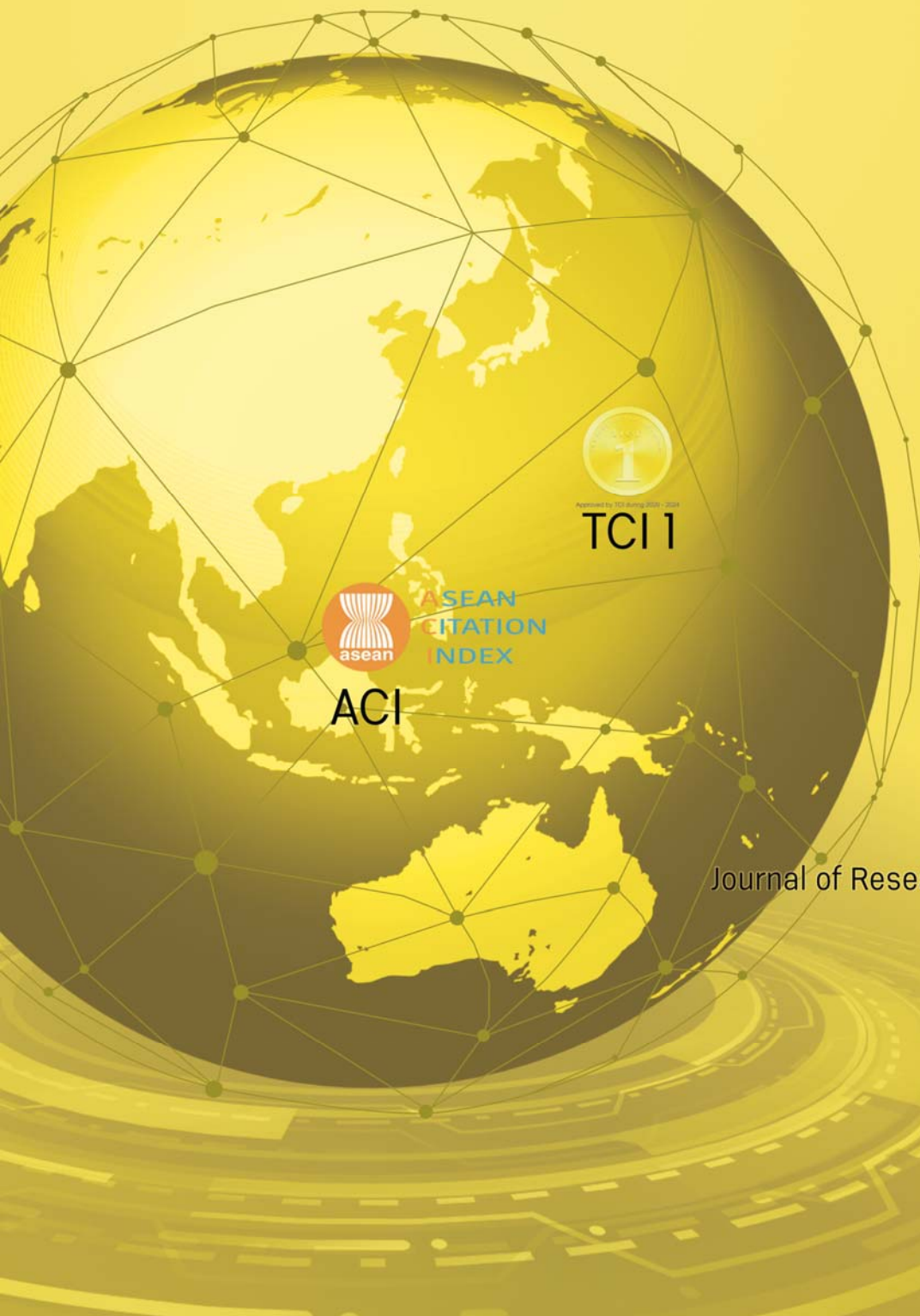


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Illocutionary Acts In Courtroom Proceedings: The Contexts Of Local Courts In The Philippines

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Abstract

Courtroom proceedings gives a lucid picture of the utilization of discourse in the judicial entities. This qualitative study employing content analysis aimed at determining the common illocutionary acts found in the contexts of local courts in the Philippines. Forensic Linguistics is an approach that deals with the relationship between language and law. The Transcripts of Stenographer's Note (TSN) served as the corpora of the study. Each of the speech acts presented the different views of how language was used during courtroom questioning. Responses of the witnesses articulated their defense in order to provide the vivid picture on every event. Thus, it provided the step-by-step process of knowing the veracity of cases. Through this, the judge can come up with a fair and just decision. The implications provided how Forensic Linguistics played a crucial role in the analysis of texts.

Keywords: Courtroom proceedings, Forensic linguistics, Illocutionary acts, Local courts, Philippines

Introduction

In the course of daily living, people are accustomed of making out mental actions in which the action only resides in the brain and then carrying out physical actions to accomplish task. Along with this, we primarily converse to communicate and convey what we truly mean. We use the language in expressing our thoughts, sentiments, observations, and the like, which makes our language do an extremely wide variety of activities – and that we perform a kind of act by using the language itself.

Forensic linguistics has been defined as the interface between language and law (Gibbons & Turell, 2008; Ariani et al., 2014; Gibbons, 2014; Ralarala et al., 2019). This discipline plays an important role in investigating crimes (Ahmed, 2021). Different approaches have been applied such as the utilization of the corpus linguistics (Gillings, 2022). More so, it leads to the identification of authors especially in the contexts of crimes and investigation (Nieto et al., 2008; Grant et al., 2022).

Behind every speech, there is always a kind of action that occurs (Austin, 1962; Searle, 1969), and this is called the speech act. He who says something, does something. He could either be commanding, requesting, asserting, questioning, promising or threatening (Tserdanelis & Wong, 2004; Solum, 2012). Vanhoozer (2001) even labeled speech acts as “the great discovery of the twentieth century philosophy of language”. In addition, speech act accentuates that utterances could mean different from its user and its listener (Henderson & Brown, 1997; Bach & Harnish, 1979).

Legal language is jam-packed with speech acts and that language and law has a relationship that is always expressed in language (Solum, 1988, 1989; Tiesma, 2002, 2002). Certainly, when a judge makes remarks throughout court discussions, he performs speech act. To a comparable way, when a witness uncovers the thing that he knows, when those exploited person accuses those suspects about as much crime, the point when that legal advisor defends as much customer, and the point when a suspect defends himself, he performed a speech act. The speaker does things with what word they spit out and what remarks they write (Bernal, 2007).

Studies relative to courtroom proceedings were accentuated in the parlance of types of questions (Catoto, 2017) and the utilization of different types of modals using the prosecutors’ resolutions (Catoto, 2022). However, the current study focused on identifying the different types of illocutionary acts as mentioned in the Transcript of Stenographers’ Notes. Aside from that, the difficulty of having the access to the transcripts is a dilemma to Forensic Linguists in the Philippines.

Therefore, this study will open another door of opportunities to scholars specializing in Forensic Linguistics. Also, this dug deeper into the contexts of local courts in the Philippines. Correspondingly, this study was conducted to give the birds eye-view of the discourse in the courtroom. The role of the language presented in different cases manifested that lawyers used

lexemes that are difficult to be understood. Thus, this study was conducted as another milestone in that contributed to the theory of speech acts.

Purpose of the Study

This qualitative study employing the content analysis aimed at identifying the different types of illocutionary acts in the courtroom proceedings using the Transcript of Stenographer's Notes (TSNs). It was grounded on the concepts of Forensic Linguistics. The data gathered were analyzed using the Austin and Searle's Framework of Speech Acts specifically the illocutionary acts. There were 10 sets of TSNs were used indicating different types of cases.

Research Question

1. What common illocutionary acts are found in the courtroom proceedings?

Theoretical Lens

Generally, this study was anchored on the premise of Speech Acts by Austin (1962). However, the classification of illocutionary acts was identified by Searle (1977) namely: representatives or assertives, directives, commissives, expressives, and declaratives. Representatives are speech acts where speakers are stating facts or opinions. Another, directives realize the utilization of requesting, questioning, commanding, ordering, and suggesting. For commissives, these indicated the future course of actions which include promising, threatening, offering, refusing, and pledging. Speech acts such as thanking, apologizing, welcoming, and congratulating are expressives where utterances showed a psychological state. Lastly, declaratives create an immediate change in the state of affairs where communicating, declaring war, christening, and firing from employment are some of the common speech acts (Hidayat, 2016).

Methodology

Research Design

I used qualitative-content analysis. As defined, qualitative research allowed the inquirer to make knowledge claims by identifying multiple meanings based on the experiences of individuals. It can be foregrounded from the aspects of narratives, phenomenology, ethnography, grounded theory, case studies, content, and or textual analysis. This approach does not use any numerical data in interpreting the findings of the study. However, this would look into the different aspects of doing research where statistical tools are no longer needed to interpret the findings. At one hand, this study is content analysis since it dealt with the different types of illocutionary acts in the courtroom proceedings using the Transcript of Stenographer's Notes (TSNs).

Research Materials

The transcripts were the corpora of the study. These were taken from the Repository of the Provincial Prosecutor's Office of the Province of Cotabato. Cases included were rape, estafa or swindling, theft, murder, and Violence Against Women and Children or VAWC). It was stated by Braun & Clarke (2013) that the suited number of corpora is 10-100.

Ethical Considerations

I observed the ethical standards in presenting the corpora. Since, these included names of personalities involved in cases, it was my role to hide their identities. I used codes and aliases. Likewise, to give a profound understanding of the contexts of the juridical issues, I consulted a lawyer which vouched the correctness of the analysis of the data.

Results and Discussions

Illocutionary Acts in Courtroom Proceedings

Directive

The first identified illocutionary act is the directive. It refers to the speech acts that direct a demand or request to the listeners. Consequently, the following statement conforms to this type of speech act. For example:

“Will you please state your name, age, occupation and other personal circumstances?” (TSN1)

The aforesaid extract is from the hearing for the prosecution of the rape case against the three men whom to be determined as accused. Obviously, the judge directed the complainant to give her personal information. In addition to this, the extract below is another example of directive. This is from the TSN presented during the direct testimony of the prosecution witness during the initial trial for the prosecution of the murder case. In this case, the judge gave an order to the prosecution lawyer to indicate something that might be used as evidence against the accused:

“Mark it.” (TSN6)

Similarly, the statement shown next is another example of directive coming from the command or order of presiding judge during the initial trial for the prosecution of the Theft case:

“Tell us what items were those.” (TSN4)

Lastly, below is the direct order of the judge to the court that hereby commanded someone to appear for he/ she could might give significant evidences and testimonies on the case.

“Issue subpoena to XXX of Brgy. Ginatilan, Kidapawan City.” (TSN7)

A statement is considered to be a directive type of speech act when it requires or directs the hearer or the listener to do something. One key point that this type of speech act is evident to is being transpired in TSN1. In this case, the complainant was given a task by the presiding

judge to state his name, age, occupation and other personal circumstances that might become good and substantive information for the investigation of the case. The usage of the word please could be a good point for directing an order and that is strongly manifested in this extract.

In TSN6, an extract was seen to be a very reliable and valid example of a directive-type of speech act. This case contains essential information during the legal action for the initial trial of the Murder case. In this case, a statement of order was given by the judge to the Government Prosecutor in response to his request to mark a thing for its significance and could be used as strong evidence against the accused murderers.

Similarly, an extract from TSN4 for the prosecution of the Theft case can be regarded as a clear example of the directives. In this case, we take into consideration the presiding judge who calls the witness to provide the information about the things being described. It can be identified that this statement of the judge is not only a mere eliciting of information, about telling the people inside the court what items were being purchased, but rather a statement that requires the witness to do some action. By this, it conforms to the directives.

Also, in TSN7, the direct order raised by the judge to the court to issue subpoena is considered to be a directive for the reason that it duly commands one barangay official of Kidapawan City, in written form, to appear in court and give his knowledge and testimonies pertaining to the *estafa* case where he might be involved to. Significantly, orders and commands are of great use in the courtroom proceedings. Hence, it is always a part of the existence and in any circumstances in courtroom proceedings. And solely, the presiding judge has the greatest right to impose orders, ask several information, issue subpoena, make appointments, set a day for the continuation of the trial, and the like.

The proponents of Speech Act theory, Austin (1962) and Searle (1969, 1977), made a presupposition that Directives attempts the speaker to carry out a particular action. They are either obeyed or disobeyed. However, one should take into consideration that Directives must always refer to future voluntary acts. It would be meaningless to tell someone to do something in the past or to do something that is impossible. It may include asking for, inviting, suggesting, requesting, urging, commanding, praying, pleading and begging. Therefore, Directives are plausibly manifested inside the court for its actions in giving directions.

Commissive

On the other hand, another type of speech act that commits a speaker to some future action is Commissive. The succeeding extracts are statements in accordance with the Commissive type of speech acts. Hence, the first extract is hereby declared and directed by the judge for the reset and continuation of the trial to some date and time in the future:

“Considering that there are still other cases ready for trial, reset the continuation of trial of these cases on November 17 and 24, 2003, morning and afternoon sessions.” (TSN7)

In the same manner, this statement is an extract during the continuation of the trial for the defense of robbery case and then contains the direct testimony of the defense witness and the accused. Thus, the statement coming next hereby accords to the type of speech act we are taking into account to for it calls another schedule for the case trial at some exact date and time.

all again this case for continuation of trial on September 9, 2004, at 8:30 in the morning, as previously scheduled.” (TSN3)

Following, is the statement declared and directed by the judge during the initial trial for the prosecution of the Theft case in making a schedule for the cross- examination.

“After the direct testimony of XXYY, set the cross-examination of the said witness on April 2, 2008, morning and afternoon sessions.” (TSN4) When a statement commits a speaker into some future action, whether it be a commitment, a promise or a threat, or any course of action, it pertains to a type of speech act called commissives. During the course of this analysis, this study has identified three strong and good examples that could prove the existence and significance of commissives in courtroom trials. First is the statement extracted from TSN7. In this TSN, the presiding judge has directed the reset and continuation of the trial for the case of estafa considering that there are still other cases ready for trial. This statement of the judge has declared that in some time in the future, a trial has to be continued. Definitely, it does not only commit for the trial to be continued but also the persons involved in the case to make an appearance on the certain day set, which is announced, for its continuation.

When a statement commits a speaker into some future action, whether it be a commitment, a promise or a threat, or any course of action, it pertains to a type of speech act called commissives. During the course of this analysis, this study has identified three strong and good examples that could prove the existence and significance of commissives in courtroom trials. First is the statement extracted from TSN7. In this TSN, the presiding judge has directed the reset and continuation of the trial for the case of estafa/swindling considering that there are still other cases ready for trial. This statement of the judge has declared that in some time in the future, a trial has to be continued. Definitely, it does not only commit for the trial to be continued but also the persons involved in the case to make an appearance on the certain day set, which is announced, for its continuation.

Second is the statement obtained from TSN3. This extract contains the information being transcribed into TSN during the direct testimony of the defense witness and the accused for the trial case of robbery. Moreover, this extract greatly implies that another continuation for the trial has to be done in some time in the future, specifically on September 9, 2004 at 8:30 in the morning.

Third and last is the statement taken from the TSN4 for the trial of the Theft case. This extract from the said TSN is a trustable example of a commissive because a cross-examination is being set by the judge at a certain time that is to come in the future following the initial trial of the case, specifically on April 2, 2008, morning and afternoon sessions.

The analyses incurred an implication on the researchers, as analysts of the document, that commissives in courtroom have genuineness values that are kept and performed or executed after a certain date has been set by the judge, who is seen to be the honorable person who presides and administers the law in court of justice and is tasked to carefully weigh evidences

in court. Commissives can be palpably observed more prospective in the occurrence when a judge calls a continuation of different trials on a definite scheduled time and date. In return, these scheduled appointments are seen not to be taken for granted but given due respect.

Commissive is a type of speech act that binds the speaker in doing future course of voluntary actions being mentioned in the actual statements of the speaker. It reveals the speaker's intention (Austin, 1962; Searle, 1969, 1977). Promises, vows, threats, guarantees, pledges, bets, opposes, threats and oaths are some examples of commissives. In addition, in 2012, Dardjowidjojo made an assumption that commissives do not ask something in return or command something that needs to be done. It means that it acts only in the form of utterance delivery. However, it would be nonsense to make a vow but you intend not to fulfil it. It is a future action because it determines what has to do in the future. And inside the court, it can also be observed especially on the setting of time and date for the continuation of the trial (Ahmad et al., 2021; Zulaeha et al., 2021)

Expressive

Consequently, when the speaker expresses his attitude or emotion to his utterances, he is performing a speech act called, Expressives. The sentence below is an example of such speech act which expresses the speaker's feelings towards his statement or proposition. This was taken from one of the rape cases we analyzed in the conduct of this study.

“Very painful, Ma’am.” (TSN1)

Along with the above-stated and written example, another statement for Expressive is as follows. In this statement, the speaker has precisely stated her sentiments towards her involvement in the Simple Seduction case.

“I did not anymore, sir. In fact, when they were told in the barangay his mother was already nagging, talked so many things. In fact, I was hurt of what she said.” (TSN5)

This statement was taken from the prosecution of the case of rape. This came from the mother, who stated to the court the aftermath feelings of the victim, her own child.

“She was crying and she was shocked of the incident.” (TSN8)

The extract from TSN1 is said to be an Expressive-type of speech act because the speaker expresses his psychological state to the listeners. The feelings and the emotion of him is potentially visible. On the stated example, it shows that the speaker is strongly hurt. He articulates his own self on what he truly felt. It is a good example of expressive sentence because it conveys messages to the listeners. In the same vein, the statement I extracted from TSN5 can possibly be called an example of expressive sentence for it also shows that the statement expresses the speaker's intention. In this statement, the speaker is clearly stated the sentiments headed her involvement with one of the cases that we have analyzed.

Apart from the above examples, the last statement that this study presents is taken from the TSN8. This statement was brought by the witness to the court. Moreover, the said statement presents information which is actually coming from the inner part of the witness. This statement is another effective example of expressive sentence for the messages would convey the listeners.

Humans as we are, we tend to feel different emotions towards any kind of circumstances without limitations on any place or anywhere as long as it stimulates one's emotional state. Evident on the TSNs, it transpired that showing and expressing of personal emotion could also be possible inside the court. Causes of such expressions could be potentially identified to have been stimulated by the crime, the incident or the accused person who is to be blamed.

Primarily, the findings of this study are supported by the proponents of Speech Act theory, Austin (1962) and Searle (1969, 1977). They say that expressives indicate the speaker's psychological state of emotion and attitude towards a proposition. It may include thanking, congratulating, welcoming, apologizing, blaming or criticizing. Conversely, inside the court, this study discloses that the expressives being performed are mostly in analogous with the witnesses' and complainants' emotional attitude towards an incident or a person who commits a crime. There are even times that they intend to cry and shout as a reaction to the crime or incident being discussed inside the court (Zulaeha et al., 2021; Firmansyah, 2022).

Declarative

When someone in the position or in the authority has changed the reality in accordance with the proposition of declaration of something significant, he is likely to perform a declarative type of speech act. In courtroom discussion and proceedings, the person to be significantly performing this type of speech act is the judge. Thus, three examples we have provided in this type of speech act are the direct declarations of different judges from different TSNs.

First, taken from the statement of the judge during the Theft case:

“But the Court have not yet acted on your withdrawal. So, pending formal appearance of a new counsel, Atty. XXX shall continue to handle this case.” (TSN4)

Second, a statement requesting the court and the prosecution defense to continue the prosecution of the case:

“Atty. XXX, we will call this case again this afternoon. (TSN10)

And third, the declaration of the judge to set the cross examination to another set of time:

“Cross examination will be this afternoon.” (TSN1)

Declaratives, as the name implies, are type speech acts whereby the speaker has the authority to declare a change in reality in accordance with the proposition of declaration. As being transcribed in the TSNs, this study has identified three validated examples that contain direct declarations of various judges based on the TSNs. All the extracted statements are based on the declarations of judges because judges alone have the greatest authority and hold the most power to declare a significant statement inside the court. With regards to the TSN4, the judge has announced, since the court has not yet acted the attorney's withdrawal, that the government prosecutor shall continue to handle his case. Similarly, it can be noted that the judge, as being described in TSN10, requests the court to continue the prosecution of the case. He and he alone can declare this proposition.

Also, in the same case in TSN1, the judge has affirmed and declared that a cross-examination has to be continued at some certain time. Indeed, the prosecution judges have the

sole and great authority to justifiably exercise declarative-type of speech act inside the court. These declarations could be significant announcements, propositions, setting for the continuation of the trial and cross-examination, issue subpoena or summon before the court and deliver final verdict. Hence, the declaratives play an indispensable role in delivering various declarations of the judges for the court is full of statements that declare something substantial.

According to Speech Act Theory based on the works of Austin (1962) and Searle (1969, 1977), Declaratives refer to the speech acts that bring about change between the content propositional and reality (Dardjowidjojo, 2012). Resigning, dismissing, naming, appointing, excommunicating, marrying, pronouncing and sentencing are some indicators that a speech act is considered to be as declaratives. The word, “hereby” could be a good manifestation that a speech act is a declarative. In the legal parlance, this is also most often used such as in giving final verdicts, dismissing the case or appointing a new prosecutor of the case. In this manner, the presiding judge has the sole authority to declare a proposition (Arif, 2018; Zulaeha et al., 2021).

Assertive

Meanwhile, the following statements are extracts from collected TSNs. These statements contain speech acts that could either be potentially true or false, or so called assertive:

“We went near the house because those who secured only those members of the RPSP and assault team were remain.” (TSN8)

In the same context, this statement was uttered by the complainant as he answered the interrogation done by the presiding judge. This statement is also an example of an assertive.

“None, Your Honor: there was no agenda because the purpose of the meeting is for her to collect.” (TSN7)

And in the same manner, this statement is gathered during the proceedings on the case of *estafa*, hereby indicating one of the direct testimonies of the complaint on the said case. This is another extract of an assertive type of speech acts.

“Except for the members because there were times when we were together in a vehicle. She tried to convince me that she knows how to manage money and to earn that money.” (TSN9)

The statement I extracted from TSN8 is an example of an Assertive because the witness, or shall we say the speaker, has conveyed an information or has committed to tell the truth of the expressed proposition on the court. The speaker asserted that as they conduct the search warrant, they did some actions because members of the RPSP and assault team were those who are remained.

Following, I come to analyze that the extracted statement from TSN7 is a kind of a valid example of an Assertive. Typically, witnesses’ oaths upon the court to tell the truth and nothing but the truth. Definitely, the speaker here asserts that there were no discussions or agenda during the concluded meeting because its purpose is only about mere collection of money by the accused.

Considering the significance of assertives, the statement I have taken from TSN9 is a potential example. This extract strengthens the idea of an Assertive type of speech act because the speaker revealed to the court that there were times that he and the accused sat together on a vehicle and this accused tried to convince him that she knows how to manage and earn money. It can be gleaned and noticed that the speaker here is trying to strongly assert based on what he knows and then provide the truth to resolve the case.

The discussions inside the court are mostly made up of different statements based on truths and evidences. For that reason, assertives are of great use inside the court. This is because when you assert, you make a statement in which you strongly believe, whether it be true or false. When you talk about things or statements that could either be true or false, explanations, declarations or claims, you are likely to observe and perform assertion.

Austin (1962) and his former student, Searle (1969, 1977) accentuated that Assertive is a type of speech act in which its purpose is to commit the speaker to the truth of the expressed proposition. It may refer to statements, descriptions, classifications, explanations, clarifications, suggestions, boasting, complains and claims. In the same manner, the results obtained from this study explicitly present the use and purpose served by assertives inside the court in any cases in which they are necessary so as to deliver various propositions (Ahmad et al., 2021; Zulaeha et al., 2021). When talking about assertives, one has to determine the truth value of such proposition (Fitriana et al., 2014).

Conclusion and suggestions

Generally, it is perceived that courtroom proceedings are remarked to be abundant of communicative arguments and discussions transcribed into TSNs. Hence, courts are generous source of speech acts where observance of proper usage of words and adherence to the instruction and statement of the judge are given due importance and compliance, respectively. However, there are times that people inside the court are potentially unaware of the illocutionary acts they perform, thus giving their utterances are likely given less importance such as lying at the front of the judge and defiance upon his orders. In spite of this, the presiding judge must always be followed because he holds the most power and authority inside the court. On the other hand, illocutionary acts are better portrayed and studied through an actual observance or a recorded video. In this sense, a clearer and more vivid articulation of speech acts can be observed. Therefore, speech acts in courtroom proceedings exist and ample in amount.

More importantly, this study will provide better learning opportunities to students and law practitioners. Knowing how language is being used in the courtroom proceedings and their corresponding philosophical assumptions will eventually enrich their understanding of the significant role of the interfacing between language and law. Thus, it is suggested that future researchers will conduct the same study in their own contexts. Presenting the Philippines in this study is such an opportunity to take and should be given considerations.

New knowledge and the effects on society and communities

Forensic Linguistics is an evolving and emerging subject in the field of studies and researches nowadays. It attempts to explore a whole new field of study and unlock new knowledge and assumptions that are seen to be substantial in the world of language. That is why this study is very timely and relevant because it is primarily grounded on Forensic Linguistics.

Illocutionary acts are also an integral part of the language and law, most especially during the proceedings inside the courtroom. This study came into a realization that the court is also a good venue for performing speech acts. And understanding these speech acts guarantees the speaker and the listener to understand the situation completely. Actual performance of speech acts inside the court, such as commanding, pleading, promising or pledging, are seen to be executed otherwise, the court has to make actions for any failures of the given orders.

On this sense, illocutionary acts are highly observed. On the other hand, illocutionary acts pave the way for better understanding of the context intended to be uttered. Language is ambiguous and multiple in meanings and for that reason, lawyers, judges, witnesses and the accused should portray and manifest what they really mean (Pragmatics) or else failure to comprehend might lead to misunderstanding, embarrassment, or outrage at worst. Above all, this study shows that speech acts are very important in order for people to understand what others truly mean, not only inside the court but in any place at any time. Illocutionary acts revolve in any daily human activities but are seemed to be taken for granted.

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Prediction and Risk Group of Coronavirus Disease 2019 Protection Behaviors in the Community among Juveniles in Northern Region of Thailand

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Abstract

The coronavirus disease 2019 protection behavior in the community of juveniles in the northern region can have an impact on the lifestyles of people in the community if the juveniles ignore or do not follow protective measures against coronavirus disease 2019. The research aims to 1) identify significant predictors and prediction of psychological traits and situations involving the coronavirus disease 2019 protection behavior in the community and 2) investigate risk groups and protective factors. The sample consists of 600 juveniles obtained from the multi-stage quota random sampling. The analytic statistics used to test the hypotheses were the enter and stepwise methods of multiple regression analysis and the three - way analysis of variance.

The findings revealed that psychological traits, situations, and psychological states can predict 56.80% of the coronavirus disease 2019 protection behavior in the community. The most significant predictor is a positive attitude towards the coronavirus disease 2019 protection behavior ($\beta=.29$), followed by future orientation and self-control regarding the coronavirus disease 2019 protection ($\beta=.27$), love-reasoned child rearing practice ($\beta=.22$), observance of media on the coronavirus disease 2019 protection behaviors ($\beta=.18$), observance of their parents' coronavirus disease 2019 protection behaviors ($\beta=.13$), moral disengagement concerning Covid-19 prevention ($\beta=.10$), and emotional quotient ($\beta=.08$), respectively. Additionally, it was found that male juveniles and juveniles who lack protective equipment are at high risk and require urgent care. The research recommended protective development guideline to raise awareness of juveniles about the coronavirus disease 2019 protection behavior in the community with the coordination of public and civic sectors in the community.

Keywords: Community, Coronavirus disease 2019, Protection, Juveniles, Behavior

Introduction

“Coronavirus disease 2019” broke out in Wuhan City, the People's Republic of China in December 2019. The outbreak occurred so widely and rapidly that the World Health Organization announced it as an international emergency on January 30, 2020, and as a pandemic on March 11, 2020 (Chokewiwat, 2020).

Over the past three years, Thailand has faced with the coronavirus disease 2019, leading to the enormous number of infection cases and deaths. Juveniles are one of the groups that have been affected by the infection and the measures to control the pandemic. The situation has a negative impact on them in various aspects, such as the quality of education, school dropout, the development of young children, stress, and education gap (Hoffman et al., 2020; Conto et al., 2020).

Juveniles are the primary force of the country. It is imperative to cultivate coronavirus disease 2019 protection behaviors among juveniles in the community and teach them to live a lifestyle with less risky behaviors. Government agencies in the community must be aware of and focus on the issue by providing knowledge, encouraging learning from the situations, raising awareness, and developing positive attitudes among juveniles so that they can see the danger of coronavirus disease 2019. Currently, the government agencies have released measures to prevent and avoid coronavirus disease 2019 with the collaboration of the Municipality Offices, the Subdistrict Administrative Organizations, subdistrict health-promoting hospitals, and community leaders in order to take care of juveniles' health. The examples of the measures are 1) providing knowledge about how to live together with empathy, 2) facilitating the accessibility of vaccines and protective equipment among juveniles in the community, 3) taking care of and providing COVID-19 testing for the high-risk group, and 4) helping the infected to get treated as fast as possible (Community Organization Development Institute, 2022).

Hence, the researcher would like to explore coronavirus disease 2019 protection behavior among juveniles in the community. The study will be useful for protection planning and can help identify significant predictors, the amount of prediction for psychological traits and situations, and juveniles who are at risk. The findings can be applied as a guideline to formulate protective measures and to conduct experimental research to train juveniles on psychological traits and skills so that they will adopt the correct coronavirus disease 2019 protection behavior in the community.

Objective

1. To identify significant predictors and prediction of psychological traits and situations concerning the coronavirus disease 2019 protection behavior in the community of juveniles.
2. To investigate risk groups and protective factors for the coronavirus disease 2019 protection behavior in the community of juveniles.

Literature Review

1. The coronavirus disease 2019 protection behavior in the community: definition and methods of measurement

Currently, juveniles may need to go to schools, markets, government offices in the community, religious sites, public parks, or gatherings, making them be exposed to or become a spreader of coronavirus disease 2019 (Department of Health, 2021). If juveniles have to meet and participate in the activities in crowded places, it is imperative that they protect themselves well so that other people in their communities will not be affected. They should 1) observe for possible symptoms and avoid going outside if they have a fever, 2) wear a mask; always have alcohol-based hand sanitizer within reach; and make a social distance of at least 1 meter, 3) wash their hands with soap or alcohol-based hand sanitizer, 4) strictly adhere to the measures and regulations of the communities, and 5) avoid participating in any activities in the communities for 14 days after leaving risk areas (Department of Health, 2021).

The coronavirus disease 2019 protection behavior in the community refers to the compliance with the measures of the community, the cooperation with the officials, the avoidance of unnecessary trips to the community, and the self-protection against other people in the community. It consists of 4 elements: 1) incompliance with the measures of the community, 2) irresponsibility towards the community, 3) adherence to the measures of the community, and 4) protection against people and places. An assessment used in the research is based on summated rating scales comprising several sentences that can be rated on a 6-point scale ranging from “always true” to “never true”. The higher the score, the more compliant juveniles are with the coronavirus disease 2019 protection behavior in the community.

2. Situational variables and the coronavirus disease 2019 protection behavior in the community

The environment of an individual is an important factor in his/her thoughts and actions. The situational variables consist of 4 variables. 1) The first one is *the observance of their parents' coronavirus disease 2019 protection behaviors*. According to the Social Cognitive Learning Theory (Bandura, 1997), observational learning comprises attentional processes, retention processes, reproduction processes, and incentives and motivation. It shows that juveniles imitate

their parents' desirable behaviors. 2) The second one is *the teaching on the coronavirus disease 2019 protection behaviors provided by educational institutions*. The environment of an educational institution refers to anything in the educational institution of a learner, whether it is internal, external, concrete, or abstract environment. All of these can have a direct impact on learning, processes influencing individuals in the school, and positive and negative development (Boonkwang, 2008; Kaewfai, 2013). 3) *The observance of media on the coronavirus disease 2019 protection behaviors* refers to a process to transmit or convey meaning between individuals through need, desire, feeling, thought, knowledge, and experience (Lapirattanakul, 2003). 4) Finally, *love-reasoned child rearing practice* refers to physical and verbal expression demonstrating love, support, care, and kindness. It also includes a reasonable decision about rewards and punishment based on children's behaviors and situations, rather than impulse (Bhanthumnavin, 2013).

3. Psychological trait variables and the coronavirus disease 2019 protection behavior in the community

1) *Future orientation and self-control regarding the coronavirus disease 2019 protection* refers to the ability to speculate how and whom our actions will have an impact on as well as the tolerability. It also encompasses 1) self-awareness, 2) systematic planning for behavioral changes, and 3) the self-control orientation to protect oneself from infection or transmission (Thoresen & Mahoney, 1974, Bhanthumnavin, 2010). 2) *Moral disengagement concerning Covid-19 prevention* refers to an act of making an excuse after doing something wrong or a refusal to be accountable (Bhanthumnavin, 2013). 3) *Emotional quotient* refers to the capability to handle environment and pressure which directly affect psychological well-being, leading to accomplishment in life (Bar-On, 1997) as well as the reasoning capability, the perception of emotion and feeling, and the understanding of emotional matters (Mayer et al, 2000). 4) *Internal locus of control regarding the coronavirus disease 2019 protection* refers to the belief that the outcomes one achieves are the consequence of one's own action rather than coincidence or external control. Being opposed to external locus of control, internal locus of control is the belief that one can control or prevent coronavirus disease 2019 by oneself (Rotter, 1966, Bhanthumnavin, 2010)

4. Psychological state variables and the coronavirus disease 2019 protection behavior in the community

Psychological states consist of two elements. 1) *A positive attitude towards the coronavirus disease 2019 protection behavior* refers to an individual's positive or negative evaluation of a certain action or a judgement on that action (Ajzen & Fishbein, 1980). It can break down into cognitive component, affective component, and action tendency component. 2) *Health literacy*

refers to an accessibility to and an understanding on health information, an ability to discuss and pose a question (Department of Health, 2017) and an ability to read and understand definition, term, concept, and content concerning health (Baker, 2006).

Hypotheses

Predictor 3 includes predictor 1 and predictor 2. For predictor 1, there are 4 psychological trait variables 1) future orientation and self-control regarding the coronavirus disease 2019 protection, 2) moral disengagement concerning Covid-19 prevention, 3) emotional quotient, and 4) internal locus of control regarding the coronavirus disease 2019 protection and 4 situational variables which are 1) the observance of their parents' coronavirus disease 2019 protection behaviors, 2) the teaching on the coronavirus disease 2019 protection behaviors provided by educational institutions, 3) the observance of media on the coronavirus disease 2019 protection behaviors, and 4) love-reasoned child rearing practice. For predictor 2, there are 2 psychological state variables which are 1) a positive attitude towards the coronavirus disease 2019 protection behavior and 2) health literacy. Accordingly, predictor 3 contains a total of 10 variables and can predict the coronavirus disease 2019 protection behavior in the community with 5% more accuracy than predictor 1 or predictor 2 alone.

Methodology

Population: Thai juveniles in the 3 northern provinces: 1) 53,312 in Uttaradit, 2) 45,206 in Phrae, and 3) 52,950 in Nan (National Statistical Office Thailand, 2021).

Sample: This research used the multistage quota random sampling by following these steps. *Step 1* was to randomly select northern provinces, and the results were 3 provinces which were Uttaradit, Phrae, and Nan. *Step 2* was to randomly select 1 district from each of the provinces, and the results contained 3 districts: Thong Saen Khan District, Wang Chin District, and Mueang Nan District. *Step 3* was to randomly select 1 sub-district from each of the districts. The results were Nam Phi Sub-district, Mae Phung Sub-district, and Nai Wiang Sub-district. Finally, *step 4* was the selection of juveniles from the 3 sub-districts using quota sampling: 182 from Nam Phi Sub-district, 197 from Mae Phung Sub-district, and 221 from Nai Wiang Sub-district, making up of 600 juveniles in total, as shown in Table 1.

Table 1 The Sample Size for the Study

Province	District	Sudistrict	Size
Uttaradit	Thong Saen Khan	Nam Phi	182
Phrae	Wang Chin	Mae Phung	197
Nan	and Mueang Nan Dis	Nai Wiang	221
Total			600

The research used 10 assessments as follows: 1 assessment of coronavirus disease 2019 protection behavior which is Coronavirus Disease 2019 Protection Behavior in the Community Assessment 14 items, Reliability 0.86; 4 assessments of psychological trait variables which are Future Orientation and Self-Control Regarding the Coronavirus Disease 2019 Protection Assessment 10 items, Reliability 0.78, Moral Disengagement Concerning Covid-19 Prevention Assessment 10 items, Reliability 0.76. Emotional Quotient Assessment 12 items, Reliability 0.80 and Internal Locus of Control Regarding the Coronavirus Disease 2019 Protection Assessment 10 items, Reliability 0.77; 4 assessments of situational variables which are Observance of Parents' Coronavirus Disease 2019 Protection Behaviors Assessment 10 items, Reliability 0.79 Teaching on the Coronavirus Disease 2019 Protection Behaviors Provided by Educational Institutions Assessment 10 items, Reliability 0.78, Observance of Media on the Coronavirus Disease 2019 Protection Behaviors Assessment 10 items, Reliability 0.81, and Love-Reasoned Child Rearing Practice Assessment 10 items, Reliability 0.80; and 2 assessments of psychological state variables which are Positive Attitude towards the Coronavirus Disease 2019 Protection Behavior Assessment 10 items, Reliability 0.83, and Health Literacy Assessment 10 items, Reliability 0.78, All of them are measurements Summated Rating Scale.

The researcher developed the assessments based on the concepts and theories pertaining to the variables of the assessment of coronavirus disease 2019 protection behavior, psychological trait variables, situational variables, and psychological state variables. First, content validity was performed by experts in the fields of social development, public health, and behavioral sciences. Second, the assessments were tested with the sample of 120 participants to analyze its quality with 2 types of statistics: 1) item discrimination analysis and 2) item total correlation analysis. The criteria used in the selection of items was $t \geq 2.00$ and $r \geq 0.20$.

For data collection, the researcher went to the three provinces and distributed a survey to each participant. Each survey contains 10 assessments in total. The researcher also explained the instruction to the participants and ask them to sign a consent document. It took an hour to complete the survey. Then, the researcher gathered the surveys from the participants and examined their completion.

In this research, to analyze the first objective, the enter and stepwise methods of multiple regression analysis (MRA) were performed with multiple predictors. The prediction was completed one instance at a time with 5% difference. And to analyze the second objective, the Three-Way ANOVA was used as a method to find risk groups. Moreover, upon examining the degree of multicollinearity among the predictors, the results indicate a low level. The variance inflation factor (VIF) of each predictor was below 10 (O'Brien, 2007), and the tolerance of each predictor exceeded 0.10 (Hair et al., 2010). Hence, Consequently, further data analysis can proceed.

Results

Prediction results of the coronavirus disease 2019 protection behavior in the community using psychological traits, situations, and psychological states as predictors

The scores of the coronavirus disease 2019 protection behavior in the community were analyzed with enter and stepwise multiple regression. Predictor 1 is psychological traits and situations containing 8 variables: 1) future orientation and self-control regarding the coronavirus disease 2019 protection, 2) moral disengagement concerning Covid-19 prevention, 3) emotional quotient, 4) internal locus of control regarding the coronavirus disease 2019 protection, 5) observance of parents' coronavirus disease 2019 protection behaviors, 6) teaching on the coronavirus disease 2019 protection behaviors provided by educational institutions, 7) observance of media on the coronavirus disease 2019 protection behaviors, and 8) love-reasoned child rearing practice. Predictor 2 is psychological states containing 2 variables: 1) positive attitude towards the coronavirus disease 2019 protection behavior and 2) health literacy. Predictor 3 is psychological traits, situations, and psychological states containing 10 variables: 1) future orientation and self-control regarding the coronavirus disease 2019 protection, 2) moral disengagement concerning Covid-19 prevention, 3) emotional quotient, 4) internal locus of control regarding the coronavirus disease 2019 protection, 5) observance of parents' coronavirus disease 2019 protection behaviors, 6) teaching on the coronavirus disease 2019 protection behaviors provided by educational institutions, 7) observance of media on the coronavirus disease 2019 protection behaviors, and 8) love-reasoned child rearing practice, 9) positive attitude towards the coronavirus disease 2019 protection behavior, and 10) health literacy.

The analysis for total group (Table 2) found that all of the eight psychological trait and situational variables can predict 51.70% of the coronavirus disease 2019 protection behavior in the community. The predictors, from most to least significant, are future orientation and self-control regarding the coronavirus disease 2019 protection ($\beta = .33$), love-reasoned child rearing practice

($\beta = .26$), observance of parents' coronavirus disease 2019 protection behaviors ($\beta = .16$), moral disengagement concerning Covid-19 prevention ($\beta = .15$), observance of media on the coronavirus disease 2019 protection behaviors ($\beta = -.14$), emotional quotient ($\beta = .08$), and internal locus of control regarding the coronavirus disease 2019 protection ($\beta = .07$). Furthermore, the analysis for 18 sub-groups (Table 2) reveals that the sub-group with the highest prediction rate from the eight psychological trait and situational variables is the juveniles who took ATK tests twice a month (72.20%). The predictors, from most to least significant, are moral disengagement concerning Covid-19 prevention ($\beta = .31$), future orientation and self-control regarding the coronavirus disease 2019 protection ($\beta = .30$), love-reasoned child rearing practice ($\beta = .26$), observance of parents' coronavirus disease 2019 protection behaviors ($\beta = .17$), internal locus of control regarding the coronavirus disease 2019 protection ($\beta = .14$), and observance of media on the coronavirus disease 2019 protection behaviors ($\beta = -.08$).

The analysis for total group (Table 2) indicated that all of the two psychological state variables can predict 38.20% of the coronavirus disease 2019 protection behavior in the community. The predictors, from most to least significant, are positive attitude towards the coronavirus disease 2019 protection behavior ($\beta = .50$) and health literacy ($\beta = .23$). The analysis for 18 sub-groups (Table 1) demonstrates that the sub-group with the highest prediction rate from the two psychological state variables is the juveniles who took ATK tests twice a month (55.40%). The predictors, from most to least significant, are positive attitude towards the coronavirus disease 2019 protection behavior ($\beta = .60$) and health literacy ($\beta = .27$).

Table 2 Prediction results of the coronavirus disease 2019 protection behavior in the community using psychological traits, situations, and psychological states as predictors

Group	N	#1 Psychological traits and situations (1-8)			#2 Psychological states (9-10)			#3 Psychological traits, situations, and psychological states (1-10)			Difference (%)
		Prediction (%)	Predictor	β	Prediction (%)	Predictor	β	Prediction (%)	Predictor	β	
Total	600	51.70	1,8,5,2,7,3,4	.33,.26,.16,.15,-.14,.09,.07	38.20	9,10	.50,.23	56.80	9,1,8,7,5,2,3	.29,.27,.22,-.18,.13,.10,.08	5.10*
Male	306	59.10	1,8,3,5,2	.27,.25,.18,.16,.12	41.70	9,10	.55,.19	64.30	8,1,9,3,10,5,2,7	.29,.26,.20,.18,-.14,.14,.10,.10	5.20*
Female	294	42.00	1,8,7,5	.39,.33,-.21,.17	30.40	9,10	.45,.24	46.20	1,10,8,7,5	.31,.28,.25,-.25,.13	4.20
Owned accommodation	200	58.40	2,1,8,5,7,4	.36,.30,.23,.21,-.19,.14	44.00	9,10	.60,.21	62.30	9,2,7,1,5,3	.36,.25,-.25,.23,.21,.17	3.90
Other accommodations	400	50.30	1,8,5	.39,.33,.15	36.40	9,10	.46,.27	54.40	1,8,9,5,7,6	.33,.32,.27,.11,-.10,-.08	4.10
Sufficient protective equipment	403	54.70	8,1,5,2,7	.34,.28,.25,.17,-.15	39.40	9,10	.57,.14	59.90	9,8,7,1,5,2	.33,.26,-.23,.21,.19,.12	5.20*
insufficient protective equipment	197	52.30	1,8,3,6	.41,.27,.26,-.15	38.60	10,9	.40,.38	55.30	1,8,3,9,6	.36,.27,.22,.21,-.16	3.00
COVID-19 knowledge from online media	452	50.70	1,8,2,5,7	.42,.25,.14,.12,-.10	33.80	9,10	.50,.20	55.70	1,9,8,7,2,5,6	.33,.28,.24,-.13,.12,.09,-.09	5.00*
COVID-19 knowledge from printed media	148	58.50	8,7,3,5,6	.53,-.29,.22,.19,.19	44.20	9,10	.43,.36	61.90	8,7,9,6,10,5	.44,-.35,.27,.19,.18,.12	3.40
2 doses of vaccines	408	52.40	1,8,2,7,5,4	.37,.24,.22,-.13,.12,.11	34.50	9,10	.46,.27	56.00	1,9,8,2,7,5,4	.32,.23,.22,.18,-.17,.09,.09	3.60
More than 2 doses of vaccines	192	46.50	8,1,3,7,5	.43,.19,.17,-.17,.15	48.20	9	.69	58.60	9,8,7,3	.54,.28,-.25,.15	12.10*
Family member infected by COVID-19	120	45.90	8,6,5	.52,.17,.17	18.10	9	.42	51.40	8,9,10,5,6,7	.56,.24,-.23,.22,-.19,-.16	5.50*

Group	N	#1 Psychological traits and situations (1-8)			#2 Psychological states (9-10)			#3 Psychological traits, situations, and psychological states (1-10)			Difference (%)
		Prediction (%)	Predictor	β	Prediction (%)	Predictor	β	Prediction (%)	Predictor	β	
Family member not infected by COVID-19	480	56.00	1,8,2,5,7,4	.40,.22,.21,.15,-.12,.09	43.70	9,10	.53,.25	61.00	9,1,8,7,5,2,3,6	.31,.29,.17,-.16,.16,.14,.10,-.09	5.00*
Report on parents with COVID-19 infection	362	50.80	1,8,5,2,7	.33,.33,.20,.12,-.11	33.40	9,10	.46,.23	54.80	1,9,8,7,5,2	.29,.26,.26,-.17,.16,.10	4.00
Report on others with COVID-19 infection	238	54.10	1,8,2,4,7,5	.37,.24,.22,.16,-.16,.12	46.10	9,10	.57,.22	59.90	9,8,3,1,7,6	.40,.27,.26,.16,-.16,-.12	5.80*
At least 3 ATK tests a month	240	16.20	5,1,8	.25,.19,.19	9.70	9	.30	20.60	9,5,1,7,8	.26,.21,.20,-.18,.14	4.40
2 ATK tests a month	360	72.20	2,1,8,5,4,7	.31,.30,.25,.17,.14,-.08	55.40	9,10	.60,.27	74.40	8,1,2,9,5,7,4	.25,.24,.24,.21,.15,-.11,.09	2.20
No confidence in vaccine	206	41.90	1,8,5,2,7	.29,.27,.21,.14,-.13	28.00	9,10	.42,.19	43.90	1,9,8,7,5	.29,.25,.22,-.18,.17	2.00
Confidence in vaccine	394	57.10	1,8,2,5,7,3,4	.35,.26,.15,.15,-.13,.12,.08	45.60	9,10	.56,.27	63.80	9,1,8,7,5,3,2	.34,.24,.24,-.18,.12,.12,.11	6.70*

Note: Each β shows a significance level of 0.05 and * a difference of 5%. Notes for predictor: 1. future orientation and self-control regarding the coronavirus disease 2019 protection, 2. moral disengagement concerning Covid-19 prevention, 3. emotional quotient, 4. internal locus of control regarding the coronavirus disease 2019 protection, 5. observance of parents' coronavirus disease 2019 protection behaviors, 6. teaching on the coronavirus disease 2019 protection behaviors provided by educational institutions, 7. observance of media on the coronavirus disease 2019 protection behaviors, 8. love-reasoned child rearing practice, 9. positive attitude towards the coronavirus disease 2019 protection behavior, and 10. health literacy

The analysis for total group (Table 2) pointed out that all of the ten psychological trait, situational, and psychological state variables can predict 56.80% of the coronavirus disease 2019 protection behavior in the community. The predictors, from most to least significant, are positive attitude towards the coronavirus disease 2019 protection behavior ($\beta = .29$), future orientation and self-control regarding the coronavirus disease 2019 protection ($\beta = .27$), love-reasoned child rearing practice ($\beta = .22$), observance of media on the coronavirus disease 2019 protection behaviors ($\beta = -.18$), observance of parents' coronavirus disease 2019 protection behaviors ($\beta = .13$), moral disengagement concerning Covid-19 prevention ($\beta = .10$), and emotional quotient ($\beta = .08$). The analysis for 18 sub-groups (Table 1) found that the sub-group with the highest prediction rate from the ten psychological trait, situational, and psychological state variables is the juveniles who took ATK tests twice a month (74.40%). The predictors, from most to least significant, are love-reasoned child rearing practice ($\beta = .25$), future orientation and self-control regarding the coronavirus disease 2019 protection ($\beta = .24$), moral disengagement concerning Covid-19 prevention ($\beta = .24$), positive attitude towards the coronavirus disease 2019 protection behavior ($\beta = .21$), observance of parents' coronavirus disease 2019 protection behaviors ($\beta = .15$), observance of media on the coronavirus disease 2019 protection behaviors ($\beta = -.11$), and internal locus of control regarding the coronavirus disease 2019 protection ($\beta = .09$).

The results of the analysis to find the risk group using the three-way analysis of variance for the scores of psychological traits, situations, psychological states, and coronavirus disease 2019 protection behavior in the community based on significant biosocial background

The results of the three-way analysis of variance for the coronavirus disease 2019 protection behavior in the community based on the juveniles' gender, accommodation, and protective equipment revealed that the coronavirus disease 2019 protection behavior in the community varied according to the interaction among 3 independent variables — the juveniles' gender, accommodation, and protective equipment (Table 3). Then, Scheffe's pair wise comparison of means (Table 5) was performed and showed 8 pairs with statistically significant differences. Among them, there were only 3 important pairs as follows. 1) in the group of the juveniles who lived in other accommodation and had sufficient protective equipment, female juveniles exhibited more coronavirus disease 2019 protection behaviors in the community than male juveniles. 2) In the group of the juveniles who lived in their own accommodation and had insufficient protective equipment, female juveniles exhibited more coronavirus disease 2019 protection behaviors in the community than male juveniles. And 3) in the group of male juveniles who had sufficient protective equipment, those who lived in their own accommodation exhibited more coronavirus disease 2019 protection behaviors in the community than those who lived in other accommodation. Additionally, the coronavirus disease 2019 protection behavior in the community varied according to the level of 2 separate

independent variables (Table 4): juveniles' gender and protective equipment. Given the means of the groups categorized based on the level of gender, female juveniles displayed more coronavirus disease 2019 protection behaviors in the community than male juveniles. And 2) considering the means of the groups categorized based on the level of protective equipment, juveniles with sufficient equipment displayed more coronavirus disease 2019 protection behaviors in the community than juveniles with insufficient equipment.

Table 3 The results of the three-way analysis of variance for the coronavirus disease 2019 protection behavior in the community based on gender, accommodation, and protective equipment

Group	N of participants	F						
		Gender	Accommodation	Protective equipment	AxB	AxC	BxC	AxBxC
		A	B	C				
coronavirus disease 2019 protection behavior in the community	600	15.749***	.708	3.721**	.001	1.503	1.795	4.205*
		.026	.001	.001	.000	.003	.003	.007

Note: **p<0.01 *p<0.05

Table 4 The analysis of the means of dependent variables when compared to independent variables

Group	Independent variable	Mean comparison of dependent variable			
		Category of group	Mean	95% confidence Interval	
				Lower Bound	Upper Bound
coronavirus disease 2019 protection behavior in the community	Gender	Male	58.088	56.828	59.348
		Female	61.830	60.473	63.186
		Sufficient protective equipment	45.524	44.923	44.946
	Protective equipment	insufficient protective equipment	44.023	43.121	43.895

Table 5 The results of mean comparison of the coronavirus disease 2019 protection behavior in the community based on juveniles' gender, accommodation, and protective equipment

Gender	Accommodation	Protective equipment	N of participants	Code	Mean	221	212	222	111	122	112	121
Female	Owned accommodation	Sufficient	79	211	62.89	0.16	1.29	2.79	3.00	3.41	5.84**	6.96**
Female	Other accommodation	Sufficient	122	221	62.73		1.13	2.63	2.84	3.25	5.68**	6.80**
Female	Owned accommodation	Insufficient	25	212	61.60			1.50	1.71	2.12	4.55**	5.67**
Female	Other accommodation	Insufficient	68	222	60.10				0.21	0.62	3.05	4.17**
Male	Owned accommodation	Sufficient	54	111	59.89					0.41	2.84	3.96**
Male	Other accommodation	Insufficient	62	122	59.48						2.43	3.55
Male	Owned accommodation	Insufficient	42	112	57.05							1.12
Male	Other accommodation	Sufficient	148	121	55.93							

Discussions

First, for positive attitude towards the coronavirus disease 2019 protection behavior, Dejsuwannachai (2021) found that attitude towards the coronavirus disease 2019 protection ranked first among predictors of the coronavirus disease 2019 protection behavior. Fishbein & Ajzen (1977) stated that attitude has an impact on an individual's behavior and expression, which in turn have an impact on the individual's attitude because attitude is associated with the individual's thought, feeling, and desire to do something. *Second*, future orientation and self-control regarding the coronavirus disease 2019 protection is in line with the research of Sakdapat (2021) who indicated that future orientation and self-control variable ranked sixth among predictors of the coronavirus disease protection behavior, as juveniles realized, effectively planned, and had self-control regarding coronavirus disease 2019 protection. *Third*, love-reasoned child rearing practice was found in similar research on other kinds of protection

behaviors. For example, Siritwiphark (2018) studied about the Behavior of People in Drug Prevention and found that rearing practice was associated with the behavior of drug prevention. *Fourth* is observance of media on the coronavirus disease 2019 protection behaviors. For instance, Prongrommarat (2018) pointed out that the influence of media is a direct variable for the AIDS prevention behavior. Luevanich et al. (2020) showed that catching up with media and information on COVID-19 ranked second for health literacy and new normal lifestyle to protect oneself against coronavirus disease 2019. Sakdapat (2021) revealed that being informed by online media ranked first among the predictors of the coronavirus disease 2019 protection behavior. The risk groups were also found as follows: female students, students with low average grades, and students in the departments of Humanities, Social Sciences, and Business Administration. Intarapanich et al. (2021) indicated that learning media influenced students' learning capability in an unusual situation like the spread of coronavirus disease 2019. *Fifth*, observance of parents' coronavirus disease 2019 protection behaviors is consistent with the research of Sakdapat (2021) who found that observance of family ranked third among the predictors of the coronavirus disease 2019 protection behaviors. Bunthan et al. (2021) demonstrated that interpersonal influence ranked second among the predictors of the health promotion behavior for coronavirus disease 2019 prevention. Observance of good models can influence juveniles to protect themselves from the disease. *Sixth* is emotional quotient which was also studied by many pieces of research. The example of research with consistent results is the research of Wangsom et al. (2018) which found intelligence variables which are health literacy, emotional quotient, and spiritual intelligence. *Lastly*, moral disengagement concerning Covid-19 prevention accords with the research of Punpromthada (2021) which showed that moral disengagement concerning Covid-19 ranked fifth among the predictors of younger undergraduates who lived alone. The juveniles that were in the risk group and should be cared for urgently were male juveniles and juvenile with insufficient protective equipment. This was consistent with a study which found that male students and students with low GPAX were in the risk group for the conscious risk behavior (Bhanthumnavin, 2013).

Conclusion and suggestions

In conclusion, the findings validated the hypothesis that the combination of psychological traits, situations, and psychological states can predict the coronavirus disease 2019 protection behavior in the community at least 5% better than each of the predictors alone. The results found in the total group and some sub-group: male gender, sufficient protective equipment, COVID-19 knowledge from online media, family member infected by COVID-19, family member not infected by COVID-19, report on others with COVID-19 infection, and confidence in vaccine. Many previous studies show consistent results with the significant variables in the total group.

Develop a training session on psychological traits, situations, and psychological states in order to cultivate the coronavirus disease 2019 protection behavior. Then, conduct experimental research on the training session.

New knowledge and the effects on society and communities

1. The juveniles displayed more coronavirus disease 2019 protection behavior in the community. They had a positive attitude towards the coronavirus disease 2019 protection behavior and possessed future orientation and self-control regarding the coronavirus disease 2019 protection. Their parents used love-reasoned child rearing practice. The juveniles showed the observance of media on the coronavirus disease 2019 protection behaviors and the observance of their parents' coronavirus disease 2019 protection behaviors. Additionally, they exhibited a low level of moral disengagement concerning Covid-19 prevention and a high level of emotional quotient.

2. The organizations in the community, such as the Municipality Offices, the Subdistrict Administrative Organizations, subdistrict health-promoting hospitals, and community leaders, should collaborate to hold activities for juveniles to develop their skills and provide knowledge about the methods to prevent or avoid coronavirus disease 2019. This will help reduce the expenditure on protective equipment and can have a positive impact on juveniles' health in the future.

3. The government agencies in the community provides knowledge and positive attitudes for male juveniles so that they will be aware of the effects of COVID-19 infection among the risk group. For the juveniles with insufficient equipment, the government agencies in the community, community leaders, and public health volunteers should prepare sufficient equipment such as masks, alcohol-based sanitizer, and ATK for the juveniles.

Ethical Considerations

This research was approved by the Ethical Committee of the Uttaradit Rajabhat University, Thailand on June 25, 2021 (URU-REC No. 037/64)

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Development of Bilingual Teaching Models According to Multicultural Education Approaches Using English and Ethnicity Language

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Abstract

According to the multicultural approach, educational administration aims to assist students in embracing and appreciating both their own culture and other cultures that are different from their own. It encourages pride in one's own culture, pride in discovering other cultures, and pride in knowing how to use information wisely. Every learning center has to offer multicultural education because, if students and educators don't learn about cultural variety through the learning center's activities, they can elsewhere in society. The goal of the project is to create bilingual teaching models employing English and language ethnicity at the Office of Non-Formal and Informal Education in the Samoeng district of Chiang Mai Province. The research methodology was conducted using developmental research methodologies. As students at the Office of Non-Formal and Informal Education in the Samoeng district of Chiang Mai Province, Thailand, come from a variety of ethnic backgrounds and each ethnic group has its own distinctive cultural traditions and ways of life, the research findings showed that where everyone will learn about the diversity of cultures present in society, it is essential to successfully manage teaching and learning in English classrooms that meet the needs of many students. Findings can be used to the delivery of education for multicultural schools in order to support equity in education in line with the concept of multicultural education. This involves managing learner differences. The unique aspect of this study is the creation of a bilingual teaching model based on a multicultural education approach using ethnic languages and English, in terms of learners' English classroom proficiency that will affect academic achievement, and the significance of curriculum development teaching techniques using various techniques, that can assist learners in studying according to their individual language proficiency to achieve better academic achievement.

