course (N = 23)

Evaluation Aspect	Mean Score (out of 5)	Interpretation
Clarity of lesson planning	4.85	Highest
Integration of teaching aids	4.75	Highest
Opportunities for active learning	4.80	Highest
Overall teaching evaluation	4.80	Highest

Table 1 reveals Data from the English for Teaching course at NRRU were collected through formal course evaluations from 23 pre-service teachers. The course aimed to prepare future teachers for EMI contexts by introducing them to CLIL principles, including lesson design, language use, and content-language integration.

3.4 Satisfaction with CLIL Implementation

The overall teaching evaluation score was 4.80 out of 5.00, reflecting the high satisfaction of students with the course’s structure and teaching methods. This strong rating suggests that the CLIL-based approach, including microteaching, scaffolding, and active learning, was highly effective in preparing students for EMI. Students reported that the course helped them develop a deeper understanding of lesson planning and content delivery in English.

3.5 Impact on Confidence and Pedagogical Readiness

Open-ended responses from the pre-service teachers highlighted their increased confidence in delivering lessons in English. For example, students remarked, “I learned many new techniques that I can apply when teaching children” (Student D, Interview, August 2, 2025), and “The teaching methods were clear, engaging, and full of ideas I can use” (Student E, Interview, August 2, 2025). This suggests that CLIL’s emphasis on practical, real-world teaching techniques helped pre-service teachers feel more prepared to implement EMI in their future classrooms.

3.6 Areas of Improvement and Recommendations

Despite positive feedback, some students expressed concerns about the challenges of balancing language objectives with content knowledge. This reflects the findings of Charunsri and Sripicharn (2023), who noted that pre-service teachers often struggle with integrating language and content effectively. The feedback from the course evaluations suggests that additional training on balancing content and language objectives, along with further support for teachers English proficiency, may enhance the preparation for EMI.

3.7 Areas of Improvement and Recommendations

The data show that many students appreciated the real-world applicability of CLIL, noting that the activities helped them understand both content and pedagogy. This aligns with previous research suggesting that CLIL can provide transferable skills that bridge the gap between theory and practice in EMI (Wichairat, 2019). The positive reception from students demonstrates that CLIL not only enhances teaching skills but also contributes

to the development of transferable competencies, preparing teachers for the professional demands of EMI.

In conclusion, The learner feedback from both primary school students and pre-service teachers suggests that CLIL is an effective pedagogical approach for preparing teachers to engage in EMI contexts. While both groups demonstrated positive outcomes in terms of language use, content understanding, and motivation, challenges such as language proficiency and balancing content and language objectives remain. These findings align with the broader literature on CLIL and EMI, emphasizing the need for ongoing scaffolding and support for both students and teachers in multilingual education settings (Coyle et al., 2010; Charunsri & Sripicharn, 2023).

Key Challenges and Pedagogical Implications

The reflections from both primary and university-level learners demonstrate the potential of CLIL to enhance subject-specific learning through English, while also revealing persistent challenges that require attention in curriculum design and teacher preparation. These challenges have been consistently noted in broader studies on EMI and CLIL implementation in non-native English contexts (Macaro, 2018; Coyle et al., 2010).

1. Language proficiency and content integration

Although enjoyment and confidence were reported by many learners, difficulties were also noted by some at the primary level, who indicated that learning content in English was “understandable but not always easy”. Such responses are consistent with prior findings that limited English proficiency can hinder comprehension of subject content if scaffolding is not systematically embedded (Coyle et al., 2010; Tachaiyaphum & Sukying,

2017). Among pre-service teachers, an opposite challenge was frequently identified, as adequate English proficiency was present but difficulties were experienced in balancing linguistic objectives with disciplinary content (Charunsri & Sripicharn, 2023). The need for sustained practice in aligning language aims with subject knowledge has therefore been underscored.

2. Learner motivation and sustained engagement

High levels of engagement were observed in the primary classroom during interactive and game-based activities, supporting claims in the literature that CLIL is most effective when meaningful, context-rich learning is provided (Coyle et al., 2010). Nevertheless, mixed responses concerning future interest in EMI, where only half of learners expressed willingness to continue, suggest that novelty alone is insufficient to sustain long-term motivation. As noted in earlier studies, the development of resilience, learner autonomy, and growth mindset must be systematically supported if motivation is to be maintained in CLIL and EMI contexts (Lasagabaster, 2011).