Keywords: Bilingual teaching, Multicultural education, Ethnic language, Multicultural society, Non-formal education

Introduction

It is obvious that the numerous social and cultural differences across the diverse cultures in each region of Thailand are due to racial, ethnic, and religious variety, which results in a wide range of lifestyles in each culture. For instance, depending on where they reside in the lowlands, the highlands, or the desert people from various cultures have diverse habits, customs, beliefs, and values. The variations in civilizations' dress, eating habits, and rituals are also influenced by topography, climate, and geographical factors. (Reungsri & Dhedchawanagon, 2021) Economic conditions, industries, job characteristics, and work will influence people's beliefs and values in addition to the economic model. Those with Western ideologies, for instance, who link to their way of life through technology, would have distinct views than others who rely on agriculture or the natural environment for their way of existence. But individuals who understand that everyone has the right to have various beliefs and behave in different ways in many cultures are essential; living in peace with variety enhances adaptation while eliminating disparities and extending social and economic possibilities. (Sajjawathit, 2003)

In order to foster an understanding of acceptance and respect for the diversity of ethnic groups, educational institutions or educational policies must provide adequate variety and refrain from contributing to societal prejudice. As students and teachers may encounter multiculturalism outside of the classroom, every school must provide intercultural education. The significance of multicultural education in educational institutions is viewed as a process that must be included into all levels of education so that children and the general public may grasp it without becoming offended. Moreover, differences in gender, race, color, language, religion, creed, way of life, and other aspects that might not be as relevant must be considered. (Buadang, 2003) As a result of the necessity to figure out how to make it so that children and the general public can understand and eventually embrace these discrepancies, school administrators, teachers, parents, and communities are major participants in this issue. In certain schools, multicultural education is taught as an obligatory topic, and associated activities are organized. These gatherings provide children of all ethnicities the chance to fully express themselves in order to strengthen that understanding. It differs from traditional education, which mainly concentrates on the culture and welfare of enormous populations, in that it educates pupils about other civilizations how histories, cultures, and ideas are related and provide a diverse perspective.

Therefore, the importance and purpose of managing education in accordance with the multicultural approach is a concept that begins with giving importance to all students, by providing a learning environment that has the characteristics of educational equality, allowing students to develop themselves in the best way possible. An essential factor that will cause educational institutions to adapt in order to create an atmosphere that values equality is to stop focusing on any one factor and instead make curriculum-wide changes to schools. It is a continuous process with the aim of excellence, i.e. educational equality, the eradication of

prejudice, and therefore a multicultural society. (Assalihein, 2010) Therefore, a multicultural school is a group of people or groups of students who are diverse in terms of their racial and ethnic origins, lifestyles, religious beliefs, languages, and practices, as well as the various thought processes and symbols that result from factors like culture, religion, race, age, gender, social class, and education. (Reungsri & Dhedchawanagon, 2021)

Richards (2006), the Director of the British Consulate, also looked for studies on the topic of teaching English in secondary school and discovered that no nation has ever initiated a program of English language instruction in secondary education before ending it, and commented that the important issues that the Ministry of Education should consider should not focus on the issue that “When will you start studying?”, but should focus on the point that “How to start learning”, will be more beneficial and productive than properly preparing to learn English as a second language. It is more significant than a child's age that those who are interested in English learn it effectively because they want to and have a favorable attitude toward both the instructor and the topic being studied, which is comparable to the first threshold that pupils will cross to enter the domain of knowledge. Even a simple lesson is ignored if a student has a negative attitude toward the teacher or the subject. As a result, the responsibility of the instructor is to instill in the children a constructive outlook on these issues.

In the Office of Non-Formal and Informal Education in Thailand Samoeng District, it was found that kids from each community engaged more socially with one another, demonstrating that people have different perspectives, convictions, emotions, and actions. It is essential that students who are a part of schools and communities learn the rules and regulations that should be followed or avoided according to each other's etiquette in order to prevent conflicts and promote harmony and coexistence among different races, ethnicities, lifestyles, beliefs, religions, and customs. In order for members of one group to live peacefully and amicably with members of other communities, there must be a set of standards for conduct and treatment between them. Since humans are social animals who need to live in groups, we cannot deny that rules must exist in every society, whether it be a school or a community. (Charoensri, 2002)

This enables everyone to accept and respect both their own culture and other cultures that are different from their own, which, given the context and significance described, allows us to draw the conclusion that educational administration using a multicultural perspective is a form of education that tries to inspire pride in one's own culture as well as pride in learning about other cultures. Knowing the appropriate use of knowledge, every learning center is required to provide multicultural education because, if students and those involved in educational administration do not learn about the cultural diversity through the learning center's activities, they can do so from sources outside of society. As students at the Center for Non-Formal and Informal Education in Samoeng District of Chiang Mai Province in Thailand are from a number of ethnic groups, each of which has its own unique cultural traditions and ways of living, everyone will learn about the diversity of cultures existing in society. Instructors and those involved in learning management, especially those involved in the language culture, must rely on the concept of multicultural education to manage English language classrooms that successfully fulfill the needs of various learners.

Objective

1. To create bilingual teaching methodologies utilizing English and language ethnicity in the Samoeng district of Chiang Mai Province at Thailand, in accordance with multicultural education methods.

2. To learn more about how the methodology is applied to bilingual education in the Samoeng district of Chiang Mai Province at Thailand, using English and language ethnicity in accordance with multicultural education methods.

Concepts and Theories in Conducting Research

1. Mother tongue-based (MTB) and multilingual education (MLE)

Malone (2006) bilingual framework is critical to the hierarchical development of language and brain development, which has been applied as a guideline for bilingual/multilingual education management, with details are as follows;

1.1 The concept of language learning development using the principle of “ladders”

The transition from learning a first language to learning a second language involves a developmental stage that begins with the development of strong listening and speaking abilities before progressing to reading and writing abilities in a ladder-like progression, as seen in figure 1.

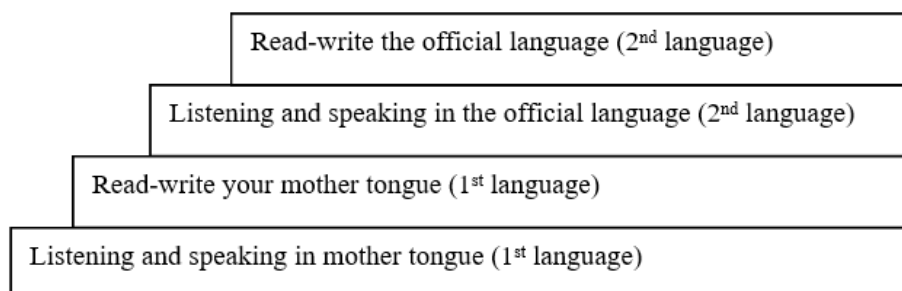


Figure 1 The concept of the principle of “stair step”

Source: Malone (2006)

In order to give children whose mother tongue is different from their school language a strong foundation and lay the groundwork for proper methods of bringing children from home to school, extending from home language to school language, the image shows how important it is for efficient administration of education to use mother tongue or first language as a medium of instruction from early childhood or the first year of schooling.

In which the child will take time to adapt and learn to a new place with the language that the child is familiar with first (listening-speaking, 1st language), then when the child is ready for a while, then prepares for writing by linking the language used to listen-speak into written language (read-write, 1st language). Subsequently, it connects from the 1st language to the 2nd language, laying the foundation for the 2nd language by listening-speaking, as well as the first language (listening-speaking, 2nd language), and leading to writing in the second

language by linking letters (reading-writing, 2nd language). Nevertheless, beginning the teaching of a second language should be separated from the listening-speaking in the first language, which is the development of the cognitive system. This separation may occur at a time when the child is already prepared to read-write in the first language or later.

1.2 Bridging language learning concept

Bilingual or multilingual education and learning rely on the concept of bridge language to connect from the child's mother tongue to the official language by using the child's mother tongue or first language. This helps children build a solid foundation of knowledge. This is because children learn well from the beginning through the language that they have the best understanding of, which is their mother tongue, and because there is a systematic and sequential link to the second language. Children also understand prior knowledge or fundamental knowledge that is learned during childhood, as shown in Figure 2 below.

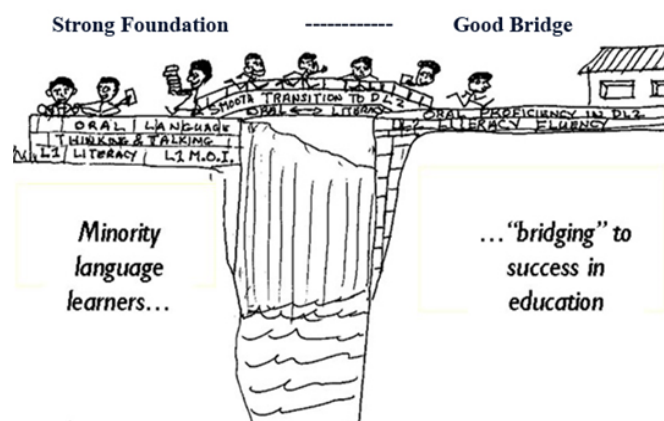


Figure 2 Bridging language learning concept

Source: Malone (2005)

The bridge is made up of steps and processes that link to one another utilizing the ladder idea, as can be seen in the diagram above, and it is strong and capable of guiding the child to the other side in safety and security. Using the mother tongue as a teaching tool, emphasizing thinking and speaking, then reading and writing in the first language, and finally using the second language teaching method to connect listening-speaking skills and read-write skills in a second language, and continuously strengthening both languages, are all ways to achieve learning in both languages. The process of teaching and learning from the mother tongue to the second language, on the other hand, will not be as successful as it should be and will lead to enduring educational problems if there is no relationship, such as the bridge in figure 3 below.

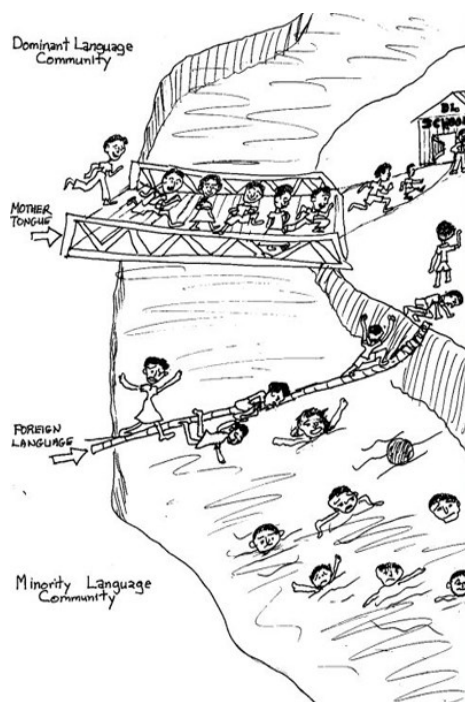


Figure 3 Bridging language

Source: Malone (2005)

The idea of a bridge without a strong foundation or framework, or one with an incomplete construction, serves to emphasize the need to study content that is still not fully comprehended in order to gain comprehensive language abilities. This will cause several kids to tumble off the bridge or fail to cross it to the other side. This is the scenario with ethnic children across the world, as opposed to the bridge in figure 2 above, which has a solid base in the child's mother language and is known to the child (Malone, 2005).

1.3 The concept of teaching and learning with a student-centered approach (Child Centered)

A term inspired from research by Dewey (1963) that focused on “Learning by doing” or “Learning by Doing,” learner-centered instruction is described as teaching and learning that is based on the advantages and benefits of the learners. This learner-centered approach, which is a widely adopted idea, changes the learner's position from that of a “receiver” to that of a “learner,” and the teacher's function from that of a “instruction or knowledge transfer” to one of a “provider of learning experiences” for students. As the roles have been reversed, the student is now the focus of learning, not the teacher. The learner thus plays a significant role and assumes a central role in both teaching and learning.

1.4 The concept of second language teaching methods using total physical response (TPR)

Jame Asher (1982) developed a method for teaching a second language using the TPR (Total Physical Response) by combining his understanding of the right and left hemispheres of the brain with his understanding of the neural connections that underlie language perception. By hearing the words which are commands observing the instructor's demonstrative gestures, and then copying them after hearing the words, the language is recognized as a language that is tied to the movement of the body, allowing him to codify and develop a method for teaching language in its most natural form. There are numerous TPR teaching methods, including TPR-Body, object, image, and story, depending on the appropriateness of the vocabulary set and supporting media. To put it another way, language acquisition and body language expression (Therefore, the vocabulary used is a set of commands that can be executed).

2. Concepts of learning theory and their application in bilingual teaching policies using English and ethnic languages.

The principles of learning development, networked learning, learning, social learning, and language and sociocultural learning have been the cornerstones of bilingual education and learning administration, and they are as follows;

2.1 Concepts about the development of learning

This idea is how Piaget (1980) investigated how people learn and holds that learning is both absorbed absorption and accommodation, and that people have an innate need to learn about the world or the objects around them and retain knowledge gained under the functioning of the brain system. Piaget (1980) identified four phases in the maturation of learning or the maturation of human cognitive skills; (1) sensorimotor stage, (2) preoperational stage, (3) concrete operational stage, and (4) formal operation stage.

2.2 The concept of networked learning or schema theory

In the past, the Greek philosopher Plato (1985) spoke of the cyclical and interrelated systems of thinking in the human brain, while Piaget (1985) spoke of a collection of informational perceptions that are taught in accordance with the way the brain system functions. Both of them refer to this as a schema, thought network, or thinking structure. Educational psychologist Anderson (1977) has extensively researched, developed, and articulated the schema theory in the following ways;

The technique by which the thinking system of the brain learns new information by methodically connecting previously learned information with newly acquired information is known as thought network learning theory or thought structure (Schema). This internal process of knowledge association links coherent or disparate knowledge through a system of comparison before being assembled (processing requires prior knowledge to compare, assess, and analyze) to provide an understanding of new knowledge. Learning results are compiled into knowledge structures that are then utilized to link new knowledge; these knowledge networks can be flexible or alter in structure based on the cycle of thinking networking. The success of learning new ideas depends on the capacity to link new ideas with existing information, and this mind network learning involves the following fundamental components:

(1) general knowledge or basic concepts; (prior knowledge); and (2) connection of new ideas. Therefore, learning new topics or expanding learning as an adult will be extremely effective if the preceding information is of excellent quality or the individual has a solid comprehension of general knowledge from infancy. The idea's learning network when it comes to understanding knowledge, it's crucial to remember that traditional knowledge and old knowledge (concepts) are perceived by people as fundamental truths that never change, as opposed to new knowledge that develops through the linking of old and new knowledge and can change depending on how those knowledge associations turn out.

2.3 Social learning theory concepts

However, Bandura (1977) theory describes human cognitive behavior in a social context. According to this view, people learn new things through observation (attention), which leads to the memory, recording, and structuring of information (retention). The brain then directs a replication (motor reproduction) or imitation based on seeing and memorizing what the prototype performs (if the subject is a youngster of learning age). After which it is analyzed to inspire action by learning from others. by studying how words (compliments) affect people's emotions, which might lead to repetition or practice to help people get better (until they are satisfied or lose motivation to perform).

The foundation of social learning theory, which supports the growth of children's learning, is imitation (replication), which is practiced and stimulated repeatedly until it develops into a skill or until it is mastered and can be performed at a level equal to or higher than the master. Children pick up new knowledge as a result of this development. Bandura (1977) analyzes the developmental implications of social learning on whether or not learning is successful. Observation, record-keeping, and practice (depending on the purpose), the setting for the observation must be suitable to observation. Additionally, recording is not simply memorized; it is also structured by turning the information acquired into words, images, symbols, or text in order to improve comprehension, apply it, or reproduce it. The effectiveness of learning is therefore dependent on practice or repetition. Also, it has been demonstrated that when motivated by an acting incentive, people may be trained and have a predisposition to imitate behavior that is similar to their own, respects their status, or is viewed as being valuable enough to be lead in a practical manner (motivation can mean compliments, applause, gifts, or recognition from others, etc.)

2.4 Social-cultural learning theory

Vygotsky (1997), a Russian scholar who studied medicine, philosophy, history, and law, conducted research on child development and educational psychology and discovered that human social and cultural learning involves language, ideas, social and cultural interactions, imitation, as well as guidance and assistance. These factors all have similarities to the idea of social and cultural learning Anderson and Bandura, but they differ in the following ways;

Language: thoughts and language are unrelated in the early stages of a child's development, but as they grow increasingly connected as they mature, thoughts are expressed via language, and language gets more logical as a result of more thought. As a result, Vygotsky (1997) notion differs from other psychologists' concepts. Children of the same generation use language to express their inner thoughts and to exchange ideas with others. Children begin

interacting with others through activities before transitioning to self-talk to express their views. Later, as the infant gained more knowledge and comprehension of things, the voice it used to communicate with itself progressively became quieter and eventually stopped speaking altogether. Which, when done so with intelligence, reveals one's own development of knowledge and consciousness. In order to better understand oneself, internalization is the act of generating new knowledge from the inside out by reading words or natural occurrences through the lens of one's own beliefs.

Social Interaction: because of biological restrictions, babies are born with lesser levels of mental abilities such as basic memory, simple perception, and attention. A kid may find it too challenging to use their imagination or to permanently imprint particular events in their memories. However, social connection with parents, teachers, and other caregivers and supporters will aid the child to create and the child can learn without limitations, depending on a social environment that permits kids to engage with others nearby who support them. In addition to the interaction between the expert and the novice, where the more experienced expert helps the beginner, assistance is also provided in the developmental border area. Vygotsky (1997) description of developmental corridor aid has a deeper and broader connotation that encompasses social cooperation in action.

Culture: according to Vygotsky (1997), children adjust their cognitive abilities in accordance with their social and cultural experiences, and this process continues until the knowledge they acquire leads to higher mental functions. Each culture imparts to the children its distinctive characteristics of beliefs and values, helping them become aware of what they are thinking and what is appropriate.

Imitation: Vygotsky (1997) defined mimicry as the vital function of imitation in learning and development. For instance, if a student is having trouble with a math issue, the teacher should write the problem out on the board. Children may mimic the teacher's problem-solving strategies at that point to develop their own understanding, but if the teacher asks the teacher to solve more challenging math problems without providing them with examples, extending what has been learned into what is new to learn, the child may not be able to comprehend at that time. This type of math issue has to be solved by teachers several times so that students may build self-learning and progressively mimic problem-solving techniques.

Guidance or Assistance: Vygotsky (1997) stresses the presence of more experienced people to provide assistance in circumstances. Mentoring or aiding is a social cohesiveness that supports cognitive growth and cognitive development; it is learning through nurturing and improving early learners, and offering a “scaffold”, or in the context of learning, a “scaffolding” complement to learning, which Vygotsky compares to help for learners to develop their problem-solving skills.

2.5 Bloom's Taxonomy

In Benjamin Bloom work from 1971, he and his colleagues examined, created, and categorized behaviors that indicate different stages of brain development (Level of Learning), or the development of learning, subsequently revised the model of such phases of development but still frequently referred to in accordance with the previous theory, Bloom's Taxonomy, the

form of information collected derived from the concept of Susan Molone (2008) as illustrated in Figure 4.

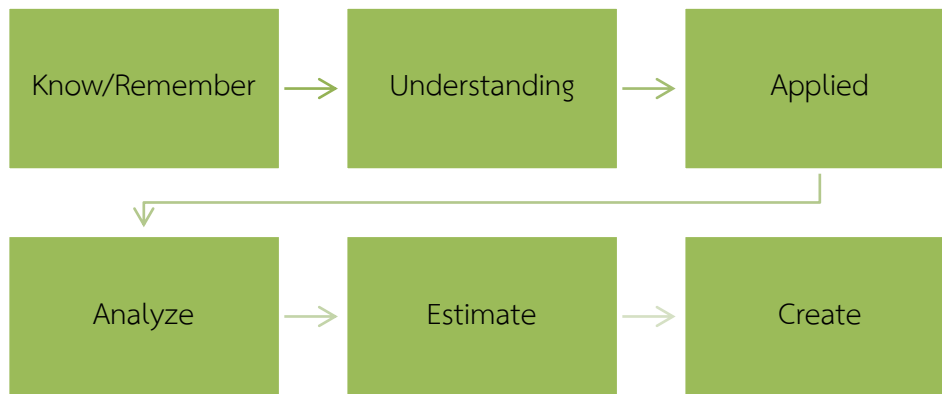


Figure 4 Bloom's Taxonomy of Education Objectives

Source: Malone (2006)

3. Multicultural Education

With the purpose of giving students of many races, ethnicities, social backgrounds, and cultures equal educational opportunities, “multicultural education” aims to develop a sense of good ideals about human cohabitation and improve all learners' learning abilities. There are many scholars who have defined the meaning of education according to the multicultural approach, such as; for instance, Yothakan (1998) condensed the definition of multicultural education as meaning education about cultural diversity in society, which is a process of changing the structure of the school curriculum, accepting and respecting the cultural diversity of students as the result of the culture in that society, resulting in a shift in educational management that takes into account the needs of students in various contexts, as well as the context of students both inside and outside the school, in order to motivate students to succeed in their studies and remain collaboratively and contentedly with others in society. According to Banks (1994), multicultural education is a notion of educational reform and a method whose main objective is to alter the makeup of educational institutions, giving pupils of all genders, those with special needs, those from diverse racial and cultural backgrounds the opportunity to succeed academically on an equal basis.

According to Cortes (1996), “multicultural education” refers to the process by which teachers assist students who have culturally diverse backgrounds in becoming more tolerant, cooperative, and empathic toward one another as well as seeing the practical advantages of interdependence, sacrifice, and justice. The growth of mutual understanding and interdependence via Multicultural education implies that societal differences come from a lack of human judgment, the embrace of cultural variety does not lead to divisions. Because everyone needs to exchange cultural variety within the same country, multicultural education is important in all schools, not only those where students or educators come from various cultural backgrounds. Schools should thus offer chances for pupils and everyone involved in

school education to broaden the limits of cultural variety from the immediate to the distant in order to promote mutual understanding and interdependence.

Which from the aforementioned meaning is enough to be able to conclude that educational management in accordance with the multicultural approach is an education that aims to allow everyone to accept and appreciate their own culture and other cultures that are different from their own culture, it causes pride in one's own culture, and pride in learning other cultures as well, and it causes pride in knowing the appropriate use of knowledge. Every school must offer multicultural education because, if students and educators are unable to learn about cultural variety through classroom activities, they may do so outside of the classroom in the community, where everyone will be exposed to the diversity of cultural traditions.

3.1 The conceptual framework of multicultural education

According to Banks (2001) conceptualization of multicultural education, all children should have the chance to get an equitable education regardless of their sex, class, status, race, ethnicity, language, religion, or culture. On the other hand, it might be argued that the concept of multicultural education is derived from the observation that some children with particular traits have access to more learning opportunities than others. In addition to promoting the academic achievement of all students and viewing schools as a multicultural social system, which has connected and different parts, multicultural education also aims to regenerate the atmosphere within schools or other educational institutions. Therefore, all fundamental elements of the school must be altered for education reform to be egalitarian.

During World War 2, there was a significant global movement of numerous ethnic groups, which is where the idea of multiculturalism first emerged with prejudice dividing people into different national groupings in each country. Asian immigrants moving to England, African and Indochina migrants moving to France, vast numbers of Italian, Greek, and Turkish immigrants moving to Northern and Western Europe, etc. Multicultural social change projects start in earnest in the United States, where the majority of immigrant groups encounter prejudice and racial discrimination in all spheres of life, including schools and outside of society. By the 1960s, African Americans had started to demand their rights, calling for the abolition of racial prejudice in employment, education, and the study of various ethnic groups. They also demanded that educational reform include more consideration of their identity, including their experiences, history, culture, perspectives, and way of thinking. It also required schools to recruit more black teachers and administrators and to update their textbooks to reflect the ethnic variety in the United States (Banks, 2001), which is where the concept of multiculturalism originated. Since objectives like equality in education and the abolition of prejudice in all spheres of life have not yet been achieved in society, multicultural education is a constant process. The main objective of multicultural education is to assist students in gaining the information, attitudes, and abilities necessary to play roles in their own subcultures, the collective's core cultures, other subcultures, as well as in the larger global society. Moreover, multicultural education is a concept that has many different dimensions, Banks (2001) divided the concept of multicultural education into five dimensions;

1) Content integration occurs when a teacher incorporates examples and material from different cultural contexts into his lessons.

2) Through the knowledge production process, teachers help students comprehend, find the truth, or determine whether underlying cultural beliefs, preconceptions, or biases can affect how genuine knowledge is constructed.

3) Prejudice reduction is the process through which teachers utilize classes and other activities to help students become more accepting of people of other races and ethnicities.

4) Equity pedagogy is the practice of teachers enhancing their instruction to motivate learners of all racial, cultural, gender, and socioeconomic backgrounds to succeed academically. This includes employing a range of instructional strategies that are tailored to the various cultural and racial learning preferences.

5) A supportive school climate the management style and organizational culture that promote equality in terms of gender, ethnicity, and socioeconomic class inside the school are another crucial component of multicultural education. Everyone must be involved in improving the school's structure, including the grouping and categorization of practical exercises, participation in activities and sports, imbalances in student enrollment in extracurriculars, and interactions between interracial staff and students. The model and management within the school must also be determined by all members and staff within the institution to create a culture within the school that will help strengthen potential to students of all races, ethnicities and genders.

The aforementioned concepts of the five dimensions are interrelated and interrelated, as shown in Figure 5 (Banks, 2001).

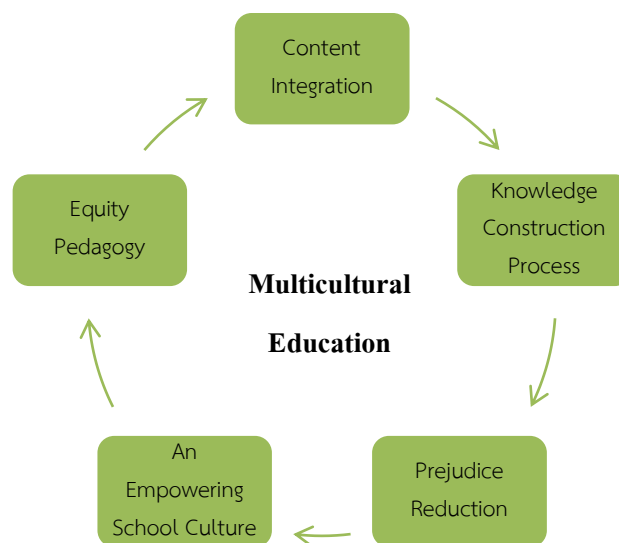


Figure 5 Concept of multiculturalism in 5 dimensions

Source: Banks (2001)

3.2 Guidelines for educational management according to the concept of multiculturalism

There is no denying that racial, ethnic, and religious distinctions contribute to the social and cultural diversity across nations. As a result, each community will have distinctive lifestyles, such as clothes, food, and rituals, and as a result, will exhibit distinctly diverse traits. Cultures differ according to geographical, topographical, and climatic factors as well, for instance individuals who live in lowlands have different eating habits, customs, beliefs, and values than people who live in highlands or desert regions. Along with the economic model, economic situations, industries, employment styles, and work will influence people's ideas and values. For example, individuals with a Western outlook may use technology in their daily lives, which is different from those who depend on agriculture or the natural world. However, in a multicultural society, it is important to have individuals who believe that everyone has the right to think, feel, and behave as they want, and that embracing our diversity improves our ability to adapt, closes gaps, and broadens our social and economic prospects.

With all schools necessarily needing a multicultural education, developing a knowledge of acceptance and respect for the diversity of multicultural groups in educational institutions or educational policies must provide sufficient diversity and must not be a source for societal conflicts. Because multicultural education is a process that must be integrated into all levels of education and that schools must assist children and the general public in understanding, if students or those involved in education management do not learn about multiculturalism from school activities, they may learn these things from the community. Differences in ethnicity, color, language, religion, belief, way of life, and gender, which may not always be equal subject, must not be looked down upon but shall instead be accepted. To find ways to help children, youth, and the general public understand and gradually embrace such differences, school administrators, teachers, teachers, parents, and communities have a major role to play. In some schools, multicultural education is included in the curriculum, and activities are planned to foster that understanding. Children and teenagers from every ethnic group have the chance to completely express themselves through these activities, allowing them to learn about the history, culture, and beliefs of other people. Contrary to traditional education, which only emphasizes the culture and welfare of sizable populations, it is seen as having a wide viewpoint.

Therefore, the significance and purpose of multicultural education are ideas that begin with the idea of giving value to all students by offering a learning environment that has the features of educational equality, enabling students to be able to better themselves in the best way possible. It doesn't focus on any one issue; rather, schools must reform in a holistic way, modifying the curriculum, and going through a continuous process. This is a crucial component that will drive educational institutions to move toward an educational environment that reflects equality. According to Assalihein (2010), the goal of excellence is educational equality, the eradication of discrimination, and subsequently a multicultural society. This goal is in line with Supa & Dhedchawanagon (2022) research, which analyzes and synthesizes the textbooks, curricula, pedagogy, and power relations structures at various educational institutions. It also explores classroom procedures and introduces the idea of gender and culturally-based analyses of learners' variety. Feminists emphasize the variety in the classrooms in multiculturalism, which includes differences based on gender, ethnicity, color, race, and handicap.

3.3 Characteristics of education management according to the multicultural approach

Nowadays, we cannot deny that Thai society has a diverse group of people in terms of culture, language, or dress, the important thing that Thai society must realize is that understanding and accepting diversity will allow Thai society to live together. The most essential thing is to provide a decent education, which must draw from a range of languages, cultures, curriculum topics, teaching strategies, and even instructors themselves, according to the circumstances of the region. As a result, there are at least three key elements that must be researched in order to manage education using a multicultural approach: an idea or concept, a movement for educational reform, and a multicultural approach-based educational process.

1) To achieve the best transformation for students in educational institutions, multiculturalism must be for all learners without discrimination of gender, socioeconomic class, ethnic group, ethnicity, or cultural features; there must be equality in the opportunity to study in schools.

2) Multicultural education is a strategy for educational reform that makes it very difficult to alter educational institutions with a big number of students, from different classes, and of diverse genders, ethnicities, and cultures in order to give equitable possibilities in education. Therefore, a comprehensive change in the educational environment of educational institutions, as opposed to modifications to just the curriculum, must be made in order to implement multicultural education.

3) The multicultural approach to educational administration is a process. As a process that must be sustained in order to achieve educational equity for all students, it aims to deliver education with freedom and justice, to erase prejudice and discrimination among groups in learners.

In order to make education a true tool for the economic, social, and political growth of the nation, these circumstances forced the educational community to reevaluate education administration. According to the state's education management policy, children should have a wide range of perspectives, be farsighted, pay attention, be a learner, be a complete individual in mind, body, society, and intellect, be knowledgeable, virtuous, capable, in a career, and be able to adapt to the current of change and be self-reliant. Especially in terms of language development, people should be able to use the local language to address the educational issues facing local youth as well as preserve and revive the local language in order to live happily in their own community as well as the global society. Employing a variety of techniques, such as constructing a writing system, a dictionary for communication and education, or books or other resources to record stories with built-in scripts in that language. The process of managing bilingual education will then begin, using the mother tongue as the foundation for learning in schools in accordance with the bilingual education management policy set forth in the Education Policy Plan 2016–2020. Managing bilingual education is still a complex issue that must place a high priority on managing education in ethnic groups.

Methodology

Research Methodology

1. Research Process

With the following research processes, the research technique was carried out utilizing developmental research methodologies;

Objective 1: To create bilingual teaching methodologies utilizing English and language ethnicity in the Samoeng district of Chiang Mai Province at Thailand, in accordance with multicultural education methods. The researcher has taken the following actions while performing the study;

1) Conduct a neighborhood survey to learn more about the English learning management system, problem circumstances, and curricula of the Office of the Non-Formal and Informal Education in the Samoeng district of Chiang Mai Province, by conducting a seminar project for the population study, which according to the researcher has established the parameters of this investigation, this includes the study sample of people engaged in educational management for the 2020 academic year, total of 15 people.

2) Summary and analysis of the results of the seminar divided into 4 aspects; (1) curriculum and curriculum implementation, (2) instructional media, (3) instructional management, and (4) measurement and evaluation.

3) From the seminar management brought to the conclusion that analyzed the joint between researchers and personnel working in education management, leading to the development of a bilingual curriculum based on a multicultural education approach using ethnic languages and English, which is English for community tourism program, because the research area is one of the province's major tourist attractions.

Objective 2: to learn more about how the methodology is applied to bilingual education in the Samoeng district of Chiang Mai Province at Thailand, using English and language ethnicity in accordance with multicultural education methods. The researcher has taken the following actions while performing the study;

Step 1: Creation and quality verification of the bilingual teaching model according to the multicultural education approach using ethnic languages and English in Office of the Non-formal and Informal Education in Samoeng district Chiang Mai Province with the method of studying documents and related research, and using purposeful selection, created a teaching and learning model that was afterwards reviewed by five experts for applicability, amended as per their suggestions, and made available to junior high school instructors teaching foreign languages to use in the first semester of the 2020 academic year. Analysis of the findings will be used to implement, enhance, revise, and publish the instructional model as a complete book, ready to be used in the field with the following sample group, in order to determine the effectiveness index of the instructional model according to the multicultural education approach, the tools used in the research are:

1) Appropriate assessment of the teaching and learning model's constituent parts, which include principles, objectives, content, teaching and learning processes, measurement, and evaluation. This assessment should be done in accordance with the multicultural education approach and emphasize the importance of individual differences in learning. This is in accordance with the study of educational management in multicultural schools in four aspects according to the announcement of the Ministry of Education “2006 the year of teaching and learning reform”, which has guidelines for curriculum and teaching services According to the Basic Education Curriculum 2008, they are (1) curriculum and curriculum implementation, (2) instructional media, (3) instructional management, and (4) measurement and evaluation.

2) Appropriate assessment form for the manual for using bilingual teaching according to multicultural education guidelines using ethnic languages and English in Office of the Non-formal and Informal Education in Samoeng district Chiang Mai Province according to the multicultural education approach, to assess the components of the manual and the learning management plan, both assessment forms are 5-level rating scales, quality checks by 3 experts, to check content validity, by calculating the conformity index (IOC), the validation result is between 0.61-1.00.

Step 2: An experiment and study of the use of bilingual teaching according to the multicultural education guidelines ethnic languages and English in Office of the Non-formal and Informal Education in Samoeng district Chiang Mai Province. In the second semester of the academic year 2020, a single-group trial was utilized to examine results solely after the trial on high school pupils who were chosen on purpose.

2. Research Tools

2.1 Questionnaire : The questionnaire contains; part 1: a status questionnaire for responses that takes the form of a checklist and inquiries about employment history and personnel roles, part 2: it is a questionnaire about the problem condition, and the effectiveness of the bilingual teaching model according to the multicultural education approach using ethnic languages and English in Office of the Non-formal and Informal Education in Samoeng district Chiang Mai Province, in 4 areas: curriculum and curriculum implementation, instructional media, teaching and learning management, measurement and evaluation, and part 3: it is an open-ended questionnaire for respondents to express their opinions about educational management and suggestions for improving bilingual teaching according to the multicultural education approach using ethnic languages and English in Office of the Non-formal and Informal Education in Samoeng district Chiang Mai Province.

2.2 A bilingual teaching model based on the multicultural education approach using ethnic languages and English in Office of the Non-formal and Informal Education in Samoeng district Chiang Mai Province, to promote the ability to design a bilingual learning management based on multicultural education guidelines, for teachers, and a manual for quality checking by five experts.

2.3 Evaluation form for the design of bilingual instruction based on the multicultural education approach using ethnic languages and English in Office of the Non-formal and Informal Education in Samoeng district Chiang Mai Province. Is a form for evaluating products that resembles a quality criterion (rubric). The indicator is a distinct criterion that is split into

four quality levels and is reviewed in two phases in accordance with the steps of the learning management system. Planning a learning management design in step one, with all 11 indicators scoring 44 points, and writing a learning management plan in step two, with all 9 indicators scoring 36 points, for a total of 20 indicators scoring 80 points and being quality checked by three experts to ensure content validity.

3. Analysis

The researcher collected data by conducting experiments on teaching and learning activities using the bilingual teaching model in accordance with the multicultural education approach using ethnic languages and English with high school students and teachers a sample group of subjects learning foreign languages at the Office of the Non-formal and Informal Education in Samoeng district Chiang Mai Province. The experiment using information from the study materials, questionnaires, and evaluations was carried out during the course of the academic year 2020 two semesters. The researcher collected all returned questionnaires and assessment forms in order to evaluate the accuracy of the questionnaire and assessment replies before doing the statistical analysis. Analyze the data on the drawbacks and efficiency of bilingual instruction using ethnic languages and English in accordance with the multicultural education method, a total of four aspects, namely curriculum and curriculum implementation, instructional media, teaching and learning management, measurement and evaluation.

4. Scope of Research

The researcher has established the parameters of this investigation, this includes the study sample of people engaged in educational management for the 2020 academic year, total of 15 people, which includes; (1) strategy and development group, (2) educational promotion group in educational institutions, (3) educational promotion group outside educational institutions, (4) supervision group monitors and evaluates the results of educational management, and (5) a group of foreign language learning teachers. In this regard, a sample of 15 people was chosen using purposive sampling, which is a method of sample selection based on the researcher's judgment and ensures that the characteristics of the chosen group are consistent with the research's objectives. As a result, the researcher's knowledge and expertise, including their experience in the field, are necessary for the selection of a specific sample.

Results

According to research objective No.1 : to create bilingual teaching methodologies utilizing English and language ethnicity in the Samoeng district of Chiang Mai Province at Thailand, in accordance with multicultural education methods. Results from a study conducted as a seminar project for the people to understand more about the English learning management system, issue situations, and curriculum of the Office of the Non-Formal and Informal Education in the Samoeng district of Chiang Mai Province. The main goal of holding the seminar was to make sure that everyone involved in education management was aware of the issue and its state, including issues with curriculum and curriculum implementation, instructional media, instructional management, measurement, and evaluation. Whatever the case, stakeholders agree that development must be

undertaken in order to obtain a good curriculum that is responsive to the needs of the learners and society, meaningful to the lives of the learners, flexible as appropriate, and it was created with the cooperation of many stakeholders, this consensus stems from brainstorming on the problem-solving needs of the aforementioned course. Setting goals is one of the most crucial steps in the curriculum development process in order to produce a high-quality developed curriculum. This is the conclusion reached by personnel working on education management in the academic year 2020, an English for tourism curriculum will be developed by integrating teaching with ethnic languages. because it shows the purpose to shape learners' qualities and knowledge in any way, including serving as a benchmark for choosing the content of learning activities. Employees at the Office of Non-Formal and Informal Education in the Samoeng district of Chiang Mai Province who are responsible for educational management must carefully set the objectives, setting them clearly and appropriately in accordance with the philosophy and values of society, the problematic conditions and needs of society and the learner, as well as striking a balance between knowledge and skills or between both.

According to research objective No.2 : to learn more about how the methodology is applied to bilingual education in the Samoeng district of Chiang Mai Province at Thailand, using English and language ethnicity in accordance with multicultural education methods, the results were found that;

From the development of a joint model between researchers and personnel working in education management, leading to the development of a bilingual curriculum based on a multicultural education approach using ethnic languages and English, which is English for community tourism program, because the research area is one of the province's major tourist attractions, when developing the aforementioned curriculum together with all parties, the curriculum was used to try out teaching and learning activities in the first semester of the academic year 2020. In any case, these communities are Karen ethnic groups where there are numerous tourist attractions within the community, but when tourists enter, especially foreigners, it is discovered that no one can provide information about tourist attractions. As a result, researchers and staff working on education management see the importance of English for community tourism courses, which have already been evaluated for suitability by experts.



Figure 6 Meeting for creating and verifying the quality of bilingual teaching model

Source: Kittiwit Dhedchawanagon (2022)

An experiment and study of the use of bilingual teaching according to the multicultural education guidelines ethnic languages and English in Office of the Non-formal and Informal Education in Samoeng district Chiang Mai Province. In the second semester of the academic year 2020, a single-group trial was utilized to examine results solely after the trial on high school pupils who were chosen on purpose. Which when doing the study using a one-group trial design and simply analyzing the outcomes post-experiment. It was discovered that in the bilingual curriculum using the tourism industry as the learning medium, the students learned English better by using things around and in the neighborhood as learning media. More importantly, however, is that the students improved their ability to use English so that they could use the language naturally fluently and could also use ethnic languages along with English as an important tool to communicate effectively with tourists. In a borderless world where English is an international language, learners may confidently utilize English as a crucial instrument for studying and learning in order to continuously improve themselves. At the same time, the Karen ethnicity and the multicultural base of traditions, customs, and culture remain well-established. Therefore, two related languages, ethnic Karen and English, are also recognized in order to attain common understanding when bilingual education is discussed in the aforementioned ways. The curriculum assessment also discovered that bilingual education, which does not specifically include Thai as the first language and English as the second language, is related to the relationship between the language and culture of the Karen ethnic group, which the non-formal education system has never managed in the form of bilingual education, such as education for ethnic groups that do not speak Thai in daily life, like the Karen ethnic group.



Figure 7 An experiment and study of the results of bilingual teaching based on a multicultural education approach
Source: Dhedchawanagon (2022)

The majority of students whose native language is not official Thai face language barriers in their classrooms, which has a negative impact on their academic performance. In the past, education for ethnic Karen children did not use their mother tongue or local language as a medium of instruction, but will instead use the official Thai language, which is centrally produced by the ministry of education. A bilingual curriculum, which is teaching and learning that uses two languages as a medium of instruction in schools, has been developed by researchers and study participants in an effort to address this issue. The ethnic Karen language or community language is used as the first language as the learning base through listening, speaking, reading, and writing and is linked to a second language, English which is a language that must be used in learning and applying in the future. The curriculum's main goal is to prepare ethnic minority students in upper secondary school to be able to use English fluently by using the Karen language and culture of the students as a basis and a learning medium, developing learning skills and systematically connecting them to English and Thai culture. The bilingual curriculum in community tourism indicated above also supports jobs for students to sustain a healthy balance after graduation by helping them keep their identity so they may coexist happily with different civilizations, despite cultural variety.

Discussions

The research's findings were analyzed, and it was discovered that bilingual curriculum helped educators in Office of the Non-formal and Informal Education in Samoeng district Chiang Mai Province, understand bilingualism to some extent. This is because today's students come from very diverse cultural backgrounds, and bilingualism is only now beginning to receive full support, but there has always been a push for multicultural studies. More than 90% of youngsters in the Samoeng district of Chiang Mai Province speak their own ethnic tongue or dialect, according to education management research by the Office of the Non-formal and Informal Education. There are extremely few opportunities to utilize Thai in conversation in daily life, and English is not used at all. Instead, they communicate with their families and local communities. An educator who studied the use of native or mother tongues in the educational system in the past, Cummins (2001) said that “the usage of the mother tongue in school not only enhances the mother tongue but also helps the official language or second language to grow better”. This is in line with Sanhachawee (2007) assertion that ethnic language use has been a part of society from antiquity to the present. The use of ethnic language in daily life varies depending on the region, reflecting human thought and knowledge systems as local wisdom, which is the unique cultural identity of the country that must be preserved to live on in the local community forever. However, it was discovered that in many regions, English and Thai achievement remained among the lowest in the nation. The main cause of this is that the local youth speak an ethnic language that is distinct from Thai and the international language, which is the school's official language and is used by students and teachers to communicate. In this regard, educators work to provide solutions based on regional language and culture,

establishing a framework for promoting bilingual/multilingual learning or an effective connecting teaching process between language and culture.

Due to the inequality of language that enters the school system, ethnic children have low self-confidence when they go to school and speak slurred. When going to study in a city that is a city, all the urban people, when introducing themselves and the accent is not clear, friends laugh in the entire room, causing loss of confidence and turning into a person who rarely speaks. The educational staff at the Office of Non-Formal and Informal Education in the Samoeng district of Chiang Mai Province were troubled by these issues and searched for solutions until they discovered bilingual teaching methods that would enable students to speak more clearly and exercise creative thinking, including the use of their surroundings in bilingual teaching and learning. The learners will not speak clearly as before when entering the college or university system, leading to Let if speaking unclearly when entering the system, they will be ridiculed, when they are ridiculed, they will lose confidence and will not dare to argue or argue with friends, if the teaching is not taught according to this method, the same problems will continue to arise.

Bilingual instruction must first prepare the children in the Thai language while preparing the learners in the Thai language, of the Thai language, and must practice thinking skills that are necessary for ethnic children to practice since childhood. In fact, the problem with learning ethnic children is that the language is not yet ready. Because ethnic children did not understand Thai, the Office of Non-Formal Education's bilingual instructional approach, and Informal Education in the Samoeng district of Chiang Mai Province, which started from ethnic languages with Thai, Thai with English, until bringing to ethnic languages with English, did not interact with the students in the past, even though it was to train children's creativity.

There have previously been research studies on the administration of multilingual teaching, including Wongrak (2017) a study on the use of mother tongue in teaching English to students discovered that utilizing mother tongue instructors together with learning management will increase student familiarity and enthusiasm in learning because it creates a relaxed environment in the classroom that reduces anxiety. However, in order to prevent linguistic differences between students who use their official language and those who use their home language, teachers must establish regulations and maintain control in the classroom. This is in line with the findings of Chaikan (2018), who investigated teaching Thai as a second language to ethnic Khmer children in Thailand. She discovered that focusing on context and real-world situations in content design helps children learn how to communicate in Thai and use it in everyday situations. Additionally, it was shown that community participation and family involvement in Thai language teaching and learning helped foster attitudes toward learning Thai as a second language throughout the formative phases of classroom instruction. Additionally, reading, writing, and speaking skills are taught first before practical communication in a community environment, commencing with listening and speaking abilities. As a result, students may pick up a second language more quickly and use it in practical settings. The use of language with an emphasis on content in circumstances and contexts of the community, as well as the choice of vocabulary and the degree of structural complexity, all contributed to lowering the tension level in the classroom.

Therefore, it was discovered through examining data in nations connected to ethnic language-based multilingual education that students receiving ethnic language-based bilingual education improved more in both academic success and attitudes toward language acquisition. This is so because ethnic languages, which serve as both the primary language of communication and a way of easing the anxiety associated with language acquisition, have an impact on how well learners pick up other languages.

Conclusion and suggestions

However, according to research findings titled “Development of Bilingual Teaching Models According to Multicultural Education Approaches Using Language Ethnicity and English in Office of the Non-formal and Informal Education in Samoeng district Chiang Mai Province”, it was discovered that the suggestions for putting the study's findings into practice were; Those in charge of managing education should concentrate on the workload related to English-speaking abilities, teachers may initially use more of their mother tongue and Thai language while using less of the target language. However, as the students become more accustomed to the target language, the teacher may gradually increase the use of the target language up to 50%, and adjust the amount of ethnic language and Thai language to the extent of the first designated language, so that learners won't become overly reliant on the ethnic accent while speaking English, lowering their ability to speak the language accurately and clearly.

New knowledge and the effects on society and communities

The research's findings will be helpful to the educational community and those involved in education management, especially for non-formal education management, which will bring criteria and guidelines for personnel management to create a setting that is supportive of innovative teaching and learning. figuring out ways to employ the bilingual system to improve the educational, child, and young quality in far-off places (based on ethnic language). In the past, educational institutions had a tough time increasing the educational bar, especially in remote locations where several ethnic groups cohabit. The communication languages used by children and teenagers in the area have a detrimental effect on their quality of life, which in turn causes low academic achievement and a lack of interest in school, which in turn causes a variety of problems. This problem is being addressed by educational institutions working together to deliver innovative bilingual or multilingual learning, often known as bilingual (ethnic language-based) learning. In addition to being relevant and consistent with the environment of each topic, a more diverse paradigm for teaching and learning has been developed.

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Development of Competency-Based Learning Management Training Curriculum to Enhance Teachers' Competency

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Abstract

The goals of this study were to: (1) create and evaluate a competency-based learning management training curriculum to improve teachers' competencies; (2) compare teachers' competencies before and after the training curriculum was implemented; and (3) investigate trainees' satisfaction with the competency-based learning management training curriculum to improve teachers' competencies. The following three research and development phases were used in conducting the study: to improve instructors' capabilities, the first step is to establish and evaluate the training program for learning management. The study produced a document that includes training programs that last a total of 24 hours for the learning management training curriculum. Five specialists were given the plans to assess the suitability of the course manual and curriculum for learning management. A guidebook for learning management training was created via study. The study tools comprised a competency-based learning management cognition test ability assessment form for learning management plan creation, a competency-based learning management training curriculum evaluation form, and curriculum manual evaluation form. Then in step two, the training program was put into practice with a sample of 30 participants that was chosen on purpose. This study used a one-group pretest-posttest design, and the data were analyzed using the means, standard deviations, and reliable t-tests, and the third step examined how satisfied trainees were with the execution of the program.

The research results found that: 1. the created training curriculum emphasizes group learning and employs a role-played teaching methodology with 8 components, including the curriculum's background, guiding principles, objectives, content, and structure, as well as training activities, training sessions, instructional materials, assessment, and evaluation. The designed training curriculum scored highly for appropriateness and scored similarly for the curriculum manual in the findings of the curriculum quality evaluation, 2. according to the results of the training curriculum's implementation, (1) teachers' competency-based learning management design knowledge and understanding were significantly higher than before at the .05 level, and (2) teachers' competency-based learning management design ability and evaluation measures were at 70%, which was higher than the stated criteria and significantly higher than before training at the .05 level, and 3. The degree of teachers' satisfaction with the

competence-based learning management training curriculum to improve instructors' competency was 0.5.

Keywords: Curriculum development, Competency-based learning management, Training curriculum

Introduction

The Ministry of Education (2017) adopted the Educational Development Strategic Plan (2019–2022) as part of its educational management strategy. The plan has an urgent agenda that needs to move forward and emphasizes competency-based curricula where the students' abilities are the most important factor. It also trains students in real-world situations so they can develop the skills necessary to be more competitive and adaptable in today's VUCA (volatile, uncertain, complex, ambiguous) environment, to assist students develop their skills in a dynamic, unpredictable, complex, and ambiguous world, Thailand must change the way that high-quality education is delivered. Competence is the result of a person's ability to use information to handle everyday tasks such as managing their jobs, personal life, and problem-solving situations, competency is characterized as a combination of knowledge, abilities, attitudes, and attributes. The capacity to acquire competency successfully is a product of the learner's ability to benefit from proactive learning management and evaluation. Competence is therefore essential for survival, and by employing it to accomplish personal goals, one may act in a way that is advantageous to society. (Rattanapoka, 2008)

In order for teaching and learning at educational institutions to be effective in line with the Ministry of Education (2017) objectives and to serve the needs of students and schools, it is also essential to train pre-service teachers, before finishing their student teaching experiences, students can learn about and grasp competency-based learning management connected with work (Reungsri & Dhedchawanagon, 2021). With this information, they may efficiently manage teaching and learning to satisfy the requirements of students and provide beneficial results for educational institutions. The researcher next went to the area to take part in a learning exchange session with educators in order to jointly explore the issue. It was revealed that small schools in Phetchabun Province had challenges with a lack of teachers, teachers whose specialty did not match the students', student dropouts, and a lack of technology to enhance teaching and learning. In order to address these difficulties, guidelines have been developed under the premise of working to lay a foundation for improving learner quality and teaching students to be good, talented, and joyful. In order to develop information and ideas, as well as skills in line with potential, aptitude, and understanding, the emphasis that must be placed on the learners is to change their roles from those who only absorb knowledge to those who are eager to practice and seek knowledge. The major goals are to: (1) promote the development of future abilities in students by addressing the problem of student dropout brought on by inadequate learning styles, (2) develop opportunities, start a job, earn money while kids are in school, and once students graduate, they may utilize the knowledge gained to

start a profession to relieve the financial burden on their family, (3) create a network between the community and the school to enable more efficient collaboration, parents, experts, and community philosophers may achieve this by imparting their knowledge to kids and motivating them to become community innovators, (4) O-NET learning accomplishment levels increase as reading and writing skills improve, (5) using a learning management system that emphasizes students' abilities that grow in line with future competencies might aid in reducing educational inequities, (6) laying the groundwork for teacher development with an emphasis on the need for the teacher to change into a facilitator and promote successful learning in order to meet teaching standards, to assist pupils acquire skills for the twenty-first century, be a great learning role model by discussing ideas, knowledge, and concerns with others and by promoting, supervising, and organizing learning exchanges, and (7) by managing competency-based learning, combining it with work to produce measurable outcomes, and serving as a good example for raising educational standards in order to achieve stated objectives, increase the effectiveness of the school.

It is essential that teachers are well-prepared in order to properly administer the curriculum and assist students in achieving their objectives in line with national education standards that promote autonomous learning, teamwork, and the growth of strong citizens. Training teachers and other members of the teaching profession in competency-promoting learning will take time, though. As a result, there's a potential that the transition from a curriculum based on standards to one based on competencies would result in worse educational quality. (The Secretariat of the Education Council, 2019) Due to these problems, the researcher created a competency-based learning management training program to help teachers become more competent and provide instructors the tools they need to manage competency-based learning successfully.

Objective

1. To develop and assess the efficacy of a competency-based learning management training program at the elementary school level.
2. To try out the competency-based learning management training curriculum at the basic education level, by the researcher comparison of before and after training competency-based learning management knowledge and comprehension at the elementary school level, and comparison of competency-based learning management skills at the elementary education level following training using the 70% threshold.
3. To conduct research on the students' level of satisfaction with the competency-based learning management course.

Conceptual Framework

The capacity to apply one's knowledge, skills, attitudes, and qualities to one's job or problem-solving in order to reach a particular degree of success is known as competence. Competency is represented via real-world behavior that can be tested and evaluated. Competency is therefore the culmination of knowledge, abilities, attitudes, and other traits that contribute to an individual's or a group's success at work, but every person also possesses

potential, or latent abilities that are present in them but untapped in terms of their potential in various domains, but may not surface until stimulation or learning pertinent to the underlying condition is obtained. If this is the case, continued promotion will result in the person's greater talents in that subject when the potential does emerge. Hence, gaining information and receiving training in procedures or skills that include the development of those desired attributes can help someone become more capable.

Consequently, the purpose of this research is to investigate the creation of a competence-based learning management training curriculum to improve instructors' competency, the conceptual framework of the research may be defined as follows:

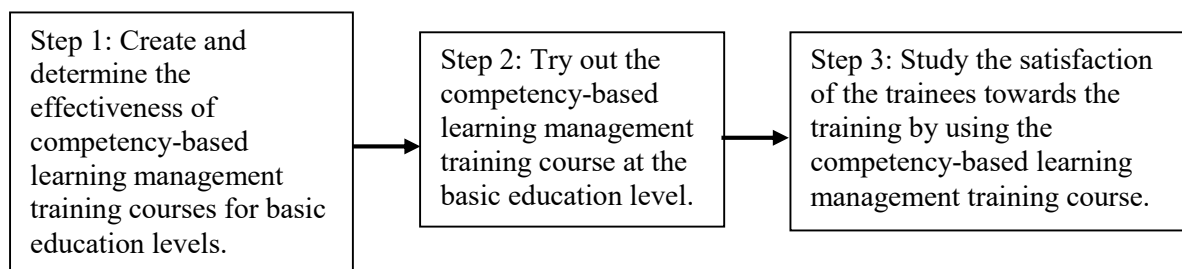


Figure 1 The Conceptual Framework of the Research

Methodology

Research Methodology

The following procedures and details were used by the researcher to carry out the study in accordance with the research and development method;

Step 1: Create a competency-based learning management training course and evaluate its efficacy.

Research tools

Including as a research tool; (1) learning management programs with a focus on competencies, (2) a guide for implementing competency-based learning management training programs, and (3) a suitable evaluation form for a competency-based learning management training course, as well as an instruction manual for utilizing a competency-based learning management training course.

Steps in developing research tools

1. Training course manual for competency-based learning management.

1.1 Curriculum history refers to the background in the training based on the created curriculum.

1.2 With the help of important educational ideas in curriculum creation, curricular principles determine the scope of the curriculum.

1.3 The following are the curriculum's declared goals, according to the researcher: (1) knowledge is familiarity with and comprehension of competency-based learning management, and (2) performance-based learning management is designed with skills in mind.

1.4 The curriculum is arranged into six training programs that cover knowledge, skills, and attitudes, and the structure of the curriculum considers how effectively the guiding principles of the curriculum relate to its content, which consists of 6 units as follows; unit 1: awareness and knowledge of competency-based learning management, unit 2: creating learning management strategies that are competency-based, unit 3: basic level competency-based learning management, unit 4: administration of competency-based education in secondary education, unit 5: performance review and measurement, and unit 6: monitoring of follow-up and competency-based learning administration.

1.5 The researcher selected training activities in order to align the training activities to the goals and content of the curriculum using the theoretical concepts looked at. By the use of reasonable teaching methods and role-playing games, this allowed pupils to experience cooperative learning. Make sure that each training plan's activities are in keeping with the objectives and content of the curriculum by developing student-centered activities that emphasize practical skills, and the teaching process is divided into 3 steps as follows: step 1 presentation, step 2 practice, and step 3 production.

1.6 The researcher determined how long the training took overall based on the session's content, which covered the participants' foundations. The amount of time required to finish the training's activities determines how long the course will be.

1.7 Instructional media, consisting of (1) guide for learners doing competency-based learning management training courses, (2) a manual for trainers on competency-based learning management training, and (3) lecture slides with Power Point.

1.8 The researcher offers techniques for measuring and assessing the usage of tests to gauge knowledge and comprehension of competency-based learning management, as well as an evaluation form for coming up with learning-based activities. The competency-based learning management training program will be assessed in terms of both cognitive and skill-related factors.

2. Training course manual for competency-based learning management, consisting of; (1) the course manual for training educators contains information on training objectives, trainer instructions, course structure, training activities, training length, training materials, teaching, measuring, and evaluating, six training learning units, and six plans, (2) the trainee's course manual, which contains the trainee's course instructions, knowledge sheet, worksheet, and activity sheet, acts as the trainee's manual of action.

3. Included in the manual for the competency-based learning management training course; (1) identify the topics to be evaluated based on the information gathered, research the specifics of the training course, how to develop the questionnaire, and compose the questionnaire by taking the curriculum into consideration, (2) study the creation and formulation of evaluations, (3) for convenience of use in assessing the caliber of the training course, a curriculum usage manual and a form for evaluating the suitability of the curriculum were produced, the researcher determines the training curriculum's components in this phase,

which is followed by part 1 that covers the analysis of the curriculum's appropriateness using a five-level grading system, part 2 contains further comments and suggestions, (4) the researcher used a five-level rating scale to evaluate the adequacy of the training course and amended the evaluation form in response to the recommendations of five experts after taking the created form to experts for review. Data were examined using means (\bar{X}) and standard deviations (S.D.) in comparison to the requirements, where the mean had to be at least 3.50 and not more than 1.00, and the data's mean value was 4.65, with a standard deviation of 0.85, (5) take the evaluation form, and based on expert counsel, make the appropriate adjustments, and (6) provide the experimenters a comprehensive course outline and syllabus.

Data Collection

1. In order to verify the quality of the research instruments for assessing the generated curriculum outline and the course manual, the researcher writes to specialists. The researcher also provides a questionnaire to assess the appropriateness of the training course, together with the prepared curriculum plan and course manual.

2. The questionnaire was resubmitted in order to evaluate the data, and means (\bar{X}) and standard deviation were used together with the curriculum handbook and the suitability of the curriculum to accomplish so (S.D.).

3. Use the knowledge gained to make the curriculum and the course manual precise and thorough, resulting in a comprehensive book for experimentation.

Step 2: Try out training programs for competency-based learning management.

The experiment's instrument

The instruments of the experiment consisted of; (1) examples of research tools include instructional materials and course manuals, and (2) the tools used for data collection were the competency-based learning management cognition test and the competency-based learning management activity design evaluation questionnaire.

Process and standards of development for the competence-based learning management competency assessment questionnaire and knowledge and comprehension exam.

1. Cognitive assessments for competency-based learning management were carried out as follows;

1.1 Take the cognitive test, which consists of 30 questions with four possible answers for each. The correct solution earns 1 point, while the erroneous response earns 0 points.

1.2 Find the IOC (Index of Item of Objective Congruence), and consider choosing items that have a value from 0.50 or more, which is equal to 0.67-1.00, on the cognitive quiz that was designed to be presented to experts to verify the quality by checking the validity. Bring it to 5 experts to confirm the validity of the issues to be assessed, and the suitability of the content and language used.

1.3 Take the cognitive quiz to determine the level of difficulty and discriminant power by conducting an experiment with 30 non-sample trainees using a 30-item exam. Where the researcher decides to utilize purposive sampling because this method of choosing a sample from the study population is based on the idea of the researcher's own consideration and is

carried out in accordance with the researcher's aims. As a result, the researcher must possess extensive expertise and understanding in the field. Using a difficulty criterion between .20-.80, which has a value between 0.26-0.67, and the discrete power value greater than or equal to .20, which is between 0.28-0.64, a 20-item cognitive test.

1.4 Using the requirements for confidence more than 0.70 and the Kuder & Richardson (1937) KR-20 formula, get the confidence value for the entire article (reliability), which is equal to 0.89.

1.5 Provide a comprehensive test to evaluate students' proficiency in competency-based learning management.

2. Ability assessment form for competency-based learning management the following has been done;

2.1 Determine the purpose and structure of the competency-based learning management competency assessment.

2.2 An analysis of literature and resources related to the assessment of competency-based learning management competencies, including a look at assessment objectives, assessment components, assessment authoring strategies, and assessment scoring guidelines.

2.3 Make an assessment framework that takes into consideration media, learning activities, resources for and equipment used in learning, instructional planning, and assessment.

2.4 A competency-based learning management system evaluation may be made by categorizing the content that students practice into 4 levels and include 15 items on a form of assessment that is structured like a rubric.

2.5 Consider choosing items with a value from 0.50 or higher, which is equal to 0.67-1.00, and submit the created competency-based learning management design competency assessment questionnaire to five experts for quality assurance to check its validity, the appropriateness of the content, and the language used, the validity of the problems to be evaluated will be gauged by the IOC (Index of Item of Objective Congruence).

2.6 Based on input from experts, enhance and amend the competency-based learning management assessment form.

2.7 Fill out the competence-based learning management competency evaluation questionnaire to determine the overall paper's confidence level. With the threshold of confidence larger than 0.70, which is equivalent to 0.88, reliability is calculated using the Cronbach's Alpha coefficient formula (Thayrueakham, 2008).

Data Collection

The procedure for gathering the data for this collection is as follows;

1. The researcher conducted an experimental design experiment by selecting a preliminary pre-experimental design and a one group pretest-posttest design. Teachers from Phrom Phiram Wittaya School, Ban Plukrad School, Chumchon 12 Tatanphrachasarit School, Ban Kaeng Sarit Sena Uppatham School, Banpasak School (Thosaphon Anusorn), and Ban Phu Khat Ruam were chosen as the purposive sampling samples. 30 kids are enrolled in Thai School in the province of Phitsanulok.

2. The pre-experimental design, which is a one-group pretest-posttest design, was chosen by the researcher to perform an experimental design experiment. Teachers from Phrom

Phiram Wittaya School, Ban Plukrad School, Chumchon 12 Tatanphrachasarit School, Ban Kaeng Sarit Sena Uppatham School, Banpasak School (Thosaphon Anusorn), and Ban Phu Khat Ruam were chosen as the purposive samples, there are 30 pupils enrolled in Thai School in Phitsanulok Province.

Preparation before Training

It is possible to become ready for training by; (1) the researcher selects a school for the curriculum trial and coordinates the training date, time, and place with the school, (2) the day before the training practice, the documents and instructional materials should be ready, and (3) arrange a one-day meeting to outline the project and training timetable.

Training Operations

1. A discussion of the curriculum and program for teacher training is followed by a cognitive evaluation of competency-based learning management.

2. Provide instruction for the present teachers in line with the training unit, the researcher set up a room, and after instructing every unit, they collated the training's results and other suggestions.

3. Competency-based learning management knowledge, comprehension, and the capacity to create such management are all tested.

4. The variances in training capacity for competency-based learning management were compared in the ways listed below; (1) knowledge and understanding of teacher competency-based learning management before to and following training, and (2) following training, performance of the competency-based learning management system is assessed and compared to the benchmark of 70%.

Data Analysis

1. Results from the cognitive competence-based learning management exam were assessed by means and standard deviation and statistically significant at the.05 level using a dependent t-test and a software program.

2. Finding the mean and the standard deviation for the performance assessment data for the competency-based learning management design and comparing the findings with the assessment results for the competency-based learning management design following training t-test on one sample, with the given conditions, and calculated using a statistical software program.

While a t-test is used to test one or more sample groups, it is also utilized to test the means when picking a hypothesis statistic to test the means. The basic terms of the t-test were as follows: (1) the sample was drawn at random, (2) the distribution of the population was normal, (3) the data were on the Interval scale or higher, and (4) the population variance is unknown.

Step 3: Research the students' satisfaction with the competency-based learning management training program.

Research Tools

The trainees' satisfaction survey on the competency-based learning management course.

Steps in developing research tools

1. Research the principles of curriculum assessment, read articles, books, and studies relevant to the establishment of training curricula, and categorize the framework for assessment into three groups.

1.1 The trainees' satisfaction with the curriculum, the curriculum handbook, the training materials, duration, and location procedure is the input component for the assessment's scope, including the satisfaction of the trainees in terms of training planning, conducting training, using instructional media, measuring and evaluating results, outputs include the creation of a 5-level rating scale, the use of information learned through training, and the pleasure of the receivers' training.

1.2 Determine the structure and purpose of the tool.

1.3 As a tool for data collection, a form that evaluates learner satisfaction with the competency-based learning management training program in terms of input, process, and output was created; the scale is about a 5-level Likert scale.

2. Take the generated assessment form and show it to 5 experts to check its validity, quality, suitability, and validity of the issues to be assessed, as well as the content and language used, to find the IOC (Index of Item of Objective Congruence), consider choosing items with a value of 0.50 or more, which is equal to 0.67-1.00.

3. In accordance with recommendations from experts, enhance and update the trainees' satisfaction survey for the competency-based learning management training program.

4. The satisfaction assessment form of the trainees towards the competency-based learning management training program was used to find the confidence value by using the alpha coefficient formula of Cronbach (Sombat Thayrueakham, 2008), using the criterion of confidence greater than 0.70 or more, which is equal to 0.87.

5. Create a questionnaire to collect data on the satisfaction levels of the learners with the whole competency-based learning management training program.

Data Collection

After the end of the experiment, the researcher distributed a satisfaction questionnaire to assess the trainees' satisfaction with the competency-based learning management training course to answer the satisfaction questionnaire, and analyzed the data by means and values, standard deviation, and compare it with a given criterion.

Data Analysis

1. The information obtained from the satisfaction assessment form of the trainees towards the competency-based learning management training courses in all 3 aspects. Finding the mean and standard deviation allowed for an analysis of the input component, the process aspect, and the output aspect.

2. Data were analyzed using content analysis, grouping, and frequency determination to provide general recommendations and comments about the training program, an acceptable standard is to have an average of 3.50 or above.

Results

The research results are as follows competency-based learning management training program development and effectiveness, which includes; the process of creating a training course includes 8 components: the course background, the course principles, the course aims, the course structure, the activities, the training, the length of the training, the teaching materials, measurement, and evaluation, the essence of each of these components is as follows the competency-based learning management training course background of the curriculum, the development of the competency-based learning management training course has the following principles and reasons; (1) it is a curriculum that responds to the needs of society and the position in which instructors find themselves today, with the intention of developing a very competency-based learning management system, (2) the development of learning management systems that take into account teachers' abilities to plan effective activities, and (3) it is a competency-based learning management training course designed to improve teachers' competencies across the board, including knowledge, understanding of skills, and attitude.

Course Principles

However, the principles of the course will consist of; (1) it is a training program that emphasizes role-playing as a teaching tool and cooperative learning theory, (2) it is a course that stresses both learning and practice, with a focus on the actual practice process.

Aim of the Course

When referring to the aims of the course, they include; (1) to educate learners about and help them understand competency-based learning management, (2) in order for the students to build a learning management system based on competencies, (3) to foster in learners a positive outlook toward performance-based learning management activities.

Course Structure

Is the structure of the curriculum taking into account the suitability of the curriculum principles, for the content of the curriculum prepared as a total of 6 training learning units, and a total of 6 lesson plans covering knowledge, skills and attitudes, as mentioned above in clause 1.4.

Training Activities

The training emphasizes practical training utilizing the following approaches: cooperative learning and teaching methods employing role playing with two ideas as a basis, and practical. The training is student-centered. Setting the teaching process into three steps—presentation, practice, and production—allows for the organization of student-centered activities that concentrate on the practice process as well as activities in each training plan that concentrate on the curriculum's objectives and content.

Training Period

By scheduling training in the Educational Innovation Room, the entire course's training will last 24 hours.

Instructional media

Instructional media, consisting of (1) guide for learners doing competency-based learning management training courses, (2) a manual for trainers on competency-based learning management training, and (3) lecture slides with Power Point.

Evaluation and Measurement

The researcher used measurements and evaluations, as follows; (1) prior to and following the training, students must pass a knowledge exam that gauges their comprehension of competency-based learning management by receiving at least 70% of the possible points, (2) the post-training competency of the learners, with a minimum score of 70% required, will be used to evaluate the learning management system's performance.

Summarize the results of the research

The researcher can conclude as follows;

1. It was discovered that five experts agreed that the overall competency-based learning management training courses were acceptable at a high level after evaluating the efficacy of training courses, their applicability, and course manuals. The overall performance-based learning management training curriculum handbook was adequate at a high level ($\bar{X} = 4.32$, S.D. = 0.13), and it scored well ($\bar{X} = 4.14$, S.D. = 0.15). The content adaptation to be timely, the training activities should be cut out for some units, to meet the required time, the duration must be adapted to the content of the training, and the media used in the training finds that is appropriate. The findings of the content appropriateness audit, the learning management training's content competency-based training activities, its duration, and its instructional resources.

2. The effectiveness of competency-based learning management training programs was evaluated with 30 teachers in the province of Phitsanulok target schools, the findings revealed; (1) participants in the training course significantly improved their knowledge and comprehension of competency-based learning management after training compared to before training at the .05 level, and (2) the competency-based learning management training program's participants were able to provide competency-based learning management that was statistically significant at the .05 level and surpassed the standards after training.

3. Results of a study of learners' satisfaction in the learning management training course showed that learners' overall satisfaction was at a high level ($\bar{X} = 4.58$, S.D. = 0.46), with satisfaction on the input factor process and productivity, respectively. In this study, learners' perceptions of a competency-based learning management training course were examined.

Discussions

From the research results for the development of a competency-based learning management training curriculum, the researchers discussed the interesting results as follows;

1. The researcher developed a curriculum for training courses that includes background knowledge, guiding principles, objectives, a framework, training activities, training duration, instructional materials, measurement, and assessment. This is in line with Buasri (1999) assertion that a training program consists of seven elements: principles and justifications; competencies to be developed; program objectives; content; activities and duration; media used in training; measuring and evaluating; and preparation of a course manual and presentation of it to five experts for review of the training course's suitability, the overall competency-based learning management training course manual is appropriate at a high level ($\bar{X} = 4.14$, S.D. = 0.15), and the overall is appropriate at a high level ($\bar{X} = 4.32$, S.D. = 0.13). Additionally, the researcher has looked into and fixed the training course's flaws. The outcomes of the training course development process, which includes training course development, training course implementation, evaluation of the effectiveness of the training, and improvements prior to implementation, are the results of the training course evaluation, by letting experts check suitability, where all assessment results are at a high level of suitability. The development of training curricula involves five steps, according to Thareekate et al. (2016) research: the study and analysis of fundamental data, the development of the curricula, the confirmation of their effectiveness, the implementation of the curricula, monitoring, evaluation, and course improvement. The researcher's curriculum development process follows the curriculum development process, which begins by developing a training curriculum suitable for requirements as well as the suitability of the expert course, and the expert course has been revised and put to trial. As a result, the researcher's curriculum can be effectively tested based on the results of the appropriateness assessment.

2. Training course trial the training curriculum trial was used to bring the revised curriculum to the sample group, namely teachers at Phrom Phiram Wittaya School, Ban Plukrad school, Chumchon 12 Tatanphrachasarit School, Ban Kaeng Sarit Sena Uppatham School, Banpasak School (Thosaphon Anusorn), and Ban Phu Khat Ruam. Thai School, in Phitsanulok Province, total of 30 students. Before training, attitudes toward competency-based learning activities were evaluated, and training was carried out in accordance with the curriculum's two stages section, these tests were conducted as part of the curriculum trial to gauge participants' competency-based learning management knowledge and understanding. Including the first step is preparation and training, and the second step Conducting and post-training tests were performed to measure cognition and attitude, and assessed competency-based learning management design capabilities. After three days of training, it was discovered that the trainees had greater knowledge and comprehension than they had previously, as well as greater competency-based learning management design skills than the required ones. The results of the curriculum trials that should be discussed are as follows;

2.1 According to a comparison of teachers' knowledge and understanding of competency-based learning management before and after training, it was found that after training, instructors had a much greater level of knowledge and understanding (0.05 level). This is so that the competency-based learning management training program, which was developed using a trainee-centered approach to training and the content of a 6-unit curriculum, can satisfy instructors' needs. The researcher used this information to choose the training materials for various units. Thus, it can be argued that the developed curriculum is in line with the core knowledge that instructors possess and may help in resolving the issue of constructing learning activities by focusing on and carrying out activities in comprehensive training in its totality. The activities that trainees complete independently, resulting in effective learning, are the main reason teachers have a better understanding of the design of learning activities, and the course manual that the trainees are provided is a document with complete details that can be studied and reviewed on their own.

2.2 It was determined from the evaluation of competency-based learning activity design competency that the evaluation of competency-based learning management capacity after training was higher than the threshold of 70%, statistically significant at the level .05. Since the training curriculum was developed and made available for 24 hours of training, more information has been learned from the training, and teachers now have greater confidence in the learning management system's design. Also, the training exercises involve working in small groups and pairs while utilizing cooperative learning and role-playing teaching methods. All of these skills the capacity to design competency-based learning management activities, get to know one another in the group, and gladly carry out the responsibilities assigned to them are promoted. According to Khammanee (2012), learning is frequently designed so that students can put what they have learned to use right away. This promotes self-development and lifelong learning, and learner-centeredness causes students to become more aware of their surroundings, which leads to effective learning.

3. The satisfaction of the learners with their training was examined using the competency-based learning management training program, the findings indicated that they were quite happy with the curriculum, as well as with the inputs and processes, and outputs.

3.1 Aspects of the input: It was found that the trainees were satisfied with the course objectives, content, arrangement of the material, course manual, media, expertise of the training provider, duration, and location. The training course manual used a variety of uses, including activities, practice exercises, and Power Point lectures, so it was determined that the three areas where the satisfaction study's findings were most appropriate were the content organization, training course manual, and training venue suitability. The training was therefore easier to understand as a result. Also, the data was appropriately structured, and the training environment was appropriate, indicating that the training program used efficient performance training.

3.2 It was discovered during the training process that teachers were extremely satisfied with the overall standard; there was a step-by-step plan for conducting practical training; the training was conducted appropriately for the trainees; and there were participate in activities during training, which assessed all three aspects of the training course.

3.3 Regarding their overall productivity, teachers were very happy with their understanding of all six learning plans, their capacity to design efficient performance-based learning management activities, their ability to put what they had learned into practice in their daily lives and at work, and their ability to pass on their knowledge to others and advance it in the future.

Conclusion and suggestions

Suggestions for implementing the training course

1. Before implementing the curriculum, instructors should have a firm grasp of the rules and procedures for conducting training in line with competency-based learning management training courses and instruction manuals. This will enable them to carry out duties in line with training plans, instructional materials, measurement, and assessment, and it will guarantee that all students have a shared knowledge of their responsibilities and are motivated to complete tasks throughout the course.

2. By talking, asking questions, and allotting ample time for each activity, trainers should provide teachers the flexibility to fully demonstrate their cognitive abilities.

3. In order to make the training effective and advantageous for the teachers, trainers should adapt the execution of the curriculum to the demands of the instructors.

Suggestions for further research

1. To increase the skills of its instructors, every school should develop a competency-based learning management training program.

2. The trial of a competence-based learning management system should last longer to enhance instructor competency.

3. Competency-based learning management training should be designed to enhance the skills of teachers in all subject areas.

New knowledge and the effects on society and communities

Findings from the research contribute to the enhancement of inquiry skills, critical thinking and critical thinking, reasoning, creativity, learning, communication, cooperation, working as a team, leadership, entrepreneurship, problem solving, living with others and multitasking skills, these skills are necessary for teaching professional experience and future careers. Due to the fact that teachers interact with the community, society, and parents of children on a daily basis, they must possess a full set of competencies. Competencies are sets of observable qualities and abilities that make it possible to do a job and constantly increase its effectiveness. As a result, successful performance in individual tasks requires a collection of knowledge, abilities, skills, experience, and behaviors. These competencies may be assessed and trained to improve.

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Civic Life in the Digital Space of Pre-Service Teachers

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Abstract

This research investigates the profile and perceptions of respondents towards widely accessible social media platforms to identify key considerations in transforming online engagement into actual civic action. Quantitative in design, the survey of the descriptive method of research is used adopting the developed questions for the study of the United Nations Development Programme on young activists in 2021 to assess the digital engagement of 118 pre-service teachers randomly selected through the multistage sampling method. Utilizing descriptive statistics, social media platforms providing greater opportunities for self-expression such as Facebook and Tiktok are found frequently used for creating and sharing content related to education, and health. Respondents concurred on widespread disinformation online and the complementary nature of civic engagement. Despite the manifested lack of trust and reservations due to the risk of data surveillance and breach, the respondents consider social media platforms as enabling venues for civic engagement. Corresponding policies and programs that institute gender-inclusive, safe, and participatory venues in both digital and traditional forms are necessary means for supporting the youth as key players in nation-building.

Keywords: Education, Sustainable development, Social media platform,
Digital civic engagement, Digital literacy

Introduction

Cognizant of the role of the youth in nation-building, universities worldwide are into advancing the civic mission of education. In the Philippines, higher education institutions are mandated by the Republic Act No. 9163 also known as the “National Service Training Program (NSTP)” to promote civic consciousness and enhance youth involvement in public and civic affairs. Whilst most studies concluded the effective implementation of civic education under the program, the challenge posed by the findings of Custodio et al. (2016) and Garingan (2021) in their research on sustaining commitment for civic participation of students beyond NSTP course completion and graduation gave impetus to this research.

Many studies revealed an increasing trend of civic disengagement among Filipino students after NSTP completion. The study by Garcia & Rizal (2017), found that only 30% of the respondents continued to participate in community service activities after completing the NSTP program. Similarly, Gavina & Miano (2019) found that only 25% of the respondents continued to engage in civic activities after the NSTP course completion. As most studies have revealed NSTP’s success in fostering students’ civic engagement during the program, the post-program participation of students was found to be relatively low in the study by Pangilinan & Loquias (2021). Several reasons were provided in explaining the declining trend in the civic engagement of students after completing the NSTP course. In 2016, Custodio cited limited access to information and resources as one of the barriers to civic engagement and highlighted the role of technology in providing opportunities for students to participate fully in civic life. Emphasized the absence of follow-up activities and support systems from stakeholders as a demotivating factor for students while Garingan (2021) pinpointed the limited opportunities for meaningful participation as barriers to student civic engagement. Confronted with this phenomenon of disengagement, finding ways and means to better support and sustain students’ civic engagement beyond civic education completion is considered a research gap this research aims to focus on.

As technology becomes intertwined with people’s lives, an evident shift in the way people engage civically has changed. In the study by Vromen et al. (2015), young people in Australia are found to be turning to digital media in engaging in civic and political affairs. Comparable to this, Kahne & Bowyer (2017) conducted a study involving youth in the United States. As found, they primarily use digital media in expressing their views on many socio-political issues affecting the country. In the Philippines, more than half of Filipino youth are accessing social media platforms and engaging in politics through their smartphones according to the Social Weather Stations. The increasing number of internet users who are actively engaging civically in the digital realm only proves the potential of digital media as a tool for promoting civic engagement among the youth sector.

Premised on the potential of digital technology in empowering and mobilizing the youth for civic engagement and social activism, the United Nations Development Programme (UNDP) conducted a study in 2021 to explore the digital engagement of young activists in Europe and Central Asia. One significant finding of the study revealed that young activists consider the digital realm as positively enabling them for civic engagement. Similarly, this research aims to study the ways pre-service teachers use digital tools and platforms to participate in civic activities. By studying how this sector engages digitally, stakeholders may gain a better understanding of how students engage with issues that matter to them, and identify key considerations for leveraging digital technology as a tool to facilitate, support, and sustain students’ engagement in civic affairs.

Specifically, this research focused on the following objectives; -

1. Profile the respondents by gender as online users.
2. Ascertain the perceptions of the respondents by gender towards the digital realm as a tool for civic engagement.
3. Assess the perceived benefits and barriers to civic participation online of respondents.
4. Determine significant differences by gender according to; -
 - 4.1 perceptions towards the digital realm as a tool for civic engagement
 - 4.2 perceived benefits and barriers to civic participation online.

Methodology

Conceived to ascertain the profile of respondents as online users and their perceptions of the digital space as to opportunities and barriers in civic engagement, this investigation utilized the descriptive method of research. Quantitative in nature, the researcher sought permission from the Dean of the College of Teacher Education of which the researcher is a faculty of many years to conduct the study. Administration of the survey questionnaire to the target representative sample of students from the Bachelor of Secondary Education (BSED) program in the College of Teacher Education of the university proceeded thereafter. During administration, student participants are ensured that all information in the questionnaire is exclusively for the study only and would be handled with the utmost confidentiality.

For this research, the survey questionnaire used by the United Nations Development Programme (UNDP) team in their study in 2021 on the digital civic participation of youth in Europe and Central Asia was utilized. Permission for the utilization of the instrument was granted via email from the Regional Communications Specialist of UNDP. Sharing similar objectives of examining the extent to which young people engage in digital civic activities and identifying barriers and opportunities they face; this research differs in involving teacher education students specializing in Social Studies and differentiating respondents by gender.

Research Sample/Participants

The respondents of the study were delimited to teacher education students majoring in Social Studies enrolled during the First Semester of the Academic Year 2022-2023. Interest in the group as respondents for the study is based on the competency required of them as future educators stipulated in CHED Memorandum Order No. 75, s. 2017. Accordingly, the institution is tasked to produce graduates of the Bachelor of Secondary Education Program majoring in Social Studies who can demonstrate leadership in organizing communities and in producing empowered community student leaders as well. Understanding the civic life of these teacher education students in the digital space would give important insights into how they perceive and use online tools in civic engagement.

Adopting the multistage sampling technique, the Sample Size Calculator by Raosoft with a 95% confidence level and a 5% margin of error was used to determine the total number of respondents by gender from the total number of enrollees under the BSED program majoring in Social Studies during the period. In the second stage, the stratified proportional random sampling technique was utilized to ensure a relative balance of male and female samples by year level for the study. Through the requested enrollment list from the College Dean, the systematic sampling procedure was done by selecting every 3rd person from the list until the desired number of respondents to survey by year level was achieved.

The distribution of respondents by year level and gender are presented in Table 1.

Table 1 Distribution of Respondents by Year Level and Gender

Year Level	Male	Sample	Female	Sample
1	6	6	30	23
2	7	6	24	19
3	6	6	31	24
4	11	10	31	24
Total	30	28	116	90

Data Collection Method/Instrumentation

In profiling the respondents as online users and determining their perceptions of the digital space for civic engagement, the researcher adopted the Survey Questionnaire developed by experts and utilized by the UNDP research team in 2021 which rapidly analyzed the digital civic participation of youths in Europe and Central Asia. Whilst the study focused on the identified student activists in the region, this research involved teacher education students specializing in Social Studies and selected only the question item sets suitable for the study.

The Survey Questionnaire utilized in this research is of two (2) parts with items based on the adopted UNDP instrument which the researcher was permitted to use and was found very effective in gathering the needed data for this investigation. Part 1 is on the profile of respondents as online users. Part II consists of 30-item statements, which the subjects used to manifest their perceptions of the digital space as a tool for civic engagement. Respondents choose a scale point continuum that ranges from one to five. For interpretation, the researcher utilized the mean score ranges and verbal interpretation specified below; -

Value	Scale Ranges	Verbal Interpretation
1	1.00 – 1.80	Strongly Disagree
2	1.81 – 2.60	Disagree
3	2.61 – 3.40	Neither Agree/Nor Disagree
4	3.41 – 4.20	Agree
5	4.21 – 5.00	Strongly Agree

Data Analysis Method

Empirical in nature, this research study attempted to profile the respondents as online users and assess their perceptions of the digital space as a tool for civic engagement. The research utilized IBM Statistical Package for Social Sciences (SPSS) for the use of descriptive statistical measures and tests such as mean, standard deviation, and Mann-Whitney U Test of 0.050 significance level for the analysis of the quantitative data collected.

Results

This portion covers the discussion of the findings patterned in a manner that coincides with the organization of the objectives posed in the study.

1. Profile of Respondents by Gender as Online Users

Profiling the civic life of respondents in the digital space is a growing area of research interest today. With the rise of social media and other digital forms, understanding how students use these online spaces could provide important insights into the role of technology in shaping democratic processes and citizenship. Figure 1 presents the profile of respondents according to their most frequently used social media platform.

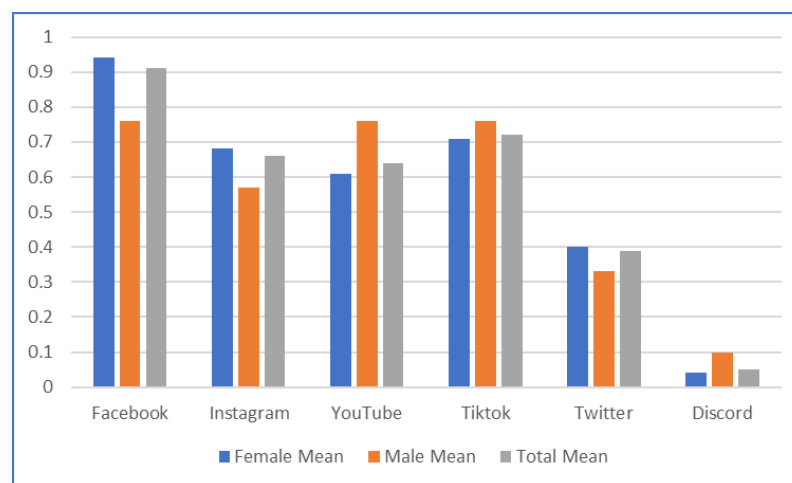


Figure 1 Most Frequently Used Social Media Platform by Gender

Social media has become intertwined with people's lives as it enables them to connect with friends, share information, and engage in various activities. As most young people look for opportunities for connectivity and self-expression, Facebook, Tiktok, and Instagram are revealed to be the most appealing platforms to respondents. This coincides with the views of Marwick & Boyd (2011) noting that people are attracted to platforms that provide the needed space for individuality and creativity. Gender differences were found with the social media pattern where females are frequently using platforms that support and maintain relationships like Facebook while males indicating a wider range of activities online are drawn to YouTube and Tiktok for entertainment and tutorial purposes. The revealed preference by gender could be attributed to the functions and features of the social media platform that the respondents consider effective in satisfying their needs. This contention is aligned with the conclusion of Hargittai & Walejko (2008) attributing gender differences in online activities to the differing motivations that while men use technology as a tool for entertainment and information search, women are more to communication and networking purposes.

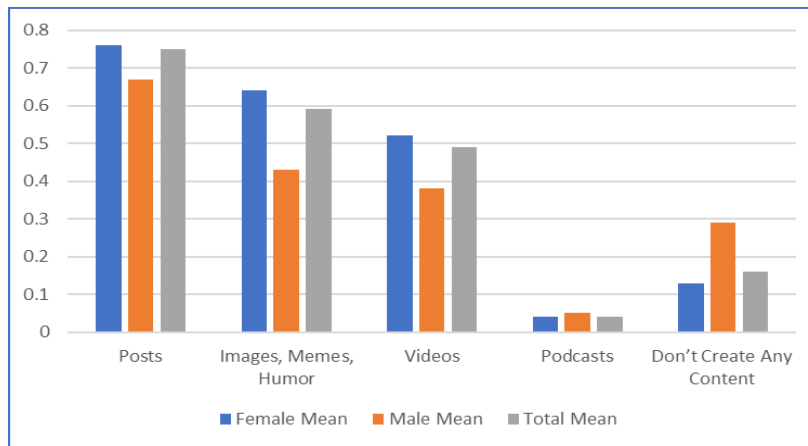


Figure 2 Types of Content Created Online

As shown in Figure 2, the respondents are more into the creation of posts and images, memes, and humor online due to the ease and speed of creating them, particularly on platforms with features supporting connectivity. As posts are short and can be quickly created and shared, they become an effective tool for communication, self-expression, and socialization. Hootsuite even found out that posts with images are 2.3 times more engaging and significantly enhance the impact of social media posts. Gender differences could be traced with female students revealing higher mean values thus more into creating posts, images, memes, humor, and videos than male respondents. This is consistent with the previous findings attributing social media usage by females for purposes of networking and self-expression. Women who are more into building and maintaining relationships are more likely to create content online (Chang et al., 2018).

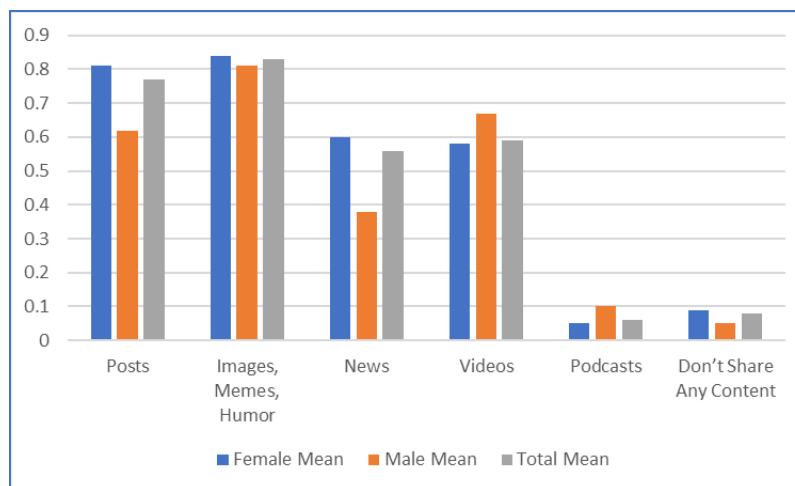


Figure 3 Types of Content Shared Online

The data disclose the types and frequency of content shared by the respondents. Studying the mean values, it can be deduced that images, memes, and humor are the most frequently shared content which could be attributed to the known traits of Filipinos for humor and positivity. Amid hardships, sharing humorous content online is a way Filipinos relate to one another which later on becomes the foundation of friendship. Supporting this, Crawford & Gressly (1991) noted that humor has been shown to facilitate social bonding as it increases positive effects on people and enhances the sense of community and group cohesion. Moreover, comparing means the female respondents are revealed to be more engaged in

sharing content than their counterparts as women by nature are known to be more expressive of their thoughts and feelings intended for keeping social networks. The resulting standard deviation revealed on the other hand variability in online activities of male respondents who use technology for entertainment and information consumption. This is in parallel to the findings by Hampton et al. (2011) explaining that women tend to be more active in sharing content as it is seen as a way to strengthen social bonds and connections.

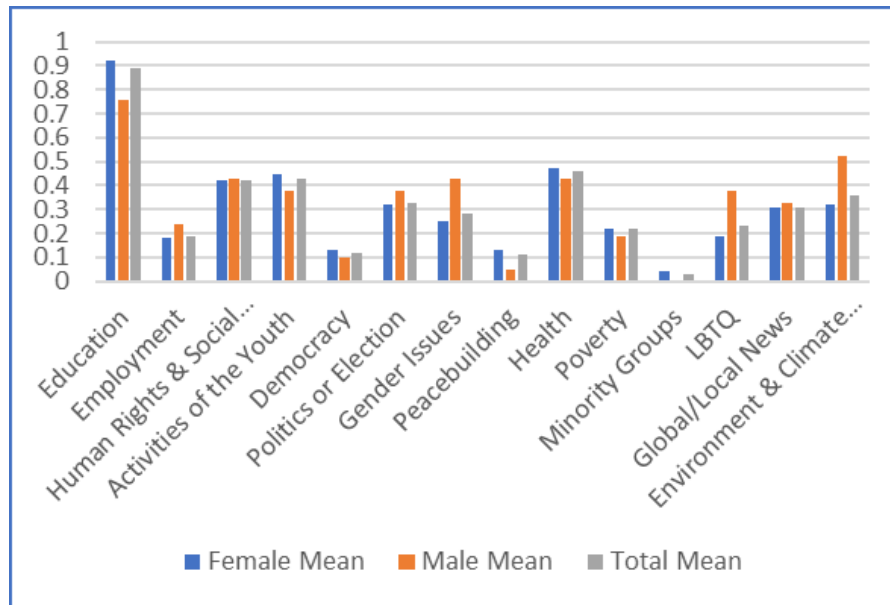


Figure 4 Socio-Political Topics Shared/Created Online

As disclosed in Figure 4, the respondents regard education and health as important topics that interest them the most. The high interest portrayed by the students in topics related to education only purports the high regard of Filipinos for education. This is consistent with the findings by the Philippine Statistics Authority (2020) revealing that education is highly valued in the country, with over 90% of Filipinos believing that education is important in achieving success in life. Succeeding this is the manifested concern of respondents with health issues which can be attributed to the heightened anxiety of everyone about the COVID-19 pandemic. The pandemic has brought everyone to the awareness of giving importance to health and effective healthcare systems in times of crisis. In terms of gender differences, the resulting value of the standard deviations reflects the more diverse preferences of males in terms of content they share or create online. This is consistent with the study of Eagly and Wood in 2012 suggesting that males tend to explore new experiences and be more competitive than females, which may be contributory to their diverse preferences in topics available online. More so, it can be surmised from the responses the difference in the respondents' outlook on life that while the males exhibited outward-looking perspectives that go beyond oneself, the females are more interested in topics that are of a personal level. Supporting this contention, Crowder-Meyer & Hall found that women are more likely to prioritize social welfare topics such as health and education compared to men who are more likely interested in issues relating to politics and national security.

2. Perceptions of Respondents by Gender towards the Digital Realm

The table below presents the perceptions of respondents by gender towards the digital realm as a tool for civic engagement.

Table 2 Perceptions Towards the Digital Realm

Items	Sex						Total		
	Female			Male			M	SD	V.I.
	M	SD	V.I.	M	SD	V.I.			
1. I feel confident using my real name/identity on social media.	3.99	0.94	Agree	3.95	1.244	Agree	3.98	1.00	Agree
2. I feel my data/privacy is protected online.	3.26	1.02	Neither Agree/ Nor Disagree	2.67	1.11	Neither Agree/ Nor Disagree	3.14	1.06	Neither Agree/ Nor Disagree
3. I feel free in expressing myself online.	3.48	0.99	Agree	3.76	0.83	Agree	3.54	0.96	Agree
4. Being active online gives me a sense of empowerment and belonging to society.	3.38	0.95	Neither Agree/ Nor Disagree	3.81	0.92	Agree	3.46	0.95	Agree
5. If I express my views on social or political issues online, they could be used against me.	3.39	0.84	Neither Agree/ Nor Disagree	3.71	0.84	Agree	3.45	0.85	Agree
6. I feel my gender impacts how others react to my civic view online.	2.96	0.86	Neither Agree/ Nor Disagree	3.10	0.83	Neither Agree/ Nor Disagree	2.99	0.85	Neither Agree/ Nor Disagree
7. The internet creates a polarization of public discourse and opinions.	3.62	0.83	Agree	3.81	0.60	Agree	3.66	0.79	Agree
8. I trust traditional media sources (TV, newspapers) more than online/social media.	3.85	1.01	Agree	4.57	0.59	Strongly Agree	3.99	0.99	Agree
9. There is a lot of disinformation and fake news on social media.	4.46	0.99	Strongly Agree	4.76	0.53	Strongly Agree	4.52	0.92	Strongly Agree
10. I am worried about hate speech, or bullying online.	4.35	0.88	Strongly Agree	4.33	0.73	Strongly Agree	4.35	0.85	Strongly Agree

As shown, the respondents strongly agreed with the prevalent disinformation and fake news on social media and the rampant hate speech and bullying online. This is consistent with findings by the Oxford Internet Institute revealing the Philippines is among the top countries with widespread disinformation. One may assume that the lack of media literacy and the highly polarized political environment in the country as primarily causing this phenomenon. While access to social media is widespread through smartphones across ages, many Filipinos still lack the necessary skills in using and navigating the internet much more to critically evaluate the information available online. In the conducted Philippine National ICT Household Survey of the Philippine Statistics Authority (2020), while 66% of Filipino households have access to the Internet, 28% lack knowledge and skills in using this digital space. The respondents agreeing on the polarization created by the internet may be rooted in the manifested political divide online most particularly at the height of the national election in 2022. Social influencers and online trolls known as the “keyboard army” have been paid to spread fake news and use hate speech in bullying opposing groups or critics of the government. The rampant use of social media as a platform for political campaigning and propaganda resulted in growing skepticism about the accuracy and reliability of news and information shared online impacting negatively public trust in government institutions, leadership, and democratic processes as a whole.

While both genders generally agree that they feel confident in using their real name/identity on social media and in expressing themselves in the digital realm, they also revealed concern about the risks of expressing themselves fully online. Gender stereotypes and the red-tagging of civic actors may be considered contributory that discourage young people from actively engaging in community affairs. This reality is explained by Boler & Davis (2018) stating the complexity governing the freedom of expression online that creates uncertainty and anxiety for individuals who want to express themselves but are also anxious about the potential risks involved.

3. Perceived Benefits and Barriers in Digital Civic Engagement by Gender

Digital technology has transformed civic engagement by providing greater opportunities for people regardless of background and location. Understanding the perceived benefits and barriers to students’ civic engagement online is essential in designing strategies to address the barriers and leveraging the benefits perceived for civic involvement.

Table 3 Perceived Benefits of Civic Participation Online

Items	Sex						Total		
	Female			Male			M	SD	V.I.
	M	SD	V.I.	M	SD	V.I.			
1. Online participation helps create well-networked, cohesive groups.	3.85	0.69	Agree	3.95	0.74	Agree	3.87	0.70	Agree
2. Online civic activity gives more freedom and autonomy to young people to respond to issues that affect them.	3.86	0.78	Agree	3.90	0.62	Agree	3.87	0.75	Agree
3. Online participation strengthens engagement within local communities.	3.67	0.83	Agree	4.00	0.63	Agree	3.74	0.80	Agree
4. Online participation strengthens engagement among different communities across borders.	3.84	0.76	Agree	4.05	0.59	Agree	3.88	0.73	Agree
5. Online civic activity gives higher visibility to important issues that should be addressed by society.	3.91	0.75	Agree	4.00	0.54	Agree	3.92	0.71	Agree
6. Online participation alone is efficient for achieving desired change in society.	3.25	0.92	Neither Agree/ Nor Disagree	3.29	1.18	Neither Agree/ Nor Disagree	3.25	0.97	Neither Agree/ Nor Disagree
7. Official decisions cannot be taken online.	3.59	1.03	Agree	3.62	1.02	Agree	3.59	1.03	Agree
8. Online communities are more efficient than traditional NGOs.	2.87	0.75	Neither Agree/ Nor Disagree	2.81	1.03	Neither Agree/ Nor Disagree	2.86	0.81	Neither Agree/ Nor Disagree
9. Online civic activity needs to be complimented with face-to-face work too.	3.92	0.95	Agree	4.14	0.57	Agree	3.96	0.89	Agree
10. Online participation is not inclusive of all young people.	3.35	0.88	Neither Agree/ Nor Disagree	3.14	1.15	Neither Agree/ Nor Disagree	3.31	0.94	Neither Agree/ Nor Disagree

In general, the genders are in accord with the importance of doing face-to-face work in addition to online civic activities acknowledging the complementary nature of online and offline engagement in making community projects successful in implementation. This is in line with the view of Zuñiga et al. (2012) emphasizing the importance of the holistic approach to civic engagement. Accordingly, all stakeholders wanting partnership with the youth sector should provide support both in traditional and digital forms to transform the personalized online engagement of students into actual civic participation. It is worth noting, however, that while the respondents concurred on the need for combined online and offline civic engagement, they manifested uncertainty concerning the inclusivity of the internet to all young people. This only proves the students' awareness of the digital divide leaving behind students

who lack access to the internet. As not all young people enjoy the civic opportunities available online, efforts are necessary to ensure that the digital realm is accessible to all. In consideration of this need, the respondents revealing mixed views on the efficiency of online communities are encouraging NGOs to provide the needed support to the marginalized group lacking access to the internet and in leveraging online platforms in reaching and engaging a wider audience for support and mobilization.

Table 4 Perceived Barriers to Civic Participation Online

Items	Sex						Total		
	Female			Male			M	SD	V.I.
	M	SD	V.I.	M	SD	V.I.			
1. Lack of access to the internet (coverage, quality, cost) or smartphone/ computer.	3.72	1.29	Agree	3.95	1.20	Agree	3.76	1.27	Agree
2. Online harassment of civic actors.	3.45	1.11	Agree	3.81	0.81	Agree	3.52	1.07	Agree
3. Difficulties in getting one's message through to a wider audience.	3.67	0.96	Agree	3.57	0.97	Agree	3.65	0.96	Agree
4. Lack of resources and funding for online civic activities.	3.56	0.87	Agree	3.62	0.74	Agree	3.58	0.85	Agree
5. Lack of confidence in the impact of civic activism.	3.60	0.87	Agree	3.48	0.81	Agree	3.58	0.86	Agree
6. Lack of interest in civic engagement in general.	3.53	0.82	Agree	3.10	0.83	Neither Agree/ Nor Disagree	3.44	0.84	Agree
7. Lack of knowledge on how to advocate and participate online.	3.48	0.97	Agree	2.86	0.96	Neither Agree/ Nor Disagree	3.36	0.99	Neither Agree/ Nor Disagree
8. Insufficient media and digital skills.	3.61	0.84	Agree	3.43	0.81	Agree	3.58	0.83	Agree
9. Internet restrictions (some platforms/websites are not available).	3.79	0.92	Agree	3.67	0.73	Agree	3.76	0.89	Agree
10. Data surveillance and risks to data privacy.	3.82	0.96	Agree	3.86	1.06	Agree	3.83	0.98	Agree

As disclosed in the table, the respondents' manifested their greatest concern on data surveillance and risks to data privacy in the digital realm as barriers affecting civic engagement in addition to issues related to internet access and restrictions. Though this may not be directly connected, this concern can be linked among other things to the prevalence of red-tagging in which the government or other organizations use data surveillance to monitor and track civic actors who are actively involved in socio-political issues online posing a risk to their privacy and safety. This has serious implications for the interest and confidence of young people in engaging civically online. The respondents may have manifested a lack of interest in participating in digital civic engagement as online activism often leads to harassment and threats. Highlighted in its article the impact of red-tagging on civil society and the need to ensure the protection of human rights in the country. For democracy to work, the Philippine government should ensure freedom of expression and protection of the rights of its citizenry.

4. Comparative Analysis of the Respondents' Perceptions of the Digital Realm

The gender divide has always been a growing concern even in the digital realm. Understanding and identifying significant differences between genders is considered crucial in ensuring that all citizens enjoy equal opportunities in both online and offline spheres. Table 5 reveals the comparative analysis of perceptions towards the digital realm between genders.

Table 5 Mann-Whitney U Test on Perceptions by Gender

Items	Sig. ^{a, b}	Decision	Interpretation
1. I feel confident using my real name/identity on social media.	.789	Retain the null hypothesis	No Significant Difference
2. I feel my data/privacy is protected online.	.022	Reject the null hypothesis	Significant Difference
3. I feel free in expressing myself online.	.226	Retain the null hypothesis	No Significant Difference
4. Being active online gives me a sense of empowerment and belonging to society.	.059	Retain the null hypothesis	No Significant Difference
5. If I express my views on social or political issues online, they could be used against me.	.063	Retain the null hypothesis	No Significant Difference
6. I feel my gender impacts how others react to my civic view online.	.637	Retain the null hypothesis	No Significant Difference
7. The internet creates a polarization of public discourse and opinions.	.374	Retain the null hypothesis	No Significant Difference
8. I trust traditional media sources (TV, newspapers) more than online/social media.	.002	Reject the null hypothesis	Significant Difference
9. There is a lot of disinformation and fake news on social media.	.223	Retain the null hypothesis	No Significant Difference
10. I am worried about hate speech, or bullying online.	.634	Retain the null hypothesis	No Significant Difference

Despite the widespread disinformation and harassment online, significant differences between genders are manifested in which the males revealed a higher level of trust in traditional media sources. This may be rooted in the type of news content appealing to them. In the study by Wanta et al. (2004), a significant relationship between gender and online news consumption is found. As women have a greater interest in social and community issues, they tend to consume online news more than men. However, since women are known to be more emphatic and emotionally responsive, news through social media about social and cultural issues featuring personal narratives and emotional content relatable to personal experiences is

more of interest to them. Pew Research Center (2019) further supported this as their female respondents are found to consume news more through social media while males are into traditional news websites. Since men are more into politics and sports in which news is presented factually and straightforwardly, they manifested greater trust in traditional media sources. More so, as men are more inclined to participate in political discourse and activities, they manifested greater apprehension towards the prevailing data surveillance and data privacy breach leading to distrust and hampered digital engagement.

Table 6 Mann-Whitney U Test on Perceived Benefits by Gender

Items	Sig. ^{a,b}	Decision	Interpretation
1. Online participation helps create well-networked, cohesive groups.	.492	Retain the null hypothesis	No Significant Difference
2. Online civic activity gives more freedom and autonomy to young people to respond to issues that affect them.	.903	Retain the null hypothesis	No Significant Difference
3. Online participation strengthens engagement within local communities.	.062	Retain the null hypothesis	No Significant Difference
4. Online participation strengthens engagement among different communities across borders.	.286	Retain the null hypothesis	No Significant Difference
5. Online civic activity gives higher visibility to important issues that should be addressed by society.	.704	Retain the null hypothesis	No Significant Difference
6. Online participation alone is efficient for achieving desired change in society.	.599	Retain the null hypothesis	No Significant Difference
7. Official decisions cannot be taken online.	.879	Retain the null hypothesis	No Significant Difference
8. Online communities are more efficient than traditional NGOs.	.862	Retain the null hypothesis	No Significant Difference
9. Online civic activity needs to be complimented with face-to-face work too.	.466	Retain the null hypothesis	No Significant Difference
10. Online participation is not inclusive of all young people.	.482	Retain the null hypothesis	No Significant Difference

The table shows that there is no significant difference among respondents. This finding could be attributed to the fact that the respondents belong to the same degree program and specialization with possible matching backgrounds and experiences online resulting in similar perceptions and attitudes regarding the benefit of civic engagement in the digital realm. In general, as revealed in the resulting means, the respondents regard the digital platform as an enabling tool for civic engagement. The study by Jones (2016) revealing a positive relationship between social media use and the level of civic engagement among young people supports the notion of the potential of digital platforms in transforming digital engagement into actual civic action.

Table 7 Mann-Whitney U Test on Perceived Barriers by Gender

Items	Sig. ^{a,b}	Decision	Interpretation
1. Lack of access to the internet (coverage, quality, cost) or smartphone/ computer.	.454	Retain the null hypothesis	No Significant Difference
2. Online harassment of civic actors.	.232	Retain the null hypothesis	No Significant Difference
3. Difficulties in getting one's message through to a wider audience.	.586	Retain the null hypothesis	No Significant Difference
4. Lack of resources and funding for online civic activities.	.983	Retain the null hypothesis	No Significant Difference
5. Lack of confidence in the impact of civic activism.	.285	Retain the null hypothesis	No Significant Difference
6. Lack of interest in civic engagement in general.	.028	Reject the null hypothesis	Significant Difference
7. Lack of knowledge on how to advocate and participate online.	.007	Reject the null hypothesis	Significant Difference
8. Insufficient media and digital skills.	.325	Retain the null hypothesis	No Significant Difference
9. Internet restrictions (some platforms/websites are not available).	.466	Retain the null hypothesis	No Significant Difference
10. Data surveillance and risks to data privacy.	.917	Retain the null hypothesis	No Significant Difference

The responses between genders reveal insignificant differences in most of the items except for the lack of knowledge on how to advocate or participate online or the lack of interest in general civic engagement. While the females readily agreed the male counterparts neither agree nor disagree manifesting uncertainty in their responses. Undoubtedly, digital skills and knowledge are important factors affecting the extent of digital engagement of people. As the World Economic Forum (2016) contends that digital skills are necessary for engaging civically online. This connotes the need of promoting digital literacy in higher education institutions to ensure the full participation of students in the digital space.

Discussions

Also, it is interesting to note that the uncertainty of the male respondents does not necessarily mean lacking knowledge or interest at all in civic engagement. It can be surmised that males have varying motivations in engaging digitally resulting in mixed opinions as to the levels of their knowledge and interest in online civic participation. As males are found to have varying activities online perceiving the internet as more of a tool for instrumental purposes of sourcing out information either for entertainment or education related to politics among other things, their engagement tends to be more on visiting a variety of websites, reading the news, and engaging in political activities online. Corollary to this contention is the findings by Hargittai & Walejko (2008) revealing that men are more into visiting a variety of websites related to political news and activities while women use social media for purposes of social and personal communication purposes. This difference in online behavior and consumption pattern on the internet may be contributory to the revealed variance among respondents.

Conclusion and suggestions

This study primarily aims to assess the profile of respondents as online users and their perceptions of the digital space as a tool for civic engagement. As revealed, Facebook and Tiktok are the leading platforms used by the respondents in posting and sharing created content related to education, health, and activities of the youth. Respondents highlighted the widespread disinformation, online harassment, and risk involving surveillance and data privacy breach which may be brought about by the polarized political climate and prevalent red-tagging affecting generally their interest to engage as civic actors in the digital sphere. Both genders concurred on the complementary nature of civic engagement requiring the combined online and offline involvement of young people armed with the needed knowledge and skills in socio-political causes through the support of the traditional NGOs leveraging social media as a tool of inclusivity of the youth for mobilization in community affairs. These findings require measures by all stakeholders seeking partnership with the youth sector to provide opportunities that enhance their digital literacy resulting in reduced gender divide and risks in digital civic engagement. More so, the provision of policies, programs, and tools ensuring a gender-inclusive, safe, and supportive environment for discussions, dialogue, debates, and collaboration is necessary to encourage the engagement of young civic actors both in digital and traditional forms as key players in nation-building. As these results are limited to the specific sample focusing on profile and perceptions, a further study involving other populations and determining correlations between social media and civic engagement is suggested in studying further the digital space as an enabling tool for civic engagement and citizenship.

New knowledge and the effects on society and communities

In general, the findings revealed that the respondents positively perceived the digital space as an enabling venue for civic engagement. Amid the challenges of widespread disinformation, harassment, and privacy breaches, investments from all stakeholders in enhancing digital literacy and in instituting safe, participative, and inclusive digital space are necessary for supporting the students' civic engagement as key players in nation-building.

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Causal Factors of Enhancing Employee Loyalty towards Organization

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Abstract

The objectives of the study were 1) to study “casual” factors enhancing employee loyalty towards organization, and 2) to develop a structural equation model of factors enhancing employee loyalty towards organization. The quantitative and qualitative research methods were implemented in this study. The quantitative data were collected from the interviews of 500 industrial business executives.

The findings indicated that the significance levels of employee loyalty towards organization were high in all aspects. The highest significance level of leadership was that the executives provided a work manual describing the structure of work. The highest significance level of labor union was that the organizations provided proper cost-of-living and fringe benefits for employees. The highest significance level of organizational commitment was that the employees always maintained their organizational values. The hypothesis testing revealed that the small, medium, and large enterprises differently focused on the enhancement of employee loyalty towards organization at statistical significance level of .05.

The results of structural equation model analysis showed that it passed the evaluation criteria with empirical data congruence including Chi-square probability of 0.699, relative Chi-square of 0.940, index of item objective congruence of 0.970, and root mean square error of approximation of 0.000.

Keywords: Causal factors, Enhancing employee, Loyalty, Organizational

Introduction

The effective consumption of resources is an important factor of success and achievement of organizational goals. Of all the resources, human resources are a crucial factor affecting the efficiency and competitiveness of organizations in the business world. The human resource with high quality can rapidly and sustainably develop organizations. Therefore, any development without human resources is rather difficult to be successful. The psychological studies found that organizational commitment can create more work efficiency, and indicate organizational trustworthiness and values (Steers, 1991). However, employee loyalty may be different because of individual expectations, for example, the perceived expectations of leadership of executives, relationship between labor union and executives, employee satisfaction, and organizational commitment. Thus, organizations need to focus on human resource management and work efficiency starting from employee recruitment, and job placement, planning and development, as well as maintaining employees with proper qualifications. For those who don't have organizational commitment and want to leave the organization, they usually have less trust and acceptance of the organizational goals. Besides, they don't try to have commitment to work and this reduces their work efficiency and finally affects the organization itself. Lack of organizational commitment impacts absence from work, work delay, or resignation. This much impacts the organizational growth.

And some major factors should be focused to prevent the valued employees from quitting, e.g., proper job assignment for each employee's competency, for example, high skilled workers with challenging tasks should get higher payment and fringe benefits than general workers. Today most organizations usually consider their benefits they earn rather than employees' job responsibilities. Therefore, the employees finally resign, and move to another organization they can provide higher payment and fringe benefits (Mitmek & Worawattanaparinya, 2020).

Figure 1 Shows a number of employees who registers in Ministry of Labor increasingly resigned per month, and in 2019, the average number of 135,856 employees resigned per month, or 1.6 million per year. It was a large amount and enormous expense. Employees who quit/month

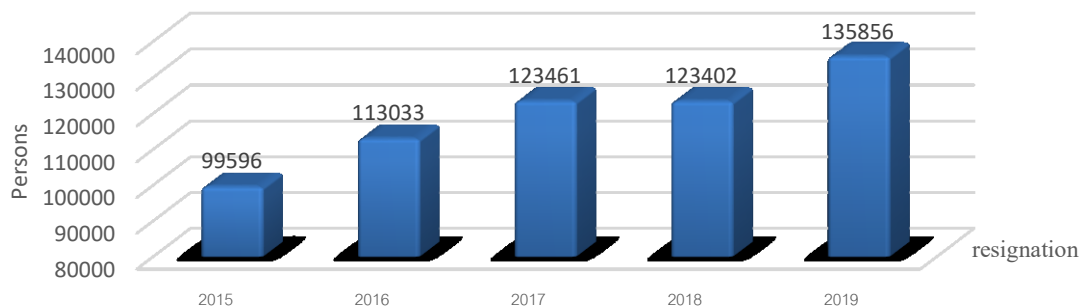


Figure 1 Resignation in 2015-2019

(Source : Office of the Permanent Secretary-Ministry of Labor: Labor Statistics in the Year 2019)

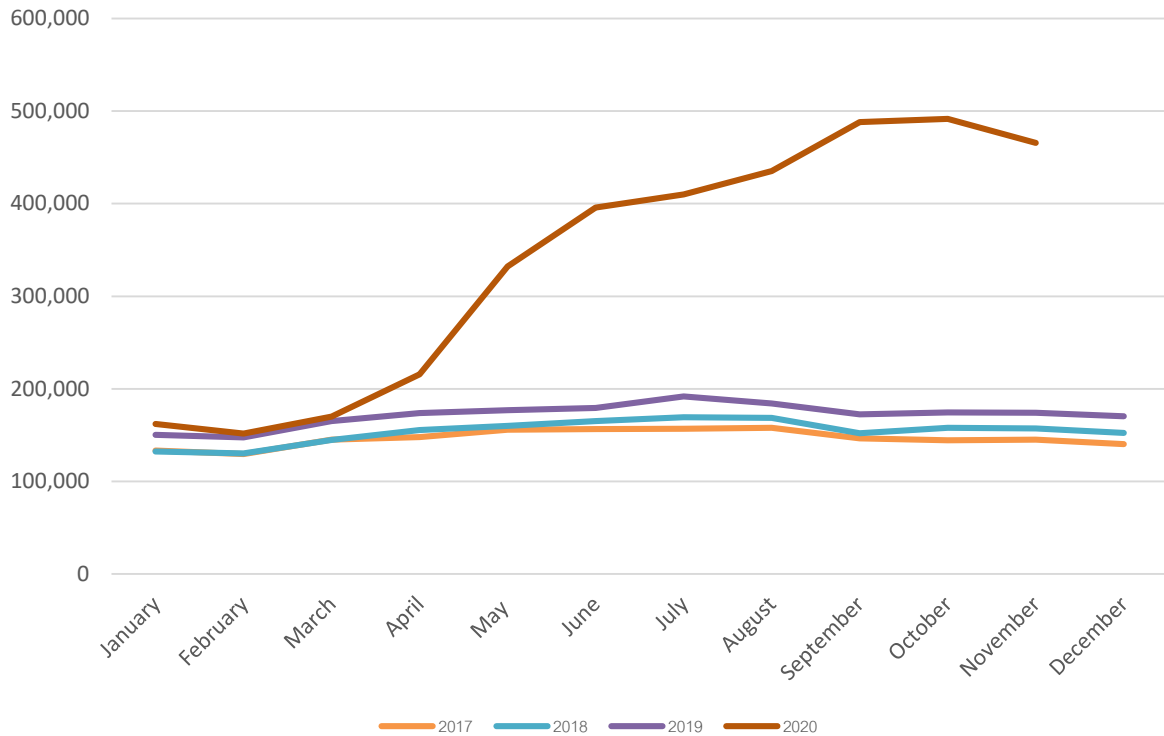


Figure 2 Number of the Employees Who Asked for Unemployment Benefits in Case of Unemployment in Social Security Systems in 2017-2020

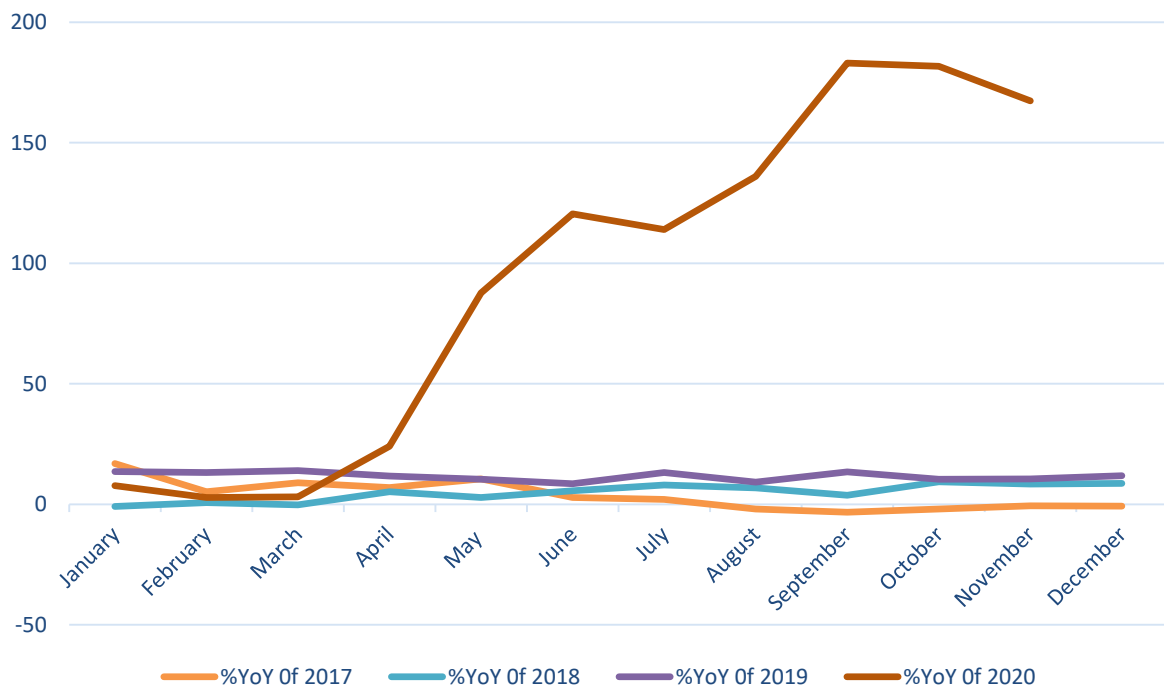


Figure 3 Percentage of Change of the Employees Who Asked for Unemployment Benefits in Case of Unemployment in Social Security Systems in 2017-2020

<https://www.tcijthai.com/news/2021/1/scoop/11298>

(Source: Social Security Office)

Note: Data calculated by policy work group of labor micro-economics, Division of Labor Economics

The statistics mentioned above shows that it is necessary for industrial organizations to enhance employee loyalty. The organizational loyalty means relationship between employees and organization. If the employees have high organizational loyalty, they will refuse to resign. There are four factors of loyalty: (1) Leadership-according to Fiedler's model, there is a situational control, i.e. relations between leader and members, and position power that enhance a proper environment for better employee work performance and organizational loyalty (Fiedler et al., 1976); (2) Union Relationship-Commons said a negotiated agreement consists of work performance regulations/rules to provide employees' rights, and labor union is established for labor protection. The employees' rights provide more freedom but it must be under the regulations (3) Job Satisfaction-the employees must be given basic needs to create job satisfaction. This enhances employee engagement and finally organizational loyalty (Locke, 1976), and (4) Organizational Commitment-factors enhancing organizational commitment are commitment factor of continuity, commitment factor of feelings/emotion, and commitment factor of social bases (Meyer & Allen, 1993)

From the reasons mentioned above, the researcher was interested in the study of factors enhancing employee loyalty towards organization. The results of this research would be the guidelines for human resource management of organizations in the industrial business sector and enhancement of employee loyalty towards organization for sustainable development.