3. Teacher readiness and pedagogical competence

Course evaluations from the English for Teaching class indicated that practical demonstrations, varied teaching techniques, and real-world applicability were highly valued by pre-service teachers. Satisfaction ratings at the “highest” level further suggest that experiential learning approaches, including microteaching and lesson simulations, were perceived as effective for EMI readiness (Wichairat, 2019). However, teacher preparation programs in Thailand have been frequently observed to lack systematic CLIL training, particularly within regional universities (Prabjandee & Nilpirom, 2022). In the absence of such structured support, pre-service teachers remain underprepared to implement CLIL with confidence and effectiveness.

4. Equity and access in EMI contexts

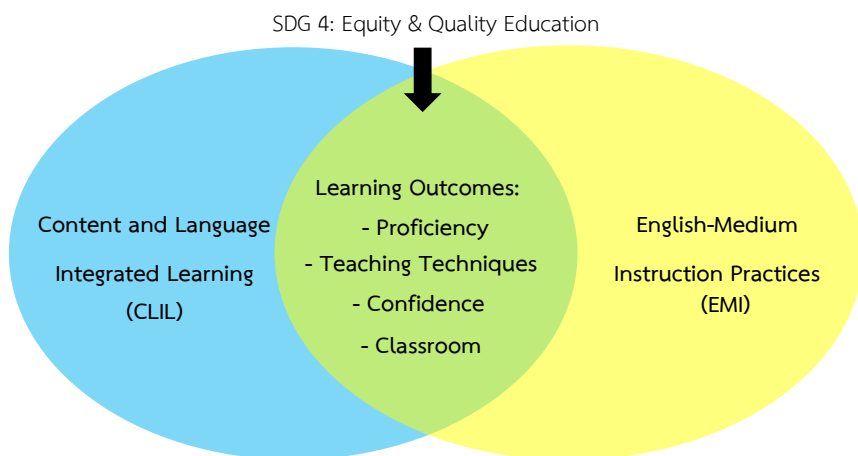
The embedding of CLIL in teacher education has been viewed as a strategy with strong potential to reduce inequities in access to English-rich learning environments. EMI and English Programs in Thailand continue to be concentrated in urban and resource-rich schools, leaving students in rural or mainstream tracks at a relative disadvantage (Prabjandee & Nilpirom, 2022; Galloway et al., 2017). By contrast, when pre-service teachers are equipped to integrate English into mainstream content teaching, access to EMI can be broadened across diverse school contexts. Such an approach has been aligned with Sustainable Development Goal 4 (SDG 4), which emphasizes inclusive and equitable quality education and lifelong learning opportunities for all (UNESCO, 2017).

5. Pedagogical implications

Several pedagogical implications can be drawn from these findings. First, structured CLIL modules should be systematically embedded in pre-service curricula, with explicit training provided in the 4Cs framework of Content, Communication, Cognition, and Culture (Coyle et al., 2010). In this way, conceptual understanding and practical application of CLIL can be developed in tandem. In addition, scaffolding strategies such as the use of visual aids, pre-teaching of vocabulary, and task-based learning activities should be consistently modeled and reinforced, as these approaches are essential for learners whose English proficiency is still developing (Mehisto et al., 2008).

Active learning methods, including games, inquiry-based projects, and group collaboration, should also be embedded in instruction, as these have been shown to maintain motivation and to support higher-

order thinking (Lasagabaster, 2011). Moreover, reflective practice opportunities should be systematically incorporated, so that pre-service teachers are guided to evaluate and refine their lesson plans according to the needs of diverse learners (Charunsri & Sripicharn, 2023). Finally, partnerships between universities and local schools should be fostered, enabling authentic practicum experiences in which CLIL strategies can be applied in real EMI classrooms. Such experiences are likely to enhance readiness for the professional demands of teaching (Ruiz-Cecilia, 2023).



Framework 1

Integrating CLIL and Pre-service Teachers' EMI to Enhance SDG 4

By addressing these challenges through the recommended pedagogical measures, CLIL within Thai teacher education can be positioned as an instructional innovation and a pathway toward more equitable access to English-medium content learning. This approach establishes CLIL as both a practical methodology and a policy-relevant strategy that contributes to long-term educational equity in Thailand.

Conclusion and Recommendations

It has been highlighted in this study that Content and Language Integrated Learning (CLIL) serves as a valuable pedagogical framework for preparing pre-service teachers to engage in English-medium instruction (EMI). Through classroom-based reflections at both the primary and university levels, evidence has been provided that CLIL supports the development of content knowledge and language proficiency, while also fostering higher-order thinking skills and intercultural awareness (Coyle et al., 2010).