Objectives of the study

The objectives of this research were 1) to study factors enhancing employee loyalty towards organization, and 2) to develop a structural equation model of factors enhancing employee loyalty towards organization.

Methodology

Study design

This study was a mixed research method that are the qualitative, the quantitative and the qualitative research methods.

Data collection and tools

Data collection was explained regarding types of research methods as follows.

Stage 1 Qualitative research: The data were collected through the in-depth interview. A sample group of this study consisted of 10 experts from 4 different groups: academic group, public and related state agency group, business industrial group, and labor union group. The scope and subject matter were four factors: Leadership, Union Relationship, Job Satisfaction, and Organizational Commitment.

Stage 2 Quantitative research: The data were collected through a questionnaire. The research population of the quantitative research were 500 industrial business executives with labor union in the private businesses registered by the Bureau of Labor Relations, the Department of Labor Protection and Welfare. The multi-stage sampling methods including cluster sampling and probability sampling were implemented to assign the sample size (Siljaru, 2020). The researcher created a questionnaire divided into 8 steps as follows.

- Step 1: Studying guidelines for creating a questionnaire based on the conceptual framework;
- Step 2: Studying related information from books, documents, articles, and related works as the guidelines for writing question items;
- Step 3: Setting subject matter and limits of question items based on the objectives and benefits of the study;
- Step 4: Creating a draft questionnaire;

- Step 5: The researcher had the draft questionnaire and quality evaluation form verified by five experts and the results of structural equation model analysis were proved by congruence evaluation criteria including the index of item objective congruence of 0.60-1.00;
- Step 6: Distributing the questionnaire evaluated by the experts to 30 similar subjects of the sampling group for try-out;
- Step 7: The results of try-out were analyzed and results of discrimination index analysis of each item were between 0.32–3.66, and the question items were rating scales with corrected item-total correlation between 0.26–0.81. And Cronbach's alpha coefficient for the questionnaire reliability was of 0.969.
- Step 8: Improving and correcting the questionnaire based on the results of discrimination index and questionnaire reliability analysis before implementation.

Stage 3: It was a focus group to have the model of factors enhancing employee loyalty towards organization verified by 7 experts. The structural equation model of this study consisted of 20 observed variables. The variables were divided into four factors as follows.

Leadership with five observed variables:

1. The leaders are respectful and trustful (LS02).
2. The leaders offer helps and support your work performance (LS06).
3. The leaders clearly provide assignments (LS13).
4. The leaders are responsible for assessing employee's work performance (LS16).
5. The leaders have rights to provide employees punishments or rewards (LS19).

Union relationship with five observed variables:

1. The organizations provide health welfare (UR02).
2. The organizations provide opportunities for employees to complain (UR05).
3. The employees are allowed to ask any questions whenever they have (UR11).
4. The organizations provide safety training in factory (UR13).
5. The organizations appropriately issue policies and plans upon labor relations the labor law (UR17).

Job satisfaction with five observed variables:

1. The job positions provide ways of creativity (JS02).
2. The supervisors have characteristics of leadership (JS06).
3. Most co-workers create collaboration in the workplace (JS09).
4. Job promotion is based on each employee's capability (JS15).
5. The employees are satisfied with their income or salary (JS18).

Organizational commitment with five observed variables:

1. The employees are highly concerned with their organizational change (OC03).
2. The employees think that they are as important as the others to the organization (OC07).
3. The employees think that their values are the same as their organizational values (OC11).
4. The employees think that their work performance is challenging with valuable experiences (OC17).
5. The employees dedicate their capabilities to organization for business success (OC20).

Data analysis

The quantitative data were analyzed by using descriptive statistics, i.e., frequency, percentage, mean and standard deviation, and inferential statistics to analyze the factors in the structural equation model. The data were analyzed by using the SPSS (Statistical Packages for the Social Science) and AMOS (Analysis of Moment Structure).

Results

Sample characteristics of the study

The overall respondents were equally from small and medium enterprises and large enterprise. Of all the respondents, 71.40% worked in the industrial businesses with over 20 year operation, 40.80% worked in the industrial businesses operated by Thai owners, 39.20% worked in the industrial businesses with the annual income of 75-500 million Baht (THB), and 30.80% worked in the industrial businesses of the group of vehicle and equipment manufacturers including the business of vehicle and equipment repair.

The results of analyzing the factors enhancing the employee loyalty towards organization

The results of analyzing the factors enhancing the organizational loyalty of the employees revealed that the significance level of employee loyalty towards organization in industrial section was at a very high level with the mean of 3.89 (S.D. = 0.44). The significance level of organizational commitment was at the highest level with the mean of 4.00 (S.D.=0.47), followed both the labor relations and job satisfaction with the equal means of 3.90 (S.D. 0.47), and the leadership with the mean of 3.84 (S.D. = 0.55).

The results of analyzing the structural equation model of the factors enhancing the organizational loyalty of the employees

Before the model improvement

The results of analyzing the structural equation model of the factors enhancing the employee loyalty towards organization before the model improvement found that the results were not consistent with the available empirical data. Therefore, the researcher improved the model to make sure that the model was consisted with the empirical data.

After the model improvement

Figure 4 shows the results of analyzing the structural equation model of the factors enhancing the organizational loyalty of the employees after the model improvement revealed that Chi-square probability of 0.699, relative Chi-square of 0.940, index of item objective congruence of 0.970, and root mean square error of approximation of 0.000. This could be concluded that the structural equation model of the factors enhancing the organizational loyalty of the employees after the model improvement was associated the empirical data, as suggested by Arbuckle (2016).

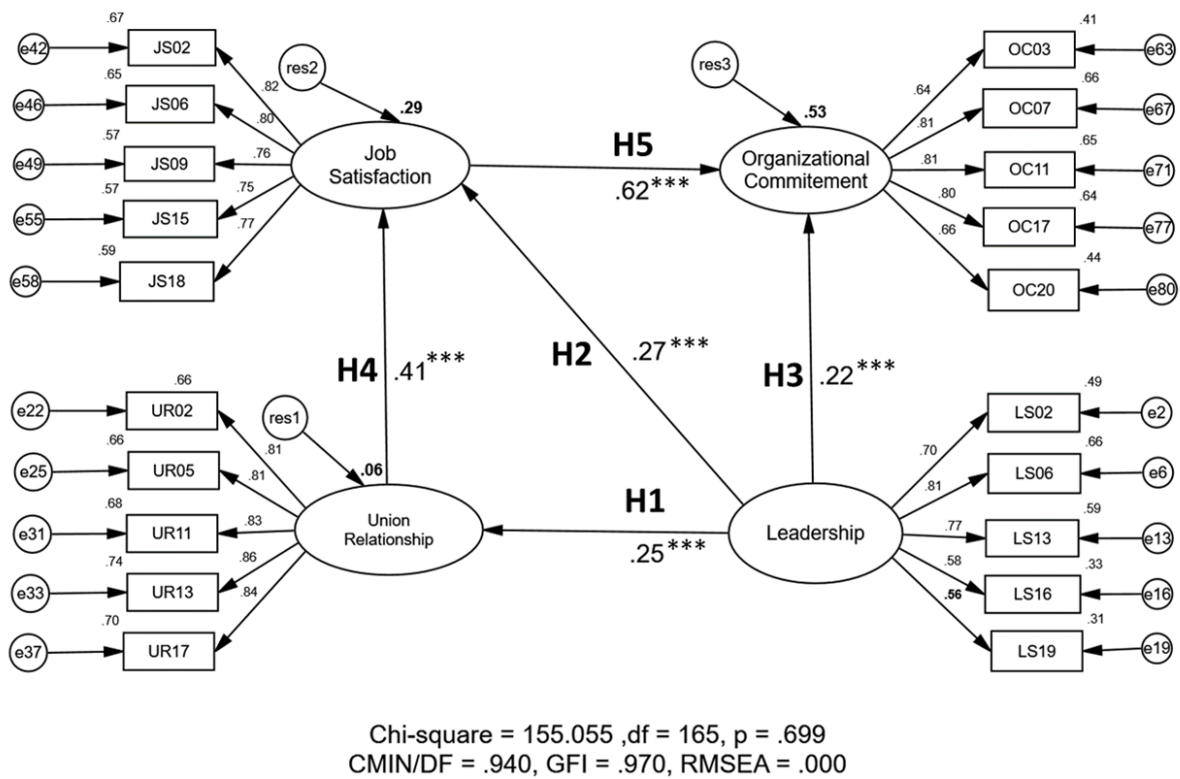


Figure 4 The structural equation model of the factors enhancing the organizational loyalty of the employees after the model improvement
 (Source : Researcher, 2023)

Discussions

The results of H(1) testing revealed that the leadership factor directly influenced the labor union factor with loading of 0.25 at significance level of 0.001. These findings were consistent with the H(1). The components of leadership consisted of relations between leader and members, and position power So that, the leaders could understand and accept the requests of trade union. Therefore, the leader must realize and accept what labor union required to enhance the employee relationships. This is in accordance with the study of Bruce et al. (2018) stating that the leaders have a good relationship and power on the members of labor union. The leaders should participate in the safety improvement to learn how to create trustfulness to each other.

The results of H(2) testing revealed that the leadership factor directly influenced the job satisfaction factor with loading of 0.27 at the significance level of 0.001. This is in accordance with the study of Adnan & Bulent (2009) stating that the employees' satisfaction is positively consistent with the organizational culture and leadership at a significance level of 0.001.

The results of testing H(3) revealed that the leadership directly influenced the organizational commitment with loading of 0.22 and at a significance level of 0.001. This is in accordance with the study of Zulfikri et al. (2015) stating that the organizational commitment is positively and significantly consistent with the leadership. Similarly, the study of Lamsuthi & Silpcharu (2020) stated that executives or leaders who are kind and close to their employees could make the employees enhance the organizational commitment. However, the industrial

businesses must have a good process of business management with morality under the principles of success.

The results of H(4) testing revealed that the labor union factor directly influenced job satisfaction factor with loading of 0.41 at a significance level of 0.001. This is in accordance with the study of Raziq & Maulabakhsh (2014) entitled of “Impact of Working Environment on Job Satisfaction” stating that the labor relation is an essential part to enhance employee job satisfaction. The results of this study showed the positive relationship among labor relation, job environment, and employee job satisfaction (Raziq & Maulabakhsh, 2014)

The results of H(5) testing revealed that the job satisfaction directly influenced the organizational commitment with loading of 0.62 at a significance level of 0.001. This is in accordance with the study of Alpander (1990) stating that nurses with high job satisfaction were more likely to have high organizational relation compared to those with low job satisfaction.

Conclusion and suggestions

The significance of organizational loyalty in the industrial businesses was at a high level in all factors, i.e., leadership, labor union, job satisfaction, and organizational commitment. The results of hypothesis testing revealed that the importance levels of organizational loyalty were different between small and medium enterprises and large enterprises at the statistical significance level of 0.05. The results of structural equation model analysis showed that it passed the evaluation criteria with empirical data congruence including Chi-square probability of 0.699, relative Chi-square of 0.940, index of item objective congruence of 0.970, and root mean square error of approximation of 0.000.

Recommendation for further development

1. The organizations should create the model of leadership competency for stakeholders and provide training course for the leaders to practice their skills and capabilities as well as good understanding.

2. The organizations should study the suitable income to enhance the organizational loyalty of the employees. It is recommended that the organizations should review guidelines for the suitable returns and non-monetary rewards because these are able to attract the employees for organizational loyalty at a high level or evaluate the returns based on the performance base.

Moreover, there are many ways you can help encourage and increase employee loyalty within your organization. Every level of management or leadership can have a direct impact on employee loyalty. Here are several elements to consider helping improve the loyalty of your employees and increase overall employee satisfaction:

Encourage employee potential

Recognizing the potential and value of each employee can help improve their quality of work and show them they are a valuable member of the team. Giving employees the opportunity to improve their skills and grow can encourage them to produce higher quality products and more products and encourage them to seek internal moves. Encouraging their potential can also help when structuring an efficient team to manage specific project tasks and responsibilities.

Foster self-management

Balancing managing daily tasks and encouraging employee self-management can increase the trust between the employees and the company. This can also strengthen the relationships within the office and increase individual happiness in the workplace because of the trust you show. Also, allowing employees to manage themselves to an extent can

improve their work performance because it can increase their confidence and productivity.

Defend your employees

It's important to defend your employees during situations of stress, such as workplace incidents. Discovering the truth of situations while defending your employees can help show your trust in them and increase their loyalty to you and the company. Taking the time to discover facts about a situation can also help you identify areas for improvement within your organization.

Involve in company's future

Another way to show employees their value to the company is to involve them in some company decisions. The company's future is the employee's future and allowing them to input on decisions that affect the future of the company can encourage them to implement change and can help resolve obstacles. Additionally, showing them the larger effect they have on the company can improve the quality of the work because they know the impact it has on the company's performance.

Value employee time

Recognizing the time outside of work hours and showing its importance can help employees feel like the company values them as individuals. Understanding obligations outside of their work hours can help them feel less stressed and may help improve their performance during work hours. Companies that show the value they place on employee time outside of the workplace can have a dramatic impact on overall loyalty.

Ask for feedback

Regularly requesting feedback can help you identify improvement opportunities within your organization. Feedback can occur anywhere and encompass anonymous surveys, feedback sessions or company questionnaires. This can increase loyalty by giving employees the opportunity to discuss ways in which they want to feel valued by the company.

Ensure employees have the tools they need

Giving employees the tools to succeed can uplift the work environment. Ensuring that employees have the right training, quality equipment and avenues for asking questions can improve performance and trust in the organization. Developing additional tools, such as a company knowledge base workshop or online training programs, can increase individual participation and loyalty.

Recommendation for further study

1. The practitioner level should be studied because in the study the researcher assigned the scope of study focusing on executives of industrial businesses and labor union in the private sectors. Therefore, this study has not covered the other levels of the workers .

2. The comparative study on the population of executive level in the government and private sectors without labor union should be conducted.

New knowledge and the effects on society and communities

Figure 5 shows the new knowledge called “*The Model of Organizational Loyalty*” created based on the results of this study. The Model of organizational loyalty consists of four major components as follow.

1. **Foundation** consists of safety, job security, and job satisfaction.
2. **Basic requirement** consists of work design, coaching, and culture and values.
3. **Four poles** consists of competency, collaboration, empowerment, and reward and recognition.
4. **Organizational loyalty** is as a top of the model.



Figure 5 The Model of organizational loyalty
(Source : Researcher, 2023)

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Evolution of Economic and Social of “Ruea Nuea” in Khiri Wong Community of Lan Saka District, Nakhon Si Thammarat Province, Thailand

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Abstract

This research brought together the issues of economic and social identity of the Khiriwong community with information about the lives of the people in this community to link to the creation of shared values of innovation through the use of the disappearance of the Ruea Nuea over time, wants to highlight the identity and evolution of Ruea Nuea, and tries to present the relationship based on the way of subsistence production in the past through stories that show the importance. This research aims to study the Economic and Social Evolution of “Ruea Nuea” in the Khiri Wong Community of Lan Saka District, Nakhon Si Thammarat Province. This qualitative research included 16 key informants, namely elderly people and village sages who knew about Ruea Nuea in the Khiri Wong Community. This study focuses on participant observation by organizing the group conversation process. It uses structured interviews and opens community forums for data processing and analysis to connect issues. It synthesizes the descriptive analysis and presents the narrative study results of the community. The results showed that the Economic and Social Evolution of Ruea Nuea, consisted of: The era of prosperity in subsistence production. Ruea Nuea was a tool for the occupation with the social and economic lifestyle and the relationship system of people in the Khiriwong community. It is considered a range of "Subsistence production", and living a self-sufficient life. The transition era of marketing relationship production happened in this period. Convenient transportation and connection to the economic progress of the community. “The market system is integrated with the livelihood”, which led to the decline of the ship's role in Ruea Nuea, leading to conservation, and the recession and conservation through traditions and rituals of Ruea Nuea from the old to the new generation in the Kiriwong community. This leads to participation in the conservation of Ruea Nuea. It indicates that Ruea Nuea is important for the coordinating treatment, and create value for the local culture.

Keywords: Economic evolution, Social evolution, Khiri Wong community, Ruea Nuea, Nakhon Si Thammarat Province

Introduction

“Kiriwong Community” is the region with the best weather in Thailand. It is certified by the Pollution Control Department (Chiang-Aree & Khunram, 2012). It is a popular community in the country and the world as a society that has abundant natural resources and perennial clean water (Ratchabampoeng, 2017). The Khiriwong community is in the region of the Indochina Peninsula and is influenced by the monsoon winds from the Andaman and Thai seas. The main occupation of the Khiriwong community is Cultivation in mixed gardens, or "Sormon Garden" (Ministry of Tourism and Sports Thailand, 2021), to balance the developing agriculture and preserve biodiversity (Luo et al., 2021). It focuses on the linkage between the creative economy in the Khiriwong community that is environmentally friendly for sustainable development (Kacerauskas et al., 2021). It is also crucial in promoting sustainable livelihoods in rural communities and ensuring food security. It even helps solve the problems of the agricultural economy with a monopoly on prices (Zerihun, 2021). The additional occupation of the Khiriwong community is grass-cutting to harvest agricultural products and work in orchards. There are professional groups in the Khiriwong community like the Natural Dyeing group that influence Folk handicrafts, herbs, lifestyle, and community cultures (Ministry of Tourism and Sports Thailand, 2021).

The Khiriwong community has a culture that indicates its identity, and its rules are based on the attitude of the people in the Khiriwong community (Ramitanon, 1994). It is like the real social time of the experience period. It is dynamic (Linstead & Mullarkey, 2010). and an indicator of the ability to make socio-economic relationships (Kaewthep, 1990). There are often abstract aspects in the concept of diverse community culture. It is complex and changes socio-economically (Pereira & Malik, 2015). but can indicate a lifestyle. The well-being and hereditary lifestyle indicate the prosperity of the community, even if it changes slightly over time (Ramitanon, 1994; Kaewthep, 1990). The development of community culture requires a vision of balancing benefits and work. It is directly linked to economic and social sustainability in several dimensions of mutual reinforcement (Mikotajczyk, 2021).

Meanwhile, the Khiriwong community has integrated farming as a flexible social model. They use agricultural resources, community culture, and innovations within their community to create shared values (Nicolosi et al., 2021). One of the innovations is the “Ruea Nuea”. It is an ancient boat in the Khiriwong community that roams the canals for the sale or exchange of agricultural products like fruits, local vegetables, betel nuts, etc. (Group of Ruea Nuea in Khiriwong Community, 2013). Ruea Nuea originated from folk wisdom as a transport for traveling on rivers and canals since ancient times. People in the Khiri Wong community used to build houses that faced the river and used the Ruea Nuea to travel to exchange agricultural products in other communities (Kaosol, 2018). This is to create the economic potential of the community as the driving force of its economic activities. It also strengthened their survival amid the economic changes in the Khiriwong community (Nithichaianan, 2016). The Ruea Nuea also helps to travel for selling or exchanging agricultural products in and outside the Khiriwong community. It allows effective cooperation management and builds relationships with "insiders" like relatives, friends, and comrades that provide useful perspectives on managing family relationships in their community (Chan & Clegg, 2002). It also facilitates making relationships with "outsiders" or friends outside the community as “Business Networks”, which build socio-economic ties and result in cultural synergy at the network level (Dahles, 2005). It is a creative socio-economic practice for managing lifestyles for the benefiting the profession (Issarathumnoon, 2017). It also helps with the changing balance of the society’s economy and creates a positive attitude from occupation. The "Ruea

Nuea lifestyle" of the Khiriwong community considers the future of sustainable ecosystems (Lapatinas et al., 2021).

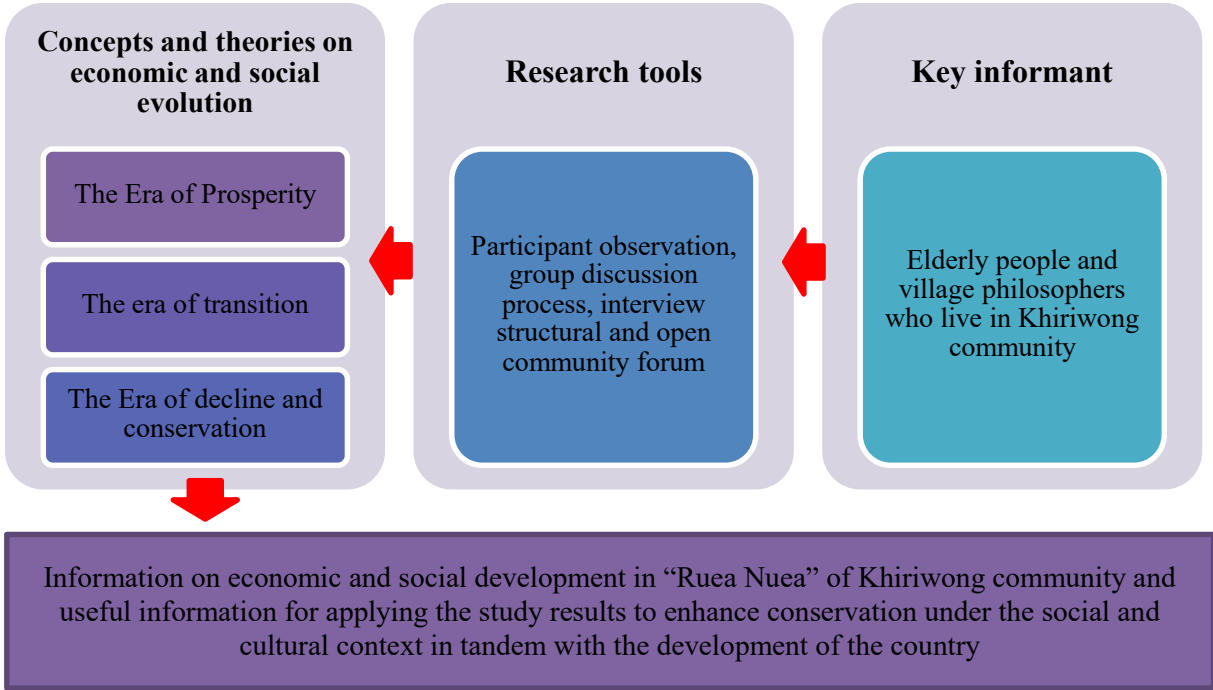
This research brought together the issues of economic and social identity of the Khiriwong community with the information of the lives of the people in this community to link to the creation of shared values. Innovation through the use of the ruea nuea boat, an ancient boat that has been a vehicle for traveling in the community for a long time, interested in the old to the new generation to live according to the community's lifestyle and can be passed down from generation to generation seamlessly and without being lost, have the mentality to fight the problems currently arising. The researcher recognizes Ruea Nuea's disappearance over time, wants to highlight the identity and evolution of Ruea Nuea, and tries to present the relationship based on the way of subsistence production in the past through stories that show the importance of Ruea Nuea. Based on the discussion above, this research keenly studies the issue from a different perspective. There is interest in the study of the Economic and Social Evolution of the "Ruea Nuea" in the Khiri Wong Community of the Lan Saka District, Nakhon Si Thammarat Province. It poses the research question of "How do Evolution of Economic and Social of Ruea Nuea in Khiri Wong Community?" and consists of The Era of Prosperity. The era of transition, and the Era of decline and conservation. This study talks of the old to the new generation to live according to the community's lifestyle and have the mentality to fight the problems currently arising. This study confirms the situation with qualitative research that provides information leading to better research results and important steps in data management in qualitative research (Ferry & Joungtrakul, 2021). It became the primary study of the Nakhon Si Thammarat province or the initial study in the southern region. It gives information about the economic and social development in the Ruea Nuea era of the Khiriwong community. It provides useful information for applying the study results to improve the conservation of Ruea Nuea in the Khiriwong community of the Lan Saka District, Nakhon Si Thammarat Province under the social and cultural context with the country's development, with a history and predominance of climate and well-being of people in communities with good levels of well-being of Thailand.

Research Objectives

This research aims to study the Economic and Social Evolution of "Ruea Nuea" in the Khiri Wong Community of Lan Saka District, Nakhon Si Thammarat Province.

Framework

The review of concepts and theories on economic and social evolution by Friedl (1981), Checkland (1959), Khaenamkhaew & Muhamad (2021), has three themes: 1) The Era of Prosperity, 2) The era of transition, and 3) The Era of decline and conservation. It is summarized as a conceptual framework for research in the following diagram:



Figures 1 Framework
(Source : Researcher, 2023)

Methodology

Research model

This qualitative research included participant observation, group discussions, structured interviews, and an open community forum. It analyses the links, synthesizes and compiles them to answer research questions as fully as possible to build knowledge from the Grounded Theory, and descriptive analysis, and presents the results of the community narrative studies (Reay et al., 2019). The research took place between 1 March 2021 to 28 March 2022 (12 months). The research area was the Kiriwong Community of the Lan Saka District, Nakhon Si Thammarat Province.

Key informant

There were a total of 16 people. The selection criteria for this study was the selection of a specific model for the elderly and local philosophers living in the Khiriwong community for at least 10 years. These people have prior knowledge of the Ruea Nuea and are willing to participate in research studies and data collection until saturation.

Research tools

The researcher used a structured interview for interviewing key informants about the Economic and Social Evolution of “Ruea Nuea” of the Khiriwong community. It included 3 issues: 1) The Era of Prosperity, 2) The era of transition, and 3) The Era of decline and conservation. The tools involved participant observation, group discussion processes, structured interviews, an open community forum, and collecting data for processing.

Data collection

The researcher studied documents and research, collected and processed basic information related to Ruea Nuea from these documents. The Economic and Social Evolution of the “Ruea Nuea” has three eras: 1) The Era of Prosperity, 2) The era of transition, and 3) The Era of decline and conservation (Friedl, 1981; Checkland, 1959; Khaenamkhaew &

Muhamad, 2021). Researchers used structured interviews and in-depth interviews for key informants during their free time or holidays between 5:00 PM and 8:00 PM. It takes about 30-45 minutes because it's free time. They used the key informant's residence as an interview location. They also collected data on spatial development issues since the beginning of Ruea Nuea, and the relationship of Ruea Nuea with the economy and society. It included the transition of the Ruea Nuea during the era of recession with the involvement of economic and market systems. The last stage for the Ruea Nuea is the age of conservation. The researcher asked flexible questions according to the interview form (Ritchie & Lewis, 2003). It used all 3 data to analyze the spatial development and the relationship system from the past to the present (Rond & Lok, 2013). Before every interview, the researcher asked for permission to interview the informant. Any information that the key contributor did not allow to be published was not recorded (Kounsamakom, 2015).

Data analysis

The researcher took all the information from the study, related papers, research, and field studies. They processed the data with participant observations and structured interviews. They analyzed, connected issues, synthesized, and compiled answers to research questions as comprehensively as possible to build the knowledge from a foundation and descriptive analysis. It brought out the results of a story-based study of the community (Reay et al., 2019). It was also included in seminars or academic reviews, research teams, community villagers, agencies or organizations, people involved, academics, and experts. There is a forum to present educational results to the community, and the public, after completing the study for the developing social service academics (Panich, 2013).

Results

Evolution and growth of economic and social, it as an attempt fill up a very great gap in our comprehension of affairs both past and present. The demand is now very strong about the broader course of human. Many of view of their own culture. This internal problem was by no means disappeared, driven by misgivings about its in-ternal decay or breakdown (Checkland, 1959). There is a key word in the economic and social evolution as a guideline for research: The Era of Prosperity, the era of transition, and the Era of decline and conservation (Friedl, 1981; Checkland, 1959; Khaenamkhaew & Muhamad, 2021). A study of the Economic and Social Evolution of the “Ruea Nuea” in the Khiri Wong Community of the Lan Saka District, Nakhon Si Thammarat Province. It reflects the way and relationship according to the past subsistence production through their inherited story. It shows the community’s progress and is the birthplace of the Ruea Nuea of the past. We seek to reflect on its origins, the following retrospectives on Evolution of Economic and Social:

The Era of Prosperity:

The researcher walked along the canal to explore the geography of the Khiriwong community. The location of the community is along the canal and surrounded by a long mountain range. They saw a prominent temple beside the canal. The researcher then began to survey from the temples with key information like the Abbot of Khiriwong temple and the local philosopher who lived by using Ruea Nuea in the past. The local philosopher led the researcher to a site, a reconstructed Ruea Nuea storage area that commemorated the community's history. As the interviewee said,

“The history of Ruea Nuea begins here. It has a history tied to the lifestyle and the relationship system. It includes the adaptation of the community to the modern world.” (Key informant A, interviewed on 9 May 2021).

The researcher, therefore, tried to gather information of the Ruea Nuea from the beginning, constructed, replicated the following importance, which is worthy of conservation: Maritime route of Ruea Nuea: The key informant's story indicated that:

"In the past, he would sail from Khiriwong to Pak Phanang." (Key informant A, interviewed on 9 May 2021).

The route of Ruea Nuea navigation started from Tha Di canal, passed the Wang Sai Temple, the Wat Khok Pho Sathit canal, the Wat Din Don, passes Wat Pa, the Tha Yai, the Muang Song Ton canal, the Wat Chan canal, Pass Ban Yan Yao, Ban Nong Bua and Ban Chang Lang. It went through the Hua Tha canal, where it was a resting point. There is rested and exchanged necessary goods before continuing to the Pak Phanang District.

Characteristics and equipment in Ruea Nuea: The key informants implied that the,

"Ruea Nuea looked like a normal wooden boat, but was larger than a normal wooden boat. Equipment like shangs, poles, and paddles was available for rowing in the canals. Items like pots, firewood, and charcoal stoves were used for cooking. The rest were agricultural products that were put on the boat to exchange or sell." (Key informant C, interviewed on 13 July 2021).

It is necessary to prepare travel-related equipment and kitchen utensils for cooking during the trip as travel lasted around 4-5 days. The appearance of Ruea Nuea is like that of a normal gondola but was much larger and had a roof made of leaves for shade. It was a way of living and production during that period.

The relationship with subsistence production: The relationship of people with ships and their development dates back more than 200 years. The Khiriwong community has a long history and gave importance to economic and social development. It is known for the best weather in Thailand that is famous locally, national, and worldwide. It is rich in historical resources of settlements. It gave rise to occupation and exchange of agricultural products to the destination area of the watershed, currently located in the Pak Phanang district. The Ruea Nuea began then in the Khiriwong community. According to the interview,

"During 1855, Ruea Nuea were a means to transport agricultural goods to communities" (Key informant A, interviewed on 9 May 2021).

Another reason was the lack of transport facilities in the past (no cars). Ruea Nuea is crucial as an economic tool for exchanging goods. The researcher's journeyed to study the historical evidence and its economic integration in the Khiriwong community. He found that:

"People in Khiriwong in the past were very difficult to live with, the economy in the past was poor. Previously, people in Khiriwong had to exchange their fruit for rice or to exchange for rice rather than trading." (Key informant D, interviewed 13 July 2021, and Key informant H, interviewed 16 July 2021).

Most of these exchanges were for agricultural products in the Khiriwong community like vegetables and fruits shipped on Ruea Nuea to exchange them for rice in the Pak Phanang area. The reflection of the old people who spoke about the lifestyle of the Khiriwong people, it was difficult to live together. As the interviewee said,

"There are few resources because the towns in the valley couldn't farm. They had to exchange agricultural products for rice." (Key informant J, interviewed on 16 July 2021).

This corresponds to their reflection in certain aspects, like previously Khiriwong people lived together and depended on each other. According to economic aspects, the past was not very good. Most people in Khiriwong had to exchange goods by bringing agricultural produce from the Khiriwong community to exchange for rice. This implies that the Khiriwong people exchanged more than trading. The necessary products at that time were fruits like durian, mangosteen, fire orange, rambutan, and langsat. Sometimes the fruit was exchanged for rice or dry food through cruises in daily life. This was the beginning of the exchange. When things started changing, people in the Khiriwong community began to adapt better to the era.

Therefore, trade started, like the community findings refer to the construction of Rueva Nuea as a supplementary occupation. It also included the sale of goods produced in the community to other communities. The production results during this period began to change the economic structure, product flow, and cash flow. Therefore, many commodities were a tool of exchange. It involved shipping and exchanging goods by people in the Khiriwong community working in gardening. As an interviewee said,

“Using a ship over cargo to trade with other communities, or someone using the Rueva Nuea above it to carry agricultural goods.” (Key informant A, interviewed 9 May 2021, and Key informant B, interviewed 25 June 2021).

Rueva Nuea is not only economically significant but also socially significant as it affects the relationship of the community people. The findings in the Khiriwong community indicate that previously they called it the "House over the water cloud". People had a dependent relationship; as the interviewee said,

“Khiriwong people help each other and do not take advantage of each other.” (Key Informant O, interviewed 22 July 2021, and Key informant P, interviewed 22 July 2021).

The generation of fathers and grandfathers spread the story of the past Khiriwong Community as an arid area without cars with only Rueva Nuea as their only transport. People in the Khiriwong community do not have rice fields, and they must buy or exchange rice. Therefore, it is a source of good relationships among the people in and outside the community. According to the reflections of the memories of the community elderly, they value relationships and kinship systems that are important for living. When civilization came, there was an important division and a condition to define the development. The market plays an important role in their lives. Adaptation happens with modernity, and the lifestyle that used to be dependent has changed according to the above conditions. Table 1 shows the era of prosperity with subsistence production:

Table 1 The era of prosperity with subsistence production

Issue	Relationship System	Change Conditions
Rueva Nuea is economically important to the Khiriwong community.	subsistence economic relations	Stepping into mainstream development
Rueva Nuea is socially important to the Khiriwong community.	kinship and sibling relationship	Kinship relations are integrated into modern society.

The era of transition

The researcher makes initial findings on the Rueva Nuea's history in its heyday and its relationship under subsistence production. When civilization came, there was an important division and condition that defined the development. The market played an important role in its life. Adaptation occurs with evolution and the previous lifestyle changes according to the market system. The conditions of change in this era consisted of the conditions of the windstorm that is the transition event of the Khiriwong community. It plays an important role in the use of canals and boats on the waterways. Such changes led to more people changing their livelihoods with the advent of road transport. The natural traffic routes began to decline. These conditions changed the trajectory of production. The market system became important for livelihoods. The flow of the outsider and the entry and exit of the insider brought about change:

The windstorm and the transition of the Khiriwong community: During 1962, there was a severe disaster. Heavy rains carried the debris of trees into the community. It resulted in heavy flooding in Khiri Wong and destroyed ship traffic routes, agricultural land, community homes.

The mud collected and made the canals shallow. The regional findings and stories of informants reflected on the incident,

"After the floods of 1962, Ruea Nuea was no longer there. Since there are roads, there is more prosperity. The people in the Khiriwong community, therefore, sell Ruea Nuea to outsiders." (Key informant Q, interviewed on 5 August 2021).

It reflects on the spatial findings of the changes in the Khiriwong community regarding the winds in the area. It is an important condition for the changing transportation routes and modes in the lifestyle of the village households in Khiriwong. The findings are consistent with the researchers' reflections and findings, like:

"After that flood, many things changed, for example, the first was that it was difficult to travel around because of the flood. The canal became shallow, so he couldn't go anywhere, and after that, he started building a road." (Key informant D, interviewed on 13 July 2021).

During 1988, the community had a great flood. Various government and private agencies extended help and support to the community people. Roads have been constructed for more convenient transportation. The results appeared in the interview,

"People in Khiriwong community stopped using the Ruea Nuea because they built roads." (Key informant A, interviewed 9 May 2021, and Key informant B, interviewed 25 June 2021).

The significance of Ruea Nuea was lost until now. Thus, the relationship between the people and the production of Ruea Nuea as a tool has deteriorated since roads were built. It implies that after the windstorm changes started to happen. The presence of roads is important for people in the Khiriwong community. Some agencies support the restoration of the Khiriwong community. As the route became more convenient, the foreigners started to arrive. The Khiriwong people's relationship began to increasingly integrate with the market system. This will relate to pioneering new transportation routes through road conditions that reflect the changing Khiriwong community. We can conclude that the 1962 flood and 1988 disaster marked the end of Ruea Nuea. After the floods and landslides, the canals in the Khiriwong community were shallow and unsuitable for paddling. Thus, the people in the Khiriwong community sold all the Ruea Nuea. A road was built in the Khiriwong community for the villagers to commute to and from by land instead of water. The community developed after that and is prosperous now.

Pioneering the route and the transition event of the Khiriwong community: From the regional findings, the researcher found that the pioneering of the bus route was because of Father Than Auad (Abbot of Wang Sai Temple). He built the road to the temple and made another from Yan Yao's side. But building a road is difficult. Father Than Chuen (Abbot of the Khiriwong Temple) made a new route that passes through the Khok Temple. He did this for the soldiers' cars to bring the Tripitaka to Khiriwong Temple and reflect on many aspects as in the interview,

"The road was built after a great flood. During that time, a military jeep brought the Tripitaka to Khiriwong Temple. The road, then, was only a small walkway. It was difficult for jeeps to enter. People in Khiriwong community, monks, and soldiers built a new entrance for jeeps to carry the Tripitaka to the temple." (Key Informant A, interviewed 9 May 2021 and Key Informant C, interviewed 13 July 2021).

When roads are formed in the community, the community changes and develops. Some respondents also reflected on the changing spatial economy that we see from the findings like,

"Village traffic improved and the economy prospered, causing the Ruea Nuea's decline. People started using cars or Ma Yong (dirt bike) because they are more convenient and faster to use than the Ruea Nuea." (Key informant A, interviewed on 9 May 2021).

This was the Khiriwong community's era of transition because of more comfortable transportation. It is also a condition that influenced the community's economic drive related to an increasing market system.

From Ruea Nuea to Ma Yong (dirt bike): After the storm and the arrival of the Khiriwong community aid, development happened. This brought the flow of foreigners into the area. Some groups came to help, and others occupied the area. Thus, Ruea Nuea began to decline into permanent disuse. Modern tools played an important role in replacing water transportation, causing Ma Yong (dirt bike) to gradually increase in spatial importance. Various phenomena also occurred like the floods caused landslides and shallower canals, reducing the usage of the Ruea Nuea. As an interviewee said,

“People in the Khiriwong community sell Ruea Nuea to buy a car or Ma Yong (dirt bike). They prefer the road trip instead of traveling by the canal.” (Key informant A, interviewed 9 May 2021, and Key informant B, interviewed 25 June 2021).

Therefore, there is no Ruea Nuea to keep, as a memorial, for the children of the Khiriwong community to see. Table 2 shows the transition era related to the production of the market:

Table 2 The transition era related to the production of the market

Condition	Event
The windstorm and the transition of the Khiriwong community	A storm affects the change in the livelihood of the Khiriwong community.
Pioneering the route and the transition event of the Khiriwong community	The change caused the transportation route.
From Ruea Nuea to Ma Yong (dirt bike)	The change made Khiriwong people more integrated with the market system. and the flow of foreigners

The Era of decline and conservation:

The market plays an important role in the course of production during the aforementioned period. It also affects changes in the utilization of Ruea Nuea. The Khiriwong community is making great economic, social, and tourism progress, for example, the spatial findings are as follows:

Current economic existence: The findings in the researcher area, including the informant's interview imply,

“The current Kiriwong community is more modern than the past. The Khiriwong people still work in orchards, for example, durian and mangosteen.” Key informant A, interviewed on 9 May 2021).

Although the prosperity of the community affects changes in many aspects, it is crucial to support the creation of a community economy to drive tourism. This is seen from the interview that:

“The events are better than the previous ones. It is lively because the Khiriwong community is now a tourist attraction.” (Key informant J, interviewed on 16 July 2021).

There are various professional groups like Plai Thien Fabric Group, Tie Dye Fabric Group, Herb Group, etc. The current Khiriwong community evolved and became an important tourist attraction of Lan Saka District like Tha Ha Waterfall and Mai Pak Waterfall. The current Khiriwong community is also a model community that promotes careers and drives economic and social progress in the Khiriwong community.

Current social development: The regional analysis results from the researcher reflected on the past perspectives from the interviewees' stories,

“Similar to the past, people in the Khiriwong community live dependently and help each other. We have something to share.” (Key informant E, interviewed on 13 July 2021).

The reflection of the informants shows that Khiriwong's social conditions have lived like brothers and sisters with kinship and dependency. As development happens, some groups

of informants think it affects the social context by bringing in more developments compared to those in the previous Khiriwong communities. During this period, the Khiriwong community considered it an open area that drove tourism. The people could live without much difficulty. While Kiriwong's social aspect progresses, social relationships depend on each other as the groups of informants in the interview say,

“How was the Khiriwong community in the past? Currently, there is sharing and dependence like before.” (Key informant F, interviewed on 16 July 2021).

In some dimensions, the relationship was not smooth, especially when people from different communities entered the area. The Rueva Nuea was missing during this development phase. The people of the Khiriwong community understood the significance of the community's life history and its preservation. Therefore, they gathered to conserve the Rueva Nuea of Khiri Wong to become a developing area.

Conservation and inheritance: As the community's economy, society, and culture changed, tourists poured into the community. Rueva Nuea is back as a historical and conservational part of the community tourism drive. As the interview shows,

“One new Rueva Nuea was built, the only and the last. It is kept at Khiriwong Temple for future generations to know about Rueva Nuea.” (Key informant A, interviewed on 9 May 2021).

The Rueva Nuea is conserved by the Khiriwong community by cooperating with various sectors like temples, schools, community people, and regional government. It also includes reconstructing the local traditions as part of the conservation and tourism support for the community. As an example, an interviewee said,

“Every year, there is a big festival during the 6th waxing moon of the 3rd lunar month, the Rueva Nuea floats in the canal for future generations to know with a blessing ceremony from Mae Yanang (The sacred things of Rueva Nuea)” (Key informant E, interviewed 13 July 2021 and key informant N, interviewed 22 July 2021).

After the ceremony of floating the boat and asking for blessings, there is a meal together along the canal called "Kod Hor Chor Pan." After that, the Rueva Nuea is kept in Wat Khiri Wong as usual. Table 3 explains the situation of Rueva Nuea during the recession and conservation:

Table 3 The Era of decline and conservation

Issue	Event
Current economic existence	The transition from a subsistence economy to a market economy
Current social development	Transitioning from kinship to informal relationships
Conservation and inheritance	Conservation by building a new Rueva Nuea and building a culture of Mae Yanang of Rueva Nuea

Discussions

This research, studying the Economic and Social evolution of the “Ruea Nuea” in Khiri Wong Community of Lan Saka District, Nakhon Si Thammarat Province. The researcher has tried to present Ruea Nuea. It is a historical heritage of Nakhon Si Thammarat with the method of dividing the evolutionary era in each era that clearly shows the development and transition in each period, found the era of prosperity related to subsistence production. Ruea Nuea became an important tool for occupations in the economy, society, and relationships between the people of the Khiriwong community like brothers and sisters. It is consistent with Tylor’s study (1871), which implies that kinship societies arise in tribal or agricultural societies in the era of prosperity or self-sufficiency. It also follows Chan & Clegg’s study (2002), which implies that the cooperation of the kinship system relates to the management of the community’s agricultural produce and benefits their livelihood. It is also consistent with the study of Nicolosi et al. (2021), which found that mixed farming is a flexible social model and uses agricultural resources in the community to create shared values. Any leftover agricultural products will be exchanged for subsistence. It is consistent with the study of Kacerauskas, Streimikiene & Bartkute (2021), that talks of the link between community economies that share in building friendships and providing a range of subsistence production through dependency. It is consistent with Zerihun’s study (2021), which implies that subsistence production is crucial in promoting livelihoods and ensuring food security.

When the transition era production is based on the market system or progress, adaptation is necessary with modernity, and the previous lifestyle also changes. During this period, the Khiriwong community had more convenient transportation related to the community's economic progress. It is consistent with Friedl (1981), Checkland (1959), Khaenamkhaew & Muhamad (2021), which resulted from the socio-economic transformation from agriculture to the era of prosperity to semi-industrial agriculture and social change. This continued until the development and the emergence of more urban communities. It is consistent with Nithichaianan’s study (2016), which found that development was consistent with building the economic potential of the community and strengthening the survival during the economic changes in the community. While the study of Issarathumnoon (2017), agrees on strengthening communities with different agricultural production, it argues that effective cooperation should create market-style relationships to survive instead of relying solely on kinship. It is a creative way of managing lifestyles to benefit their career with appropriate changes. It is consistent with Kaewthep’s study (1990), which indicates that market production can connect socio-economic ties for development. It is consistent with Dahles’s study (2005), which found that market production was able to link the community’s economic and social relationships with those outside the community as a "Business Network". It uses the system of market integration with the livelihood, including trading of agricultural products that are disputed by Zerihun’s study (2021). It found that the production depending on the market system would cause a monopoly on agricultural economic problems. It is because there are more merchants outside the area that play a role.

The result of the transition in the relationship method of production depends on the market system. The Ruea Nuea is declining in the "Era of Recession and Conservation". Therefore, there is a tradition to pay respect to Mae Yanang (The sacred things of Ruea Nuea). It is consistent with Khaenamkhaew & Muhamad’s study (2021), which speaks of floating the boat in the canals for conservation and asking for blessings from Mae Yanang. It is also consistent with the study of Lapatinas, Litina, & Zanaj (2021), that found dealing with beliefs and creating a positive attitude from occupation. This is also consistent with Ramitanon's (1994), and Kaewthep’s study (1990), which agree that Ruea Nuea indicates a lifestyle and well-being. It includes the inherited life that

talks about the prosperity of the community. The existence of people in the community creates a culture that connects relationships. It is consistent with Pereira & Malik's study (2015), which found that although the Ruea Nuea has several abstracted concepts of a diverse community, it is complex and changing socio-economically. It deserves to be preserved to maintain the spiritual values of the people in the Khiriwong community. It is consistent with Mammadova & Ivars's study (2018), which finds that a sense of preference and connection with community culture will help raise awareness. It creates values, linking the community culture with community development amid modernity and a "Cultural Path". It is consistent with the study of Terzic et al. (2014), It proposes that cultural paths and eco-concepts develop community sustainability. It is also consistent with the study of Mekrueang, Khaenamkhaew, Dechochai, & Damrongwattana (2020). It found that community storytelling reflects economic, social, and cultural, and it is consistent with the study of Luan, Halim, & Hafif (2021), It found that the uniqueness and its role in bridging social capital. These beliefs, values, and lifestyles developed and changed over time to become valuable lifelong learning sources, even if they changed slightly over time.

Conclusion and suggestions

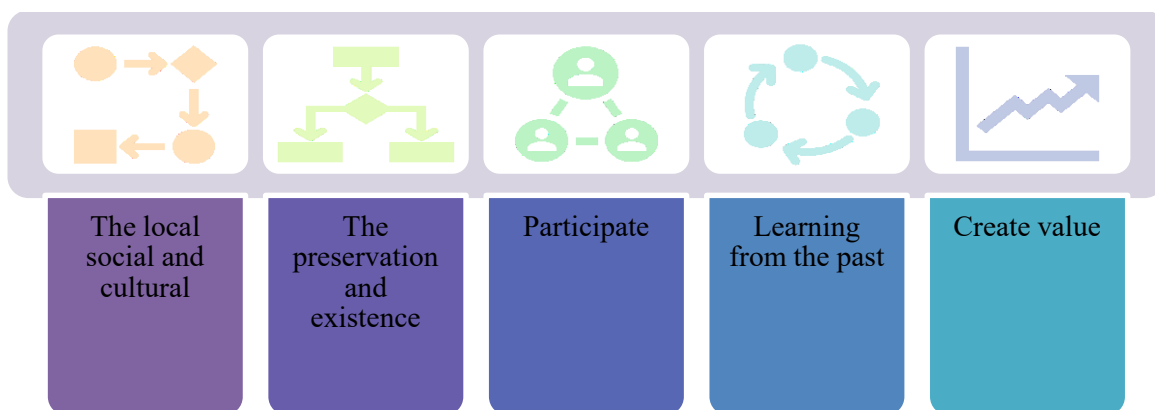
The era of prosperity related to subsistence production, shows that Ruea Nuea is significant in determining the lifestyle, economically and economically. It also influences the social conditions and relationship systems of people in the Khiriwong community. It is an occupational tool as they live in a difficult remote area. There are no farmlands, and they have to find agricultural products like fruits within Khiriwong to exchange for rice. This is a period of subsistence production. People in the Khiriwong community live dependently, share, do not take advantage of each other, and have sufficient livelihoods. The transition era related to the production of the market found during this period. This is known as the Khiriwong community's era of transition because of more comfortable transportation. It is also a condition related to the community's economic drive, namely the market system and its integration with livelihoods. This includes trading in agricultural products like fruit and vegetable rubber trading, etc., by bringing in more merchants outside the area as well. Ruea Nuea have a smaller role and have deteriorated, leading to their conservation in the community. The conservation of Ruea Nuea through the tradition of Mae Yanang (The sacred things of Ruea Nuea). After the ceremony, they have a meal together and form a group called "Love the hometown, love the people, love the brothers and sisters". All generations in the Khiriwong community, from the old to the new, participate in the conservation of their valuable cultures. This indicates that Ruea Nuea is important for harmonious behavior and existence in the Khiriwong community. It includes various local social and cultural rituals. Future research should link together economic, social, cultural, political, legal, technological and demographic dimensions in order to study the degree of evolutionary relationships between these areas. It should be completed in all dimensions, integrated with quantitative and qualitative research, or documentary and participatory research, in the following diagram:



Figures 2 Ruea Nuea
(Source : Researcher, 2023)

New knowledge and the effects on society and communities

New to this research is the presentation of the economic and social evolution divided into each period allows readers to easily relate the mind map and make the research a model for historical social science research in Thailand that can be applied. Ruea Nuea coordinates the preservation and existence of the community within the local social and cultural context. All the generations in the Khiriwong community, the old to the new, participate in cultural conservation by “Learning from the past to create value” from the Ruea Nuea, socially and culturally, for community development. It is summarized for New Knowledge and The Effects on Society and Communities in the following diagram:



Figures 3 New Knowledge and The Effects on Society and Communities
(Source : Researcher, 2023)

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Application of the MACRO Model Approach to the Interpretation Management of Creative Tourism in the form of Coffee in Khao Kho Sub-district Phetchabun Province

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Abstract

The goal of this study was to spread information about interpretative management of creative coffee tourism using the MACRO model approach and to create new strategies for promoting coffee-based creative tourism in Khao Kho Subdistrict, Khao Kho District, and Phetchabun Province. The 40 people who are interested in taking part in the project of utilizing the MACRO model approach to transmit Khao Kho Arabica Coffee tour guides from beginning to finish and the 40 people who are coffee growers in the Khao Kho Sub-district of Phetchabun Province are the target demographics. The tools used in this research are; 1) a creative guide utilizing the MACRO model method to promote coffee-based community creative tourism, and 2) interpretative activities and a guidebook for tourism from source to mouth Using the MACRO model approach, Khao Kho Arabica coffee is a form used to interview project participants. The results showed that utilizing MACRO model approach with an IOC value of 0.89, guidelines and interpretative activities for tourism from source to mouth, Khao Kho Arabica coffee goods, which are values that may be used, and the final product after that, the researcher has improved and then communicated to the group of coffee producers and interested parties the guidebook and interpretative tourist activities from the beginning to the mouth, Khao Kho Arabica coffee goods. According to the transfer findings, participants in the project were highly satisfied with their engagement in the project of transferring the handbook and interpreting tourism activities, with an average of 4.66 and a standard deviation of 0.47. Participating in the activity encourages participants to construct a learning process through group brainstorming to create a body of information they can use to advance their careers and share with the general public.

Keywords: Interpretation management, Coffee creative tourism, MACRO model

Introduction

Many countries are now committed to raising education in accordance with the education of the 21st century in response to the changing development trajectory of the world in the present and in the future. The topic of education in the twenty-first century has received a lot of attention in modern education circles. The focus of education in the twenty-first century is on student-centered learning management, encouraging and assisting learners to produce new knowledge and innovations in accordance with their interests, skills, and aptitudes, using the process of thinking and collaborating as well as utilizing technology. In order for students to communicate with one another during the learning process, organize relevant material, and be able to practically apply what they have learned. The job of the teacher will evolve in the 21st century from that of a teacher who imparts information to one who facilitates learning management so as to encourage students to produce knowledge. Using a range of learning-promoting activities and evaluations tailored to each learner's ability, instructors may encourage independent thought and creativity. A teaching model known as the MACRO model is one of the educational models that have been developed in response to the establishment of the 21st century education principles. (Wannasian, 2017)

Tourism interpretation is a form of communication that involves telling engrossing tales to make visitors understand and appreciate the worth and significance of natural, historical, and cultural assets, it plays a crucial role in enhancing the value of goods and services, may make visitors feel good, have fun, and form positive perceptions, it can also help visitors understand the tales that are told and build positive attitudes toward the preservation and development of sustainable tourism resources (Kongdit & Nawasnathi, 2018). As a result, communication is a crucial tool that aids in the achievement of a tourist destination's objectives by conveying the importance of a tourist attraction in a variety of ways. Regardless of the medium used spoken, written, or any other quality of interpretation should be taken into account in order to pique the visitor's interest and forge a strong bond. (Special Area Development Administration for Sustainable Tourism Administration, 2019)

Consequently, interpretation of tourist attractions serves a number of crucial goals in the context of tourism. For instance, the interpretation aims to enlighten visitors about the significance of each tourist destination, provide them with a fresh learning opportunity, and help them understand the value of both natural and cultural features. (Phaasakul, 2012) Tourists who communicate more easily feel more at ease, learn new things, and are more amazed by each attraction. The objectives of tourism management and the objectives of the visiting tourists will encourage tourists to participate in tourism-related activities that satisfy their needs, and interpretation will help the process of managing each tour to be able to proceed smoothly and achieve the set objectives, and educate visitors about environmentally sustainable and socially responsible tourism, including how to make it more secure.

A feature of a tourist vacation location is creative tourism, which gives travelers the chance to explore and expand their creative potential via interesting activities and educational encounters. Moreover, tourism that is connected to a place's history, arts, culture, community life, and identity is referred to as creative tourism. Furthermore, it enhances the history, arts, and culture, as well as the local way of life and identity, it is not an activity that merely stresses communal values and does not lay a strong emphasis on generating cash for the community. (Rojrungsat, 2010) It is crucial for both local business owners and visitors to actively engage in the learning experience of the attraction in order to promote positive interaction under the notion of creative tourism interpretation. In addition, the community also adds value to the history, art, culture, community way and community identity, which is not a focus on the

income of the community but is an activity that emphasizes the value of the community. (Special Area Development Administration for Sustainable Tourism Administration, 2019) As a consequence, the tale of that tourist destination will be made memorable and told, and tourists will be able to learn from the interpretation and gain information, leading to a transfer of cultural knowledge between locals and visitors. The design of meaning tools makes use of materials that are robust and long-lasting, harmonious with the surrounding landscape and community, and take inspiration from the local community's identity or architecture. The content characteristics of the interpretative tools should be entertaining, not boring, use language that is easy to understand, showing the uniqueness or value of the attraction, the content is easy to understand and creates awareness of resource conservation for tourists as well. (Phakdipinit, 2010)

During the peak travel period (October to March), Phetchabun is one of the provinces with the largest number of visitors, and this number declines during the off-peak period. Also, the trend in tourism is not just leisure travel but also attention to learning about other people's lifestyles and cultures, the environment, and neighborhood activities. Several significant historical, cultural, and natural features can be found in the Khao Kho District of Phetchabun Province, which is situated in the middle of nature in a high mountain region. As an illustration, mention Phra Borommthat Chedi Kanchanapisek and the Khao Kho International Library. Because of the high mountains and chilly climate, it is also a source of top-notch coffee, in fact, Arabica coffee is particularly well-suited to the region's high mountainous terrain. Nowadays, Khao Kho District has many coffee growing areas such as Khao Kho Highland Agricultural Research Center, Rai Janarin Coffee, and Arabica Plantation Coffee at Khao Kho. Which from the situation of coffee tourism, which is a popular trend among tourists who drink and care more about coffee, both Thai and foreign tourists, making tourism trends not only leisure travel, but also interested in learning about coffee and other cultures, environments, and community activities. (Techo, 2022) Increase interest in studying coffee because, before it is a cup that can be drunk, it must go through a variety of processes, such as gathering coffee berries, fermenting them, then milling them until the coffee beans are ready to be roasted and ground, etc. Make the coffee business grow quickly, tourists are popular to drink coffee, until it becomes a form of coffee tourism that has a positive impact on communities and tourist attractions.

According to the findings of the literature review, there is still no method for coordinating the transfer of knowledge by the community in which experts participate, and there is no way to strengthen the dissemination of creative tourism, such as coffee, which is a distinctive feature of Khao Kho District. As a result, the MACRO model approach was used to build the creative tourist communication management in order to tackle the problem. This is a 21st-century learning management approach that emphasizes students' participation in a range of learning activities, their independent creation of a body of knowledge, and their application and dissemination of that information to others. The goal is for local specialists in the field of coffee production to take part in the knowledge exchange. and innovation, putting a focus on the thought process and connecting the production of new information and innovations via the use of social and intellectual processes, respectively, through enjoyable activities. In order for knowledge to be transferred and used for the development of a strong family, strong economy, and a strong community in accordance with sustainable national policies and strategies, it is also a part of the relationship between coffee producers in the Khao Kho District and interested parties to interact and participate in learning.

Objective

- 1. To apply the MACRO model approach and interpret the meaning of creative tourism in coffee tourism.
- 2. To develop a model for promoting creative tourism in the form of coffee in Khao Kho sub-district of Phetchabun Province.

Conceptual Framework

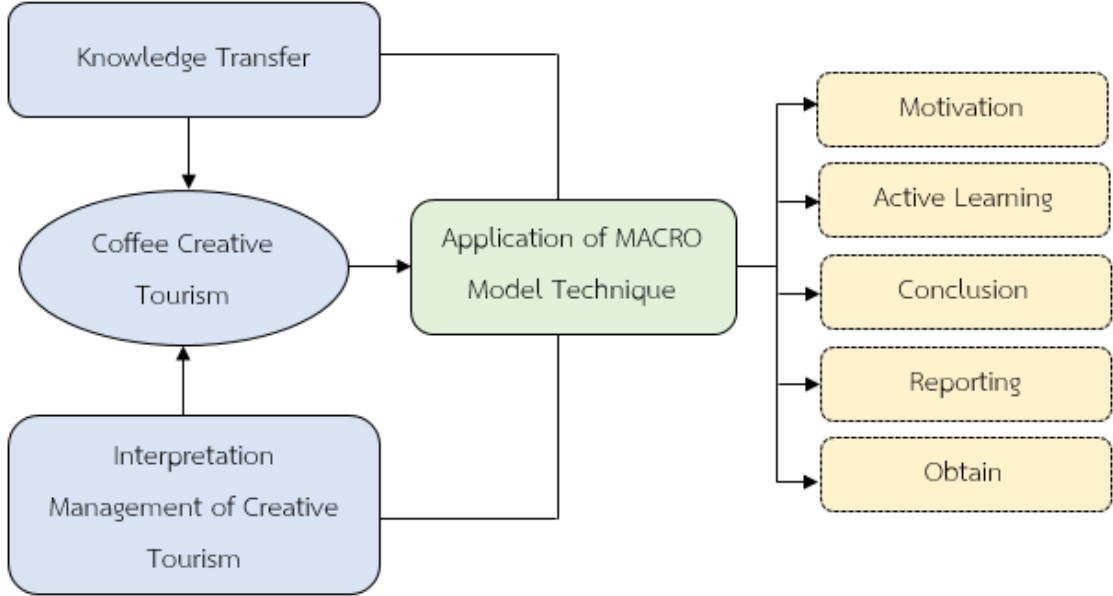


Figure 1 Show the details of the research conceptual framework
(Source : Researcher, 2023)

Methodology

This research is a participatory action research, in which a group of coffee producers in Khao Kho sub-district participated in the research process in transferring knowledge about coffee, which was the knowledge obtained in the research by applying the MACRO model technique. After identifying and studying the issue, a group of coffee growers from the Khao Kho sub-district took part. In addition to sharing expertise about managing creative media tourism, they also assist in finding solutions to challenges that develop. In this participatory action study, the research procedure took the form of knowledge and technology transfer from coffee growers in the Khao Kho subdistrict to other coffee producers and general interested parties. The sample group utilized in the research identified the proportion of the sample group by simple random sampling by utilizing a particular random sampling method from the area. The population in this study was the group of coffee farmers in Khao Kho Subdistrict. The group of coffee producers in Khao Kho Subdistrict who are interested is open to accepting applications for project participants via online channels (Facebook), with a goal of including 40 people, and the study period runs from October 2021 to November 2022. This population was created by the enrollment of participants from the public relations investigator's online recruitment process; as a result, the investigator specifically assumed that the number represented the selection of participants to take part in a research project that satisfies the researcher's criteria or goals. As a result of the key informant's contact information, the researchers will be aware when the key informant has signed up to participate when there is a

public call for participants. A key informant is someone who has good and deep information, is particularly extensive, and must be appropriate to the researcher's needs.

Research Process

This research used a qualitative research methodology, divided into 5 steps as follows;

Step 1: to guide the study and design of an innovation guide to promote coffee creative tourism, a thorough analysis of the interpretation of tourism, the essence of coffee creative tourism, the creation of manuals and MACRO model learning techniques, from documents, textbooks, and related research, were conducted, a space was then set up to collect information from community enterprises about coffee.



Figure 2 Showing an area for collecting community enterprise data about coffee
(Source : Researcher, 2023)

Step 2: the researcher collected field data about coffee at the Phetchabun Highland Agricultural Research Center, Janrin Coffee Plantation, and Arabica Coffee Shop in Khao Kho, to determine the content, the researcher used observations, interviews, participatory practices, and photographs of the fundamentals of coffee, provide a clear innovation guide to encourage coffee-based creative tourism, and create an event structure that is more appropriate.



Figure 3 Show field data collection
(Source : Researcher, 2023)

Step 3: to design and develop community participation activities for media management, the meaning of creative tourism in coffee by applying the MACRO Model technique, and by creating a tourism program through an innovative manual to promote creative tourism in the form of coffee using the MACRO model technique, it is necessary to analyze problems, needs, and basic

information, this is done through observations, interviews, participation in practice, and the collection of data.

Step 4: data synthesis is the process through which the researcher utilizes the data from the analysis. was created as an innovation guide to boost coffee creative tourism by utilizing the MACRO model approach, it was synthesized by taking into account the content and learning process in the information transfer process. Khao Kho Arabica coffee goods are presented using the MACRO model approach, which involves planning actions to be delivered as a project of distributing a trip handbook from source to mouth. There is also a project assessment form in which the implementation has been conducted by experts to verify the manual and the assessment form for consistency of the objectives with the questionnaire (IOC). The results showed that every questionnaire had a consistency index between 0.50 – 1.00, which was considered to be within the valid criteria, and bring things that should be improved and suggestions to improve the questionnaire to be more quality. The consistency of the information acquired utilizing a range of methodologies, including interviews, data sources, and time, was taken into account, along with knowledge gained from a triangular evaluation of interviews and recordings and data collection procedures. Then be subjected to analytical induction analysis, which gathers information from happening events and uses it to evaluate them and draw conclusions, in which most of the research data are secondary data.

Step 5: the creation of events and the dissemination of cutting-edge guides to encourage creative tourism in coffee “from the beginning to the mouth - Khao Kho Arabica Coffee”, under the project of transferring tourism-relevant guides from the beginning to the mouth of Khao Kho Arabica coffee products, by using the MACRO model technique, and using the evaluation form to measure the results with project participants to eventually achieve sustainability.

Research Tools

The tools used to collect data according to the research procedures are as follows;

1. Using an interview data recording form, gather information on the past of coffee farmers in the province of Phetchabun by speaking with representatives from the Khao Kho Highland Agricultural Research Center, Janrin Coffee Plantation, and coffee shops. The value of coffee, its appeal, its history, how communities and coffee production are related, and the processes involved in growing and processing coffee the advantages and worth of coffee, as well as strategies for marketing it and turning it into fascinating new goods. After creating the interview data recorder, the researcher presented three experts to weigh in on and confirm the accuracy of the linguistic usage in question. The researcher had previously studied the documents pertaining to the interview record form, as well as the criteria and procedures for creating it, the language used must be blatantly relevant for the sample and include the necessary topics or variables. The interview data was then improved in accordance with the recommendations of the experts, and the expert was then presented with the task of evaluating the content validity by determining the IOC (Item Objective Congruent Index) consistency value for each item. The expert then considered choosing the questions for which the IOC was found to be greater than 0.5, and they offered feedback on the language clarity and coverage, in accordance with the framework for developing interview data that was suggested by the experts, to be utilized in the interview, improve the interview record in accordance with professional recommendations.

2. An innovative guide to promoting coffee-based creative tourism using the MACRO technique model, together with participatory speakers (participatory learning appraisal), with speakers who have knowledge and understanding about the dissemination of knowledge about the history of Phetchabun coffee producers, origins and the relationship between communities and coffee production. From the beginning to the end of Khao Kho Arabica coffee products, from the process of planting to coffee processing, studying Khao Kho coffee identity to promote and increase the value of coffee products through participation in practical activities, knowledge exchange, and engaging with participants who are interested in coffee, this is done through an innovative guide to promoting creative tourism in coffee.

3. An evaluation form for the innovation guide to promote coffee creative tourism using the MACRO model technique, using a questionnaire as a 5-level rating scale according to Likert model, which has passed the quality assessment of 3 experts, by calculating the consistency index of the objective and the point in question (IOC: Index of item objective congruence) has a value between 0.50 – 1.00 with valid validity.

Results

The study findings were based on the analysis of the opinion questionnaire and used the MACRO model method to produce an innovation guide to promote coffee creative tourism. As a result, the researcher provides the following two research findings;

Part 1: After assessing the consistency of the innovation manual for promoting community creative tourism in coffee using the MACRO model method, the researcher created an innovation manual for promoting community creative tourism in coffee. Based on information gathered from interviews, study, the use of manual design experts, relevant document and research searches, and interview data. In connection to innovations to promote creative tourism and people with expertise in coffee activities, the effectiveness of the instrument, the index of item-objective congruence (IOC), which is used to design and develop knowledge transfer procedures, was assessed. It was found that all three experts concurred that the guidance in the innovation handbook for fostering creative tourism in coffee using the MACRO model approach was suitable and consistent with the goal. This was accomplished by using the MACRO model approach to manage coffee-based creative tourism in a meaningful way that would be useful for future knowledge transfer to coffee farmers and other interested parties. Efficiency assessment The researcher rewrote the innovation guide to encourage creative tourism in coffee, named "from the beginning to the mouth - Khao Kho Arabica Coffee," which inside the manual book comprises of all 10 themes of knowledge; IOC value in the range of 0.5 -1.00, which is a value that may be employed; (1) Macro Model pour process to coffee activity, (2) Sawasdee Coffee, (3) Khao Kho Arabica Aroma, (4) What's in Coffee Beans, (5) Coffee Bean Journey, (6)) the good benefits that exist in coffee, (7) coffee grounds that do not waste, (8) this story for "coffee lovers", (9) planted with love, created with heart, and (10) activities "from the beginning to the mouth - Khao Kho Arabica Coffee". As a result of the first analysis of the material, it has been organized according to content, including the actions under the project of transmitting journey meanings from the beginning to the mouth of Khao Kho Arabica coffee goods by using Wannasian (2017) MACRO model approach. When someone employs the adage "teach less, learn more," they're referring to a theory that emphasizes letting pupils learn more independently by using less narrative teaching techniques. The first concept is the notion that students may learn more on their own by lowering the usage of narrative teaching techniques, which is related to education management in the twenty-first century and highlights two principles. The second concept is called direct learning, and it aims to give students as much freedom as possible to learn on their own through independent inquiry, experimentation, practice, problem-solving, creativity, and group work as well as the capacity to synthesize knowledge and effectively communicate it. The aforementioned teaching strategy was developed as a project activity to motivate participants, involve them in hands-on learning, assist them in synthesizing their knowledge, and assist them in delivering their learning outcomes using appropriate language and techniques. If done properly, it may also be disseminated to families and communities using the appropriate technologies and by adhering to the knowledge transfer process;

Stage 1: Inspiration, in this phase, the speakers define or construct knowledge points on issues related to creative tourism in coffee, so the participants are aware of the site and are

encouraged to do so, learn together, and the presenters pick a variety of activities to promote interest. Role-playing activities, real research, nature excursions, physical studies, or watching movies are some examples of activities that may be used to introduce learning, spark participants' curiosity, and inspire questioning and other forms of inquiry. Participants then take part in point-to-point activities while responding to difficult questions and taking part in interesting activities, to go on to the next level of learning at this stage, it is essential for participants to be able to develop a discussion topic regarding their area of interest.

Stage 2: With active learning, the participants are the main focus, and they get the ability to learn directly with their hands while utilizing a variety of learning methods from various learning sources. At this point, the facilitator will provide the participants with a basic understanding of how to search for knowledge through project activities in order to obtain the necessary knowledge, and will compile information using the process of brainstorming, and learning by using experimental activities related to coffee together, emphasizing the thinking process, which is at the core of the learning process, and encouraging participants to conduct activities to find information about, using method research from knowledgeable interviews, search operations from learning sources, and self-experiment (experiment, inquiry, observation, exploration).

Stage 3: Conclusion: At this point, participants can restate their understanding or combine what they've learnt through their words and ideas. Let's define it at this point as the result of brainstorming and learning via experimenting that results from the exchange of information with one another as a new notion or body of knowledge. Finally, let's use a mind map and a narrative presentation to condense the body of information. The facilitator will be in charge of assessing the participants' knowledge in order to ascertain their general knowledge base and how thorough their knowledge is.

Stage 4: Participants have the opportunity to share their knowledge-building efforts with others through reporting and presentations, which enables them to assess their understanding and engage their creativity. A display of the completed work is also available, and it may be seen in a variety of ways, including discussions, images, and presentations on the Padlet forum and by using the Line application.

Stage 5: This step of knowledge distribution (Obtain) invites participants to practice using their information and understanding in a variety of contexts. Making the most of information, promoting innovation, and sharing knowledge with families, communities, and society once it has been applied or even via social networks by publishing are the key objectives. It has been released on Facebook, Line, and print media.

So, in order to inspire participants to dare to think, dare to express themselves, and dare to make decisions, the MACRO Model approach is applied in the information transfer process. As a result, the preferred method of learning changes from passive listening to collaborative self-learning. Which encourages the use of information and its communication to the outside world for the advantage of or understanding of others on a public level, and which spurs interest in learning and knowledge to address problems by being able to internalize new information properly through the learning process. (Fanchien, 2020)

Part 2: By utilizing the MACRO model approach under the research project series, evaluation findings of the project manual and the innovation of the transfer of the trip manual from the source of the mouth of Khao Kho Arabica coffee goods manage the meaning of creative tourism in the form of coffee. It provides general information on the study participants. The respondents include 40 interested parties from the Khao Kho Subdistrict who are coffee farmers, with the participants' ages ranging from 22 to 45.

However, project participants are teachers, civil servants, government employees, self-employed, coffee shop owners, and farmers, the reasons for participating in project activities are; (1) are interested in various processes of coffee to learn and find interesting new

experiences, (2) want to find new tourism activities and want to know the coffee production process from the beginning to the consumer, (3) love coffee and love drip coffee by yourself, so want to join the activity to gain knowledge about coffee clearly and understand more, (4) interested in agrotourism and product processing, along with wanting to find inspiration for organizing tourism promotion activities at the provincial level, (5) participants are interested in learning about the history of coffee, researching, and developing coffee beans because they enjoy coffee and it is another method to promote tourism, (6) would want to study the steps involved in growing, harvesting, and producing coffee, as well as the method of creating it.

In the context of a number of research projects on interpretive management of creative tourism in the form of coffee, evaluation results of the project of disseminating the meaningful travel guide from origin to mouth of Khao Kho Arabica coffee products, by applying the MACRO model technique and transferring the innovative manual to promote coffee creative tourism by using the MACRO model technique. The project participants were happy with the project of transferring the journey meaningful guidance from source to mouth by applying the MACRO model approach, as shown by the mean total of 4.66 (S.D. = 0.47), which was calculated using the MACRO model technique, and the transmission of innovation manuals to promote coffee creative tourism using the MACRO model technique were at the highest level, which were able to sort the evaluation items from the highest to the lowest as follows;

First, participants thought that this project was a mix of learning about Arabica coffee, engaging in activities related to it, and using a learning management system to facilitate learning that would happen naturally, and can apply knowledge and disseminate to the public according to the MACRO model process with an average of $\bar{X} = 4.87$ (S.D. = 0.33) next, this project has a trainer who specializes in educating about coffee activities with an average of $\bar{X} = 4.80$ (S.D. = 0.40). Next, this project helps people who are interested to gain more knowledge and understanding of coffee with an average of $\bar{X} = 4.75$ (S.D. = 0.43). The next step was the satisfaction of the project participants with participation in handbook transmission and tourism interpretive activities from source to mouth Arabica coffee by applying MACRO model technique, with mean $\bar{X} = 4.75$ (S.D. = 0.43). In addition, the next order was that the project participants' satisfaction with manual and mouth-to-mouth activities by application of MACRO model technique was mean $\bar{X} = 4.64$ (S.D. = 0.48). The next step is that this project has knowledge transfer on interpretive management of creative tourism in coffee with an average of $\bar{X} = 4.62$, (S.D. = 0.49) next is this project has a step-by-step broadcast, interesting activities, content that is easy to understand and suitable for interested people with an average of $\bar{X} = 4.62$ (S.D. = 0.49). In addition, this project is consistent with the content and objectives of the project, and is also a guide for those who are interested in extending and helping to integrate knowledge about coffee to be sustainable with an average of $\bar{X} = 4.6$ (S.D. = 0.49). Finally, the project had a handbook with clearly consistent pictures, mean $\bar{X} = 4.37$ (S.D. = 0.66). In any case, the project participants have offered ideas that it is a good activity, please continue to have projects like this the next time, it is also a good activity and teaches understanding, a project that receives both having fun and knowledge go hand in hand.



Figure 4 Show event design details to promote creative tourism in the form of coffee
(Source : Researcher, 2023)

Discussions

It was discovered from research investigations on Meaningful management of coffee-based creative tourism by utilizing the MACRO model method that the knowledge transfer of Meaningful media creative tourism in coffee was found by applying the MACRO model approach. All three experts agreed that the information in the innovation manual for promoting coffee creative tourism using the MACRO model technique was appropriate for transferring knowledge to coffee producers and interested parties. They also found that the consistency of the innovation manual and project activities for knowledge transfer had been evaluated by all three experts. With an effective IOC value in the range of 0.5 –1.00 which is a value that can be used. In this regard, the knowledge transfer has been carried out under the project of transferring travel meaningful guides from source to mouth, by applying the MACRO model technique, which has activities within the project that uses the teaching technique of the MACRO model to manage knowledge for the participants, consists of 5 steps;

Stage 1: the participants and the facilitator work together to define or establish the knowledge area of interest during the motivational stage, which is when the objective is accomplished and learners are motivated to learn.

Stage 2: direct learning stage, in which the presenters give the audience tasks and information resources while the learners learn and practice on their own.

Stage 3: participants in knowledge summaries bring the learning outcomes to share and learn from one another to define new ideas or new knowledge using a variety of methods, this aids participants in having higher learning achievement, with retention of long learning, and an attitude towards the area learned.

Stage 4: report and presentation stage: Participants can use this stage to share their knowledge-building efforts with others, which helps to solidify or validate their understanding.

Stage 5: the knowledge distribution stage is where participants are urged to use what they have learned in multiple contexts by distributing it through written materials, hands-on activities, or social media platforms like Facebook, Line, and YouTube.

The MACRO Model is crucial for teaching students to be courageous in their inquiry, in their thinking, in their decision-making, and in their expression. This transform learning from passive listening to active self-learning, and it prepares students for lifelong learning. By encouraging students to ask questions out of curiosity and to think critically and creatively about their questions' potential benefits, the MACRO Model also helps students find the right solutions. According to the Chinese philosopher's notion that teaching people to fish is better

than giving them fish, it teaches them to be able to look for information from sources that are abundant in the world, helping students to acquire lifelong learning abilities. Summarizing, by demonstrating to the student that the knowledge he or she has internalized is fresh information that has experienced an appropriate learning process, the learner is more likely to remember the information than if it were simply memorized. Before drawing any conclusions, the instructor provides the class a chance to explore the theoretical underpinnings. This promotes cooperation, teamwork, and a democratic way of life, while leadership development programs also uphold morals and ethics. A student can build communication, language, and competency through practicing presenting and communication skills, which are critical abilities demanded globally. While presenting, having knowledge that can be used and shared to promote the growth of innovation for the country's continued development is important. (Wannasian, 2017)

The MACRO model approach has been employed as a component of the project activities to transfer information. The project was designed to use the MACRO model technique to communicate the meaning of tourism from source to mouth. Using manuals and learning exercises that followed the MACRO model method, the lecturers gave the audience information and comprehension while also inspiring them to participate. The direct learning stage involves doing and conducting research in actual locations, drawing conclusions about oneself from the material learned from the speakers and practice, reporting and presenting their own knowledge content by exchanging knowledge with one another within and outside the group, and disseminating knowledge through the Line channel. In addition to using what they have learnt through project activities to further improve their own goods, participants may better their own knowledge and understanding of coffee by following these five steps. The facilitator assists in guiding and creating activities that enable people to evaluate their own learning progress because it is clear from the stages listed above that the participants have learnt via self-discovery. This is consistent with the study of Sirirattanajit & Hemman (2017), has studied the competency of teaching and learning with a student-centred focus of the Hat Yai University faculty, in which some concepts of the Macro model were applied.

Overall, it was shown that the effectiveness of student-centered teaching and learning was at a very high level. The improvement of student learning is a side effect of learning management. In line with Intarakosum (2021) who said that a learning style that focuses on giving students the opportunity to use their abilities to learn, participate in activities, and encourage students to become interested, eager to learn, and creative. As well as that the activities are timely, the teaching materials, and the atmosphere within the classroom facilitates the learning process through the design of the teacher's activities.

Many academic educators have studied the MACRO model of teaching in the past, one such academic educator is Fanchien (2020), who claimed that the MACRO model of teaching is a teaching strategy that encourages students to dare to ask questions, dare to think, dare to be assertive, and dare to make decisions. This changes the learning style from one in which students merely listen to one in which they actively participate in learning, which promote learning and problem-solving motivation, the ability for students to independently internalize new information through the proper learning process, and the encouragement of students applying their knowledge. This is consistent with Onlaor (2020) assertion that if students engage in teaching and learning activities, they would love learning and have the opportunity to collaborate with peers. Learners will be more open to learning if they encounter fresh questions and answers, as well as new items, problems, and talents, as well as success in self-initiated activity. Uamcharoen (2016), on the other hand, said that the macro model is a learning activity that promotes learners to learn by practice, learners will construct knowledge, or the meaning of what is seen by oneself, may change according to the person's past knowledge. They provide the chance Students have the opportunity to express their thoughts, reflect on

their own actions, and grow and enhance their own work, which encourages students to be curious in learning and find solutions to challenges for their own progress.

Conclusion and suggestions

According to the study's findings, creative tourism media meaning management in terms of coffee by the use of this MACRO model approach was discovered through an analysis of information related to innovation development to promote coffee tourism of Khao Kho sub-district in Phetchabun province. In order to impart information about “from the beginning to the mouth - Khao Kho Arabica Coffee” this researcher has created a manual and established a method via project activities and innovation manuals, the manual book contains all 10 knowledge topics, and it has been communicated through the project of communicating the tour handbook, by using the MACRO model approach, specialists with input from the community created “from the beginning to the tongue - Khao Kho Arabica coffee”. Allow the participants in the project activities to put what they have learned into practice so that they can learn more and be better able to use what they have learned to innovate and grow business and society. This is done by putting an emphasis on how participants think and how they can connect their prior experiences with their current ones. Technology must be transferred and used to build a strong community, which employs a learning process that enables the information to be passed down sustainably.

This is in line with the research of Nuichim (1999) about designing a book to come true. Which method to choose depends on the needs of creating a guide, together with when tourists want to participate in activities and want to know the details of the project. This travel guide thus satisfies the requirements of both source owners and tourists. In addition to publicizing the project activities so that interested parties are aware of the various details of the activities, it also provides background information and details on how activities are carried out, particularly in the garden where forests are planted and aquatic species are released. This is consistent with the research of Sirikul (1989) who commented that the preparation of a manual in the form of a book make it possible to talk more about the subject, and have illustrations to attract attention, and to make it easier to understand the content of the activity. This is in line with the study of Kulchai (2017) found that the tourist guide will allow tourists to know the story, get to know the unknown tourist attractions, and will get to travel more, having beautiful illustrations, good content makes it easy to read, and travel guides are appropriate to continue to publish travel guides. Participants will also be able to study more on their own by utilizing the macro model method to assist in creating a creative manual to promote creative tourism in coffee. It strives to provide students more chances to learn on their own via thinking, problem-solving, creativity, and group work, this will help them to synthesize their information and be able to use it correctly in future scenarios, resulting in a transfer process that will fuel the economy and create a participatory community that is sustainable.

In any event, the following advice is provided as a result of the study: the creation of creative tourism activities should be used knowledge transfer techniques in order to make them diverse and responsive to the requirements of the community, tourism innovation handbooks should be small and portable.

New knowledge and the effects on society and communities

According to the innovation guide, this research has designed tourism activities to be a part of the imaginative interpretation of tourism that has an interesting, positive impact on coffee tourism, to communities and tourist attractions, and to an increase in coffee shop owners in popular tourist areas. Therefore, the idea of creative tourism has been implemented along with an inventive manual that combines the use of the MACRO model technique, which is a learning technique that aims to teach students to dare to ask questions, dare to think, dare to express themselves, and dare to make decisions. This transforms the learning style from learners to listeners only, to cooperative self-learning. Which encourages children to have an interest in learning and know how to solve problems, be able to crystallize new knowledge by yourself through the correct learning process, and encourage learners to apply knowledge and present it to the outside, to benefit or understanding to others at the public level.

It consists of (1) M-motivation is the creation of motivation, inspiration, interest and desire to learn, (2) A-active learning is learning where learners have the opportunity to gain knowledge directly by doing it themselves, with a variety of learning methods from a variety of different learning sources, it is important, (3) C-conclusion is learners summarize knowledge or synthesize what they have learned according to their thoughts and language, (4) R-reporting is the learner communicating and presenting learning outcomes with appropriate language, methods and information technology, and (5) O-obtain is the learner takes the learning outcomes to use for dissemination of knowledge to the family, communities and societies, through appropriate means, media, or technology.

Entrepreneurs, groups of coffee producers, and interested parties who participate in the project can apply the activities participating in the project, or extend it into activities that help support coffee tourism. Activities and routes for coffee tourism were creatively designed in the process of organizing activities; it is an extension of tourism from the old form of tourism to a new form of tourism. It can also add value, examples of activities that can be applied, such as exploring the nature trails for growing coffee, processing coffee as souvenirs, coffee grounds soap, coffee scented candles, coffee shell resin, coffee shell fertilizer, etc. Tourists now recognize the value of taking part in the numerous tourism activities offered by the community or tourist destination as a consequence of such tourism activity organization. Through individual or group learning, it adds value to the experiences that travelers and communities have when visiting places, for engagement authentic experiences, and deep cultural understanding, and in tourism design, which leads to income and benefit for the community, and can also create added value to the culture, way of life of the community, and the identity of the community as well.

As a result of the shifting development trajectory of the current and future worlds, it is believed that the application of the MACRO model to 21st century education will enhance the level of education in accordance with 21st century education. The focus of education in the twenty-first century is on student-centered learning management, which encourages and supports students in developing new knowledge and innovations in accordance with their interests, skills, and aptitudes while utilizing technology, community and local collaboration, and thought processes. The creative tourism management of the coffee community was therefore applied using the MACRO model technique, which led to learners interacting and participating in learning, differentiating appropriate information, and being able to apply the knowledge that had been applied in a concrete way. This learning will change the teacher's role from being a teacher and inputting knowledge to becoming a facilitator of learning management.

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Investigating the Relationship between Religious and Tourists' Perceptions of Temple Visitation Experience: Evidence from Phra Nakhon District Bangkok

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Abstract

The objectives of this research are 1) to analyze the differences in religious tourism behaviors of Thai tourists in Phra Nakhon District, 2) to develop a structural equation model of religious tourism behaviors of Thai tourists. Data was collected, by using accidental sampling technique, with a sample of 400 people who were tourists and came to visit temples.

The results revealed that the relative chi-square (CMIN / DF) is 1.978, the conformity index GFI is 0.938, the CFI of the comparative conformity index CFI (Comparative Fit Index) is 0.980, (NFI) is 0.961 and the expected shift (RMSEA) is 0.050.

The results of the hypothesis testing which scrutinized the causal influence of image variables on experience, showed a significant direct impact. Furthermore, the experience component directly influences the satisfaction component. Additionally, the elements contributing to the willingness to spread the word were found to be statistically significant at the 0.001 level. This includes the importance of constructing floor features, such as ramps, to accommodate the needs of elderly tourists.

Keywords: Destination image, Experience, Satisfaction, Revisit intention, Word of mouth, Religious tourism

Introduction

Religious attractions, by and large, attract more than 300 million tourists every year (Gabor, 2016), and revenue from the religious tourism industry is approximately US \$ 20 billion (Askin, 2012). The nature of religious tourism has attracted the attention of researchers from the fields of education, religion, psychology, leisure, sociology and tourism (Argyle, 2002; Harris, 2004). Scholars had separated groups by distinguishing the pilgrimage-style tourism from tourism activities, and focused on the motivations and activities of tourists (Abbate & Nuovo, 2013; MacCannell, 1973; Oktadiana et al., 2016; Wong et al., 2013). Past studies have shown more trends in creating differentiation and interest in traveler experiences than other trends in the past (Badone & Roseman, 2004; Collins-Kreiner, 2010).

Although religious tourism is concerned with the issue of motivation, it was found that the studies on image and experience gained from tourism were relatively few. That is, few researchers attempted to analyze the visitor experience (Pearce et al., 2013; Poria et al., 2006; Sharpley & Sundaram, 2005). The image of a destination is a key element to attract consumers, since consumers tend to choose their holiday destinations when they have free time from their regular work or main jobs. Mostly, selection of the location is based on the weather, facility, safety, or specific interest (Qu et al., 2011). From the foregoing, it showed that the influence of travel destination choice on many occasions will play an important role in travel decision making. It is the image of a destination that is one of the key decision-making attributes. This is because it helps differentiate each location in the consumer sentiment. Past research has shown that the image of a destination is related to satisfaction in tourism that will influence revisit intention and will develop as a recommendation or word-of-mouth (Nisco et al., 2015; Prayag et al., 2017). In addition, little consideration is given to visitors' views on new services that could impact religious experiences and revisiting (Huang et al., 2017; Kasim, 2011; Raj & Morpeth, 2007; Singh, 2004; Wong et al., 2013).

Additionally, studying the image of religious tourism is a crucial tool for predicting tourist behavior. This study aims to understand behavioral differences and develop a structural equation model for religious tourism behavior, thereby optimizing the results to attract tourists. It aims to meet tourists' expectations when they visit the Phra Nakhon area, rich with historical and political landmarks like Wat Chetu, Phanvimonmangkalaram Ratchaworamahaviharn, Wat Bowonniwet Worawihan, Wat Suthat Thepwararam, Wat Chana Songkhram Ratchaworawiharn, and Wat Ratchanatdaram Worawihan. Given its historical depth and rich culture, the Phra Nakhon district has become a major attraction in Bangkok for both Thai tourists and foreigners. The district is regarded as a region of significant religious and cultural tourism in Thailand.

Research objectives

1. To analyze the differences in religious tourism behaviors of Thai tourists in Phra Nakhon District
2. To develop a structural equation model for religious tourism behaviors of Thai tourists concerning temples in Phra Nakhon District Bangkok

Research conceptual framework

According to the literature review, the development of the model can be divided into 5 components. These include 1) the image of the tourist attraction 2) the tourism experience 3) satisfaction 4) the revisit intention and 5) the word-of-mouth intention, as shown in Figure 1

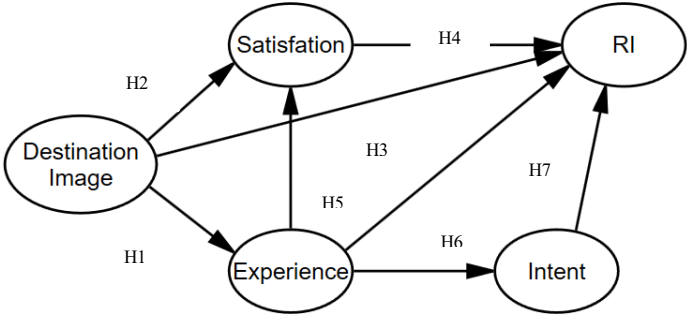


Figure 1 Research conceptual framework
(Source : Researcher, 2023)

Literature review and hypotheses development

1 Destination Image, Experience

The image of a tourist destination is a complex structure (Gallarza et al., 2002). A tourism destination image is fundamentally based on two components: 1) cognitive evaluation and 2) emotional evaluation (Walmsley & Young, 1998). The cognitive evaluation is the nature of the tourist's beliefs or knowledge of the destination; however, the emotional evaluation will reflect the visitor's emotions, or it could be the visitor's feelings about the destination. (Giles et al., 2013; Marchiori & Cantoni, 2015; Qu, kim, &2011). Especially for religious sites, having a positive image not only promote personal beliefs and maintain mental health but also promote unity in society and stability.

Hence, there could be some debate as to whether maintaining or creating a good destination image would still be essential for the development of religious tourism sites to maintain popularity. In general, the opinions of tourists about destinations are built on the relationships they have kept in their memories of experiences. These experiences can be affected by different sources of information that influence the conceptual imagination of the image.

In addition, when it comes to gaining experience, several times, travelers can get information from referrals through telling or reading other visitors' travel posts. Recent studies show that most travelers enjoy sharing their knowledge, emotions and moments of their experiences in online communities (Buhalis & Law, 2008; Jacobsen & Munar, 2012). All of these studies suggested that word of mouth is a major tool in defining a destination image (Beerli & Martin, 2004). Getting travel information before the actual trip is so important that (Pearce, 2011) tends to enable travelers to virtualize their destination image (Cohen, 1979).

Besides, the great experience will be the main objective of the traveler which is related to the behavior of the person in the promised attraction and the nature of the location such as the aesthetics, history and culture of the landscape, through the synthesis of personal experiences of tourists which is closely related to their own characteristics, personality and prior knowledge. Therefore, it can be stated that the traveler experience will shape the behavior and psychology of the destination image in the views of the traveler before traveling.

Although the process is categorized as a purposeful or measurable tourist destination for activities, expenses and general travel deals, the psychological component is a traveler's personal perception of the friendliness of the atmosphere and the quality of service. The process can be regarded as a traditional cognitive aspect or as the knowledge of the travel destination image (Stabler, 1995).

Recently, the awareness of the importance of emotional elements in relation to the psychological characteristics of the tourist attraction image have been increasingly emphasized nowadays (Chen & Uysal, 2002; Kim & Richardson, 2003; Martin. & Bosque, 2008; Qu et al., 2011). In addition to the cognitive and emotional components, Son and Pearce (2005) addressed several sensory components. It is a predictable imagination about the sensory possibilities of the place which can help assess multiple aspects of the destination image. Overall, the image that tourists perceive about the destination is an ongoing matter and it is built in a society of different backgrounds (Henderson & Frelke, 2000; Pearce & Pabel, 2015; Son & Pearce, 2005; Stokowski, 2002; Trauer & Ryan, 2005; Williams, 2002).

Religious tourist experience

In holy places, people can experience a unique culture and seek spiritual support and make life meaningful. (Fletcher, 2004; Mazumdar & Mazumdar, 2004). In the past, researchers noted that both cultural and natural environments played a direct role in impacting visitor experiences. Physical arrangements such as natural beauty and traditional temples with statues and images will influence visitors' perceptions of beliefs, ideals and spirituality (Mazumdar & Mazumdar, 2004). In such an environment, travelers may experience a sense of enlightenment or the existence of their beliefs, which Yagi & Pearce (2007) argued that environments with symbolic properties that induce strong emotional reactions will have a great impact on cultivation of human values. At the present time; however, it leads to the view that specific places of worship can help individuals create their own group identity (Mazumdar & Mazumdar, 2004). Past research has highlighted that traveler experiences are influenced by the behavior of others (Belhassen et al., 2008; Pearce, 2005; Yagi & Pearce, 2007). Pilgrimages are often shared with others. They are generally positively influenced by the behavior of similar groups. Hence, thanks to its positive energy, people in many places of worship tend to create a feeling of belonging, gaining respect and love from others. Besides, there are a lot of merit making offerings. This is to achieve the belief that they will gain happiness and progress in all aspects (Fletcher, 2004). Upon further consideration, the most meaningful experiences for religious tourists may arise from their own (Collins-Kreiner, 2010). Self-experiences are affected by the nature of the visitor (Poria et al., 2003) that characterizes a spiritual need or motivation.

H1: The image of religious tourist attractions directly influences the religious tourism experiences.

H2: The image of religious tourist attractions directly influences the satisfaction of religious tourist attractions.

H3: The image of religious tourist attractions directly influences the revisit intention.

Satisfaction

Tourist satisfaction is essential to improving product quality presented to tourists, specifically in religious tourism which is expressed as satisfaction in a form of a reflective perception. That is, an opinion that will be a valuable information for managing and planning the religious tourism development. This will create certain level of satisfaction and will cause the intentional behavior concerning word of mouth and the tourist's satisfaction will contribute to solving a problem. Chuah et al. (2017) pointed out that product and service quality are the key factors affecting traveler satisfaction in the form of word of mouth (Dawi et al., 2018). This, by word of mouth, has been recognized as having an influence in the transmission of

information between individuals (Martensen & Grønholdt, 2016) that will influence the decision to visit temples in Phra Nakhon District, Bangkok.

H4: Satisfaction in religious tourist attractions directly influences the revisit intention.

H5: Religious tourism experiences directly influences the satisfaction in religious tourist attractions.

Revisit and word of mouth

The willingness of tourists to return to use the service again or to revisit is a widely studied issue that leads to a positive effect on the competitive environment. However, from the past literature reviews, it was found that the intentions of returning and word of mouth mostly involved in the business sector. There is little study of these issues in religious tourism, therefore, it is necessary to study the reasons why tourists return to religious tourism. In the relevant issues, there are scholars stated that repeat tourism is considered as a sense of loyalty of tourists towards their travel destination before returning to use the service again, that is to attract the target group to realize the worthiness of having the opportunity to revisit (Shoemaker & Lewis, 1999). Chen & Tsai, 2007 stated that this will affect the occurrence of word-of-mouth behavior, a long-used method of transmitting information (Dellarocas, 2003) and there are multiple forms of referrals. Arndt (1967) suggested that word of mouth is a means of communication between the messenger and the recipient which perceives the information obtained about a product or an opportunity to gain experience such as from religious tourism. Meanwhile, word of mouth is defined as being free from commercial influence (Litvin et al., 2008). The exchange between tourists will provide access to the information related to religious tourism rather than official advertising (Brown et al., 2007). Therefore, word of mouth is recognized as one of the most influential forms of information transmission to travelers (Martensen, A. and Grønholdt, L., 2016) that are relevant to the travel or purchase decisions of the consumer.

H6: Religious tourism experiences directly influence the revisit intention.

H7: Religious tourism experiences directly influence the word of mouth intention.

Methodology

Population and sample groups used in the research.

Tourists who visit temples in Phra Nakhon District Bangkok: Wat Chetuphon Wimonkalam Ratchaworamahawihan, Wat Bowon Niwet Worawihan, Wat Suthat Thepwararam, Wat Chana Songkhram Ratchaworamahawihan, and Wat Ratchanatdaram Worawihan. The researcher selected the sampling technique regardless of the probability. (Non-Probability) by using Accidental Sampling and determining the number of samples that can represent the population from the sample size by specifying the sample size in the test query with 40 samples and calculate Partial R² for estimation of sample size using program G * Power 3.1 Faul et al, (2007, 2009). From the estimation of the sample with the effect size of 0.3, calculated from 40 samples from the use of statistics in the goodness of fit test group. The probability of error in one type of test (α) is 0.05, the test power ($1-\beta$) is 0.95 (Cohen, 1977), resulting in a sample size of 400 population.

Research Instruments

The nature of the tools used in this research, a type of tools was used according to the nature of the research method. Quantitative research tools with the characteristics of the research tools were divided into 3 parts as follows:

Part 1: General Status Questionnaire

The purpose of the visit of those who traveled to the study area. The nature of the questionnaire is in the form of a check list.

Part 2: The Questionnaire on the issues in this study consisted of 5 components: 1) Image of the tourist attraction 2) Repeated travel experiences 3) Satisfaction 4) Word-of-Mouth Intention 5) The revisit intention A questionnaire with a rating scale which has the criteria for giving the weight of the assessment at 7 levels According to the Likert Scale Method, the rating for each scale was 1 with the least opinion level to 7 with the highest degree (Olya & Al-ansi, 2018). Part 3: A Questionnaire on comments and suggestions for religious tourism

Research tools

The researcher used the questionnaire as a research tool as follows: 1) Study the principles of questionnaire construction according to the research concept. 2) Study information from relevant books, documents, articles, and research to guide and form questions. 3) Determine the issue and scope of the questions in accordance with the objectives and bring the questionnaire to the 5 Experts with knowledge and experience in the field of study in order to find out the quality of the tool. The next process, the Index of Item Objective Congruence (IOC) consistency index was examined, in which the results of this audit of the consistency index between the question and the research objective were between 0.80. - 1.00. 4) The questionnaire was used to analyze the discrimination power with items in the part of questions in the form of a checklist with the standard deviation and questionnaire with a scaled nature, estimated with a correlation coefficient and the reliability of the questionnaire.

The scaled questionnaire was estimated using Cronbach Alpha (Sinjaru, 2020). The results of the analysis of the discrimination power by each item were between 0.51 - 1.97 and the questions that were in a scaling type were estimated by analysis of Corrected Item – Total Correlation Values were between 0.41–0.78. The reliability analysis of the questionnaire with Alpha Coefficient of Cronbach was 0.928.

Statistics used in data analysis

This research includes the beginning process in data analysis, explanation of basic information, descriptive and statistical explanation in the form of Multivariate Statistic with a software package that analyzes the Structure Equation Model (SEM) of the issues studied. The analysis of the model has been developed by the Component or Latent Variable Adjustment to be complete with criteria for determining the consistency assessment of latent variables containing CMIN-DF, NFI, GFI, CFI, and RMSEA values (Arbuckle, 2016).

Results

The study indicated that the majority of tourists were 282 women (70.5 %) and followed by 118 men (29.5 %). There were 196 people, 21-25 years old (49.0 %). 291 people were single (72.8 %). 260 people graduated with a bachelor's degree or equivalent (65.0%). 189 people were students (47.3%). 171 people had average monthly income of 5,001-15,000 baht (42.8%), followed by 87 people (21.8 %) with the average income of 15,001-25,000 baht. 244 people have permanent residences in Bangkok (61.0%), and followed by 89 people who have permanent residences in provinces in the central region (22.3%).

The results of analysis of the differences of satisfaction levels of religious tourism behavior of Thai people concerning temples in Phra Nakhon District, categorized according to demographic factors, it was found that men were more satisfied than women to use word-of-mouth information when deciding about repeat travel, however, the satisfaction of tourism behavior in terms of tourism experience, image of religious tourism sites and overall satisfaction for men and women were not different. Moreover, it was found that a level of satisfaction in tourism behavior in terms of tourism experience, the satisfaction of tourism behavior, religious tourism sites, overall satisfaction, and the word-of-mouth intention of the sample group between 26-40 years old were higher than the sample group who were not over 25 years old and who were older than 40 years old.

Table 1 Statistical values, obtained from structural equation model analysis after modifying the model, the results showed that it was statistically significant at the level of 0.001.***

Variables	Estimate		Variance	R ²	C.R.	P
	Standard	Unstandard				
Destination Image			0.563			
-> Experience	0.929	0.932	0.078	0.863	16.917	***
-> Satisfaction	0.019	0.020	0.099	0.843	0.143	0.887
-> Revisit Intention	0.127	0.197	0.323	0.763	0.922	0.356
Experience			0.078	0.863		
-> Satisfaction	0.900	0.951	0.099	0.843	6.363	***
-> Intention	0.886	1.100	0.188	0.785	18.554	***
-> Revisit Intention	0.150	0.233	0.323	0.763	0.589	0.556
Satisfaction			0.099	0.843		
-> Revisit Intention	-0.107	-0.157	0.323	0.763	-0.880	0.379
Intention			0.188	0.785		
-> Revisit Intention	0.717	0.895	0.323	0.763	7.096	***
Destination Image			0.563			
-> Image1	0.804	1.000	0.308	0.646	N/A	
-> Image2	0.812	1.061	0.328	0.659	18.409	***
-> Image3	0.796	1.066	0.369	0.634	17.930	***
-> Image4	0.197	0.814	9.265	0.039	3.818	***
-> Image5	0.863	1.221	0.288	0.744	13.499	***
-> Image6	0.637	0.671	0.371	0.406	13.499	***
Experience			0.078	0.863		
-> Exp1	0.728	0.890	0.399	0.530	16.171	***
-> Exp3	0.816	1.078	0.330	0.666	18.920	***
-> Exp4	0.707	0.803	0.365	0.500	15.580	***
-> Exp5	0.809	1.000	0.298	0.655	N/A	
Satisfaction			0.099	0.843		
-> Sat1	0.881	1.000	0.181	0.777	N/A	
-> Sat2	0.871	0.932	0.174	0.759	24.055	***
-> Sat3	0.886	0.993	0.171	0.785	24.862	***
Intention			0.188	0.785		
-> Int1	0.905	1.000	0.192	0.820	N/A	
-> Int2	0.908	1.087	0.220	0.824	27.440	***
Revisit Intention			0.323	0.763		
-> Cb2	0.945	1.000	0.162	0.894	N/A	
-> Cb3	0.920	0.963	0.228	0.847	30.849	***

From Table 1, it was found that the structural equation model of religious tourism behavior of Thai tourists concerning temples in Phra Nakhon District Bangkok after modifying the model consists of 5 Latent Variables, divided into 1 Exogenous Latent Variable, namely the image of religious tourism and 4 Endogenous Latent Variables. These include the religious tourism experience, satisfaction, the intention of revisiting religious tourism, and word-of-mouth intention.

Image component of religious tourism sites after modifying the model consists of 6 Observed Variables. It was found that the Variance of 0.563 directly influences on the component of religious tourism experience, the Standardized Regression Weight of 0.929 and leads to a conclusion that it was statistically significant at the level of 0.001, this resulted in the Squared Multiple Correlation (R²) of 0.863 and the Variance of 0.078. However, it did not directly influence the satisfaction component and the intention of revisiting religious tourism, and it leads to a conclusion that it was statistically significant at the level of 0.001. The image elements of religious tourism sites consist of 6 Observed Variables of Standardized Regression Weight sorted in descending order as follows: The religious attraction variable had a new and unique image (Image5), this resulted in the Standardized Regression Weight of 0.863, the Squared-Multiple Correlation (R²) of 0.744, and the Variance of 0.288. It leads to a conclusion that it was statistically significant at the level of 0.001. Entertainment variables in religious tourism sites such as annual events, and traditional festivals (Image2), this resulted in the Standardized Regression Weight of 0.812, the Squared Multiple Correlation (R²) of 0.659, and the Variance of 0.328. The quality of service in religious tourism sites (Image1), this resulted in the Standardized Regression Weight of 0.804, the Quadratic Multiple Correlation (R²) of 0.646, and the Variance of 0.308, and including the quality and diversity variables. It leads to a conclusion that it was statistically significant at the level of 0.001. (Image3) This resulted in the Standardized Regression Weight of 0.796, the Quadratic Multiple Correlation (R²) of 0.634, and the Variance of 0.369. It leads to a conclusion that it was statistically significant at the level of 0.001. The architectural and building variables in the religious tourism site is unique and remarkable (Image6), this resulted in the Standardized Regression Weight of 0.637, the Quadratic Multiple Correlation (R²) of 0.406, and the Variance of 0.371. It leads to a conclusion that it was statistically significant at the level of 0.001. The variables of traveling to religious sites, such as by bus, by private car, (Image4), this resulted in the Standardized Regression Weight of 0.197, the Square Multiple Correlation (R²) of 0.039 and the Variance of 0.265. It leads to a conclusion that it was statistically significant at the level of 0.001.

Religion tourism experience components after modifying the model consist of 4 Observed Variables. This resulted in the Variance of 0.078 with direct influence on the satisfaction component, the Standardized Regression Weight of 0.900, the Squared Multiple Correlation (R²) of 0.843, and the Variance of 0.099. It leads to a conclusion that it was statistically significant at the level of 0.001. It directly influences the word-of-mouth component, this resulted in the Standardized Regression Weight of 0.886, the Squared Correlation (R²) of 0.785, and the Variance of 0.188. It leads to a conclusion that it was statistically significant at the level of 0.001. However, it did not directly influence the revisit intention component of religious tourism. It leads to a conclusion that it was statistically significant at the level of 0.001. The elements of religious tourism experience consist of 4 Observed Variables of Standardized Regression Weight in descending order as follows: The variables which learned something about themselves from this religious tourism experience (Exp3), this resulted in the Standardized Regression Weight of 0.816, the Squared Multiple Correlation (R²) of 0.666, and the Variance of 0.330. It leads to a conclusion that it was statistically significant at the level of 0.001. The variables have discovered things that have psychological value, during this religious tour (Exp5), this resulted in the Standardized Regression Weight of 0.809, the Quadratic Multiple Correlation (R²) of 0.655, and the

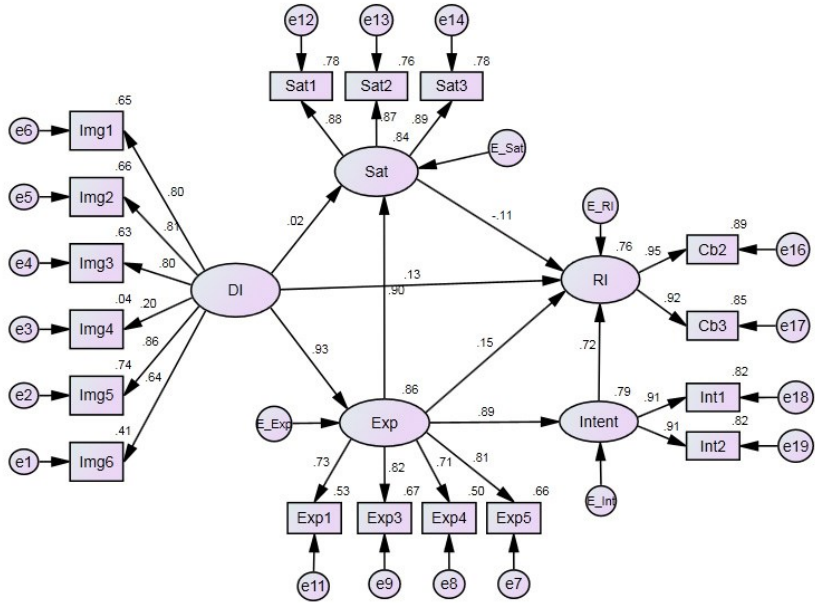
Variance of 0.298. It leads to a conclusion that it was statistically significant at the level of 0.001. The variables enjoyed this religious tourism experience (Exp1), this resulted in the Standardized Regression Weight of 0.728, the Squared Multiple Correlation (R²) of 0.530 and the Variance of 0.399. It leads to a conclusion that it was statistically significant at the level of 0.001. The variables had the opportunity to experience the art and culture of religious tourism sites closely (Exp4), this resulted in the Standardized Regression Weight of 0.707, the Quadratic Multiple Correlation (R²) of 0.500, and the Variance of 0.365. It leads to a conclusion that it was statistically significant at the level of 0.001.

The satisfaction component after modifying the model consists of 3 Observed Variables, this resulted in the Variance of 0.099, without direct influence with the statistical significance of the relegation intention component at the level of 0.001. The satisfaction component consists of 4 Observed Variables of the Standardized Regression Weight in descending order as follows The variables were satisfied with this travel experience (Sat3), this resulted in the Standardized Regression Weight of 0.886, the Squared multiple correlation (R²) 0.785, and the Variance of 0.171. It leads to a conclusion that it was statistically significant at the level of 0.001. The variables were impressed with this travel experience (Sat1), this resulted in the Standardized Regression Weight of 0.881, the Quadratic Multiple Correlation (R²) of 0.777, and the Variance of 0.181. It leads to a conclusion that it was statistically significant at the level of 0.001. The variables enjoyed this expedition (Sat2), this resulted in the Standardized Regression Weight of 0.871, the Squared Multiple Correlation (R²) of 0.759, and the Variance 0.174. It leads to a conclusion that it was statistically significant at the level of 0.001.

The word-of-mouth component after modifying the model consists of 2 Observed Variables with direct influence on the intention component of revisiting religious sites, resulted in a Variance of 0.188 at the Standardized Regression Weight of 0.717, the Squared Multiple Correlation (R²) of 0.763 and the Variance of 0.323. It leads to a conclusion that it was statistically significant at the level of 0.001. The word-of-mouth component consists of 2 Observed Variables of Standardized Regression Weight in descending order as follows: The variables will convince friends and family to visit the tourist attractions (Intent2). This resulted in the Standardized Regression Weight of 0.945, the Quadratic Multiple Correlation (R²) of 0.894, and the Variance of 0.162. It leads to a conclusion that it was statistically significant at the level of 0.001. In addition, the variables will recommend places they have visited to their friends and family. (Intent1) This resulted in the Standardized Regression Weight of 0.920, the Square Multiple Correlation (R²) of 0.847, and the Variance of 0.228.

The elements of intention of revisiting religious tourism after modifying the model consist of 2 Observed Variables of Standardized Regression Weight in descending order as follows: The variables plan to revisit the attraction within 1 year (CB2). This resulted in the Standardized Regression Weight of 0.945, the Square Multiple Correlation (R²) of 0.894, and the Variance of 0.162. It leads to a conclusion that it was statistically significant at the level of 0.001. You will attempt to revisit the attraction within 1 year, (CB3). This resulted in the Standardized Regression Weight of 0.920, the Quadratic Multiple Correlation (R²) of 0.847, and the Variance of 0.228. It leads to a conclusion that it was statistically significant at the level of 0.001.

Structural equation model analysis results



CMIN/DF = 1.978, GFI = .938, NFI = .961, TLI = .976, CFI = .980, RMSEA = .050, RMR = .024

Figure 2 Structural equation model
 (Source : Researcher, 2023)

The consistency assessment results showed that the Chi-Square Probability Level was 0.980, the relative Chi-Square Probability Level (CMIN / DF) was 1.978, and the Conformity Index (GFI) Value was 0.938 and the root index of the mean square of the estimation of the error. It leads to a conclusion that the Criterion-Based Suitability Index (NFI) is 0.961 and the RMSEA is 0.050. Therefore, it can be concluded that it passed the assessment criteria and was in accordance with the empirical data (Arbuckle, 2016). As shown in table 2

Table 2 Conformity Assessment Results

Statistics	Criteria for consideration	Analysis results
CMIN/DF	is less than 2	1.978
CFI	is greater than 0.90	0.980
GFI	is greater than 0.90	0.938
NFI	is greater than 0.90	0.961
RMSEA	is less than 0.08	0.050

Table 3 Results of hypothesis testing

Hypothesis	Statement	Decision
H1	The image of religious tourist attractions directly influences the religious tourism experience.	Significant (p = 0.000)
H2	The image of religious tourist attractions directly influences the satisfaction of religious tourism sites.	Unsignificant (p = 0.887)
H3	The image of religious tourist attractions directly influences the revisit intention.	Unsignificant (p = 0.356)
H4	Satisfaction in religious tourism directly influences the revisit intention.	Unsignificant (p = 0.379)
H5	Religious tourism experiences directly influence satisfaction in religious tourist attractions.	Significant (p = 0.000)
H6	Religious tourism experiences directly influence the revisit intention.	Unsignificant (p = 0.556)
H7	Religious tourism experiences directly influence the word-of-mouth intention.	significant (p = 0.000)

Discussions

There were important issues found from the research results, the researcher presented the issues for discussion by referring to the relevant research papers, including supporting data, and giving different reasons as follows. Thai religious tourists who came to visit temples in Phra Nakhon district had good overall satisfaction with the concept of Dawi (2018). Martensen and Grønholdt, L. (2016) said that satisfaction is the level of a person's feelings of being satisfied or disappointed. As a result of the comparison between the results that differ from those received, tourists were satisfied with visiting temples in Phra Nakhon district, since most of the temples used in the study were temples in the Phra Aram Luang group which have been well maintained and restored all the time by the government, this makes the place clean and convenient for travelling. Additionally, they also enshrine important Thai Buddha images and chedis. As a result, tourists who come to visit the place will surely be impressed and wish to revisit when they have an opportunity. Regarding religious tourism experience, the overall image was good, which is in agreement with the concept of Otto & Ritchie (1996), who stated that the experience of a traveler is a state of mind, a feeling in which service recipients participate in the service. Religious tourists who come to visit temples in Phra Nakhon District will experience stunning and beautiful architectures of religious places and artifacts with a distinctive and unique ancient style that remain intact and also gain spiritual experience from participating in religious activities such as paying respect to the Buddha images, making a donation, or giving the offerings dedicated to the monks. As a result, tourists will be contented and mentally respected and also impressed by visiting temples in Phra Nakhon district.

Regarding the image of the religious sites, the overall image is good, which is in agreement with the concept of Neuhofer & Buhalis (2014). The image of tourism stems from two major ways: 1) From the tourists who travel by themselves, and referrals of friends or acquaintances, and 2) From advertisements and public relations of various types of media such as radio, television and Internet. As the religious sites have peaceful, beautiful and sacred atmosphere, most tourists who come to visit the temple focus on its beauty and sacredness for making a wish. Moreover, the temples used in conducting the research are quite famous for

making a wish in such topics as love and wealth which encourages the tourists who come to make a wish there to have more confidence and more spiritual anchor. The intention of using word-of-mouth for the religious Thai tourists arises from the fact that the person has used the product or service and after that the person feels satisfied. As religious Thai tourists have great experience and satisfaction from visiting temples in Phra Nakhon district, they will tell people around them about the place or others by word-of-mouth or through posting on social media. This point, therefore, is in agreement with the concept of Loureiro (2014) who stated that word of mouth is the transmission of information that is beneficial to an individual who wants to travel to visit the attraction, especially religious tourism which is in agreement with this study. Regarding the intention of revisiting the attraction for Thai religious tourists, it was found that the overall image is good, which is in agreement with the concept of Tung & Ritchie (2011). They stated that memorable travel experiences are essential because remembering good experiences influences future travel decisions and it is based on the results of the behavioral structural equation model analysis. Regarding the religious tourism of Thai people, it found that when religious tourists are satisfied with the image of the temple, the tourists will feel that they will have a good experience while visiting the tourist attraction. As a result, tourists are satisfied to visit the religious attraction and willing to tell other people about it, including willing to bring people close to them to revisit the attraction.