At the primary level, opportunities for integrated learning across mathematics, science, and English were created through CLIL, and enthusiasm together with improved confidence was reported by learners. Nevertheless, comprehension challenges arising from limited English proficiency were also observed. At the university level, positive outcomes were associated with the English for Teaching course, in which CLIL-based strategies such as microteaching, scaffolding, and active learning were applied. As a result, greater competence in lesson design, content delivery in English, and reflective teaching practice was demonstrated by pre-service teachers.

The integration of CLIL into teacher preparation has been identified as carrying implications beyond pedagogy. The inequities created by the concentration of EMI and English Programs in urban and resource-rich schools (Prabjandee & Nilpirom, 2022) can be addressed by equipping pre-service teachers at regional universities with CLIL tools, thereby extending the benefits of EMI to mainstream and rural classrooms. In this respect, CLIL functions not only as a teaching methodology but also as a mechanism contributing to Sustainable Development Goal 4 (SDG 4), which emphasizes

inclusive and equitable quality education for all learners (UNESCO, 2017).

Several recommendations can be drawn from the findings. First, the systematic embedding of CLIL modules into pre-service curricula has been recommended, with structured opportunities provided for lesson design and classroom delivery within the 4Cs framework of Content, Communication, Cognition, and Culture (Coyle et al., 2010). Second, the expansion of experiential components such as reflective practice, microteaching, and school-based practicum has been proposed to further strengthen teacher readiness for EMI.

In conclusion, CLIL has been recognized as offering a practical, equity-oriented approach to bridging the gap between EMI policy and classroom practice. Its systematic adoption within teacher education in Thailand would enable pre-service teachers to deliver English-medium content instruction across diverse contexts, reduce disparities between elite and mainstream programs, and contribute meaningfully to the global agenda of equitable and quality education.

References

- Charunsri, K., & Sripicharn, P. (2023). Effects of Content and Language Integrated Learning (CLIL) training program on pre-service teachers' knowledge of CLIL approach, CLIL material design, and CLIL teaching. *International Journal of Education and Literacy Studies*, 11(4), 3–12.
- Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning*. Cambridge University Press.

- Galloway, N., Kriukow, J., & Numajiri, T. (2017). *Internationalisation, higher education and the growing demand for English: An investigation into the English medium of instruction (EMI) movement in China and Japan*. British Council.
- Lasagabaster, D. (2011). English achievement and student motivation in CLIL and EFL settings. *Innovation in Language Learning and Teaching*, 5(1), 3–18.
- Macaro, E. (2018). *English medium instruction: Content and language in policy and practice*. Oxford University Press.
- Mehisto, P., Marsh, D., & Frigols, M. J. (2008). *Uncovering CLIL: Content and language integrated learning in bilingual and multilingual education*. Macmillan Education.
- Prabjandee, D., & Fang, F. (2021). Developing a conceptual framework for English-medium instruction teacher education in Thailand: Addressing equity, inclusivity, and sustainability. *Innovation in Language Learning and Teaching*, 15(2), 168–182.
- Prabjandee, D., & Nilpirom, P. (2022). Pedagogy in English-Medium Instruction (EMI): Some recommendations for EMI teachers. *rEFLECTIONS*, 29(2), 421–434.
- Ruiz-Cecilia, R., Medina-Sánchez, L., & Rodríguez-García, A. M. (2023). Teaching and learning of mathematics through CLIL, CBI, or EMI—A systematic literature review. *Mathematics*, 11(6), 1347.
- Suksakorn, P. (2020). English medium instruction policy in Thai universities: Practices and challenges. *Journal of Language Teaching and Research*, 11(5), 655–662.

- Tachaiyaphum, P., & Sukying, A. (2017). EFL pre-service teachers' perceptions of CLIL implementation in a Thai university. *Asian Education Studies*, 2(4), 44–56.
- UNESCO. (2017). *Education for sustainable development goals: Learning objectives*. UNESCO Publishing.
- Wichairat, N. (2019). Implementing CLIL in a Thai university: Challenges and opportunities. *LEARN Journal: Language Education and Acquisition Research Network*, 12(1), 113–128.



Name: Rattanyu Wongsasawat

Highest Education: Master's of Arts (M.A.) in
Teaching English as a Foreign Language (TEFL)

Affiliation: Nakhon Ratchasima Rajabhat University



Name: Dr. Waewalee Waewchimplee

Highest Education: Doctor of Philosophy
Program in English Education

Affiliation: Nakhon Ratchasima Rajabhat University



Name: Dr. Jatupon Phulakor

Highest Education: Doctor of Philosophy
Program in Teaching English as a Global Language

Affiliation: Nakhon Ratchasima Rajabhat University