Conclusion and suggestions

It could be said that traveling to temples in Phra Nakhon district is very convenient, however, the results of the study indicated that the group of tourists aged over 40 had a low level of satisfaction in traveling to this area. This could be due to the fact that the cars and buses are quite far from the temple and the walkway to the temple is not designed in the universal design which causes inconvenience for the elderly. Therefore, the government should build suitable ramps and passageways for the elderly in the temples.

New knowledge and the effects on society and communities

The research results suggest that religious tourism in Phra Nakhon district is positively perceived by Thai tourists. The well-maintained and restored temples, with their unique and ancient architecture, create a peaceful and spiritual atmosphere that provides tourists with a good overall satisfaction. This satisfaction is likely to lead to repeat visits, positive word-of-mouth recommendations, and increased tourist traffic in the area. The positive impact of religious tourism can be seen in various aspects of society and communities. Firstly, it can contribute to the economic growth of the area. As more tourists visit, they will require services such as accommodation, food, transportation, and souvenirs, which will generate revenue for local businesses and create job opportunities. This, in turn, will lead to more significant investments in the area, which will benefit the community and its infrastructure. Moreover, religious tourism can have a positive impact on the preservation and maintenance of cultural heritage sites. As these sites become more popular, they may attract more funding for conservation and restoration work, ensuring that the sites remain accessible and well-maintained for future generations to appreciate and enjoy.

Religious tourism can also contribute to the social and cultural aspects of the community. The influx of tourists from different backgrounds and cultures can promote understanding and tolerance, leading to increased cultural exchange and dialogue.

Additionally, the participation of tourists in religious activities can create a sense of belonging and community, both for the tourists and the local people. However, it is also essential to ensure that the negative impacts of tourism are minimized. For example, overcrowding and excessive commercialization can degrade the spiritual and cultural significance of religious sites, causing discomfort for visitors and residents alike. Therefore, it is crucial to balance tourism development with the preservation of cultural and spiritual heritage, ensuring that the local community benefits from tourism in a sustainable and responsible manner. The research results suggest that religious tourism in Phra Nakhon district has a positive impact on society and communities. By creating economic, cultural, and social benefits, religious tourism can contribute to the sustainable development of the area while preserving its unique heritage and spirituality.

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Issarapong Poltanee : Conceptualization, Methodology, Investigation, Data curation, Formal analysis, Writing - original draft.

Umaporn Boonphetkaew : Investigation, Data curation, Formal analysis, Writing - original draft.

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The Cross-Cultural Leadership Strategy of School Administrators under the Secondary Educational Service Area Office Bangkok 1

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Abstract

The objective of this survey research is to study and compare the cross-cultural leadership of school administrators under the Secondary Educational Service Area Office Bangkok 1 classified according to the academic standing, special classroom in foreign language, and school size. The sample population consisted of 357 teachers working in schools under the Secondary Educational Service Area Office Bangkok 1 during the 2022 academic year. The research instrument was a five-rating scale questionnaire. The test of accuracy found an index of item objective congruence (IOC) between 0.60-1.00 and a Cronbach's alpha coefficient of 0.969. The statistics used in the data analysis were frequency, percentage, mean, and standard deviation. The researcher also employed a t-test technique and the one-way analysis of variance (ANOVA) technique in addition to Scheffe's multiple comparison method. The results were that the cross-cultural leadership of school administrators under the Secondary Educational Service Area Office Bangkok 1 had an overall high-level average. When the five aspects were considered, it showed as follows: multicultural acceptance, cultural communication, equity and ethics, positive power, and organizational relationship. In addition, the teachers who differed in academic standing and school size exhibited overall differences in their opinions towards the cross-cultural leadership of school administrators at a statistical significance level of .05. However, there were no differences in the opinions of teachers who differed in special classroom in foreign language.

Keywords: Cross-cultural leadership, Educational administration, School administrator, Leadership, Cross-culture

Introduction

The world has become a more connected and interdependent place because of globalization and social changes. Nowadays connecting with people on the other side of the world is much easier than it was in the past. People from different countries, languages, ethnicities, cultural attitudes and other aspects must understand one another and express themselves to others effectively in order to live and work together (Akarachantachote, 2018). The Strategy for Human Capital Development and Strengthening in The National Strategy (2018-2037) aims to develop Thai people of all ages in a multidimensional manner to become good, skillful, and quality citizens. Transforming social values and culture of Thai people are one of the key development guidelines. Thai people are encouraged to unite in instilling desirable values and culture through fostering values and culture within communities; promoting positive values and culture in the business sector; and creating values and culture via the mass media. Finally, Thailand will have an integratedly managed public sector that adheres to the National Strategy as an end goal and can effectively support and promote developments at all levels, issues, missions, and areas (Strategic Transformation Office, 2018).

According to The National Strategy (2018-2037), the Ministry of Education (2021) announced a budget policy regarding the recruitment of native English-speaking teachers for all schools in 2022. This policy is expected to improve Thai students' proficiency in English. All departments of the Ministry of Education have to plan and prepare a budget for having native English-speaking teachers in their schools.

The Secondary Educational Service Area Office Bangkok 1 has determined the strategy for human development and competitiveness enhancement. The purpose of the Educational Service Area Office is to improve students' learning efficiency and develop competencies of learners and equip them with 21st century skills. Learning foreign languages is important for those competencies and skills. Each school has to develop its curriculum and adjust to different conditions to become a world class standard school. In view of the above, it is important to recruit foreign teachers.

Although many schools in The Secondary Educational Service Area Office Bangkok 1 are ready to recruit native English-speaking teachers, already hired foreign teachers encounter working problems (Chaiyasaeng & Sudrung, 2019). A lot of foreign teachers usually give up teaching because of cultural differences and misunderstanding. This causes students' learning to be discontinued and this interrupts educational development. Consequently, school administrators need cross-cultural leadership which is the main concept of understanding people who differ in cultures, nations, languages, cultural attitudes, religions, and genders to manage foreign teachers efficiently and help both Thai and foreign teachers to work together in harmony to reach objectives of the organization (Petersen, 2019).

Cross-cultural leadership is the concept of understanding different people who work in an organization. This leadership style comprises of the ability to motivate and influence people's attitude and behavior to reach a common organizational goal. It is important for administrators to be open-minded to understand differences in other cultures (Hofstede, 2010). After reviewing various related concepts, theories and literature, five aspects were found. These five aspects include; multicultural acceptance, cultural communication, organizational relationship, positive power, and equity & ethics (Srikaew, 2020; Poopatanapong, 2019; Promta, 2019; Chinawong, 2019; Rinthaisong, 2018; Jantarakot et al., 2018; Mangklasiri, 2017; Petersen, 2019; Hofstede, 2010; Grisham & Walker, 2008). The cross-cultural leadership strategy of school administration should be implemented in the way that is beneficial and valuable to educational administration further on. School administrators, therefore, need to

possess cross-cultural leadership, which is the strategy for leaders in managing human resources that differ culturally, such as language, values and attitudes to understand differences, seek ways to work together, respond to environmental changes, and know how to adapt themselves. Cross-cultural leadership affects school administrations because it reduces the rate of foreign teacher resignations in schools. That ensures constant learning for students.

The main purpose of this study is to study and compare the cross-cultural leadership strategy of school administrators under the Secondary Educational Service Area Office Bangkok 1 classified according to the academic standing, special classroom in foreign language, and school size. It would get ideas of how to develop the cross-cultural leadership of school administrators. This study could be a guide for developing effective cross-cultural leaders in educational institutions that aligns with the context of the schools under The Secondary Educational Service Area Office Bangkok 1. In addition, this could be used as information for other Educational Service Area Offices to develop effective cross-cultural leadership in schools under their jurisdiction.

After synthesizing the aspects of cross-cultural leadership, there were five aspects which are as follows: multicultural acceptance, cultural communication, organizational relationship, positive power, and equity & ethics (Srikaew, 2020; Poopatanapong, 2019; Promta, 2019; Chinawong, 2019; Rinthaisong, 2018; Jantarakot et al., 2018; Mangklasiri, 2017; Petersen, 2019; Hofstede, 2010; Grisham & Walker, 2008). The diagram of the conceptual framework was presented below.

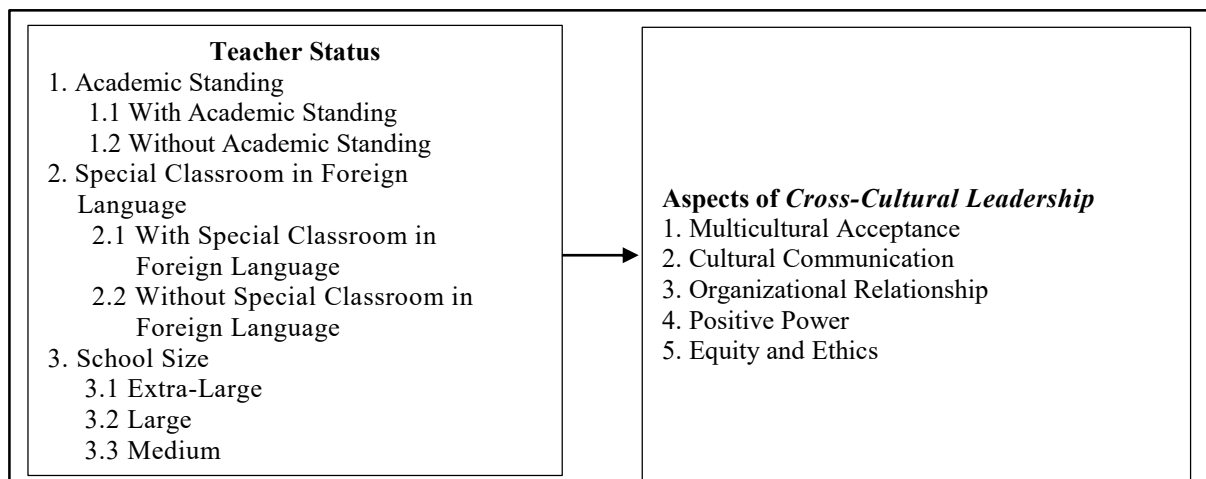


Figure 1 Conceptual Framework

1. Multicultural Acceptance is the understanding of leaders towards various dimensions of culture. Leaders have a proper understanding of the culture of the organization and the culture of other nations. They avoid behaving inappropriately in a way that is detrimental to other cultures and are able to manage cultural diversity.

2. Cultural Communication is the communication process of leaders with individuals from different cultures, considering differences, constructive communication, and having appropriate communication channels.

3. Organizational Relationship is the process of open-mindedness, listening, attentiveness, and intentionality of leaders in creating relationships amidst cultural differences both inside and outside the organization including promoting knowledge, understanding, and acceptance of diversity. It also fosters cooperation in working together to achieve the goals.

4. Positive Power is the behavior of leaders who have influence over others in directing individuals to follow and use democratic principles to assign tasks that are appropriate without cultural bias.

5. Equity and Ethics is the acceptance in working equally for both Thai and foreign people. This takes into account the relationship between individuals and the freedom to work, creating an awareness of ethics, adhering to the principle of harmony, and having a sense of justice, compassion, and self-sacrifice.

Research Objectives

1. To study the level of the cross-cultural leadership strategy of school administrators under the Secondary Educational Service Area Office Bangkok 1.

2. To compare teachers' opinion towards cross-cultural leadership of school administrators under the Secondary Educational Service Area Office Bangkok 1 classified according to the academic standing, special classroom in foreign language, and school size.

Methodology

The purpose of this part is to illustrate the research methodology of this study. The study's method and process of data collection are also represented in this part. This research was quantitative. The objective of this research is to study and compare the cross-cultural leadership of school administrators under the Secondary Educational Service Area Office Bangkok 1 classified by academic standing, special classroom in foreign language, and school size.

Population

The population comprised 5,000 teachers working in schools under the Secondary Educational Service Area Office Bangkok 1 during the 2022 academic year.

Sample

The sample of this research consists of 357 teachers. The number of sampled respondents was determined by using the table of Cohen et al. (2011) at the statistical significance level of .05 (with the level of accuracy of 95 percent).

Sampling Method

The sample was selected through the technique of proportional stratified random sampling used to obtain 3 levels of stratification according to school sizes; extra-large, large, and medium. After that, the technique of simple random sampling was used to determine the proportion of sampled respondents in 6 groups of schools.

Research Instrument

The research instrument used is a five-rating scale questionnaire with 47 items. The first part was about the respondents' background and the second part was about the cross-cultural leadership of school administrators. The test of accuracy found an index of item objective congruence (IOC) between 0.60-1.00 and a Cronbach's alpha coefficient of 0.969. The questionnaire used was also presented to advisors for approval prior to the completion of the questionnaire.

Data Collection

The questionnaire used was transferred to Google Form, after which generated QR code was sent together with a letter of request for data collection via registered mails to 18 schools within the sample group. The researchers received 329 responses via Google Form, which accounted for 92.16% of all questionnaires. Then, the questionnaires received were checked for completeness prior to its analysis and interpretation.

Data Analysis Methods

The statistical methods used in the data analysis were frequency, percentage, mean, and standard deviation. The techniques of t-test and one-way analysis of variance (ANOVA) in addition to Scheffe's multiple comparison method were also employed. The research used items in the aspect at the least levels to suggest cross cultural leadership strategies that school administrators should develop.

Results

1. The level of cross-cultural leadership of school administrators under the Secondary Educational Service Area Office Bangkok 1 is presented in Table 1.

Table 1 The level of cross-cultural leadership of school administrators

Aspect	Mean	SD	Level
1. Multicultural Acceptance	4.28	0.82	High
2. Cultural Communication	4.18	0.87	High
3. Organizational Relationship	4.14	0.89	High
4. Positive Power	4.14	0.91	High
5. Equity and Ethics	4.16	0.91	High
Overall	4.17	0.86	High

Note. The criterion of Punthai (2016)

Table 1 illustrates the information of level of cross-cultural leadership of school administrators under the Secondary Educational Service Area Office Bangkok 1 using mean and standard deviation. The overall cross-cultural leadership average was at 4.17 indicating high level according to the illustration above. Multicultural acceptance had the highest average (4.28) followed by cultural communication (4.18), equity and ethics (4.16), positive power (4.14) and organizational relationship (4.14) respectively.

2. The results of comparing teachers' opinion towards cross-cultural leadership of school administrators under the Secondary Educational Service Area Office Bangkok 1 classified according to the academic standing, special classroom in foreign language, and school size are summarized in Table 2-4.

Table 2 The results of comparing teachers' opinion towards cross-cultural leadership of school administrators classified by academic standing

Aspect	With		Without		<i>t</i>	<i>p</i>
	Academic Standing	SD	Academic Standing	SD		
1. Multicultural Acceptance	4.05	0.73	4.36	0.86	-3.334*	0.001
2. Cultural Communication	3.97	0.76	4.31	0.91	-3.643*	0.000
3. Organizational Relationship	3.88	0.81	4.32	0.89	-4.509*	0.000
4. Positive Power	3.90	0.82	4.30	0.93	-4.033*	0.000
5. Equity and Ethics	3.91	0.85	4.32	0.92	-3.984*	0.000
Overall	3.94	0.77	4.32	0.89	-3.970*	0.000

Note. * $p < .05$

Table 2 illustrates that teachers who differ in academic standing exhibited overall differences in their opinion towards cross-cultural leadership of school administrators under the Secondary Educational Service Area Office Bangkok 1 at the statistical significance level of .05.

Table 3 The results of comparing teachers' opinion towards cross-cultural leadership of school administrators classified by special classroom in foreign language

Aspect	With		Without		<i>t</i>	<i>p</i>
	Special Classroom	SD	Special Classroom	SD		
1. Multicultural Acceptance	4.21	0.85	4.30	0.73	-0.942	0.348
2. Cultural Communication	4.16	0.90	4.23	0.79	-0.632	0.528
3. Organizational Relationship	4.12	0.90	4.22	0.84	-0.926	0.355
4. Positive Power	4.10	0.94	4.26	0.82	-1.448	0.148
5. Equity and Ethics	4.12	0.94	4.25	0.83	-1.121	0.263
Overall	4.14	0.89	4.25	0.79	-1.029	0.304

Note. * $p < .05$

Table 3 illustrates that teachers who differ in special classroom in foreign language exhibited no overall differences and in each of their opinion towards cross-cultural leadership of school administrators under the Secondary Educational Service Area Office Bangkok 1.

Table 4 The results of comparing teachers' opinion towards cross-cultural leadership of school administrators classified by school size

Aspect	Extra Large		Large		Medium		<i>F</i>	<i>p</i>
	Mean	SD	Mean	SD	Mean	SD		
1. Multicultural Acceptance	4.28	0.85	4.03	0.85	4.21	0.55	1.845	0.160
2. Cultural Communication	4.22	0.90	3.93	0.90	4.20	0.55	2.382	0.094
3. Organizational Relationship	4.22	0.90	3.74	0.90	4.17	0.59	6.147*	0.002
4. Positive Power	4.19	0.95	3.87	0.89	4.21	0.58	2.675	0.070
5. Equity and Ethics	4.21	0.95	3.90	0.93	4.17	0.54	2.387	0.094
Overall	4.22	0.89	3.89	0.87	4.19	0.55	3.043*	0.049

Note. * $p < .05$

Table 4 illustrates that teachers who differ in school size exhibited differences at a statistical significance level of .05 overall and in regard to the organizational relationship of their opinion towards cross-cultural leadership of school administrators under the Secondary Educational Service Area Office Bangkok 1.

After using Scheffe's multiple comparison method, the result showed that teachers working in extra-large school had their opinion towards cross-cultural leadership at higher average level as compared to teachers in medium-sized schools. No differences were found in other aspects.

Discussions

The level of the cross-cultural leadership strategy of school administrators under the Secondary Educational Service Area Office Bangkok 1 overall and in each aspect was at a high level. Multicultural acceptance had the highest average followed by cultural communication, equity and ethics, positive power, and organizational relationship respectively. This could be because of the degree of enforcement of the Constitution of the Kingdom of Thailand (Office of the Council of State, 2017). People who differ in race, origin, language, religious belief, disability, sex, age, physical or health condition, personal status, economic or social standing or education must not be unjustly discriminated. Moreover, according to Universal Declaration of Human Rights, it is important for school administrators to be aware of the dignity and worth of all persons (United Nations, 1948). As a result, school administrators under the Secondary Educational Service Area Office Bangkok 1 had efforts to communicate with foreign teachers in their schools to achieve goals. Obviously, cross-cultural leadership is the main concept applied to manage foreign teachers efficiently. This is consistent with Sangsawang (2015) stating that the level of cross-cultural leadership applied by private school administrators at the primary level in the Bangkok area is at a high level. Similar to Jantarakot et al. (2018) stating that cross-cultural leadership of world-class standard schools in the Secondary Educational Service Area 25 is at a high level.

Comparing teacher's opinion towards cross-cultural leadership of school administrators classified by academic standing, special classroom in foreign language, and school size is presented as follows:

1. Teachers who differ in academic standing exhibited concomitant differences in their opinions towards cross-cultural leadership of school administrators overall and for all aspects at a statistical significance level of .05. This could be because the teachers with academic standing normally had more working experience. Those teachers could easily realize and understand the characteristics of school administrations much clearly. On the other hand, teachers without academic standing might have less experience dealing with school administration. This was consistent with Pho-On (2015) stating that after comparing leadership of school administrators perceived by administrators and teachers under Singburi primary educational service area office divided by academic standing, there were differences at a significance level of .05.

2. Teachers who differ in special classroom in language did not evince concomitant differences in their opinion towards cross-cultural leadership of school administrators overall and for all aspects. This could be because the Ministry of Education and the Secondary Educational Service Area Office Bangkok 1 requires schools to recruit foreign teachers to develop students' English skills. Whether schools provided special classroom in language or not, they must comply with the policy. This was consistent with Mangklasiri (2017) stating that the outcome of comparing multicultural leadership of school administrators under secondary educational service area office 1 found that there are no differences in the special classroom aspect.

3. Teachers who work in schools with differences in sizes exhibited concomitant differences in their opinion towards the cross-cultural leadership of school administrators overall and in the aspect of organizational relationship at a statistical significance level of .05. This could be because extra-large schools are fully equipped with educational resources such as, human resources, materials, money and management. The extra-large schools were in readiness for cross-cultural leadership. At the same time, medium schools were prominent in organizational relationship because the school administrators were close to the teachers.

Nevertheless, large schools had problems with lack of educational resources and gap between the school administrators and teachers. This was consistent with Promlut (2018) stating that the teachers who work in schools of different sizes exhibited concomitant differences in their opinions of the roles played by administrators overall and in all aspects at a statistical significance level of .05. Similar to Buabang & Suebor (2022) stating that the comparative analysis of School Administrative Innovation in a multicultural society classified by school size and location of Prachuapkhirikhan Primary Educational Service Area Office 1 showed a statistically significant difference at 0.05 level.

Conclusion and suggestions

Conclusion

Overall, and in all aspects, the level of cross-cultural leadership of school administrators under the Secondary Educational Service Area Office Bangkok 1 is at a high level.

The results of comparing teacher's opinion towards cross-cultural leadership of school administrators under the Secondary Educational Service Area Office Bangkok 1 are summarized as follows:

1. Teachers who differ in academic standing exhibited concomitant differences in their opinion towards cross-cultural leadership of school administrators overall and in all aspects at a statistical significance level of .05.

2. Teachers who differ in special classroom in language did not evince concomitant differences in their opinions towards cross-cultural leadership of school administrators overall and in all aspects.

3. Teachers who work in schools with differences in sizes exhibited concomitant differences in their opinions towards cross-cultural leadership of school administrators overall and in the aspect of organizational relationship at a statistical significance level of .05.

Recommendations

Based on the finding to develop educational administration strategy, the school administrators should promote teamwork among people working in a cultural diversity environment. They should encourage cooperative learning as well. According to the aspect of positive power, school administrators should follow the principles of Good Governance, as it is widely trusted by both Thai and foreigner teachers. Furthermore, school administrators should characterize and develop organizational culture to determine the direction of schools. School administrators should accept the principle of democracy and be open-minded.

Regarding future research recommendation, the researchers would recommend to future research to study into the factors of developing Thai and foreign language proficiency and using languages to illustrate the characteristics of school administrators. In addition, future research should aim to study other factors that affect foreign teachers' needs.

New knowledge and the effects on society and communities

To understand the differences of leadership in each educational administration culture, cross-cultural leadership is the main characteristic of school administrators to manage foreign teachers in schools. School administrators have to be aware of diversity and its impact on enriching people's lives as individuals. There are five elements of cross-cultural leadership which are as follows: multicultural acceptance, cultural communication, organizational relationship, positive power and equity & ethics.

1. Multicultural Acceptance

School administrators should be able to manage cultural diversity and understand and accept diverse cultural dimensions, culture of organizations and other countries properly. Moreover, they should avoid inappropriate behavior that conflicts with other cultures.

2. Cultural Communication

The communication process between school administrators and individuals with different cultures must involve learning about each other, considering differences, communicating creatively, and having appropriate communication channels.

3. Organizational Relationship

School administrators should be open-minded about listening to others’ opinions and having proactive attitude towards creating harmony among cultural diversity within and outside the organization. They have to promote learning, understanding, and acceptance of diverse cultures, as well as collaboration in achieving goals together.

4. Positive Power

School administrators need to understand leadership behavioral patterns that have influence over others to convict them of following directions. Furthermore, school administrators have to use democratic principles to assign tasks appropriately. They should be able to observe and analyze work efficiently. It is important to avoid cultural biases.

5. Equity and Ethics

School administrators accept the importance of progress in work, according to the organizational culture of both Thai and foreign personnel, with consideration for interpersonal relationships and freedom in work, awareness of ethics, adherence to the principles of mutual benefit, justice, kindness, and sacrifice.

Therefore, School administrators must have the ability to lead across cultures, which is a process of thought for leaders in managing human resources that are diverse in terms of culture, such as language, values, attitudes, and ways of thinking. They need to understand differences and plan the ways to work together, by using knowledge, skills and experience. It is important to adjust to the uncertain world.

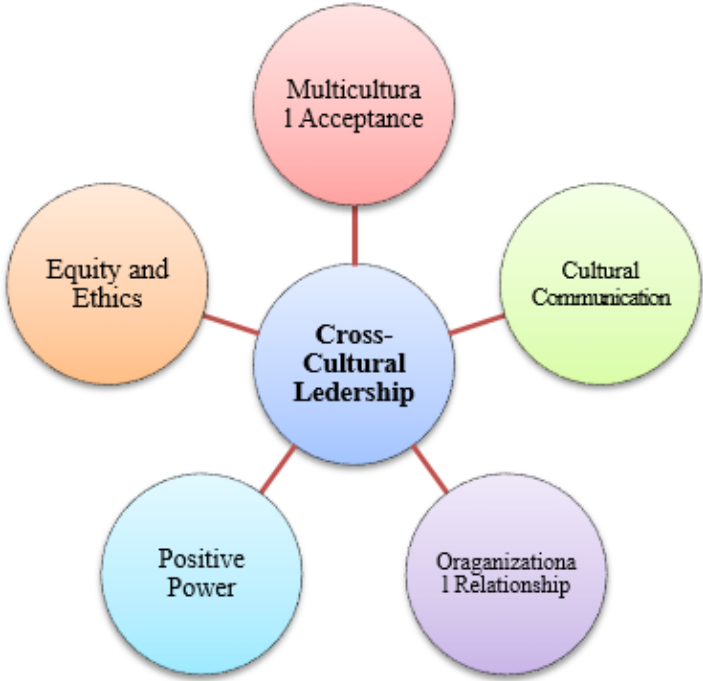


Figure 2 The Elements of Cross-Cultural Leadership

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A Development Model of School Administration Towards the Next Normal

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Abstract

The objectives of this research were: 1) to investigate the current state and problems of school administration in the new normal to prepare the school for the next normal; 2) to analyze success factors and conditions of school administration towards the next normal; 3) to develop a model for school administration towards the next normal, and 4) to propose policy proposals and practical guidelines for school administration towards the next normal. The research was divided into four phases, as follows: 1) investigate the current state and problems in the new normal by using an in-depth interview with 29 administrators; 2) analyze the success factors and conditions by participating in the workshop of 11 informants; 3) develop a model by constructing, verifying, and evaluating it by attending connoisseurship; and 4) propose policy proposals and practical guidelines by conducting brainstorming discussions with 15 experts and a research team. The research results were as follows: 1) the current state and problems in the new normal have seven components: 1) Planning (P), 2) Organizing (O), 3) Staffing (S), 4) Directing (D), 5) Coordinating (C), 6) Reporting (R), and 7) Budgeting (B); 2) the success factors and conditions were administrators, educators, and school boards must work together to ensure the overall academic progress of students, technology, and communications were playing an important role in helping people adapt to the next normal; 3) a model consisted of a principle, objectives, operational approaches, an evaluation, and conditions for achievement; and 4) policy proposal and practical guidelines were the government should implement an entirely new policy to establish strategies for school administration towards the next normal and the Office of the Basic Education Commission (OBEC) and directors of the Educational Service Area should lead the school administrators and affiliate agencies to apply strategies into practices for school administration towards the next normal.

Keywords: Model, School administration, The next normal

Introduction

More than just a crisis, Bozkurt & Sharma (2020) studied the coronavirus (COVID-19) pandemic that served as a global wake-up call to action to change our perspectives and mindsets. It should not be a surprise that the pandemic altered our perception of what was normal and how we lived. The definition of "normal" was relative, and we currently use the definitions of "normal," "new normal," and "next normal." However, keep in mind that your new normal may not always be the same as theirs, or that your normal might have previously been their new normal. The current or prior normal for some people may be the approaching normal for other people.

According to Sneader & Singhal (2020), stated in *Beyond the Coronavirus: The Path to the Next Normal*, the war against COVID-19 is one that leaders today must win if they are to find an economically and socially sustainable path to the next normal. These five stages have collected the necessities of our time as follows: 1) Resolve referred to emphasizing the urgent need for leaders to tackle COVID-19 and the economy and that educational institutions must drive online teaching to offer chances for ongoing education while educational institutions must close; 2) Resilience referred to something that must be adapted for financial liquidity and survival that continued at a rapid pace, which affected the health crisis and was becoming a morale crisis as well as a financial crisis due to the uncertainty of the government's ability to keep the financial system working; 3) Return referred to the return to normal working conditions after a major shutdown. Leaders, therefore, had to reevaluate the entire business system and plan for any action that may occur. To return their businesses to productive production at scale quickly and at scale, including health system capabilities; 4) reimagination refers to the leader's need to rethink, which is needed to improve new business operations and create a continuous transformation of people as citizens, employees, and consumers. Obviously, the online world of commerce could change consumer behavior forever. These changes affected the way we live, work, and use technology, as shown more clearly. There would be institutions that rebuilt themselves with more knowledge and foresight, and 5) reform referred to reform for a better future. Leaders needed to anticipate policy changes and regulations. As society tried to prevent the future health crises we were facing today. Learning from the economic failures of the latest global financial crisis, educational institutions must fight to strengthen the system to withstand the sudden and global impacts of external forces. They must also consider modernizing the integration of classroom and distance learning.

As the World Economic Forum (2020) focused on unlocking technology to deliver education because of the COVID-19 epidemic, educational institutions all over the world were forced to employ current technology to produce content for distance learning for students in all fields. Educators around the world were facing something new, something different, and something more flexible. These are the benefits of accessing education for students around the world.

According to Supising (2022, pp.251-252), the school administration towards the next normal must accept that there is no way of going back. Everyone must move forward. Knowledge changes because the world changes in various contexts, causing learning to change. Therefore, in the future of learning, school administration towards the next normal has many conditions that the school administrator must adopt, including the acceptance of the next normal that has already occurred by overcoming new obstacles by being able to perform in a variety of roles, while also anticipating the future of learning and the future of education by 2030. Moreover, school administrators must provide lifelong learning to cope with the current situation from the signs of change, seek factors for drivers of change, and view education as a

limitation only in the school, students could study anywhere, anytime, as well as prepare them to have the abilities or competencies that society needs.

As a result of the COVID-19 epidemic, a research team recognized that the educational system has had to adapt to considerable changes in teaching and learning. Nonetheless, the experience has shown that teaching and learning may continue even in the worst of circumstances. Also, this circumstance has given us the chance for professional growth in school administration. School administrators should take advantage of the changes brought about by the pandemic to build a framework for development in the post-pandemic Next Normal Era. A model for school administration towards the next normal would be the answer to the situation change.

Research objectives

1. To investigate the current state and problems of school administration in the new normal to prepare the school for the next normal.
2. To analyze the success factors and conditions of school administration towards the next normal.
3. To develop a model for school administration towards the next normal divided into 3 steps as follows:
 - 3.1 To construct a model for school administration towards the next normal.
 - 3.2 To verify the accuracy and suitability of school administration towards the next normal.
 - 3.3 To evaluate the usefulness and feasibility of school administration towards the next normal.
4. To propose recommendations and guidelines for school administration towards the next normal.

Methodology

This research was divided into four phases as follows:

Phase 1: The investigation of the current conditions and problems of school administration in the new normal to prepare the school for the next normal. Key informants selected by purposive sampling consisted of school administrators that received the OBEC Awards in the excellence of educational institutions, innovation, and technology for teaching and learning under the Northern Provincial Office of Education in 2021, for a total of twenty-nine informants. The instrument used for data collection was an in-depth interview using face-to-face interviews at the interviewee's school and interviews via the Zoom meeting program or Google Meetings. The data were analyzed using content analysis and summarizing empirical data.

Phase 2: The analysis of the success factors and conditions of school administration towards the next normal. Key informants selected by purposive sampling consisted of experts in various fields, six administrators from the Chiang Mai Primary Educational Service Area Office, and a director or an acting director of Chiang Mai Secondary Education Service Area, for a total of eleven informants. The instrument used for data collection was a meeting recording in terms of 1) school administration, 2) technology and communications, 3) the role of literacy leadership and distributive leadership, 4) the determined plan, 5) the epidemic situation of COVID-19, 6) new teaching approaches, and 7) the cooperation of relevant sectors and validation by the research team that was conducted in a workshop via the Zoom meeting program. The data were analyzed through content analysis.

Phase 3: The development of a model for school administration towards the next normal was divided into three steps as follows:

Step 3.1: The construction of a model for school administration towards the next normal. Key informants were the research team that constructed the model for school administration towards the next normal. Six elements of school administration towards the next normal consisted of a principle, objectives, operational approaches, an evaluation, and conditions for achievement. The data were analyzed by classifying them into issues.

Step 3.2: The verification of the accuracy and suitability of six elements of school administration towards the next normal. Key informants selected by purposive sampling consisted of faculty lecturers in educational administration, school administrators who graduated with a doctoral degree in educational administration, and experts, for a total of fifteen informants. The instrument used for data collection was a meeting recording form that was conducted in connoisseurship via Google Meetings. The data were analyzed using frequency.

Step 3.3: The evaluation of the usefulness and feasibility of six elements of school administration towards the next normal. Key informants selected by purposive sampling consisted of nine school administrators. The data were analyzed using mean and standard deviation.

Phase 4: The proposal of policy recommendations and practical guidelines for school administration towards the next normal. Key informants selected by purposive sampling consisted of experts in various fields from school administrators who promoted gifted projects, EP (English Program), MEP (Mini English Program), GATE program (Gifted and Talented Education Program), MSEP (Mathematics and Science Enrichment Program), ESC (Enrichment Science Classroom), etc., both government and private schools in the upper northern region, and experts, for a total of fifteen informants. The instrument used for data collection was a meeting recording form that was conducted during brainstorming via the Zoom meeting program. The data were analyzed by classifying them into issues.

The research framework was shown in Figure 1

Research framework

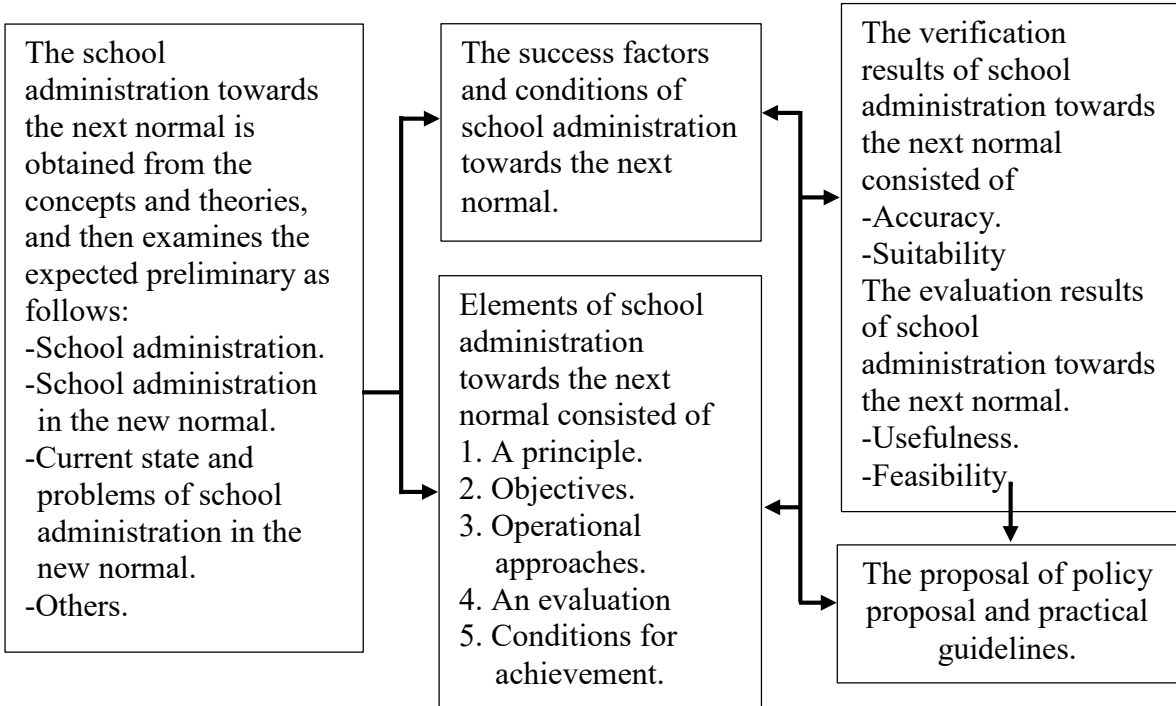


Figure 1 Research framework

Results

Phase 1: Results of investigating the current state and problems of school administration in the new normal to prepare the school for the next normal from an in-depth interview comprised of: 1) Planning (P): A plan had to be revised to accommodate the changes; 2) Organizing (O): Teachers should increase teaching methods of blended learning, hybrid learning, flipped classrooms, etc.; 3) Staffing (S): Teachers and educational personnel must be trained to be ready for teaching and learning in a new way; 4) Directing (D): School administrators must provide appropriate technology for teachers, personnel, and students to facilitate teaching and learning; 5) Coordinating (Co): School administrators should focus on communication, follow-up, and directing teachers and personnel to be responsible for working in accordance with the determined period; 6) Reporting (R): School administrators should record daily, verify, and solve problems in a timely; and 7) Budgeting (B): School administrators must provide additional budgets when causing an emergency. (As cited in Jiraporn Supising, et al., 2022, pp.136-138)

Phase 2: Results of analyzing the success factors and conditions of school administration towards the next normal comprised of 1) administrators, educators, and school boards must work together to ensure the overall academic progress of students; 2) technology and communications were playing an important role in helping people adapt to the next normal; 3) school administrators had to perform a role of literacy leadership and be situated within distributive leadership. These roles required a strategic construct of the content and pedagogical knowledge of literacy that converges with traditional leadership skill sets to support student learning and teacher capacity; 4) the determined plan must be modified to accommodate the change to the next normal which was a new concept in a society with which we were not familiar after the COVID-19 situation. A new plan should consist of new problem-solving, a new way of learning, and communicating the world of the next normal. Some activities need to be modified and postponed indefinitely; 5) the approaches that school administrators previously considered impossible and not in the right place and in the right direction had become a common sight as usual and were used in the context of the epidemic situation of COVID-19. Some activities needed to change out of the plan; 6) teachers and staff had to be trained to be ready for teaching and learning in accordance with the next normal, such as blended learning, hybrid learning, flipped classroom, etc. to integrate with teaching and learning management; and 7) school administrators, teachers, educational personnel, parents, and at all relevant sectors needed to prepare for changing situations by cooperating in organizing an online learning management environment and collaborating to arrange learning equipment and technology.

Phase 3: Results of developing a model for school administration towards the next normal comprised of five elements as follows:

1. A principle was to adapt to the new normal to prepare the school administration towards the next normal.
2. Objectives:
 - 2.1 Determine policies and practices to increase participation and learning environments for the school in the next normal.
 - 2.2 Realize a shift to a more digital school.
3. Operational approaches:
 - 3.1 Investigate the urgent requirements after the post-pandemic crisis.
 - 3.2 Rethink and establish new network relationships.
 - 3.3 Appoint a planning committee to manage learning projects according to school administration towards the next normal.

- 3.4 Ensure that the digital infrastructure is sufficient for current operations.
- 3.5 Encourage school teachers to become actively involved in professional learning and development activities.
- 3.6 Implement learning projects following guidelines to meet quality standards.
- 3.7 Monitor and follow up on how to change in the next normal.
4. An evaluation was to enable an inclusive assessment of the school's effectiveness in managing its resources to improve education standards towards the next normal.
5. Conditions for achievement:
 - 5.1 Set up the school criteria consistent with the next normal without pressure.
 - 5.2 The school administration copes with the next normal change.

The verification results of a model for school administration towards the next normal in terms of accuracy and suitability from fifteen informants are shown in Table 1.

Table 1 The verification results of a model for school administration towards the next normal in terms of accuracy and suitability

Elements of a model for school administration towards the next normal	Verifying results.			
	Accuracy		Suitability	
	Percentage	Interpret	Percentage	Interpret
1. A principle.	100.00	Highest	100.00	Highest
2. Objectives.	96.65	Highest	90.00	Highest
3. Operational approaches.	96.19	Highest	96.19	Highest
4. Evaluation.	86.67	Highest	86.67	Highest
5. Conditions for achievement.	100.00	Highest	100.00	Highest
Average	96.41	Highest	95.38	Highest

Step 3.2 The evaluation results of the usefulness and feasibility of school administration towards the next normal from nine school administrators as shown in Table 2.

Table 2 The evaluation results of a model for the school administration towards the next normal in terms of usefulness and feasibility

Elements of a model for school administration towards the next normal	Usefulness			Feasibility		
	\bar{x}	S.D.	Interpret	\bar{x}	S.D.	Interpret
	1. A principle.	4.89	0.31	Highest	4.78	0.42
2. Objectives.	4.78	0.42	Highest	4.97	0.46	Highest
3. Operational approaches.	4.86	0.34	Highest	4.86	0.34	Highest
4. An evaluation.	4.98	0.31	Highest	4.89	0.31	Highest
5. Conditions for achievement.	4.98	0.31	Highest	4.78	0.40	Highest
Average	4.85	0.36	Highest	4.81	0.39	Highest

Phase 4: Results of proposing policy proposals and practical guidelines for school administration towards the next normal as shown in Table 3.

Table 3 Results of policy proposals and practical guidelines for school administration towards the next normal.

Policy proposal	Practical guidelines
3.1 The government should establish an entirely new policy to establish strategies for school administration towards the next normal.	- The Office of the Basic Education Commission (OBEC) and directors of the Educational Service Area should lead the school administrators and affiliate agencies in applying strategies into practices for school administration towards the next normal.
3.2 School administrators should construct educational literacy towards the next normal.	- School administrators should perform roles of literacy leadership and be situated within distributive leadership towards the next normal of the content and pedagogical knowledge of literacy that converge with traditional leadership skill sets to support student learning and teacher capacity.
3.3 School administrators should be responsible for providing literacy leadership and designing, putting into effect, and reviewing educational systems and guidelines.	- School administrators should investigate the literacy leadership of teachers and school personnel. - Teachers, students, and other employees of the institution should get direction, support, and guidance from the school administration.
3.4 School administrators should work on improving communication between teachers, parents, and learners, using even more creative methods such as virtual classrooms or other digital platforms.	- School administrators should facilitate virtual classrooms or other digital platforms and provide an educational experience and classroom experience to ensure continuous school improvement towards the next normal. - School administrators should help parents adapt to the next normal technology and communications, which are playing an important role in school.
3.5 Teachers and educational personnel should be trained to be ready for teaching and learning in accordance with the next normal, such as blended learning, hybrid learning, flipped classroom, etc. to integrate with teaching and learning management.	- School administrators should organize training courses following the next normal in several approaches and transform the school systems in numerous ways. - School administrations should provide supportive schooling environments, meaningful learning experiences, counseling with more intensive support, integrate social-emotional learning, and support students in their educational journeys to help them transition into the next normal and focus on creating a personalized learning environment that is tailored to each student's needs.
3.6 School administrators should apply guidelines from the model of school administration towards the next normal actively.	- School administrators and teachers should jointly set up monitoring and follow-up guidelines for evaluating the school administration towards the next normal continuously. - The evaluation results should be used to improve the application of school administration towards the next normal as soon as possible.

Discussions

The authors selected the significant issues to discuss as follows:

Results of investigating the current state and problems of school administration in the new normal to prepare the school for the next normal in terms of teaching methods, such as blended learning, hybrid learning, flipped classrooms, etc. Also, teachers and educational personnel must be trained to be ready for teaching and learning in a new approach consistent with CTOUCH Europe BV (2021), who explained the advantages of digital education: no matter the time or place, students are free to choose where, when, and how they study. This was how they could truly center the student. From massive online open courses to small private online courses to blended learning and virtual classrooms, digital was a great enabler for new methods of learning. The constant availability of video content, gamification, virtual reality, artificial intelligence, etc. made learning more fascinating and pleasurable.

The results of analyzing the success factors and conditions of school administration towards the next normal were as follows:

In terms of administrators, educators, and school boards, they must work together to ensure the overall academic progress of students. Linde (2017), summarized that teachers and school administrators had an important relationship that often involved collaborating to make important decisions and explored how teachers and administrators worked together to develop curricula, determine educational standards, establish parent engagement, and discover some reasons for collaborating.

Likewise, in terms of technology and communications playing an important role in helping people adapt to the next normal, Chirakitnimit & Laoakka (2020, p.144) studied the current conditions and problems of digital cultural heritage archives in Thailand. It was found that the main problem with the digital archives in Thailand was a lack of readiness and supporting elements, such as the goal, the scope, and the clarity of the development, the data management planning, the skills and knowledge of the staff, the administration of the expense or budget system, the systematic data management, the government promotion policy, the equipment and technology, and the cooperation of the network.

Correspondingly, the Information and Communications Technology Council (ICTC) - Conseil des Technologies de l'information et des Communications (CTIC) (2021) explored the development of a resilient post-pandemic economy that supports universal lifelong learning and the future of work by embracing online and digital education. Digital education, or ed-tech, was not a new phenomenon, and the concept of distance education was even older. Besides, Musikanon (2022, p.291) concluded that technology and digital innovation, which people of all ages and from all sectors must learn and implement in daily life, as well as digital transformation like online learning, were related to the change from “New Normal” to the “Next Normal”. The new style of life in the next normal period, however, was a different one. Most individuals were willing to accept the situation as it was and adjust their lifestyle accordingly. An online teaching system would replace traditional forms of educational communication. Although there were some weak points to online learning, this type of educational system would grow even after the COVID-19 situation was over.

In terms of school administrators having to perform the role of literacy leadership, Lead for Literacy (2022) stated that there were four reasons literacy leadership matters for school administrators, they must have an immediate influence on students' academic performance, advance equity, form effective literacy teams, and serve as instructional leaders. Moreover, Overstreet (2022) agreed that the state department in Alaska wisely provided in collaboration with DEED, , advice on how to help teachers with a variety of literacy leadership

tactics in their school context, which should all be better understood by school leaders. Furthermore, the state's efforts to align their literacy instruction, their commitment to developing leaders' literacy to support their educators in implementing evidence-based instruction, and ultimately, their efforts to improve literacy attainment for all students have a strong foundation.

In terms of the determined plan must be modified to accommodate the change to the next normal, which was a new concept in a society with which we were not familiar after the COVID-19 situation. A new plan should consist of new problem-solving, a new way of learning, and communicating the world of the next normal. Some activities need to be modified and postponed indefinitely. It may be because this plan ought to include a new, engaging administration that teachers and communities can use to provide education. It is important to assess performance conditions and train project staff and teachers to ensure that the plan is carried out effectively towards the next normal. For the purpose of developing a successful plan for enhancing student performance, the plan should also take into account suggestions from school parents, teachers, and other stakeholders.

The results of developing a model for school administration towards the next normal comprised of five elements in terms of a principle that was to adapt the new normal to prepare the school administration towards the next normal. In line with Mathuros (2021, p. 33), who studied management education online in the new normal of COVID-19, it was found that the educational management used by the administrators must be consistent with the new normal. The technology and equipment used in online education were designed with each student's differences in mind when they were shut down to prevent the spread of the disease, The COVID-19 outbreak, which had affected educational facilities across the nation, had been declared over. Both teachers and students to adjust to online teaching and learning.

In terms of objectives, they were to determine policies and practices to increase participation and learning environments for the school in the next normal and realize a shift to a more digital school. According to data from the OECD Programme for International Student Assessment (PISA) 2018 (Organization for Economic Co-operation and Development (OECD), 2022), explained the effectiveness of using digital devices and ICT to enhance teaching and learning might also depend on schools' policies and practices. On average across OECD countries, having regular discussions between principals and teachers about the use of digital devices for pedagogical purposes, having written school statements about the use of digital devices, and having a specific program to prepare students for responsible Internet behavior were the most common school practices intended to improve learning using digital devices. Similarly, when Thepthewin (2018, p.103) studied the development strategy plan for participatory lifelong education management, it was found that innovation objective and innovation importance were factors to be developed in this plan.

In terms of conditions for achievement, the school set up the school criteria consistent with the next normal flexibility, and the school administration coped with the next normal changes. Similarly, Richmond (2023) mentioned that choice, flexibility, and accountability drive school improvement and that there was good news for the students attending a group of public schools (Charter) that offered little comfort to those who were not. Some schools were improving more quickly than others to boost student achievement across all school types because the charter schools were motivated to adopt procedures that produced superior outcomes thanks to the combination of choice and flexibility.

The results of proposing policy proposals and practical guidelines for school administration towards the next normal in terms of the government should implement an entirely new policy to establish strategies for school administration towards the next normal, and the Office of the Basic Education Commission (OBEC) and directors of the Educational Service Area should lead the school administrators and affiliate agencies to apply strategies

into practices for school administration towards the next normal. A policy recommendation from the Thailand Development Research Institute (TDRI) (2022) found that it reviewed the prerequisites for reopening the school and the preventative measures to ensure a balance was met. The rules must not be either too lax to cause an outbreak or too strict to prevent schools from reopening. COVID-prevention strategies must be logical and inclusive; thus, non-immunized pupils should not be barred from attending class. Any restrictions that the school cannot control must be eliminated.

Conclusion and suggestions

In summary, during the COVID-19 pandemic, the education system has had to adapt to radical changes in teaching and learning. School administrators should take advantage of the changes brought about by the pandemic to build a framework for development in the post-pandemic or next normal era. Digital technologies can play a crucial role in responding to pandemics. School administrators are expected to provide instructional leadership and examine their own leadership skills to ensure continuous school improvement. That should accelerate digitization in education. However, experience has shown that even under such extreme circumstances, teaching and learning can continue. This situation has also provided an opportunity for professional development in school administration. By embracing technology and innovation, school administrators can enhance their skills and knowledge in areas such as virtual learning, online communication, and remote management. Through professional development, administrators can adapt to the new reality, make better decisions, and provide literacy leadership in the next normal era of education. Therefore, it is important for school administrators to recognize the potential of change as an opportunity for growth and development.

New knowledge and the effects on society and communities

Towards the next normal, school administrators must be educated on the importance of new education systems, and schools still require communities' guidance to remain successful. To ensure the success of such schools, school administration should be managed by elected school boards from local communities that have a shared interest in educating their students. School administrators should also be mindful of the need to create conducive learning environments that foster successful student outcomes and school effectiveness. This includes teacher professional development and creating a culture of collaboration among teachers, students, parents, school society, and local community stakeholders. In this regard, the school administrators and local community stakeholders must ensure that students have access to learning tools for the next normal classroom, such as technology, digital innovation, or materials that can assist with their learning. Additionally, ensuring effective communication between all members of the school community is essential to building relationships among school administrators, teachers, and local community stakeholders to clarify expectations for student performance and use the best practice strategy for maximizing student outcomes.

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Managing Creative Online Learning Activities on “How to be an Inspirational Teacher using the IMTEAC Model” via the Line Application

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Abstract

The objectives of this research were to 1) develop and evaluate the quality of using creative online learning activities, 2) study the results of using creative online learning activities; and 3) study the evaluation results of using creative online learning activities; The study indicated that: 1) the quality of using creative online learning activities has the mean IOC scores for Step 1 - Step 6 (I-M-T-E-A-C) = 0.88; as evaluated by 7 experts using the Index of Consistency. 2) the results of using creative online learning activities on “how to be an inspirational teacher using the IMTEAC model” taught via the Line application on a sample group of 30 graduate students (population =42 graduate students) in the first semester of the 2020 academic year was that the inquisitive mind scores of the students were higher than before the study to a statistically significant degree at significance level .05. 3) the evaluation results of using creative online learning activities as assessed by 5 qualified experts are found to be “the most appropriate”.

Keywords: How to be an inspirational teacher, Knowledge management, IMTEAC model, Inquisitive mind, Line application

Introduction

Due to the COVID-19 pandemic situation and in compliance with government regulations (following a Cabinet resolution of 17 March 2020) , on 18 March 2020, Ramkhamhaeng University announced that all the classes for both undergraduate and graduate levels would be conducted using online teaching method only. And people were instructed to work from home. At the time, organizing online teaching and learning was a new challenge for teachers and instructors at all levels. Teachers had only less than two weeks’ time to find tools and equipment such as microphones and earphones through online shopping, as stores were closed except those selling food and medicine. Many tried to obtain high speed Internet service, and all searched for suitable applications to facilitate teaching and learning. Many decided to try Zoom, Google Meet, Cisco Webex, Microsoft Team, Google Classroom, Edmodo, Line, or other applications. Once the systems and equipment were all in place, the next challenge was how can we make them psychologically ready for it? as most students are new to online leaning and the switch was too sudden.

The COVID-19 situation directly impacts peoples’ mental health. Every day people are inundated with news of the pandemic’s toll in reports of infections, hospitalizations, and deaths. Naturally this causes stress, fear, and anxiety. All these factors could affect students’ emotional

states. In addition, peoples' expenses may have risen from quarantine- or isolation-related expenses, such as the need for protective equipment, medications, or other self-care expenses. At the same time, many families suffered a drop in income from work being reduced or suspended.

Under this situation, significant questions are, “How can we manage an online learning activity through a mobile phone application to create happiness, fun, and excitement for these learners?” How can instructors design online learning activities to attract learners' attention and make these leaning activities as fun as playing games? How can you make an abstract concept like “being an inspirational teacher” easy to understand and heart-touching? How can you make online learning activities full of interaction under a positive learning environment among all learners, and between the instructor and learners? How can you give the learners a deep and meaningful learning experience that generated self-learning and constructivism? How can you foster creativity through online learning activities and promote learners' inquisitive minds? Furthermore, how to inspire learners who are teachers to make them feel that they always want to spark inspiration in their students. How can methods of organizing creative online learning activities be transmitted to student teachers so they can apply them with their students and are willing to integrate affection into learning to reaches the hearts of their students?

As mentioned above, the next challenge for researcher is how to turn all these aspirations into a reality by using the IMTEAC model. How can I best harness this knowledge management model to design creative online learning activities through Line application's chat and message functions so that learners feel they are embraced in fun, and challenging activities at every step of learning? Finally, how can we make learners open to new methods of learning.

Literature Review:

According to the study on acceptance of e-learning (perceived usefulness, and perceived ease of use) using the Technology Acceptance Model (TAM) on a sample of 694 university students in Bangladesh during the COVID-19 crisis, Tamal et al. (2022) found that “sudden transition raises many concerns about e-learning acceptability. Students' overall e-learning acceptability was not adequate (32.8%), a significant number of students (46.8%) were not satisfied with the e-learning experience and the majority (70.2%) of students preferred face-to-face education systems for their future study.” The study also stated that the underlying factors that negatively affect students' e-learning acceptance included lack of technological skills, less familiarity with e-learning, lack of simplicity, low productivity, inefficiency, and so on (Tamal et al, 2022). Therefore, for learners who are unfamiliar with online leaning and short of technological skills may begin with technology that they are familiar with, such as the mobile phone, then the transition would be easier.

In a systematic review, Calderón-Garrido et al. (2022) analyzed 60 articles indexed to the Journal Citation Reports database between the years 2011 and 2020 and found that mobile phones in classrooms can be beneficial for educational purposes, provided that certain preliminary work is carried out and a certain development is achieved of the digital and media skills of both students and teaching staffs.

An application that is very user-friendly for learners is Line Application. As of 2020, there were about 45 million registered Line user accounts in Thailand. Using the free Line application would be easy for students and would not be a burden as it would not increase students' Internet expenses or require additional speed or bandwidth.

The study of LINE application: An alternative tool to develop writing abilities by Jumariati & Febriyanti (2020) has revealed the potential use of LINE application in developing students' writing abilities through blended learning. It employed a quasi-experimental design which involved 39 students on the advanced writing course. The experimental group was taught

by using process and product approach combined with LINE application with teacher's and classmates' feedbacks while the control group was taught by using a conventional method without LINE application. The data were the result of students' writings collected by using a writing test and scoring rubric as the instruments. The analysis of the students' scores was carried out by employing an independent sample t-test. The finding showed that there was a significant effect of the use of LINE application on the students' writing abilities.

Children's minds are delicate. Their emotional maturity and psychological immunity are not as well-developed as adults. Now, we all are living in the world of social media, problems do arise in the virtual world as well as in the real world. These problems include deception and bullying using insulting and aggressive language. News on self-harm and abusive behaviors can be seen daily. And while the level of severity is growing, the age of the culprit is getting younger and younger. Therefore, life skills should be integrated into lessons to strengthen emotional maturity and psychological immunity. As recommended by the Bureau of Educational Activity Promotion (2015). These life skills consist of 4 main components 1) The awareness of self and others, 2) The critical thinking, decision making and creative problem solving, 3) Dealing and emotions and stress, and 4) building good relationships with others.

To integrate life skills into the subject content is important as it makes learner realize the value and importance of the lesson, also to create incentive and inspiration to learn. As Good & Brophy 1997; Wager, Golas & Keller 2005; Polland 2006; Nasongkhla 2007; Whattananarong 2009 cited by Dangchamroon (2016), wrote, there are both internal and external incentives to learn. Internal incentive can be driven by helping learner to see the value or usefulness of the lesson, creating participation through a positive learning environment, making learning fun, using challenging questions that spark learners' curiosity, giving inspiring feedback, and building learner's confidence. In contrast, external incentives such as point/grading systems and rewards can be beneficial for the learner in the beginning but may lead to boredom and negative pressure later.

Teacher is one of the most important sources of knowledge for student, and "being inspirational" is an important skill for teachers in the 21st century Panich (2012). Being inspirational comprises of at least 2 components: 1) creating a positive learning environment by communicating creatively and building a desire to learn; 2) (using the IMTEAC model) to design learning activities that touch learners' heart, such as activities that encompass learners' feeling, focus on life skills, knowledge creation, and inquisitive mind (Dangchamroon, 2016). Also, when a life crisis happens to students, it is a challenge for the teacher to incorporate helpful life lessons into the subject matter and encourage learners to creatively apply what they have learned to real life problems. Life skills are essential for people of all ages, especially teachers as well-adjusted teachers can act as a role model for their students.

Once learners are motivated and inspirationally driven, they will be happy and enjoy learning. This outcome, in return, creates learners' inquisitive mind characteristic. Being inquisitive means mastering knowledge by mean of 1) Su: listening, watching, reading, and receiving information; 2) Ji: pondering and reflecting on what you have seen / heard/read; 3) Pu: inquiring about things to get the truth and form new knowledge; 4) Li: recording by noting down in writing, printing, or making a digital recording. This process resulted in systematic thinking. Because thinking is needed before writing something down. It also helps in memorizing, reviewing, and collecting what have learned as well as sharing it to others. These 4 components of an inquisitive mind are timeless. According to the education revolution, one of the important characteristics of learners in the 21st century is active learner. By participates in group discussions, expresses opinions, and learns from the teacher and fellow students by listening, thinking, reading, writing and recording (Her Royal Highness Princess Maha Chakri

Sirindhorn 1999; Phradhammagitthiwong 2003; Office of the Education Council 2004; cited by Dangchamroon (2016).

The characteristics of inquisitive mind and eagerness to learn exhibited in sharing and exchanging knowledge during learning. Knowledge management exists when learner participates in discussing and expressing opinions, reflects on thoughts and ideas, and sharing feelings and experiences. The meaning of knowledge management is bringing out a person's tacit knowledge and explicit knowledge and transmitting it between fellow learners or other people in form of sharing and exchanging knowledge, learning through discussion and reflection to produce new and valuable knowledge. Technology is used to facilitate knowledge recording, making it quicker and easier to access. In knowledge management (KM) an emphasis is on interactive interpersonal communication via technology rather than focusing on technology itself. Successful KM depends heavily on interpersonal relations (Panich, 2003; Jindawong, 2006; Phasukyud, 2006; Punlumjeak, 2009; Sirasoonthorn, 2009 cited by Dangchamroon, 2016).

Applying knowledge management principles into the IMTEAC model begins with synthesizing KM related researches both domestically and internationally with the intention of designing activities that nurturing inquisitive mind, creating motivation, building self-confidence and self-image, promoting interactions with fellow learners, openness to new ideas, managing learning activities that emphasize on feeling rather than rote memorization, applying knowledge, analytical skills and synthesizing ideas, ability to solve problems, and ability to draw conclusions and write summaries. This is based on research on "Developing a form of KM through learning exchange on web blogs".

Dangchamroon (2016) wrote about the reasons for applying KM principles in learning management are that 1) interaction is the core of KM and technology is only a channel or a tool for storing, accessing and transmission of knowledge (Davenport cited by Sirasoonthorn (2009); 2) positive interaction leads to good relationships, good relationships replace feelings of unfamiliarity therefore, learners are fully and comfortably participate in classroom or online learning activities as well as other activities outside the classroom. Also, under these friendly leaning environments, learners' willingness to learn is increasing; 3) when learners are familiar with classmate as well as see themselves as part of the group, their desired to learn is rising. This helps solve the problems of truancy, dropouts, and fail to graduate; 4) familiarity helps learners be their true selves, willing to express themselves, reflect on ideas, along with sharing life experiences while completing learning activities; 5) activities that encourage learners to reflect on ideas, knowledge, feelings, and experience including both tacit knowledge and explicit knowledge. The more reflected, the deeper level of expertise they develop. Learning is then more durable and meaningful; 6) when learners are both listen to and reflect on ideas, knowledge, feelings, or experiences of their classmates in form of knowledge sharing, they will be able to learn new knowledge from different points of views. This leads to a broader and deeper understanding; 7) while sharing knowledge, ideas, feelings, and experiences, learners feel more confident about expressing themselves. Also, when learners share knowledge (tacit and explicit knowledge) with their classmates they feel a greater sense of pride in a creative way. They feel capable and knowledgeable. It is self-fulfillment and complete as a whole human; 8) the more learners feel good about themselves, the more energy they must devote to learning. This is an internal incentive and an endless source of inspiration to learn more; 9) when a learner has a powerful driving force inside, and wants to learn, wants to develop him- or herself, they will be even more inclined to participate by sharing thoughts, knowledge, feelings, and experiences both in the classroom, on the web blog, and outside the classroom. Also, when a learner sees their own personal development by comparing their abilities from the beginning of the term to near the end of the course, they will see changes that will make them feel very proud. For example, a switch from doing a reflective writing by repeating what

is learnt through rote memorization and parroting to synthesis and critical thinking method; 10) in addition, apart from high-level thinking processes, synthesis thinking; learners will also develop greater self-confidence, willing to express oneself, understand others' feelings and points of view, understand the reality of the world, be open and friendly and willing to help others, be insightful and able to respond quickly and rationally to various problems or setbacks. These are all valuable traits for people in the teaching profession.

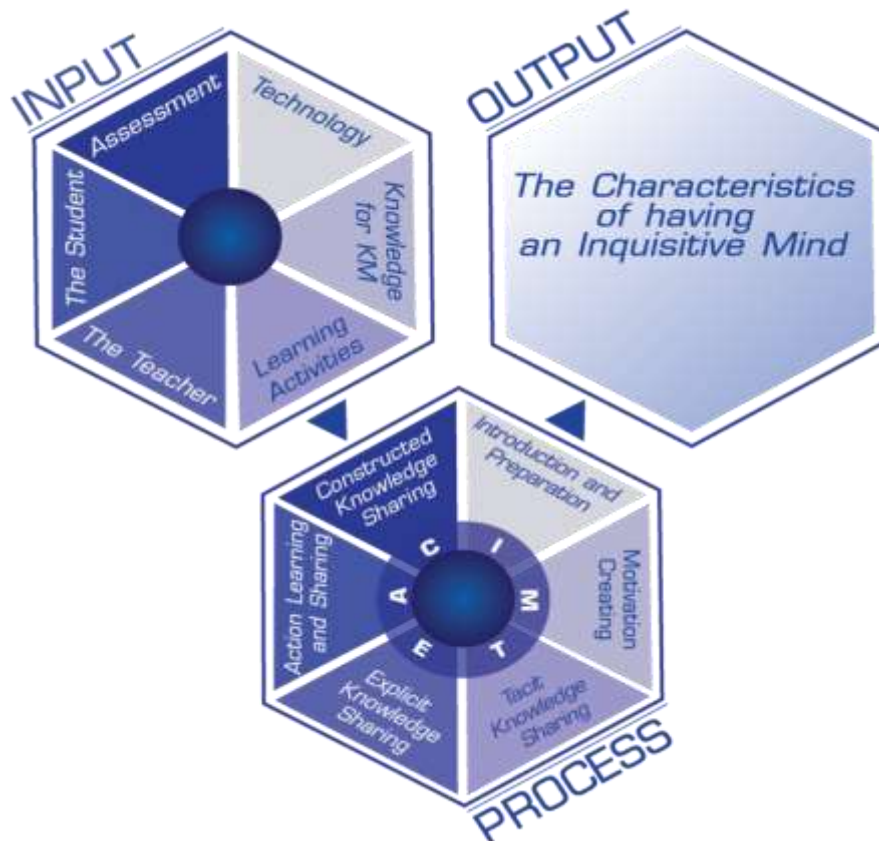


Figure 1 The Elements and Steps of IMTEAC Model (Dangchamroon, 2016)

The IMTEAC model (Dangchamroon, 2016) are comprises 6 elements including technology, knowledge for KM, learning activities, the teacher, the student, and assessment. And 6 steps are:

Step 1: Introduction and preparation (I) – getting the learner ready before starting off the learning process is very important. This can be done by building up a positive atmosphere, creating familiarity, and using ice-breaking activities to make the learner feel more at ease, relaxed and ready to open to the instructor, the course, and the subject matter. When students first meet each other and first meet the teacher, ice-breaking activity is very important to help them get to know each other. If the opening activities make them excited and curious, then it will really help start the learning process and maintain student's enthusiasm throughout the journey.

Step 2 : Motivation creating (M)- how can you make learners see the value and importance of the lesson or course material? How can you create the lesson that touches their hearts and mind? There are many ways to create incentives to learn. You can inspire them with a personal story, or with a fictional story, song, picture, animation, performance, or by asking an interesting open-ended question related to the content. These methods can bring the lesson into the hearts and minds of the learners in a natural way without making the learner feel

pressured or opposed to the lesson and without relying on rote memorization. The subject matter can seep into the learners' hearts and minds without them being aware of it- the next thing they know, they feel good about the subject matter, and they are thirsty for more knowledge and eager to develop themselves and learn more.

Step 3 : Tacit knowledge sharing (T)-the teacher and students discuss subject matter that is relates to existing experiences via online interactions. Creating opportunities for learners to share their past experiences will create a sense of belonging and being a part of the lesson and an important part of the class. When learners share their past experiences, knowledge, ideas, and feelings, which may be positive or negative will be accepted as valid and meaningful and thus, enhance learning and understanding between learners, making them feel deeply sympathize with each other rather than a superficial connection. When learners share their ideas, knowledge, feelings or experiences, good or bad, related to the same topic, each thing they express is unique. Even if they have not had the same experiences as their classmates, hearing about others' ideas can help learners get a better understanding of different contexts and they are exposed to a diversity of opinions.

Step 4 : Explicit knowledge sharing (E)- as the teacher and the learners discuss the subject matter together, they share new experiences (by working on group or solo projects and assignments) and start interacting online. In this step, when you give learners the opportunity to exchange and share new experiences, they feel that they are an important part of the lesson. And when they constantly share their ideas, feelings, and experiences as they find these activities are challenging, they will want to continue to be an important part of the class. The important thing is to quickly solve problems as they arise, respond quickly to every question and be aware of individual differences. Everyone has their own strong points, inclinations, and levels of ability. As learners give out different ideas and experiences on the same subject, they will learn about their classmates' special abilities, and this will help break down the old idea that there is only one correct answer to every question. Learners will accept different ideas and their learning experience will become broader, deeper, and more colorful. This leads to the implementation of step 5, action learning, more creatively as they let go of the ideas that the was the only one correct answer.

Step 5 : Action learning and sharing (A)- this happens when learners brainstorm to creatively solve a challenging question or difficult situation (it should be a real problem or situation so that the results of brainstorming can be applied to real life). As learners share real experiences, this leads to meaningful and sustainable learning. Learners can build up their own knowledge while the instructor acts as a coach by asking open-ended questions or by giving additional opinions that create inspiration. These all help learners be able to solve problems better in a creative way when facing challenging situations. Learners not only exchange and actively learn together through real action and experiences from group activities, but they also learn together through their friends' experience and other groups' activities. They can experience a wide variety of different viewpoints, processes of planning, ways of doing, ways of thinking and how creative works are done. This bring them to another level of thinking process, which are ability to assess and evaluate other's works in a more productive way and be able to give feedback creatively.

Step 6: Constructed knowledge sharing (C) -the instructor and learners discussing and extracting knowledge learnt. By reviewing and concluding the ideas, feelings and experiences gained from participating in all the learning activities from step 1 to step 5 (introduction and preparation, motivation creating, tacit knowledge sharing, explicit knowledge sharing, and action learning and sharing). In all steps, when learners are fully participated in every activity, a meaningful and retention learning take place. They were able to experience a wide variety of ideas and knowledge from their classmates and learned from their friends' work. Their written assignments are of good quality because it was distilled from real experience. The written

assignment is derived from actual learning experiences and has gone through synthesis-thinking process. not just a list of fact or knowledge that was memorized. It is a written work that has been thought, reflected, and synthesized.

When learners share knowledge through writing assignments or video clips, their written or spoken words along with facial expressions, tone of voice and body language will enhance leaning of this process by assisting them to reflect, and construct knowledge more deeply. Also, process of sharing constructed knowledge assisting them in practicing higher-level thinking skills such as evaluating skill as they assess their friend's work quality on clarity, impressiveness.

From the above description, you can see that the IMTEAC model is valuable and can increase the enjoyment and pride in the learning experience. It can be applied for both offline and online learning activities. The foundation principles of the IMTEAC model are based on knowledge management and learning exchange, with emphasis on a motivational learning process that harmoniously integrates ethics and focus on learner feeling (affective education), then by sharing prior experiences to create linkage to new experiences and finally, put that knowledge into action that encompass challenge. Sustainable learning is created through the process of constructed knowledge sharing.

Methodology

1. A course on organizing creative online learning activities on how to be an inspirational teacher using the IMTEAC model for graduate students in the field of education was developed and taught online through the Line application. The course was evaluated by 7 experts from 7 institutions. The quality of the activities was assessed based on the Index of Consistency (IOC). The criteria for selecting qualified expert were that they had to be an instructor, educator, or involve in academic teaching with at least 20 years of expertise in the field of technology and communication in education, knowledge management, learning activities management, psychology in education, reflective writing, development of inquisitive mind or having academic title of associated professor.

The results of the creative online learning activities on how to be an inspirational teacher using the IMTEAC model for graduate students in the field of education that was taught online through the Line application was studied. The pre- and post-test results are as following:

A test group of 45 graduate students registered for the Curriculum development and learning resource course at Ramkhamhaeng University in the second semester of the 2019 academic year (April 2020) were used for evaluating the efficiency of the creative online learning activities on how to be an inspirational teacher using the IMTEAC model taught online through the Line application.

2. A sample group of 30 graduate students registered for the Curriculum development and learning resource course at Ramkhamhaeng University in the first semester of the 2020 academic year who volunteered to participate and did participate in the learning activities through the developed course on creative online learning activities (on how to be an inspirational teacher using the IMTEAC model) taught online through the Line application.

One-Group Pre-test/post-test design was employed in this study. The study was conducted after the developed model (including 6 components and 6 steps) with a duration of 24 class hours (8 class hours x 3 days).

3. The creative online learning activities (on how to be an inspirational teacher using the IMTEAC model) for graduate students taught online through the Line application was evaluated by five qualified experts from 5 institutions. The criteria for selecting qualified experts were that they had to be an instructor or involve in academic teaching with at least 25

years of expertise in the field of technology and communication in education, knowledge management, learning activities management, psychology in education, reflective writing, development of inquisitive mind or having academic title of associated professor. A 5-level evaluation form was used to assess the appropriateness of the activities.

Results

1. The quality of the creative online learning activities (on how to be an inspirational teacher using the IMTEAC model) for graduate students taught online through the Line application evaluated by 7 experts from 7 institutions have an Index of Consistency (IOC) score of (Mean=0.88, S.D.=0.32) > 0.8, indicating that the online learning activities were appropriate for teaching. Then the creative online learning activities (on how to be an inspirational teacher using the IMTEAC model) taught online through the Line application were used to teach on a test group of 45 graduate students who had registered for the Curriculum Document and Learning Source Development course at Ramkhamhaeng University in the second semester of the 2019 academic year (April 2020). The results of using the online learning activities on “how to be an inspirational teacher using the IMTEAC model” taught via the Line application on a test group of 45 graduate students at Ramkhamhaeng University in the second semester of the 2019 academic year (April 2020) was that, after the activities, the Inquisitive mind scores of the test group were higher than before the study.

2. The results of the creative online learning activities on how to be an inspirational teacher using the IMTEAC model for graduate students in the field of education that was taught online through the Line application was studied using pre-test and post-test design, with the following details:

Next, the creative online learning activities (on how to be an inspirational teacher using the IMTEAC model) taught online through the Line application were tested on a sample group of 30 graduate students who had registered for the Curriculum development and learning resource course at Ramkhamhaeng University in the first semester of the 2020 academic year who volunteered to participate and did participate in the learning activities in the developed course on creative online learning activities (on how to be an inspirational teacher using the IMTEAC model) taught online through the Line application following the steps of the IMTEAC model for a total of 24 class hours (8 class hours x 3 days) was studied and analyze. The level of inquisitive mind of the sample group students before and after participating in the learning activities were statistically analyzed.

Tabel 1 Average score, standard deviation and t-test of the Inquisitive mind scores of the samples between before and after the study

Inquisitive Mind	n	\bar{X}	S.D.	t	Sig.
before the study	30	3.22	0.32		
after the study	30	4.60	0.72	12.50	.000

* $p < .05$.

The evaluation form consisted of 32 questions under 4 main indicators including: 1st indicator: “Su”- behavioral patterns that include determination to learn/ study (listen, read). 2nd indicator: “Ji”- behavioral patterns that include recollection of existing knowledge, trying to understand what they have read and listened. 3rd indicator: “Pu”- behavioral patterns that include learning by questioning and talking. 4th indicator: “Li”- behavioral patterns that include learning by memorizing. In each area, there are four types of knowledge gained,

namely: knowledge gained in class, knowledge gained outside class, knowledge gained on the weblog and new knowledge that pops up in mind. The pre-test/post-test scores were statistically analyzed using t-test for dependent samples (paired t-test). The sample group in this study consisted of 30 graduate students. The scores were distributed in a normal curve at significant level .05, which is consistent with the initial considerations for using t-test for dependent samples. After the study, the Inquisitive mind scores of the samples were higher than before the study to a statistically significant degree at significance level .05 .

3. The result of the evaluation of the creative online learning activities (on how to be an inspirational teacher using the IMTEAC model) for graduate students (taught online through the Line application) as evaluated by the 5 qualified experts from 5 institutions was that the experts gave the learning activities an average score of 4.7 (S.D. = .35). Additional opinions from experts are that the course was an example of online teaching that did an excellent job of bringing teaching theory into practice, especially basic psychology, which was harmoniously blended into the teaching process, while the teaching process itself was systematic and promoted participation so that learners could share an interesting learning experience without getting bored. However, the qualified expert noted that the instructor had to work hard in preparing the lessons ahead of time before the first lesson, but after that, the course would proceed smoothly. Overall, the course is an interesting academic work. This is reflected in the body of knowledge transmitted through actual teaching management. It is a good model for online instruction.

Discussions

For implementing the creative online learning activities course (on how to be an inspirational teacher using the IMTEAC model) through Line application, key factors that has direct positive effects on learners are to create positive learning environments using constructive communication; build inspirations; encourage friendly and warm interactions among learners; design learning activities that interesting yet sophisticated enough to gain learner's attentiveness. The above factors are consistent with the work of Wang (2022), who found that learning interest, learning attitude, and learning motivations can improve learning outcomes significantly. Throughout the course, by using IMTEAC model, students will be engaging in exciting, fun, and interesting stimulus activities.

In addition, the success of using Line application to organize the online learning activities is that all learners were already familiar with the application. Similarly, the research reported by Liu (2022), who wrote "Learning motivation, teaching model, learning ability, learning attitude, and learning environment have a significant positive effect on learning satisfaction. The average learning satisfaction of students not familiar with the use of mobile social media is significantly lower than that of students familiar with using mobile social media."

In terms of creating a positive leaning environment, all written messages used in conversing are about to create inspiration, self-fulfillment, and pride in members of the class. Command and forceful type of order was restricted. Open-end type of questions is used most of the time to grab learners' attention and opportunity to express their thought (Dangchamroon, 2016). All feedback given is intended either to create a challenge or to cheer up the learners. Word such as "need improvement", "weak spot", or "below standard" should be avoid when giving advice or opinions. Asking questions and giving productive compliments when appropriate are the proper ways to encourage participation and keep interaction going. Also, help learners to develop an inquisitive mind.

Finally, designing challenging tasks and fun activities is significantly important. Lacking of these factors, learners' attention, excitement to participate, and active involvement might be low, hence, impact the creation of positive leaning environments.

Conclusion and suggestions

The implementation of creative online learning activities through Line application in this research was based on the principles and concepts of Affective Education and Knowledge Management. Activities are including asking interesting open-ended questions in which learners can answer freely based on their own ideas and experiences that led to knowledge sharing and positive interactions among learners, giving constructive feedbacks to help create inspirations, combine and integrate what is being learned with life skills such as knowing oneself, realizing one's worth and the value of others, how to build good relationships with others, stress and emotional management, analytical skills, decisions making and creative problems solving skills.

Throughout the course, by using IMTEAC model, students will be engaging in exciting, fun, and interesting stimulus activities; student will recognize the importance of knowledge being learnt even abstract concept; participating in the process of exchanging personal experiences in form of tacit knowledge, would produce various perspectives that reflect a deep understanding of the studying matters, followed by explicit knowledge sharing via completing a role as an inspirational teacher; then, bringing all knowledges and experiences accumulated applied to real life by means of problem solving and innovative thinking; finally, sharing of constructed knowledge that being synthesized, organized throughout the leaning process.

The core concept of designing online learning activities via Line application is to pull attention, each activity is like playing games, and this can be seen, especially, in the development of "being an inspirational teacher" course. From an abstract concept turns out to be activities that are easy to understand, heartwarming, and insightful. Meaningful leaning, knowledge construction and inquisitive mind has developed within each learner after the end of the course.

Therefore, regarding the mentioned factors and leaning activities above, Line application is the most appropriate leaning tool, as it supports individual differences, allows learners to type and post their ideas and questions at the same time. Learners can response and send feedback instantly and simultaneously unlike traditional classroom where a learner must take turn when asking and answering questions.

With Line application, learners can immediately see what their classmates think, as all posts appear right away. Therefore, more opinions are to be shared and discussed without interrupting each other's time and thoughts. Activities are likely to consume fewer leaning hours. Learners tend to feel proud of their own responses and classmates' abilities.

While compared to standard video conferencing, a longer time would need to listen to all of classmates' responses, especially where there were several issues to discussed, people might start to get weary and bored. Since the classmates only got to know each other a few days before the beginning of the course, some might feel nervous and uncomfortable to respond on video, leading to moments of dead air. Also, video conferences can be plagued with problems such as interference, interruptions, audio or video problems, technical difficulties, or problems with Internet connections.

New knowledge and the effects on society and communities

The outcome of the research not only adds an innovative way of online teaching but also creates a positive impact on society and community, especially teaching profession and educator. Inspirational teachers are a characteristic that fills the gap between traditional style of teaching and modern way of teaching. A teacher should not be viewed as knowledge provider but also to inspire, to bring understating and affection into the classroom.

After the process of leaning using IMTEAC model, student will create a deeper understanding to realize that the core of online learning is not the application tool or technology but the creative activities that embedded challenging tasks itself, in other word, interaction is the key.

Furthermore, learners learn how to be an inspirational teacher (moving from traditional teaching method that characterized by a retell, demand, and explanation type of teacher to be an inspiring teacher), how to create positive leaning environment and how to create creative online learning activities.

Finally, students at graduate level have the inspiration to be one of inspirational teachers for their own student. They applied knowledge constructed and experiences that they have accumulated throughout the course to their own class at both primary level and secondary level in an innovative way. They learn how to use affectionate led knowledge when it comes to teaching using IMTEAC model.

Reflective writing from learners (during the 6th step: Construct knowledge sharing) showed that the acquisition of inquisitive minds had developed through leaning activities. For example: Romping into the Super Fun Station,” **day 1** (8 class hours):

It was the morning of Vesak Day (an important Buddhist holiday). After I gave my offering to the monks, I hurried to take a shower, get dressed and eat breakfast get myself ready in front of the computer screen waiting for my first online class with Ms. Apicha. I kept looking at the clock and checking the Line group. It felt like I was a little girl in school with pigtails hair again.

(I): The time I had been waiting has come. Ms. Apicha came up with a challenge to battle activities, where we had to send stickers in 2 rounds. The first activity was so exciting, I forgot that I was study online.

(M & T): The teacher approached the leaning content without explaining the subject matter directly, but yet I understood both the learning source and the roles of teachers in the 20th and 21st centuries. It’s very strange that ever since I started working as a teacher, there are times when I totally forget my childhood and forget what it’s like to be a kid. I forgot what I was feeling then, and that has sometimes created an emotional gap between teachers and students.

(E): Today the instructor showed us a video that made me feel like I went back to my childhood. “How can I, as a teacher, reach the hearts of the students?” and the answer I got is, every student is different. Each student has their own ideas, their own abilities, and their own styles.

(A & C): The teacher is an important factor that actually make learning happened. The teacher should encourage all student to express their opinions by giving them opportunity and supporting them and this will, eventually, lead the teacher into the hearts of all students. In managing learning activities, the important thing is creating a positive leaning atmosphere and building inspiration. The teacher builds inspiration using constructive communication. Constructive communication can be observed through teacher’s facial expression and actions. Regardless of what the teacher says or do have an impact on learners’ perceptions and knowledge acquisition. When teacher express themself in an agreeable way by respecting

others more than respecting oneself that's disrespecting oneself. When teacher express oneself in an aggressive way, that show you are only thinking of yourself. But teacher who express oneself in a constructive way, they are respecting oneself as well as others. When you're a teacher, all your actions have a direct impact on the learners. Everyone in teaching profession should be a good presenter and practice good expression skills to bring about sustainable learning. All of this, everything I have mentioned about since the beginning, comes from what I learned and understood in class today. I have to say, it's incredible. I have to say it again and again. It is hard to believe that a learning experience without really sitting down in the classroom (online leaning) could be so much fun and be full of knowledge.

Reflective writing from learners (during the 6th step: Construct knowledge sharing) showed that the acquisition of inquisitive minds had developed through leaning activities. For example: Romping into the Super Fun Station," day 2 (8 class hours):

(I): The time I have been waiting for is now! What will the second day of class with Ms. Apicha be like indeed? Will I be able to keep up in a sticker duel with my classmates? Thinking about it, I hurried to turn on my phone and search for stickers in preparation. Today, The learning began with the summary of what we learned yesterday. The same feelings came around again – the feeling of “am I really learning in a class?”.

(M & T): “Teacher” is the most important source of learning for students. By creating a positive leaning atmosphere and utilizing activities that truly fascinated by learners (IMTEAC model) will resulted in a student-based teaching model. Being a teacher is in my blood. I can't give up.

(E & A): Following Ms. Apicha in her time machine to all 3 Super Fun Stations. The first station... Who am I? I was asking myself who am I? What do I tell the teacher about who am I. My answer is based on the value I see in myself, but not to flatter oneself, (grinning). Narcissistic, wrapped in one's thoughts, compel and look down on other people which is different from feeling of pride. When I treat other people nicely and they reflect that back to me, that's a good thing. And when you realize that your self-value will gradually start to shine out beautifully. After I got to know myself at the first station, the second station came right up next: to accept other people. Accepting others means building friendships and sound relationships. That leads to good interactions in classroom. In this class, I have lots of good friends (in fact they are all lovable). Everyone is helping each other in learning. I want to say thank you to all of them but better wait a while, until we all get our diplomas together. In short, I want to say I love you all. The third station is about 5 steps problems solving following Eng & WantZ (1978). 1) search deeply to know the true problem; 2) obstacles; 3) diverse methods; 4) assess all situations; and 5) choose the best method. When I go through all 5 steps, I learned that every problem could go from looking really bad to, seemingly manageable.

(C): Our adventure at the third station ... when we arrived at this station, my first thought is my students. I will tell them that I found a invaluable treasure from these 3 “Super Fun Stations”. I will turn my classroom into an adventures journey just like Ms. Apicha took us on today. At this point, I feel just like yesterday class, ‘wow, how did I learn so much in one day?’, ‘It's evening time already? is class over for the day? See you tomorrow! Good evening.

Reflective writing from learners (during the 6th step: Construct knowledge sharing) showed that the acquisition of inquisitive minds had developed through leaning activities. For example: Romping into the Super Fun Station," day 3 (8 class hours):

(I): For me, throughout this course with Ms. Apicha, can be summed up in one word “It's impossible.” From the very first assignment that Ms. Apicha asked us to summarize the book “1) Life skills (Dangchamroon, 2020) and 2) How to organize a captivating training (Dangchamroon, 2016) session” in just 3 days' time, I told my family, “It's too difficult. I can't do it.

(M): What should I do?" It turned out, it was easy to read, and it was actually really fun.

(T): When I compared it to my actual experiences in real life, it was like, "that's really it!" Is that what they mean by "life skills?" I never look at it that way.

(E): When I wrote it out, it was really fun and enjoyable. I finished the writing in a day - very fast, it just came out and it was faster than I thought. The classmates wondered how I did it so fast. I had fun. The book was easy to read. The only problem I had was working during daytime, I was with my family and my children are small. They did not understand. They asked, "What are you doing, Papa?" Normally I would play with them during the daytime. I thought, "OK, I will change my work time to nighttime." So, I had to stay up late, and do work at 2:00 or 3:00 in the morning. Reading and summarizing the book "How to organize a captivating training session"

(A): I was really amazed by it, because I finished it in one day. I made a mind map. At first, I thought I would have to send in the assignment late. But some classmates said they could do it, and I should give it a try, and work on it. They cheered me on. So, I tried my best. I took out all I had; all the skills I possess; every knowledge I had learned before. It took me a while, but at the end I was satisfied with my work.

(C): When my classmates and the teacher praised my work, I felt proud. I thought, "I can do it."

(I): But then when the class begin, the old doubts came back in my mind... "can I really study?" "can I make it?" I wondered if taking a course using the Line application would really keep me interested. I have no idea what it would be like.

(M): But when the teacher started teaching using Line Application I have to admit I liked it a lot. Not only that I can do it, but I also enjoyed it. I should not doubt the leaning via the Line application at first. It turned out, just 2 days after I had thought it was impossible, I had to change my thought. Everything is possible for me. It's like I became more confident. Just like the teacher said, I saw my own value. After I realized, I worked hard, and I felt proud. I tried my best; I faced every problem that came up with full attention and effort. And I could do it.

(T & E): It was a good work. The instructor praised it, my classmates and friends praised it. I patted myself on the back that I could do it and do it well. Another thing that turned out well and I was proud of was the group work of Group 1. Besides feeling proud of myself and proud of all my classmates (not just those in Group1), I feel proud of all classmates. They are all accomplished. I really like their work. It's a great feeling of pride. When you are surrounded by capable people and with good friends, I think we make each other stronger and accomplish even more.

(A): At first we felt unsure on the first day, but by the second and the third day when we are able to create something together... when I would throw out a question like "can we do it this way?" everyone contributed some ideas, and we were able to blend and combine them together. And the work came out really well. Certainly, I'm not sure who would think it was good, but I will go ahead and praise my own work. I want to thank everyone in the group.

(C): As for what I gained, the knowledge I got... I think the teacher had summarized it very well today. I liked her conclusion. We realized our own value and felt proud of ourselves. The friendship and acceptance from classmate including older and younger in the course are very good. They are great people. I really got something out of it. As for the IMTEAC model, I have memorized it in my mind. I will certainly use it. How will I use it? I can share that with you. If you have free time, you can read my Line posts. In fact, tomorrow I'm going to teach online. I will adapt parts of the IMTEAC model and try it out. I will use it in a physics class. I have already made an appointment with my students. I really want to say thanks to the instructor. I did not realize how taking a master's degree course here would open-up my world.

In just the first week, my world became much bigger. In just a week I got very close to my classmates. I know everyone in my group and everyone in my year. Through activities, we open our hearts to each other I feel good about myself. I'm glad I could study with Ms. Apicha and all my classmates. Thank you.



Figure 2 Romping into the Super Fun Station (IMTEAC Model, 2020)

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Enhancement of Study Skills for the Subject Career 3 (3D Drawing) for Mathayomsuksa 2 Students using the Canva Application

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Abstract

The objectives of this research were (1) to enhance study skills for the subject career 3 (3D Drawing) for Mathayomsuksa 2 students, (2) to develop teaching materials using the Canva application, and (3) to study the satisfaction of students in studying the subject career 3 (3D Drawing). The samples used in the research were grade 2/10 students, semester 1, academic year 2022, Sanpatong Wittayakhom School, Sanpatong District, Chiang Mai Province, total 36 people. Research tools included the Canva application, skill building guides, video clips of 3D drawing using the Canva application, and lesson plans. However, data analysis uses statistics of percentage, mean and standard deviation. The results of the study found that the enhancement of learning skills was at a high level = 4.43, the development of instructional materials using Canvas Image application was at a high level = 4.48, and overall student satisfaction was at a high level = 4.47. While educating students utilizing innovative teaching medium and analyzing student behavior in class, it was discovered that students paid attention and participated in class activities quite well.

Keywords: Canva application, 3D drawing, Enhancing study skills

Introduction

The core curriculum is the curriculum that the commission for basic education determines will be used in the development of all students at the level of basic education. The core curriculum is made up of important components like learning standards and indicators, core learning subject matter, and a basic learning time structure that outlines how each class period will be structured. The main requirements for passing the course, learning subject groupings, and learner development activities. The occupational learning topic area is a subject area that aids in the development of learners' knowledge, comprehension, and fundamental life skills as well as their awareness of changes and ability to creatively apply information. (Department of Academic Affairs, 2008)

3D modeling is a technique for creating items that can be viewed from all directions, including front, top, and oblique, with various resolutions based on the intended use of the workpiece. Many details could be present, for instance, if it is a 3D representation of a structure. It may contain information on the exterior of the thing if it's a product rather than within, and vice versa. Making 3D drawings is now widely used in every industry because to the rising efficiency of computer hardware, its low cost, and the availability of several 3D drawing applications. (Chiraphan, 2013) To generate items or work with high resolution, including scale that satisfies requirements, it takes an expert in design regardless of whether it's for the purpose of product design, advertising, or the film business. However, how each program operates will vary. For example, some programs pay close attention to the details necessary to accurately simulate the movement of real objects using real physics; others are suited for using to create a variety of effects for presentations; still others have more support tools than others etc. Hence, 3D drawing may be completed using a number of programs that are now on the market, with the benefit of cheap production costs, current technology that is suited for 3D drawing, can be utilized in a variety of applications, and can also be created from scratch.

Drawing is the method of expressing a designer's thoughts on paper in a systematic way. It is used in handicraft or industry as writing to depict pictures, forms, and other aspects of a design so that it may be produced as a physical object. (Chaiyarat, 2010) The drawings must be in a universal language with signs or symbols, and the formats must be simple enough for someone who has not studied drafts to understand. This will save money and get quality work that meets the requirements. The written form will be a medium to communicate the ideas or needs of the designer to others and can be used to create correctly. reasonable. (Suetrong, 2010)

Users can design using “Canva”, a ready-made software in the form of a website, users do not need to have a background in art to use Canva, which offers a mobile application version that is simple and convenient for users to use in addition to developing websites. Canva offers a variety of tasks, including presentations, and can help every task very well, especially in times of urgency because there are many formats to choose from. (Diggelen, 2021). Canva is a platform for graphic design that may be used to create content for social media, presentations, print, and animation. The benefit of using the Canva app is that you can rapidly produce lovely photos or movies since there are so many templates to pick from that you can get started right away even without a graphics or video background. The program is available in both free and premium editions. Canva offers the benefit and strength of offering more than 60,000 templates, making it easier to create professional-quality designs for a variety of purposes, including social media posts, infographics, resumes, presentations, logos, and more. If someone is seeking for a free video creator, Canva is an intriguing option because it is free to use and supports Thai languages.

The core curriculum has set the content and learning standards for Mathayomsuksa 2 students, creating objects or methods according to technological processes safely designed by conveying ideas in 3D sketches or projections, to contribute to the prototyping of objects or to convey the idea of how to model ideas and report results, to present methods for studying 3 professional academic subjects on 3D drawing. The issue is that because most students have never used it and have use restrictions, they lack fundamental drawing abilities and cannot master 3D drawing in the allowed period. The researcher has a suggestion that using the Canva application can be used to develop 3D drawing materials for Mathayomsuksa 2 students, to give students drafting skills and satisfaction in learning about 3 careers in 3D drawing, as well as the development of teaching materials that are interesting and can be applied in the future.

Research Objectives

- 1. To enhance study skills for the subject career 3 (3D Drawing) for Mathayomsuksa 2 students.
- 2. To develop teaching materials using the Canva application.
- 3. To study the satisfaction of students in studying the subject career 3 (3D Drawing).

Conceptual Framework

Using the Canva application, the researcher focuses on the study as Figure 1 in this study on the improvement of vocational topic study skills 3 (3D drawing) for Mathayomsuksa 2 students.

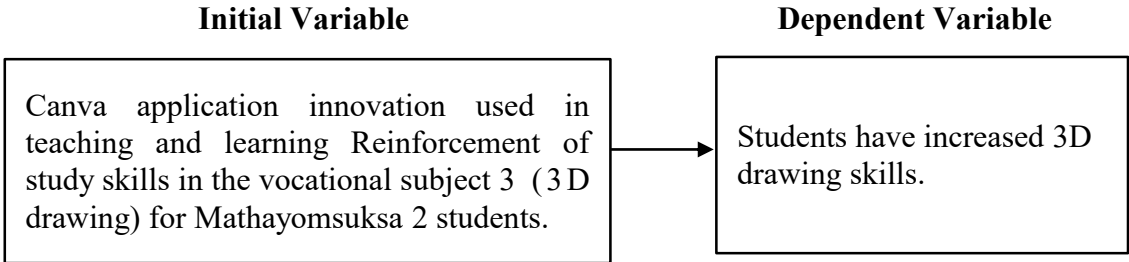


Figure 2 Conceptual Framework
(Source : Researcher, 2023)

Methodology

1. Population determination and sample selection

1.1 Population determination

Population and sample, the population used in this research were Mathayomsuksa 2 students of Sanpatongwittayakom School, 5 rooms, totaling 188 people, semester 1, academic year 2022.

1.2 Sample selection

The sample used in this research were 36 students in Mathayomsuksa 2/10, first semester, academic year 2022, at Sanpatong Wittayakhom School, which was drawn by purposive random sampling. Purposive sampling on the other hand, refers to the selection of a sample group that most closely matches the researcher's criteria or objectives.

2. Canva application study

“Canva” is an application for creating various presentation materials such as presentation, poster, card, resume, certificate, infographic etc., Canva comes in standard sizes or user-defined sizes.

2.1 Using the Canva Application: users can access it in two ways: (1) through the Canva app and (2) through the website www.canva.com.

2.2 Use through the website: sign up users can sign up with their Facebook account, Google mail (G-mail) or any other email address. First page when logged in to the CANVA website page as follows; it is user design management, grouping and deleted media, the creation of each design has a predetermined size, but the user can customize the size as well, it's all designs that have already been made.

- 2.3 How to create a design.
- 2.4 Operation management menu.
- 2.5 Menu in the upper right corner that needs to be designed.

2.6 Creation of research tools (manuals), links and QR codes, research manuals, as illustrated in Figure 2 below.



Figure 2 The cover of the research handbook and the process of creating research tools (Source : Researcher, 2023)

3. Tool Trial

Population groups have difficulties and barriers in their work, certain population groups are unable to adopt the researcher's methods, problems and skepticism arise in the work, and the researcher is unable to offer all populations thorough assistance.

3.1 Tool Modifications: the researcher has prepared a video clip of the operational process as follows; (1) procedures for creating tools for drawing work using the Canva application, (2) example of isometric drawing using the Canva application, and (3) examples of obvious writing using the Canva application, by creating a YouTube link: <https://youtu.be/2mfl1yanfLY4>, as illustrated in Figure 3 below.



Figure 3 3D drawing video clip using Canva application
(Source : Researcher, 2023)

3.2 Applying to the sample: The researcher had the sample group perform the activities in accordance with the video clip they had been watching when it was time to study, and the researcher always provides assistance to the sample group when they are having difficulties carrying out their jobs appropriately. The sample group had been given a 3D sketching video clip created using the Canva software to watch before class, thanks to the researcher.

4. Tools used to collect data

The questionnaires were the instrument used for data collection, and the researcher produced them based on the conceptual framework derived from the idea, theory, and related study; the questionnaire was composed of three sections;

Section 1: general information questions.

Section 2: there were three parts to the question the learning management process, media innovation, and assessment and evaluation and a total of nine questions. Students were asked to rate their satisfaction on a 5-point scale with regard to their learning about jobs in three-dimensional (3D) drawing.

Section 3: open-ended questions enabling students to offer further thoughts regarding issues and recommendations they have encountered while learning vocational science 3 (3D Drawing).

The completed questionnaire was then handed to the mentor, who reviewed it to make sure it covered the study goals. Three mentors and experts then received amended questionnaires, which were then checked for content validity and linguistic accuracy as follows: (1) head of occupational affairs group, totaling 1 people, and (2) teachers in the vocational subject group, totaling 2 people. At the end of the questionnaire, the answers from the mentor and the experts were used to determine the IOC. It was found that all questions exceeded 0.6, Nonetheless, the mentor and the subject matter specialists advised changing the questionnaire's language structure. For instance, measurement and assessment inquiries should be updated to include new questions since queries or optimized statements are more understandable. Then use advice from teachers and industry professionals to properly develop it before putting it to the test (Try Out). Fifteen students who were not part of the sample were used to test the redesigned questionnaire in order to determine its reliability using the Cronbach's alpha coefficient. It was discovered that the content validity questions had an IOC

value of 1.00 for the connection between the questions and the objectives. (Srisaard, 2010) Then, continue copying the questionnaire to use for actual data collection.

5. Data collection

In this study, the researcher collected information from students taking vocational subject 3 (3D drawing) in order to perform a study of student satisfaction; (1) the researcher has asked for cooperation in answering the questionnaire for 36 students studying occupational subjects 3 (3D drawing) on September 20, 2022, (2) take the questionnaire to verify its completeness, (3) the data obtained from the questionnaire responses of the sample were analyzed using a packaged program, and (4) qualitative data verify the integrity of the data.

6. Data analysis

Analysis of the satisfaction of the sample as follows; (1) calculate the satisfaction response score from a questionnaire with a 5-level estimate scale to obtain data, (2) to determine the percentage, mean, and standard deviation from the survey data, a packaged application was used for analysis, (3) to understand the mean satisfaction, use the findings from the data analysis, and (4) the tabular findings of the data analysis are shown and discussed.

7. Statistics used in data analysis

7.1 Statistics used to determine tool quality use the following statistics; (1) Finding the validity of a questionnaire using the IOC consistency index formula, and (2) analysis for discriminant power using Pearson's simple correlation between Item-total correlation. (Tairuakham, 2009)

7.2 The statistics used for data analysis are; Percentage, Arithmetic Mean, and standard deviation. (Srisaard, 2010)



Figure 4 Represents the steps in the trial
(Source : Researcher, 2023)

Results

The findings of a questionnaire used to gather feedback from students in a particular sample group to determine how satisfied students were with their experience learning the vocational topic 3 (3D drawing) are as follows;

1. Respondents' basic demographic data: from the satisfaction questionnaire distributed on September 20, 2022, a total of 36, 33 questionnaires were returned, accounting for 97.7 percent, from those 33 satisfaction questionnaires, the respondents were as follows;

1.1 Gender; as stated in Table 1, there were 36 responses to the satisfaction survey, with 9 men (or 27.3%) and 24 women (or 72.7%).

Table 1 Shows percentage of gender of respondents

Gender	Quantity	Percentage
Male	9	27.30
Female	24	72.70
Total	33	100

1.2 Age; from the satisfaction survey respondents of 33 people, it was found that they were in the age range of 12-14 years old, the most number of 33 people, representing 100%, details as shown in Table 2.

Table 2 Percentage of respondents' age range

Age	Quantity	Percentage
Under 11 years old	-	-
12-14 years	33	100
15 years or more	-	-
Total	33	100

2. Displays information on student satisfaction assessment items in learning about careers 3 (3D drawing); from the results of the satisfaction assessment of the sample of students in learning occupation 3 (3D drawing), in summary, the overall picture of the questionnaire found that they were satisfied at a high level ($\bar{x}= 4.47$) or accounted for 89.4 percent as shown in Table 3.

Table 3: Shows the student's satisfaction in studying the occupational subject 3 (3D drawing)

Assessment Items	Level of Satisfaction					Average \bar{x}	S. D.	Level
	5 (the most) percentage	4 (a lot) percentage	3 (moderate) percentage	2 (little) percentage	1 (least) percentage			
1. Learning Management Process								
1.1 The content is appropriate	14 person 42.43	16 person 48.48	3 person 9.09	-	-	4.33	0.65	a lot
1.2 Learning management activities are appropriate	19 person 57.58	10 person 30.30	4 person 12.12	-	-	4.45	0.71	a lot
1.3 Teachers can manage learning appropriately	20 person 60.61	10 person 30.30	3 person 9.09	-	-	4.52	0.67	the most
average	53.54	35.69	10.1			4.43	0.67	a lot
2. Media and Innovation								
2.1 Availability of student learning materials (telephone, internet)	15 person 45.46	13 person 39.39	5 person 15.15	-	-	4.30	0.73	a lot
2.2 The media and innovations used are modern, accessible and easy to use	23 person 69.70	7 person 21.21	3 person 9.09	-	-	4.61	0.66	the most
2.3 The media and innovation used are suitable for learning	20 person 60.61	10 person 30.30	3 person 9.09	-	-	4.52	0.67	the most
average	58.59	30.3	11.11			4.48	0.70	a lot
3. Measurement and Evaluation								
3.1 Assessment methods are consistent with the objectives and teaching activities.	18 person 54.55	11 person 33.33	4 person 12.12	-	-	4.42	0.71	a lot
3.2 Measurement and evaluation are in accordance with established regulations, rules and agreements	21 person 63.64	8 person 24.24	4 person 12.12	-	-	4.52	0.71	the most
3.3 Measurement and evaluation are efficient and fair	22 person 66.67	8 person 24.24	3 person 9.09	-	-	4.58	0.66	the most
average	61.62	27.27	11.11			4.51	0.69	the most
Total Average	57.92	31.31	10.77	-	-	4.47	0.68	a lot

From Table 3: The respondents were satisfied with learning about the occupational subject 3 (3D drawing), it was found that they were satisfied at a high level ($\bar{x} = 4.47$, S.D.= 0.68), it lists each side in order from greatest to least. As follows No. 1 in measurement and evaluation ($\bar{x} = 4.51$, S.D.= 0.69), No. 2 in media and innovation ($\bar{x} = 4.48$, S.D.= 0.70), and No. 3 in learning process ($\bar{x} = 4.43$, S.D.= 0.67) respectively.

Discussions

From the satisfaction survey respondents of 33 people, it was found that they were in the age range of 12-14 years old, the greatest number of 33 people, representing 100 percent, and displays information on student satisfaction assessment items in learning about careers 3 (3D drawing); from the results of the satisfaction assessment of the sample of students in learning occupation 3 (3D drawing), in summary, the overall picture of the questionnaire found that they were satisfied at a high level ($\bar{x} = 4.47$) or accounted for 89.4 percent.

In class research reinforcing study skills in occupational studies 3 (3D Drawing), for Matthayomsuksa 2 students, using the Canva application, the results of data analysis can be discussed as follows; the satisfaction assessment results after the vocational coursework 3 (3D drawing) for Matthayomsuksa 2 students, using the Canva application, found that students were overall satisfied with their studies at a high level ($\bar{x} = 4.47$, S.D.= 0.68) which is in accordance with the predetermined assumptions, and when considered as an evaluation item, it was found that students were satisfied with the first order, No. 1 in measurement and evaluation ($\bar{x} = 4.51$, S.D.= 0.69), No. 2 media innovation ($\bar{x} = 4.48$, S.D.= 0.70), and the No. 3 in learning management process ($\bar{x} = 4.43$, S.D.= 0.67) respectively, thus making students satisfied. The findings are consistent with the research of Chanput (2018) which researched “the effects of blended training via using cloud computing to students' infographic design ability faculty of education, Sikpakorn University”, by the purpose of this research were to (1) a comparison of the effectiveness of training combined with the use of cloud computing students in the faculty of education, before and after training, (2) the ability to design infographic students in the faculty of Education, and (3) the study the opinions of the trainees, training on the use of technology combined with cloud computing. The ability to design infographic. The sample used in this study include undergraduate students in the Faculty of Education, Sikpakorn University first-year academic year 2017 the students 20 people the method of selecting volunteers. The instrument used in this study (1) structured interviews, (2) the planning of training activities combined with the use of cloud computing, the ability to design infographic, (3) achievement test training design infographic, (4) assessments design infographic, and (5) survey training, training on the use of technology combined with cloud computing, the statistics used to analyze data were mean (\bar{x}), standard deviation (S.D.) and statistical t-test (Dependent). The results have found that (1) the results of the comparative effectiveness of training, combined with the use of cloud computing, the ability to design an infographic of students, Faculty of Education, Silpakorn University higher learning the statistical significance level 05., (2) the ability to design infographic, after training combined with the technology of cloud computing students Faculty of Education, Silpakorn University in very good the average ($\bar{x} = 16.30$, S.D. = 0.13) 3) a review of the student, training on the use of technology combined with cloud computing, the ability to design infographic, student opinion was good, the average ($\bar{x} = 4.35$, S.D. = 0.47).

This is in line with the research results of Bamrungjit (2013) on the development of e-learning system lesson materials for the subject of handicraft and craft 1 (drawing 1) Matthayomsuksa 1. The results showed that (1) the e-learning system lesson media for the subject of mechanic and craft 1 (drawing work 1) Matthayomsuksa 1, the efficiency was

81.75/81.25, (2) the mean score of learning achievement after learning was significantly higher than before learning at the .05 level, and (3) the students' satisfaction with the e-learning system was at a high level. Moreover, it is consistent with Boonsue (2018) study on the Office of Educational Service Area's elementary English teachers' understanding of TPACK the integration of technology with teaching techniques and content and the variables influencing that knowledge Primary Education in Chiang Mai, Region 1. The researcher provides students with access to the Canva application so they may choose a template to use while creating a piece of work (resume). The results of integrating research into teaching and learning revealed that students were more interested in the subject matter, more confident, and more skilled in using technology and language abilities necessary for success in the twenty-first century. Also, by incorporating research results into teaching and learning, it is possible to link data on the importance of technical proficiency, successful teaching techniques, and curriculum, as well as the integration of teachers' experience in each field.

Conclusion and suggestions

From the above findings it can be concluded that; (1) to enhance the study skills of vocational subjects 3 (3D drawing) for Mathayomsuksa 2 students, the overall picture was at a high level ($\bar{x} = 4.43$, S.D.= 0.67), (2) to develop teaching materials using the Canva application, the overall level is high ($\bar{x} = 4.48$, S.D.= 0.70), and (3) to study the students' satisfaction in studying the course occupational career 3 (3D Drawing), the overall level was at a high level ($\bar{x} = 4.47$, S.D.= 0.68). There are also suggestions for conducting research, namely; (1) suggestions for applying the research results are; the Canva application can be applied in the process of teaching content or activities in other subjects, and (2) suggestions for further research are; the Canva application can be applied to teaching and learning in other areas by applying drawings such as architectural and engineering drawings.

However, in future studies, the researcher may provide questions or administer tests both before (using an application) and after (increasing study abilities), since doing so would improve research comprehension, this will allow the researcher to assess the effectiveness of skill improvement in this study.

New knowledge and the effects on society and communities

A time when there is so much information that there isn't enough time to process it all has led to the preference of many companies for adopting digital media for information exchange and public relations; it is a successful medium for communication between professors and students. An infographic (or information graphic) is a visual representation of a lot of information and knowledge that accurately and clearly identifies facts, statistics, knowledge, and numbers as well as provides significant information in a condensed form that is organized into categories. Information consumption is thus facilitated and accelerated by infographic media. In addition, infographics are used by scientists, computer programmers, mathematicians, statisticians, public relations professionals, and educators as tools to facilitate the creation and dissemination of conceptual information, support human self-learning, and stimulate learning, which is an important aspect of education in the modern world.

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A Survey on Teachers' Attitudes Towards Bilingual Education (Thai-Tai Yai based) for Border Schools in Mae Hong Son, Thailand

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Abstract

This paper aimed to carry out a preliminary survey on teachers' attitudes towards bilingual education (Thai-Tai Yai based) for local schools in border areas of Pang Mu areas, Mueang district of Mae Hong Son Province of Thailand, to reveal 1) the feasibility and requirements of implementing MTB program(s) in border schools; 2) the nature and implementation of MTB materials; and 3) the nature and implementation of MTB curricula. The research population was 109 teachers from 18 educational institutions. The research instruments were 1) a survey form about language and language use in schools and 2) a questionnaire consisting of five sections: basic information of the respondents; opinions on the management of bilingual education; cost and need for creating primary bilingual media, bilingual courses; and suggestions, respectively. Data were analyzed quantitatively and qualitatively by using frequency, percentage, summation, and arithmetic mean. The results were that (1) the teachers were not ready for any form and aspect of teaching instructions—having few costs and making few demands for building and creating media for bilingual instructions in five related issues as follows: solid foundational media; primary media for listening-speaking Thai; preparation for reading-writing the Thai language; development of reading-writing skills in Tai Yai language with Thai characters; and enhancement of reading-writing skills with reading materials in Tai Yai language; (2) the teachers have few costs and needs for creating a bilingual model course in their schools on eight bases, namely: educational standards; Thai/Tai Yai languages; Thai/Tai Yai cultures; local needs conformity; basic language skills; multicultural understanding, Tai Yai cultural conservation; and teaching plans in bi/multilingual education, and; (3) the teachers lack knowledge, understanding of bi/multilingualism principles, and experiences. Conclusively, bilingual (Thai-Tai Yai) education was not a ready requirement for schools in Mae Hong Son border areas.

Keywords: Attitudes, Survey, Bilingual, Education, Border school

Introduction

According to the World Bank's (2004) report, more than half of the world's school children are living in many communities where their native languages are not accepted in schools. So, their desired learning is not achieved nor does not meet national educational standards—resulting in higher rates of dropouts or repetition. This is a huge problem in education for all that oppose UNESCO's (2005a) goals agreed to fulfil the children's needs of every community in all ethnic groups with full access to free and quality basic education.

Like other countries in Asia-Pacific regions, such as the Lao People's Democratic Republic (PDR), Thailand is an area of ethnic diversity—over 72 languages and cultures were found there with 35-45% of the population (Chaze & e, 1999 in Kosonen, 2005) speaking a mother tongue or ethnic language. Similarly, in the People's Republic of China, over 100 million people belong to numerous ethnic groups, but the standard Chinese as the national or official language is superior to children's ethnic languages—freezing children's literacy achievement in education and creating unequal opportunities in society. In schools, language inequality occurs when the medium of instruction is not children's home language (L1), but rather their standard Chinese (L2)—making the difference between poverty and wealth, living with dignity and living without dignity in society. As a result, those who do not speak or use larger languages as the medium of instruction in schools lose opportunities for good communication, language learning, and other school subject learning (UNESCO, 2005b).

In Thailand, fundamental education starts from the age of three in Pre-Kindergarten to Kindergarten three (early childhood) and compulsory education starts from the age of seven to the age of 12 which is primary education and continues for another six years until they are 18 in secondary school. Therefore, children are forced to meet the standard Thai as a medium of teaching for many years. Consequently, their L1 is confined to narrower domains of use until it is abandoned or else they do not receive appreciation or attention from teachers. Being forced to understand standard Thai from a younger age is a reason for them to have low learning achievement in the Thai language and other courses through which the teacher uses the standard Thai language as a teaching medium.

A report on an analysis of the provincial budget allocation for the year 2019 by the Provincial Budget Bureau revealed that Mae Hong Son (MHS) province has chronic poverty problems among its population of 279,088 people. In 2020, household incomes were low, with an average of 63,419 baht/year/person by the criteria for the management of basic necessity data collection (Open Government Data of Thailand: OGD). Poverty is not only based on household incomes, but also on six dimensions: education, livelihood, work, welfare, life and property safety, and health. According to this, MHS had a low mean of poverty in all dimensions (Chiang Mai News, 2019). In the education dimension specifically, there were some facts about MHS's poor education quality as follows: a) from and out of all 77 provinces across Thailand a study revealed that the average number of years of schooling among the population aged 15 years and over was the lowest level of the quality education by 5.81 years in 2016, b) an access rate to higher education than the primary level (secondary and vocational education) was the 68th (64.9%) in 2015, c) the average intelligence quotient (IQ) of primary school students in 2016 was the 61st (94.6 points), d) the O-Net average result at high school level in 2016 was ranked at 67th (31.54%) (Office of the National Economic and Social Development Board, 2019), and e) MHS Provincial Education Area, Regions 1 and 2, had an O-Net average score of 33.36 in four core subjects—Thai (43.52), English (28.04), Math (28.81), and Science (33.07) from O-Net score evaluation results in the academic years 2017-2019 (Ministry of Education, 2020).

The education quality alone suffices to reflect human achievement from the Human Achievement Index (HAI) 2017. MHS is considered being at the least progress in human achievement with an index of HAI = 0.4637 (lowest) in the 77th province of Thailand. Thus, it is reasonable for MHS to speed up the development of the education quality among children as rapidly as possible.

Mother tongue-based (MTB) - bilingual education (BLE):

MTB-BLE is the use of two distinct languages as a medium in the classroom where the first language (L1: mother tongue) is the language of the family or the language of the community. Tai Yai (Shan) for example is a learning base of other languages, society, and the world through various activities to develop at least four basic language skills and to link them to official languages such as standard Thai (L2: central Thai). MTB-BLE provides better education and the understanding of children's language and culture to learn new things suitable for them around. MTB-BLE as well honours the language and culture of ethnic people by maintaining their linguistic and cultural values and improving their children's education. MTB-BLE is a teaching approach to solving educational disparities and improving Thai literacy and English skills of ethnic school children especially in remote, rural and border areas with the use of L1 as the basis principally in all activities to practice reading, writing and thinking skills and to use L2 and other languages as an additional subject. Children however can expose to L2 more and more as they need—not having to abandon L1. In the long run, the children with L2 skills based on L1 will become bilingual learners with a high level of proficiency (Cummins, 2001; Thomas & Collier, 2003) and achievement in other subjects and additional languages as well (Baker, 2001). Although the term “bilingual learner (BLL)” has broad meanings, here it simply means the learner who uses L1 with family and learns L2 at school.

MTB-BLE involves several programs such as 1) L2 adaptation where L2 is readily adapted to L1 of the learners as much as possible as a medium of instruction, such as Tok Pisin language in Papua New Guinea (PNG) (Siegel, 1997); 2) L2 plays as the medium of instruction in school curriculum while L1 as one school subject such as Hmong and Song in Vietnam (UNICEF's Next Generation Viet Nam, 2013) and Balinese, Javanese, and Sundanese in Indonesia (Maryanto, 2008), and 3) only L1 for a few years earlier in the school system and then adopting L2 as the language of instruction.

The advantages of MTB-BLE are several: 1) reducing dropouts; 2) reducing repetitions; 3) stimulating and encouraging bilinguals to learn more; 4) encouraging parents and the community to participate in the educational system; and 5) effectively cutting costs (World Bank, 2004). MTB-BLE also promotes bilinguals' appreciation of L1 and identity. In the long term, it helps the bilingual to have a full range of knowledge and bilingual competency, to hold the value of backgrounds, to earn self-esteem, to gain greater self-confidence, and to achieve high aspirations in life and education (Baker, 2001; Benson, 2002a).

The main objective of MTB-BLE is that learners succeed in learning and gaining confidence by maintaining the language and culture of their speech community at the same time. So, MTB-BLE is anticipated as one suitable pilot program to improve the quality of school education in MHS, of which areas are bordered by Thai-Myanmar territories.

Backgrounds:

Pang Mu here refers to Pang Mu sub-district area of Mueang District of Mae Hong Son Province, Thailand that covers 13 villages, namely: Pang Mu (PM: Area 1), Kung Mai Sak (KS: Area 2), Tung Kong Mu (TM: Area 3), Nai Soi (NS: Area 4), Ban Mai (BM: Area 5), Sop Pong (SP: Area 6), Sop Soi (SS: Area 7), Mai Ngae (MN: Area 8), Mai Sape (MS: Area 9), Phakholo (PK: Area 10), Khun Klang (KK: Area 11), Shan Mueang (SM: Area 12), and Doi Saeng (DS: Area 13). The area may be classified into three geographical types as

follows: the plain type which includes PM, KMS, TM, MN and SM; the hill type which include NS, BM, SP, SS, PK and KK; and the mountain type which include MS and DS as shown in Table 1.

Table 1 Area characteristics of 13 villages in Pang Mu Subdistrict

Village	Geography			Mother tongue
	plain	hill	mountain	
PM	✓			Tai Yai
KS	✓			Tai Yai
TM	✓			Tai Yai
NS		✓		Tai Yai, Kayah, Kayan, Kayaw
BM	✓			Tai Yai, Pa-O
SP		✓		Tai Yai
SS		✓		Tai Yai
MN	✓			Tai Yai
MS			✓	Kayah
PK		✓		Sgaw
KK	✓			Tai Yai
SM	✓			Tai Yai, Sgaw, Khammueang, Yunnan Chinese, Kayah, Pa-O
DS			✓	Kayah

Source: Pang Mu Administrative Organization (2020); Office of Mae Hong Son Culture (2021)

From an ethnolinguistic perspective, people from these villages can speak and understand at least two languages (bilingual)—those from the plain villages mainly have a good command of Tai Yai, and non-Tai Yai such as Sgaw; those from the hill villages do either; and those from the mountain villages are commonly good at speaking non-Tai Yai which are Kayah and Sgaw. However, most of them are capable of understanding both Tai Yai and Central Thai to some extent. Some other ethnic minority groups which can also be found within the area are Lisu of part of KS; Kayah, Kayan, and Kayaw of part of NS; Pa-O of part of BM; Yunnan Chinese, Yuan, Pa-O, and Kayah of part of SM that it seems to be the most multilingual village of all.

Pang Mu area is bordered to the north by Mok Champae and Huai Pa sub-district, to the south by Pha Bong sub-district, to the east by Huai Puling sub-district, and the west by Myanmar. So, the schools in Pang Mu area are inevitably considered border schools.

With the exception of the following villages—MN, SM, PK, and KK—the majority of the local villages have community schools that offer primary education to the local youth. As a result, a sizable portion of community school pupils come from the neighborhood where they reside. Although there is no proof as to where the children from these villages attend school, it is likely that some MN students attend Tha Pong Daeng School in the Pha Bong subdistrict, some SM and PK students attend the nearby BM School, and some KK students attend the close-by SP School.

The Municipal Primary School (colloquially as Rongrian Thetsaban Mueang Mae Hong Son), Provincial Administrative School (colloquially as Rongrian Ban Chong Kham), Bannawitaya School, and Hong Son Primary School are among the larger schools that other children from wealthier families are more likely to attend.

As these children belong to various ethnic minority groups whose languages and cultures are not the same, for example; Sgaw (ꨀꨂꨃꨆ or ꨀꨂꨃꨆꨂꨃꨆ in Thai: กะเหรี่ยงสะกอ), Tai Yai (တိꨄꨂꨃꨆ, in Thai: ไทใหญ่), Kayah (Thai: กะเหรี่ยงคะยา), Lisu (Thai: ลีซู or ลีซอ), and Lahu (Thai: ล่าหู่ or มุเซอ), they speak different languages and practice different cultures from their homes and communities. To one point, they do not speak the same language as their teachers are using in

classrooms, and they do not practice the same culture as their teachers are doing in the classrooms. These consequently result in low quality of education as mentioned earlier.

To facilitate integration within Pang Mu context particularly, MTB bilingual education is advised for supplementary courses like Local Language and Culture or required courses like Local History and Local Studies in L1, whereas modern subjects like Sciences and Math in L2 or in both languages where possible because specialized subjects and language subjects are inextricably linked—learners cannot develop academic skills and knowledge without having language skills they need in language activities. The same holds true for pupils' ability to develop their academic language abilities without being familiar with academic material (Cambridge Assessment International Education, 2017).

As many large schools in major cities like Krung Thep Maha Nakhon and Chiang Mai offer—Thai instruction as L1 in a specific course like Thai Language only; and English of instruction as L2 in most remaining subjects—this study has not yet attempted to survey which type of MTB program was most appropriate or to immediately launch any of MTB programs. Instead, this study conducted a preliminary survey on three different topics: the possibility of using MTB programs to improve the quality of education in border area schools; the type and implementation of MTB media; and the nature and implementation of MTB curricula.

Objectives:

The objective of this study is mainly to survey teachers' attitudes towards 1) the feasibility and requirements of implementing MTB program(s) in border schools; 2) the nature and implementation of MTB materials; and 3) the nature and implementation of MTB curricula.

Methodology

The research methodologies were as follows;

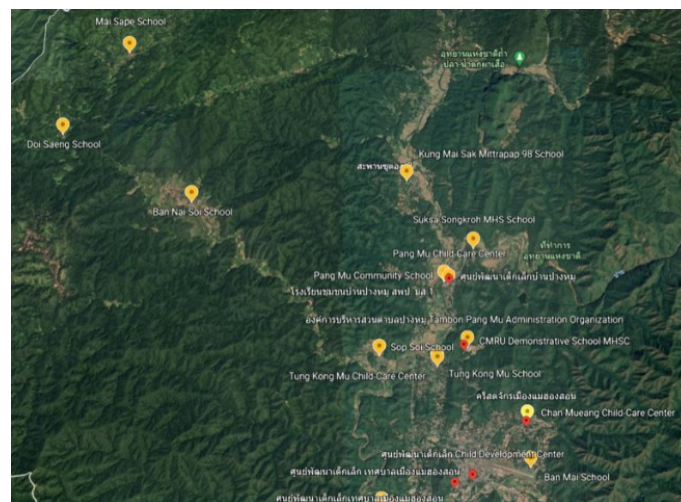


Figure 1 Map of school locations
(Source: Panyawuthakrai, 2022)

This study focused Pang Mu sub-district area of Mueang District of Mae Hong Son Province, Thailand where Mae Hong Son Campus of Chiang Mai Rajabhat University (CMRU) is located. The population was 109 community school teachers who were working (at the time this study was being done) in five different types of 18 educational institutions: 1) eight

community schools affiliated with Mae Hong Son Primary Educational Service Area (PESA) 1 are Pang Mu Community School, Kung Mai Sak Mittrapap 98 School, Tung Kong Mu School, Nai Soi School, Ban Mai School, Sop Pong School, Sop Soi School, and Mai Sape School; 2) a learning centre affiliated with Border Patrol Police Area (BPPA) 336 of Doi Saeng; 3) a special school affiliated with Bureau of Special Education Administration (BSEA) is named Sueksa Songkhro Mae Hong Son School; 4) a demonstrative school affiliated with Mae Hong Son College (MHSC), Chiang Mai Rajabhat University (CMRU) is called CMRU Demonstrative (DM) School, Mae Hong Son Campus; and 5) seven community child-care centres affiliated with Pang Mu Administrative Organization (2020) are from the following communities—PM, KM, NS, TK, DS, MS, and SM. These teachers were chosen for three reasons: first, they were responsible for early childhood and/or primary education, which is a priority of MTB programs; second, their schools are in close proximity to MHSC of CMRU; and third, they had never been involved in any MTB education research previously.

Table 2 Research target border schools

Schools affiliated with MHS PESA		Special school affiliated with BSEA	
1	Pang Mu Community School	10	Sueksa Songkhro Mae Hong Son School
2	Kung Mai Sak Mittrapap 98 School	Demonstrative school affiliated with MHSC	
3	Thung Kong Mu School	11	CMRU Demonstrative School
4	Nai Soi School	Child-care centers affiliated with PMAO	
5	Ban Mai School	12	Pang Mu Child-Care Center
6	Sop Pong School	13	Kung Mai Sak Child-Care Center
7	Sop Soi School	14	Nai Soi Child-Care Center
8	Mai Sape School	15	Thung Kong Mu Child-Care Center
Learning center affiliated with BPPA		16	Doi Saeng Child-Care Center
9	Ban Doi Saeng School (colloquially)	17	Mai Sape Child-Care Center
		18	Chan Mueang Child-Care Center

Background information about language and language use in schools was gathered and studied from a survey form developed from *Planing mother tongue-based education programs in minority language communities* (Malone, 2010) and revised by an expert from the Resource Center for Revitalization and Maintenance of Languages and Cultures, the Research Institute for Languages and Cultures of Asia, Mahidol University. So, the survey form featured 11 questions— 9 yes-no questions e.g. ‘Are there many students speaking the Tai Yai language?’ plus 2 open questions e.g. ‘In what class(es)/school subject(s) of lower (or upper) elementary levels do the teachers speak Tai Yai?’. However, when ‘yes’ answers arose, some more questions e.g. ‘How many/About how many?’ or ‘How often?’ were added and an estimated number was filled in.

Issues concerning basic personal information, opinions about MTB education, costs and needs for MTB media, the creation of an MTB curriculum, and suggestions for the improvement of quality education in border area schools were examined and analyzed from a questionnaire. The questionnaire was created and adapted from relevant studies: 1) *a development model for bilingual communication abilities at the elementary level of the three southern border provinces’ students* (Kannaowakun et.al., 2010) regarding the opinion about MTB education; 2) *the development of Thai language teaching policy in southern border provinces* (Office of the Education Council, Ministry of Education, 2007) and the other one on *local Thai (languages) medium instructions: a case of bilingual education (Thai-Malay) in four schools of southern border provinces* (Premsrirat et al., 2007). It featured 87 items in total. Except for the first and last issues, each item was designated by a Likert’s five-point satisfaction scale in ascending order— 1, strongly disagree; 2, disagree; 3, neither agree nor disagree; 4, agree; and 5, strongly agree.

To make these questionnaire items qualified, two measures were implemented: a) content validity or Rovinelli and Hambleton’s Index of Item-Objective Congruence (IOC), which was performed by three experts’ judgements—two from Mahidol University and one from Yala Rajabhat University—and b) reliability, as measured by the Cronbach’s alpha coefficient for items’ internal consistency in IBM SPSS 26 Version from 20 teacher samples.

As illustrated in Table 3, there could be four expected outcomes for the IOC based on the three average judge scores for each item. Any item examined at a lower level than the IOC average of 0.5 would be removed, nevertheless. Table 4 displays Cronbach's alpha internal consistency and reliability levels. Table 5 shows the validity statistics for seven items on the questionnaire part 1 and Table 6 presents the validity and reliability statistics for 80 items on the questionnaire parts 2-4.

Table 3 Four expected outcomes of three average judges’ ratings

No.	Item	Scale	IOC 1			IOC 2			IOC 3			IOC
			1	0	-1	1	0	-1	1	0	-1	
1	X ₁	1, strongly disagree; 2, disagree; 3,	0			0			0			0
2	X ₂	neither agree nor disagree; 4, agree;	1			0			0			0.33
3	X ₃	and 5, strongly agree	1			1			0			0.67
4	X ₄		1			1			1			1.00

Table 4 Cronbach’s alpha and internal consistency

Cronbach’s alpha	Internal consistency	Reliability
$\alpha \geq 0.9$	excellent	perfectly reliable
$0.9 > \alpha \geq 0.8$	good	highly reliable
$0.8 > \alpha \geq 0.7$	acceptable	reasonably reliable
$0.7 > \alpha \geq 0.6$	questionable	not terribly reliable
$0.6 > \alpha \geq 0.5$	poor	not entirely reliable
$0.5 > \alpha$	unacceptable	unreliable

Table 5 Validity statistics of items on the questionnaire part 1

Items	Validity (IOC)
1) Basic personal information	
sex	1.00
age	1.00
position	0.67
education	1.00
work experience	1.00
affiliation	0.67
Tai Yai ethnicity	1.00

Table 6 Validity and reliability statistics of items on the questionnaire parts 2-4

Items	Validity (IOC)	Reliability (α)
2) Opinions on and needs for MTB education (Tai Yai based)		
<i>Tai Yai based MTB education</i>		
I agree.	1.00	0.989
I find it fit.	1.00	0.989
I find it beneficial to students.	1.00	0.989
I find it beneficial to school.	1.00	0.990
I find it beneficial in the locality.	1.00	0.990
I need it.	1.00	0.989
<i>Tai Yai based MTB education pattern</i>		
As a compulsory subject	1.00	0.989

Table 6 Validity and reliability statistics of items on the questionnaire parts 2-4 (cont.)

Items	Validity (IOC)	Reliability (α)
As a supplementary subject	1.00	0.989
As an extra curricular activity	1.00	0.989
Tai Yai and Thai spoken in all subjects	1.00	0.989
<i>Preparedness to implement Tai Yai based MTB education</i>		
School administrators are eager to support the adjudgement of the school curriculum.	0.67	0.989
School administrators are eager to advocate school teachers for it.	0.67	0.989
School administrators are eager to allocate a partly budget for it.	0.67	0.989
I can speak Tai Yai.	0.67	0.990
I can spare my time for MTB education trainings.	0.67	0.989
I am pleased to assess MTB teaching outcomes.	0.67	0.989
Most/almost students speak Tai Yai.	0.67	0.989
They like MTB teaching.	0.67	0.989
They are ready for MTB learning assessment.	0.67	0.989
There is an MTB curriculum draft.	0.67	0.989
An MTB curriculum is in use.	0.67	0.989
There are MTB teaching plans.	0.67	0.989
The MTB curriculum has been improved.	0.67	0.989
MTB media and materials are adequate.	0.67	0.989
MTB media and materials are durable and of good quality.	0.67	0.989
MTB medial and materials support the Tai Yai language, cultures, and wisdom uses.	0.67	0.989
Student guardians support the use of Tai Yai in school.	0.67	0.989
Student guardians share knowledge about Tai Yai language, cultures, and wisdom.	0.67	0.989
Student guardians are assured MTB education will develop their children's knowledge and learnings.	0.67	0.989
There are MTB education plans.	0.67	0.989
There are MTB teachers.	0.67	0.989
School supports teachers for MTB education trainings.	0.67	0.989
There are some MTB activity budgets.	0.67	0.989
There are some budgets for MTB teachers' recruitment.	0.67	0.989
There are some budgets for MTB teachers' trainings.	0.67	0.989
Student guardian association is ready.	0.67	0.989
Local administrative organization is ready.	0.67	0.989
Riligious organization is ready.	0.67	0.989
3) Costs and needs for MTB media		
<i>To found stable learning bases in Tai Yai as L1 in school</i>		
Picture stories exist.	0.67	0.989
Picture stories are required.	0.67	0.989
Stories with Tai Yai cultural backgrounds/illustrations exist.	0.67	0.990
Stories with Tai Yai cultural backgrounds/illustrations are required.	0.67	0.989
Educational games exist.	0.67	0.989
Educational games are needed.	0.67	0.989
Tai Yai folk plays exist.	0.67	0.989
Tai Yai folk plays are needed.	0.67	0.989
A collection of Tai Yai narratives exist.	0.67	0.990
A collection of Tai Yai narratives is needed.	0.67	0.990
Teaching and questioning techniques exist.	0.67	0.990
Teaching and questioning techniques are needed.	0.67	0.989
<i>To found listening-speaking bases in Thai as L2</i>		

Table 6 Validity and reliability statistics of items on the questionnaire parts 2-4 (cont.)

Items	Validity (IOC)	Reliability (α)
TPR in Thai is emphasized.	0.67	0.989
TPR in Thai needs to be emphasized.	0.67	0.989
<i>To prepare for reading-writing bases</i>		
Writing bases start with drawing pictures.	0.67	0.989
Drawing activities are required at the beginning.	0.67	0.989
Picture – letter activities exist.	0.67	0.989
Picture – letter activities are needed.	0.67	0.989
Creative writing through picture story telling activities exist.	0.67	0.989
Creative writing through picture story telling activities are needed.	0.67	0.989
<i>To develop reading-writing by Thai alphabet based Tai Yai</i>		
Reading-writing primers exist.	0.67	0.989
Reading-writing primers are needed.	0.67	0.989
<i>To supplement reading-writing skills with Tai Yai reading materials</i>		
Big books exist.	0.67	0.989
Big books are needed.	0.67	0.989
Small books exist.	0.67	0.989
Small books are needed.	0.67	0.989
4) Creating an MTB curriculum		
School curriculum is based on education standards.	1.00	0.990
School curriculum based on education standards is needed.	1.00	0.990
School curriculum connects the Thai with Tai Yai languages.	1.00	0.989
School curriculum that connects the Thai with Tai Yai languages is needed.	1.00	0.989
School curriculum connects the Thai with Tai Yai cultures	1.00	0.989
School curriculum that connects the Thai with Tai Yai cultures is needed	1.00	0.989
School curriculum relates to local needs.	1.00	0.989
School curriculum that relates to local needs is needed.	1.00	0.989
School curriculum emphasizes the development of both languages in all basic skills.	1.00	0.989
School curriculum that emphasizes the development of both languages in all basic skills is needed.	1.00	0.989
School curriculum supports an understanding of multi-cultural societies.	1.00	0.989
School curriculum that supports an understanding of multi-cultural societies is needed.	1.00	0.989
School curriculum supports the conservation of Tai Yai language and cultures.	1.00	0.990
School curriculum that supports the conservation of Tai Yai language and cultures is needed.	1.00	0.989
MTB teaching plans exist.	1.00	0.989
MTB teaching plans are needed.	1.00	0.989
Avg.	0.78	0.990

Again, the quality items would have values of 0.67 or 1.00 for their validity, and for their reliability, the resulting correlation coefficient alpha would be greater than or equal to 0.7 ($\alpha \geq 0.7$) indicating that these items were both acceptable and reliable.

The data collected from the questionnaire items were analyzed quantitatively by using statistical methods: arithmetic sum, mean, mode, percentile, and standard deviation through the IBM SPSS Statistics 26 program as were the data collected from the survey form which were also described qualitatively through the author's observation, and some personal communications. The analysis of data from suggestions was also done qualitatively.

In relation to the research objectives, the data collected from the survey form for language and language use in school and the questionnaire items concerning the opinions and needs for MTB education (Tai Yai based) would meet objective 1 (the feasibility and

requirements of implementing MTB programs in border schools), the items related to costs and needs for MTB education would attain objective 2 (the nature and implementation of MTB materials), and the items about the creation of an MTB curriculum would reach objective 3 (the nature and implementation of MTB curricula). The items, moreover, concerning the basic information of the respondents plus their suggestions would add more details to the objectives and provide a profound insight into the implementation of MTB education (Tai Yai based) in Mae Hong Son Province.

Results

The following insights resulted from the examination of the information gathered via the study form and questionnaire, which ended up contributing to the accomplishment of the study’s goals.

1) According to an examination of the basic demographic data gathered from 109 repondents (teachers), there were more female instuctors than male teachers (40.4%), with a 36.7% age range between 30 and 39 years old, a 56% bachelor’s degree, and a 34.9% postgraduate degree. 69.7% of the population has between one and fifteen years of professional experience. Tai Yai instructors were outnumbered by non-Tai Yai instructors by 20.2%. 39% of all instructors are Tai Yai, 60% are non-Tai Yai, and 1% gave an anonymous comment. Figure 2 and Table 7 have specifics.

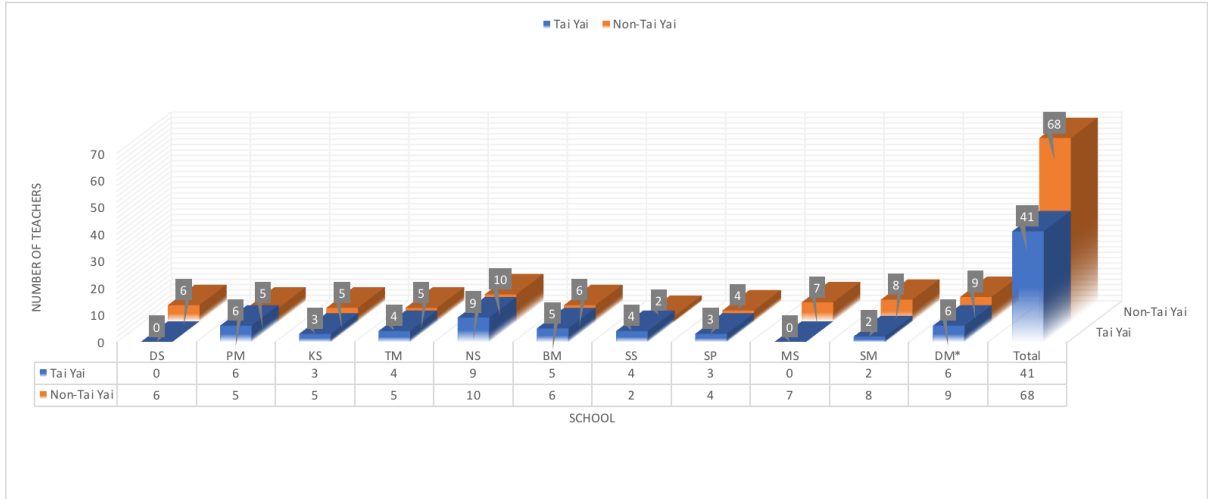


Figure 2 Number of Tai Yai vs non-Tai Yai teachers
 (Source: Panyawuthakrai, 2023)

Table 7 Number of Tai Yai and non-Tai Yai teachers

School	Tai Yai	Non-Tai Yai
DS	0	3 (Sgaw), 1 (Khammueang), 1 (Kayah), and 1 (Burmese)
PM	6	3 (Khammueang) and 2 (Sgaw)
KS	3	2 (Khammueang) and 3 (Sgaw)
TM	4	2 (Laos), 1 (Khammueang), 1 (Thai), 1 (Yong) and 1 (Lisu)
NS	9	4 (Khammueang) and 6 (Sgaw)
BM	5	6 (Sgaw) and 1 (not specified)
SS	4	2 (Thai), 1 (Lao) and 1 (Sgaw)
SP	3	2 (Sgaw)
MS	0	3 (Sgaw), 2 (Khammueang) and 1 (Thai)
SM	2	5 (Sgaw) 2 (Lao) and 1 (Khammueang)
DM*	6	9 (Sgaw)
Total	41 (38%)	68 (62%)
Total	109 respondents	

Note * DM includes all community child-care centres and CMRU Demonstrative School, Mae Hong Son Campus, **No ethnicity specified, 1 person (1%)

According to the table above, 62% of the population speak languages other than Tai Yai, which are listed in descending order as follows: 37% of the population is able to communicate in Sgaw Karen, 13% in Khammueang, 4% in Lao, 3% in Thai, and 5% in other languages, including Kaya Karen (1%), Burmese (1%), Yong (1%), Lisu (1%), and other that is not defined (1%). Additionally, in DS and MS schools, there are no Tai Yai-speaking teachers.

Based on whether or not the following student kinds speak Tai yai at any point in the school, the analysis of teacher-student language (2.3) is based on these student types: As indicated in Table 10 and Figure 3, students in early childhood, lower primary, and upper primary schools are represented by the items 2.3.1, 2.3.2, and 2.3.3, respectively.

2) Four types of information emerged from the study of the survey responses on language and language usage in schools: 2.1) Language used by students; 2.2) Language used by instructors; 2.3) Language used by teachers and students; and 2.4) Opinions on school support for Tai Yai teaching.

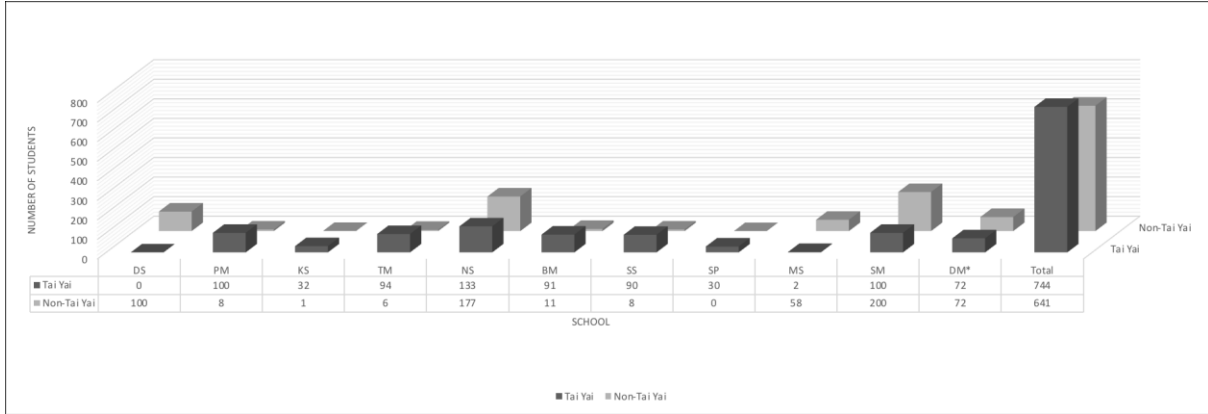


Figure 3 Number of Tai Yai vs non-Tai Yai students
 (Source: Panyawuthakrai, 2023)

Whether or not pupils speak Tai Yai at school is considered into account in the language analysis of students (2.1), which is represented in Table 8.

Table 8 Tai Yai vs Non-Tai Yai students by number

Student	Tai Yai	Non-Tai Yai
DS	0	70 (Kayah or Red Karen/Kayae, colloq.) and 30 (Burmese)
PM	100	5 (Thai) and 3 (Black Lahu)
KS	32	1 (Lisu or Liso, colloq.)
TM	94	3 (Thai), 2 (Khammueang) and 1 (Sgaw)
NS	133	158 (Kayah) 10 (Sgaw or White Karen, colloq.) 9 (Kayan or Long-necked Karen, colloq.)
BM	91	7 (Sgaw) 1 (Lisu) 3 (Not specified)
SS	90	4 (Sgaw) and 4 (Pa-O)
SP	30	-
MS	2	58 (Kayah)
SM	100	50 (Kayah) 100 (Sgaw) 50 (Lisu)
DM	72	18 (Khammueang) 43 (Kayah) 6 (Sgaw) 5 (Not specified)
Total	744	641
1,385 individuals (approximately)		

Figure 3 and Table 8 show that there were 54 to 46% more Tai Yai students than non-Tai Yai pupils. Following is a list of the non-Tai Yai languages in decreasing order: By comparison, Kayah was spoken by 59% of the population, Sgaw by 20%, Lisu by 8%, Burmese by 5%, Khammueang by 3%, Kayan by 1.5%, Thai by 1.25%, Pa-O by 0.5%, Black Lahu by 0%. The only schools with solely Tai Yai-speaking students are SS and PM daycare centers. The only school where Tai Yai is never spoken by the pupils are DS and MS daycare centers.

The examination of instructors’ language (2.2) is based on whether or not they use Tai Yai in the classroom. See Figure 4.

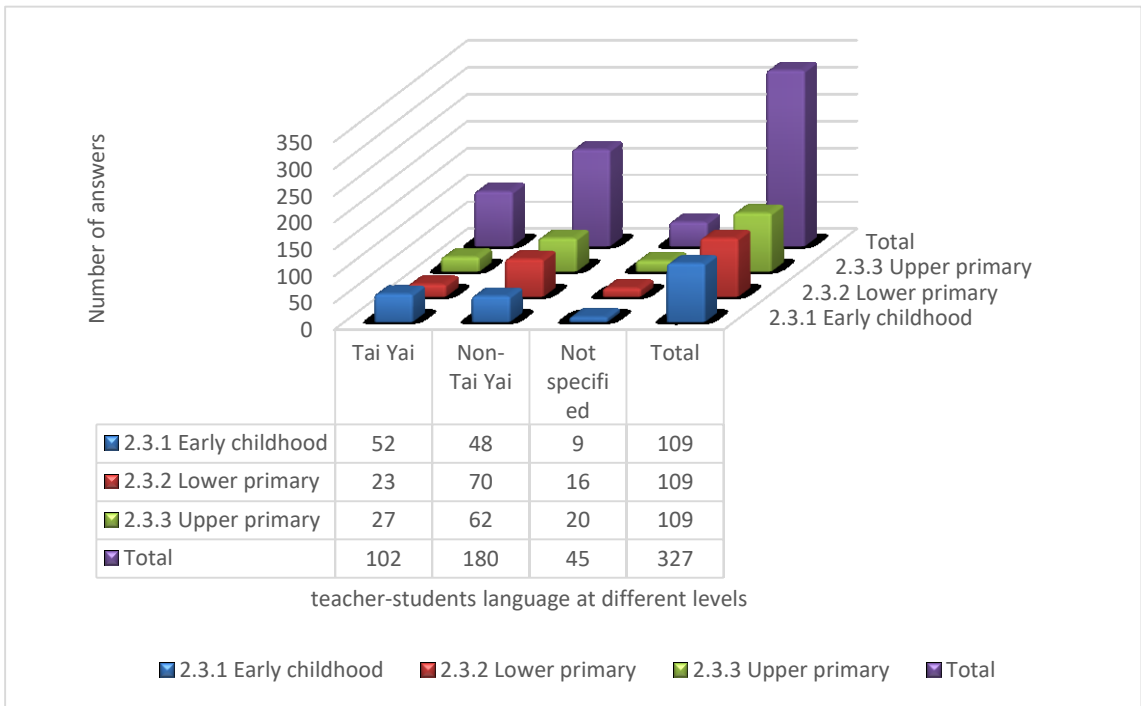


Figure 4 Teacher-students language at different levels
 (Source: Panyawuthakrai, 2023)

In any case, 48% of teachers speak Tai Yai to children in preschool (2.3.1), 21% to students in lower primary school (2.3.2), and 25% to students in upper primary school (2.3.3). In Tai Yai, only 31% of teachers communicate to students of all levels. It appears that more teachers speak Tai Yai to preschoolers than to pupils in primary school. In all, 14% of respondents did not provide any specifics.

Furthermore, some comments indicate that the majority of teachers refrain from using Tai Yai in the classroom. However, some of them only use it sparingly and merely when necessary, switching to Thai the majority of the time. Furthermore, there were no findings regarding the subjects in which they “always” speak Tai Yai.

Based on whether or not: 2.4.1) a master of Tai Yai teaching was employed; 2.4.2) he or she is hired (in 2020); and 2.4.3) teachers who are fluent in both Thai and Tai Yai are necessary, as stated in Table 11 and Figure 4, the analysis of teachers’ perceptions regarding the school support for Tai Yai teaching (2.4) is conducted.

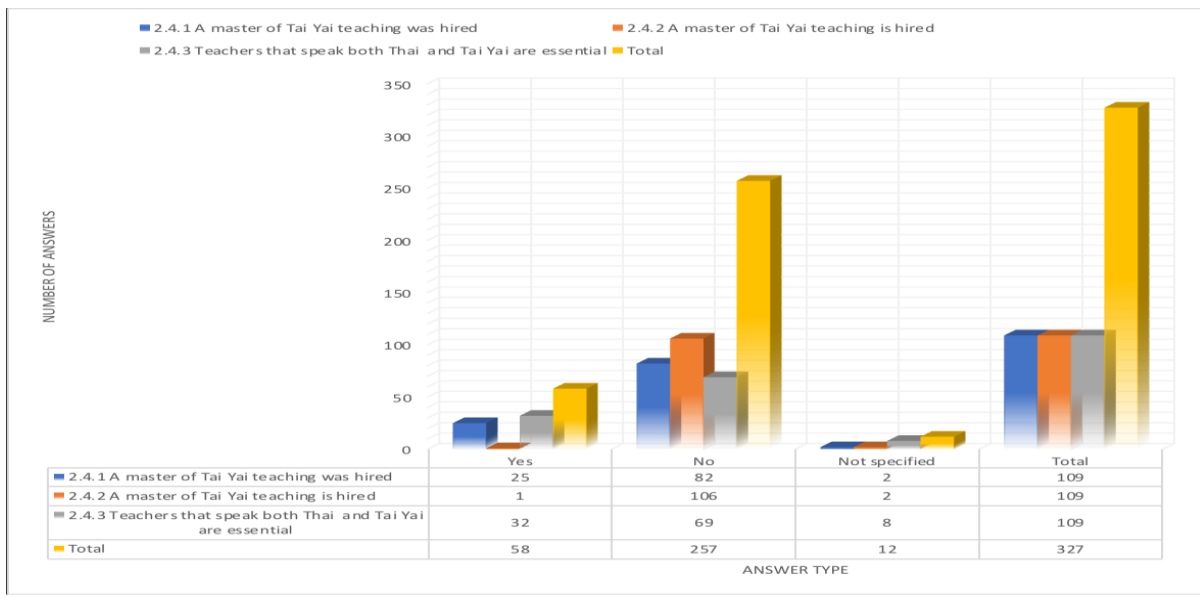


Figure 5 School supports on Tai Yai teaching
 (Source: Panyawuthakrai, 2023)

In responding to the question of whether or not the school director has previously hired a master of Tai Yai teaching (2.4.1), 75% said ‘no’ while 23% said ‘yes’. 97% of respondents said ‘no’ to the question about whether the school’s director hired a master of Tai Yai to teach this year (2.4.2). Only 29.5% of respondents agreed, 63% disagreed, and 7.5% were undecided on the question of whether bilingual teachers are required (Thai-Tai Yai) (2.4.3). It appears that over 80% of respondents opposed Tai Yai’s teaching in schools.

Additionally, it appears from some comments that the majority of instructors and pupils have an excellent understanding of both Thai and Tai Yai.

3) The questionnaire results on the respondents’ perceptions about MTB bilingual education were analyzed, and three types of information were found: 3.1) opinions and needs regarding MTB bilingual instruction (Thai-Tai Yai based); 3.2) opinions and needs regarding the forms of MTB bilingual teaching; and 3.3) opinions on the instructors’ readiness for MTB bilingual instruction (Thai-Tai Yai based), as shown in Table 9 and Figure 6.

Table 9 In favor of MTB bilingual education (Thai-Tai Yai based)

Item	\bar{x}	SD	Opinion/In-favor levels (%)				
			5	4	3	2	1
3.1 MTB bilingual instruction	2.85	1.05	2.65	23.35	45.5	17.5	10.8
3.2 MTB bilingual instruction type	2.44	1.05	1.9	12.2	43.2	20.6	22.1
3.3 How prepared the teachers were for MTB bilingual instruction	2.38	1.01	1.8	12.2	44.3	17.5	24.2
Avg.	2.56	1.04	2	16	44	19	19

Note 5 = totally agreed/most, 4 = agreed/much, 3 = can't decide/moderate, 2 = not agreed/low, and 1 = totally disagreed/very low

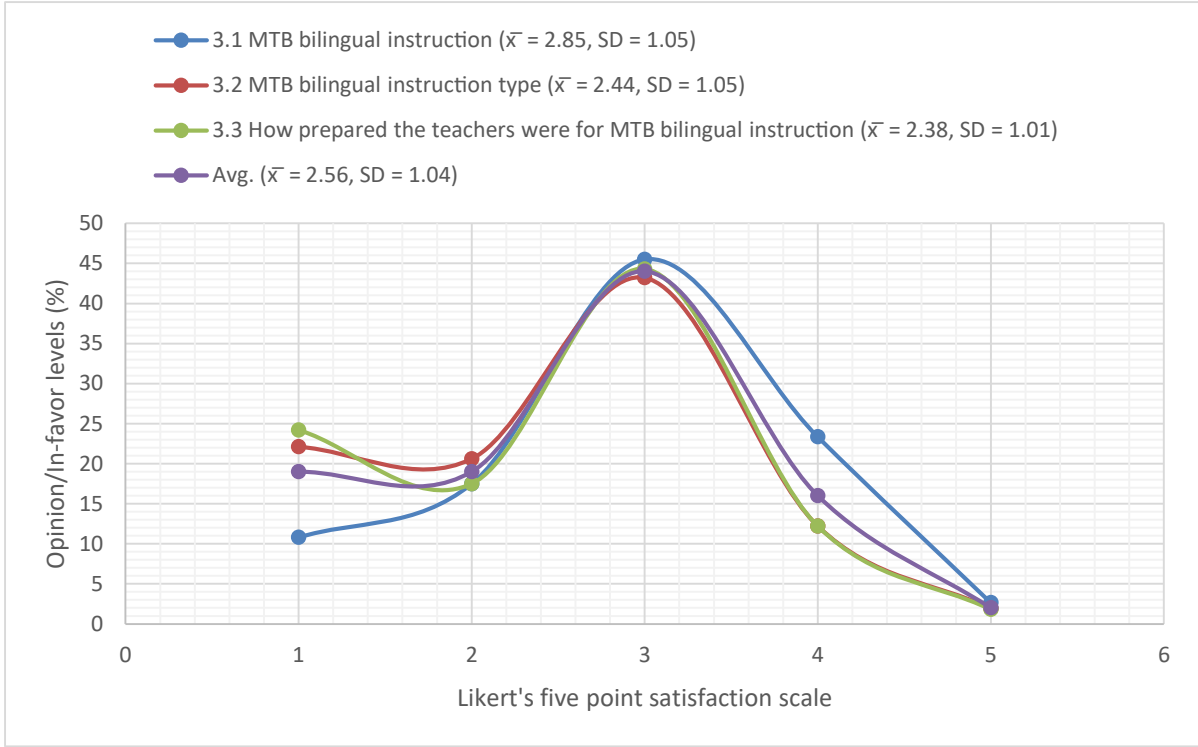


Figure 6 In favor of MTB bilingual education (Thai-Tai Yai based)
 (Source: Panyawuthakrai, 2023)

The table and the figure reveal that 44% of the respondents are unsure of their need for MTB bilingual instruction (3.1), its types (3.2), and readiness for the program (3.3). Additionally, only 18 individuals support the program, while 38% oppose it.

4) Five types of information concerning costs and needs for MTB materials were analyzed from the data gathered from the questionnaires: 4.1) constructional elements in Tai Yai (L1); 4.2) creating Thai (L2) basic listening-speaking materials; 4.3) preparing for Thai literacy; 4.4) increasing Tai Yai literacy with the Thai alphabet; and 4.5) reading materials to enhance Tai Yai literacy, as in Table 10 and Figure 7.

Table 10 Costs and needs for MTB materials

Item	\bar{x}	SD	Opinion/In-favor levels (%)				
			5	4	3	2	1
4.1 Constructional elements in Tai Yai	2.63	1.24	7.3	19.5	28.3	16.5	28.5
4.2 Creating Thai basic listening-speaking materials	2.69	1.13	8.8	14.3	37.0	20.1	19.9
4.3 Preparing for Thai literacy	2.65	1.20	6.7	14.6	32.5	24.1	22.2
4.4 Increasing Tai Yai literacy with the Thai alphabet	2.29	1.22	6.6	8.6	28.9	14.2	41.8
4.5 Reading materials to enhance Tai Yai literacy	2.37	1.24	9.0	10.3	28.4	18.9	33.5
Avg.	2.53	1.20	7.7	13.5	31.0	18.8	29.2

Note 5 = totally agreed/most, 4 = agreed/much, 3 = can't decide/moderate, 2 = not agreed/low, and 1 = totally disagreed/very low

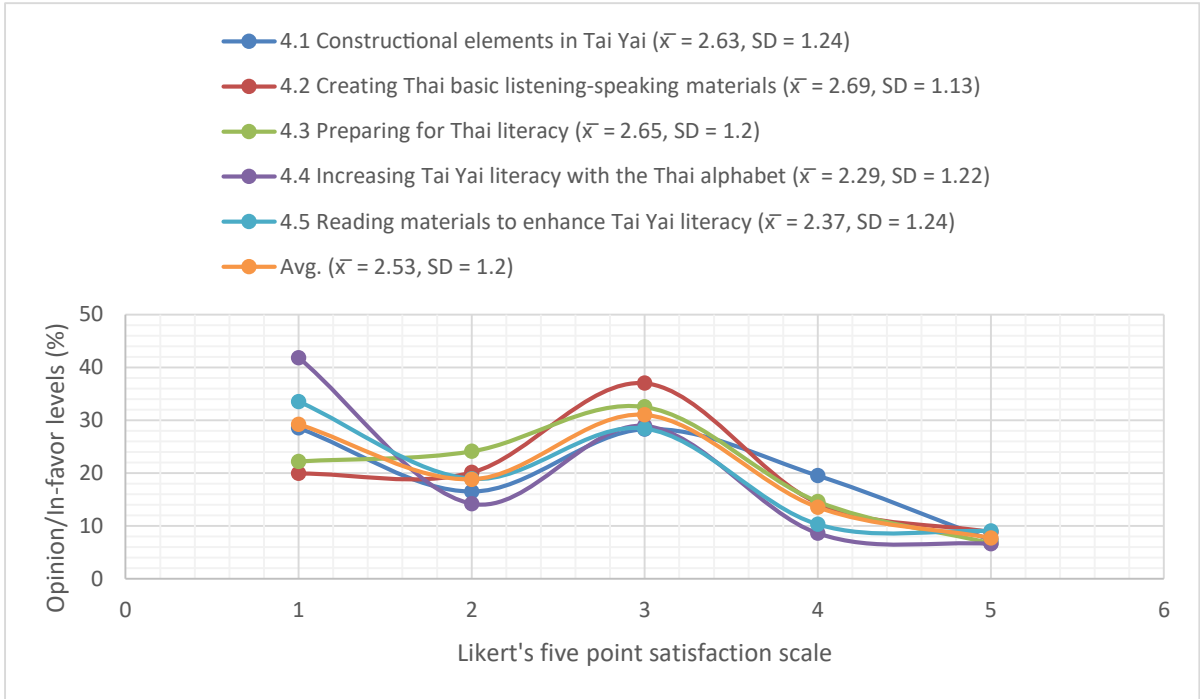


Figure 7 Costs and needs for MTB materials
 (Source: Panyawuthakrai, 2023)

The table and figure demonstrate that the majority of items (4.1, 4.4, and 4.5) have the highest percentages that fall in descending order on level 1 (28.5%, 41.8%, and 33.5%, respectively)—indicating that Tai Yai materials of all kinds are of slightest interest. The remaining items (4.2 and 4.3, respectively) are on level 3—meaning that Thai materials are favourable; even the average high percentage is between levels 3 and 1. In other words, over half of the teachers were uninterested in or showed little interest in MTB materials.

5) The following eight related concerns about the curriculum’s ideal features were investigated in the analysis of the data collected from questionnaires on MTB curriculum costs and needs: 5.1) be established using national educational standards; 5.2) link the Tai Yai language to the Thai language; 5.3) connect the Tai Yai cultures to Thai cultures; 5.4) correspond to the local demands; 5.5) prioritize the improvement of the Thai and Tai Yai language abilities; 5.6) promote the knowledge and understanding of multiculturalism; 5.7)

support the conservation of the Tai Yai language and cultures; and 5.8) have instructional plans. See Table 11 and Figure 8 for specifics.

Table 11 Costs and needs for MTB curriculum’s ideal features

Item	\bar{x}	SD	Opinion/In-favor levels				
			5	4	3	2	1
5.1 be established using national educational standards	3.22	1.43	27.5	12.3	30.7	17.3	12.3
5.2 link the Tai Yai language to Thai language	2.26	1.43	4.1	7.6	35.5	15.7	36.7
5.3 connect the Tai Yai cultures to Thai cultures	2.45	1.17	4.3	11.4	33.3	25.9	24.7
5.4 correspond to the local demands	2.66	1.21	10.7	9.7	39.6	21.9	17.8
5.5 prioritize the improvement of the Thai and Thai Yai language abilities	2.48	1.17	5.1	11.4	31.5	23.3	28.3
5.6 promote the knowledge and understanding of multiculturalism	2.52	1.10	7.4	10.6	32.5	29.9	19.2
5.7 support the conservation of the Tai Yai language and cultures	2.68	1.23	8.2	10.7	37.1	23.3	20.9
5.8 have instructional plans	2.36	1.15	6.0	7.8	38.0	17.2	31.2
Avg.	2.58	1.24	9.2	10.2	34.8	21.8	23.9

Note 5 = totally agreed/most, 4 = agreed/much, 3 = can’t decide/moderate, 2 = not agreed/low, 1 = totally disagreed/very low, \bar{x} = the sample mean of a distribution, and SD = standard deviation

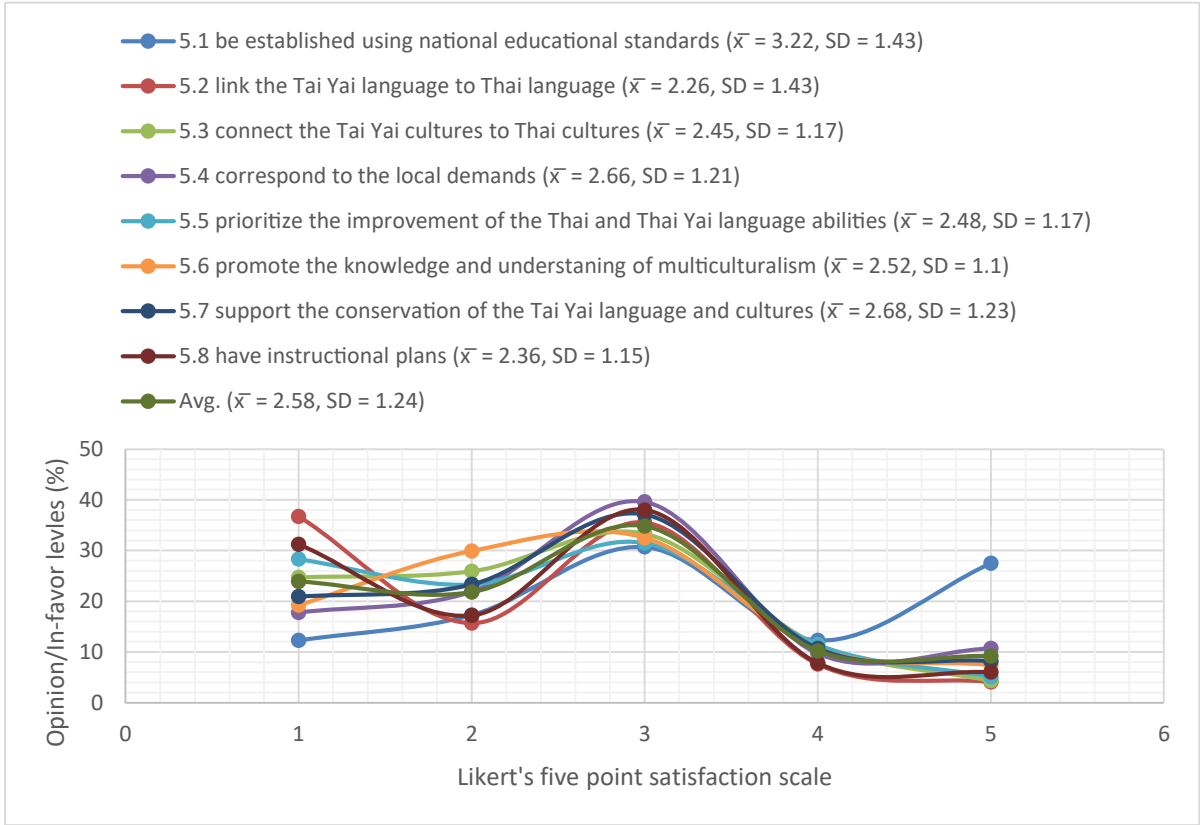


Figure 8 Costs and needs for MTB curriculum’s ideal features
 (Source: Panyawuthakrai, 2023)

As shown in bold numbers in Table 14 and Figure 8, the highest percentage is found in level 3 and in all except item (5.2). The second highest percentage is either levels 1 or 2 and is found in all except items (5.1 and 5.2), where it falls in levels 5 and 3, respectively. The level with the greatest average percentage is level 3, whereas the level with the next-highest average percent is level 1. This suggests that most teachers are not particularly interested in addressing the MTB curriculum.

6) Since there are a few details from the suggestion survey form, the analysis is not very thorough. Although MTB bilingual education on a Thai-Tai Yai base as introduced through these survey forms is highly aimed at improving the quality of education in Pang Mu border schools as well as conserving the Tai Yai language and cultures, there are two main personal views—it is likely to work in practice because of two reasons: firstly, a majority (actually about half) of students are Tai Yais themselves and capable of speaking both Khammueang and Thai, so there is no worry about their (oral and aural) understanding in Tai Yai or Khammueang and Thai; and secondly, several non-Tai Yai students already have a command of Tai Yai and Thai for themselves.

Discussions

With over 14 different ethnic minority groups coexisting peacefully in a total of 415 villages over 45 Tambon (subdistricts), Thailand's Mae Hong Son Province is incredibly varied, both linguistically and culturally. Most native locals generally speak different languages as L1 which mainly belong to four language families: Tai-Kadai (Tai Yai, Tai Yuan or Khammueang); Sino-Tibetan (Burmese, Lahu—black and red, Lisu, Yunnan Chinese, Sgaw, Kayah, Pwo, Pa-O, Kayan, Kayaw); Hmong-Mien (Hmong—white, green); and Austroasiatic (Lawa—Lua, Lavue, Lawua). However, only eight languages (Tai Yai, Sgaw, Khammueang, Lisu, Yunnan Chinese, Kayah, Kayan, Kayaw, and Pa-O) were found in the Pang Mu border region. Additionally, it is appealing to note that despite there being six Karenic languages spoken throughout Thailand—Sgaw, Kayan, Kayah, Kayaw, Pa-O, and Pwo (Luangthongkum, 2014), only five of them—excluding Pwo—are spoken in Pang Mu. The majority of non-native languages, however, are Lao and Thai.

Due to a huge population, Tai Yai appears to be the primary language of exchange among these them, including multilingual school instructors, as opposed to Khammueang and Thai, which is the official language of teaching and communication. Most Tai Yais, however, are more proficient in Khammueang than Thai, and some of them also speak Sgaw or other minority languages.

Regarding MTB bilingual education with the Thai-Tai Yai base, local school instructors appear to be hesitant in backing the program, especially those non-Tai yai teachers who constitute about half of the population. Given that practically all students already comprehend both Tai Yai and Thai themselves, it is not yet required urgent. Besides, mastering Thai reading, and proficiency is the final objective of training students must complete to be able to do better on the national examinations, PESA and ONET. In contrast, the MTB program's preservation of Tai Yai's language and cultures and its facilitation of improved communication with the children's parents or legal guardians are the only aspects that some teachers felt to be positive.

From an alternative viewpoint, I believe that MTB-MLE (Multi-Lingual Education) based on Thai-Tai Yai, Thai-Sgaw, or even Thai-Kayah may operate more effectively and be more prevalent due to a sizable population of instructors and pupils. Additionally, teachers typically employ a particular kind of MTB bilingual education (Thai-Tai Yai based)

unintentionally through more restricted channels—listening and speaking Tai Yai rather than Thai.

The investigation also revealed two additional issues: the instructors themselves did not have a thorough concept of MTB multilingual education, and both the former and present school leaders failed to acknowledge the significance and worth of the children's mother languages.

Thus, these have a detrimental impact on the notions of cautiously proposing and creating the MTB fundamental resources and curriculum, which are centred on the development of Thai literacy four skills rather than Tai Yai speaking and listening skills. One aspect of the school curriculum that has been identified is that most schools' curricula, which primarily depend on the national core curriculum standards for basic education, have been out of date for over 14 years—since they were first introduced in 2008 (Ministry of Education, 2008)—and do not align with the national examinations (PESA and ONET), which are updated annually.

As a result, the test results for Primary School Level 6 students taking the Ordinary National Educational Test (O-NET) from 2008 to 2020 from general small and remote schools and Border Patrol Police learning centres nationwide were shockingly below 50% on average of standard level in all core subjects, including math and science, as well as language subjects like Thai and English (The National Institute of Educational Testing Service: NIETS, 2020; Office of the National Economic and Social Development Council: NESDC, 2019). This is consistent with the state of practically all schools in the Pang Mu border area of Mae Hong Son Province.

Conclusion and suggestions

Based on the findings, this study draws three conclusions that address the study's three main goals: 1) the feasibility and requirements of implementing MTB program(s) in border schools; 2) the nature and implementation of MTB materials; and 3) the nature and implementation of MTB curricula.

Conclusion 1. According to results 1, 2, 3, and 6, it is feasible to anticipate the potential and necessity of implementing MTB programs in Pang Mu border schools due to the teachers' positive need, despite their uncertainty about the type of MTB and their lack of readiness for the program; and the fact that students are either bilingual or multilingual with some proficiency in Tai Yai or Thai.

Conclusion 2. According to result 4, the type(s) of MTB bilingual education that would be essentially practical for the teachers and students would be those that use Tai Yai (L1 or L2) as the auxiliary language of instruction and Thai (L2) as the primary language of instruction, as needed in activities to prepare students for Thai literacy. Therefore, there is a greater need for foundational materials in Thai than in Tai Yai (See Issues 4.2 and 4.3 in Table 11). Contrarily, any MTB program that promotes Tai Yai literacy or creates the language's core resources has major unintended consequences (See Issues 4.1, 4.4, and 4.5 in Table 11).

Conclusion 3. According to result 5, the MTB curriculum may be anticipated and should be finely featured with Thai-Tai Yai cultural and language ties, national educational standards, and the needs of the community. The program should, if required, be implemented specifically using Thai (L2) and its cultural traits.

The study on teachers' opinions of MTB bilingual education (Thai-Tai Yai based) in Pang Mu border schools that use Tai Yai (language and culture) as the L1 for fundamental language skills on speaking, listening, reading, and writing in Tai Yai may not be entirely

practical. However, the MTB bilingual education program, as well as the creation of literacy foundational materials and its curriculum, could be more readily accepted if it were partially based on Tai Yai as L1/L2 for basic literacy in listening and speaking only, and on Thai as L2 for fully basic language skills.

The research's conclusions may benefit 1) the development of educational systems and procedures for children of ethnic minorities; 2) bilingual/multilingual education in other places; 3) serving as recommendations for thinking about different types of education that are appropriate for ethnic minorities. It would be ideal for future research if: 1) more research tools such as in-depth interviews, forms for small group interviews, and observation forms were required; 2) the questionnaire should be adapted to match the understanding of the respondents; and 3) the target children's learning achievement in MTB-MLE experimental groups were compared.

New knowledge and the effects on society and communities

This study produced both great results and some unexpected findings, which may provide some invaluable information about 1) the geographical features of 13 communities in the Pang Mu area, 2) educational staff in schools overseen by the Primary Education Commission, 3) ethnic school students, 4) opinions and demands regarding instructional management, 5) learning media creation, and 6) bi/multilingual school curriculum towards at least four relevant sectors: Office of Mae Hong Son Culture concerning ethnic culture and language policies and plans, Office of Mae Hong Son Primary Education concerning primary education policies and plans, community schools concerning providing basic education to children, and community children concerning gaining a basic foundation in education. Additionally, a seminar was recently held with staff from Mae Hong Son College of Chiang Mai Rajabhat University (CMRU) to organize this year's activities for children in Mae Hong Son Province with assistance from the Child's Dream Foundation (CDF). The Foundation for Applied Linguistics (FAL), an organization that primarily provides services for children of ethnic minorities about their learning through L1 as a base, hosted the conference. Actually, prior to this, there had been collaborative initiatives for MTB education in many schools in Chiang Mai Province that were run by many sectors namely FAL, Pestalozzi Children's Foundation (PCF), CDF, CMRU by Faculty of Education and Digital Education, and Chiang Mai University (CMU). Successful outcomes of these initiatives include, for instance, a teacher training project on the creation of a digital MTB/MLE curriculum via CMRU Mass Open Online Courses (MOOCs), Memoranda of Understanding (MOU), an academic services operation, and classroom research proposals. These results may have significant implications for MTB education in Mae Hong Son Province.

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The Study of Product Development from Sarong (Sinh) Fabric of San Kamphaeng, San Kamphaeng district, Chiang Mai Province

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Abstract

Study and development of products from sarong (sinh) fabric of San Kamphaeng, San Kamphaeng Subdistrict, San Kamphaeng District, Chiang Mai Province has objectives: 1) to study the needs of entrepreneurs and target groups of Sarong (sinh) fabric of San Kamphaeng, 2) to develop product designs from sarong (sinh) fabric of San Kamphaeng, in conducting the research, the San Kamphaeng sarong fabric was used and applied to be bag products in various 3 types: handbag, shoulder bag and backpack by surveying the shape from experts' opinions and Thai consumer group, tourists in the target area. The tools used in the research were Physical test result record form, Mechanical test result record form and evaluated products by experts and the consumer acceptance questionnaire data that were analysed from the assessment forms and questionnaires with descriptive statistics, including percentage, mean, and Standard Deviation.

The materials used to form the product structure were leather, steel, and bag making equipment to make the products were strong and more complete. When the products made from San Kamphaeng sarong were given to all 6 experts, they were evaluated that the developed San Kamphaeng sarong products with an overall average of 4.35 at a very satisfied level. Results from consumer group acceptance test evaluation, it was found that consumers accepted San Kamphaeng sarong fabric products which were the most accepted. In this regard, handbag products and shoulder bag products, the consumers accepted the same, with an overall average of 4.67 and backpack products with an overall average of 4.63.

Keywords: Sarong (sinh), Product development, Consumer acceptance

Introduction

In the north, there are beautiful sinh tor lai (woven sarong) manufacturing sites. There are many provinces and districts in this area. The sarong or sinh from San Kamphaeng District is a unique. In the past, around 100 years ago, most of the villagers in San Kamphaeng District, Chiang Mai Province, had handicraft career. Men did wicker works. For women, weaving at home, such as sarongs, bags, ready-made bags, scarves, towels, shawls, etc. When the goods were produced, they headed to the Burmese border to sell or exchange their goods there. Once HM Queen Sirikit visited San Kamphaeng district, she was interested in silk gowns and ordered Miss Thailand who was going to join the Miss Universe pageant that year, wearing silk gowns from San Kamphaeng in a ready-to-wear sarong for the contest. At that time, Miss Thailand was Miss Apasara Hongsakul, and in that year, Miss Apasara was also given the title of Miss Universe. As a result, silk gowns became famous in the world at that time. It was considered a very prosperous era of silk gowns from Sam Kamphaeng (Information from Chalermraja San Kamphaeng Silk Waving Cultural Centre).

From the area in San Kamphaeng district to explore the problem of silk sarong in San Kamphaeng district, it was found that since the Transportation Authority of Thailand started to develop various railway and concrete roads. The clothing style was changed from wearing sarongs to pants. When globalization changed, most of the villagers changed their careers to other things, leaving few villagers to weave. During that time, the sarongs from San Kamphaeng were exhausted over a period of more than twenty-three years. Until the present era, some people were still interested and loved in the sarong (sinh) wearing them to temples. When the elders saw it, they asked where they got the sarongs from. Later, other people in Sam Kamphaeng, who still had sarongs at home, picked it up, and it was the beginning of the restoration of the San Kamphaeng's sarongs. Villagers who could weave began to produce new San Kamphaeng's sarongs in modern times. And because cotton is now an easy-to-buy material and is more popular than silk in modern times, it is mainly made with cotton and most of them will change to other occupations (Buyson, 2560). Few still make sarongs, which have been incorporated. They created a group to operate various activities, including the Chalermrach Cultural Center, the San Kamphaeng Silk Museum. To find ways to build strong groups together and develop themselves, such as taking training courses offered by government agencies, which are university students, school students or individuals to study or visit the wisdom of San Kamphaeng district.

The study of the research project on the revival of the art of weaving San Kamphaeng Silk to inherit the culture through local media and strengthen the community of San Kamphaeng subdistrict, San Kamphaeng district, Chiang Mai Province. From the study, it was found that San Kamphaeng sarong fabric was not used to make various products, only to study to inherit the culture with local media with local media and strengthen the community only. There is no product design and development. Therefore, the researcher has come up with the idea of developing the products from San Kamphaeng's sarong fabric into a new alternative and maintaining the unique nature of the sarong (sinh) of San Kamphaeng. It can generate additional income according to creative economic practices in the community. In addition, it will be beneficial. Further development and extension of the local wisdom of San Kamphaeng District.

Research Objectives

1. To study the needs of entrepreneurs and target groups of sarong or sinh fabric of San Kamphaeng.
2. To develop product style from the sarong or sinh fabric of San Kamphaeng.

Methodology

Population and Sample Group

1. Population: The researcher determined by selecting a specific (purposive selection) that has the qualifications specified by the researcher and was interested in studying. In order to obtain a sample group to collect data as desired, able to collect data and made use of a sample of 6 people, consisting of product and San Kamphaeng sarong fabric experts, Chairman of Chalermraja San Kamphaeng Silk Waving Cultural Centre, Chairman of community enterprise Ban Ton Jok (Kham Sao) Vocational Promotion Group, San Kamphaeng district, San Kamphaeng sarong weavers and a group of products from San Kamphaeng sarong fabric.

2. Sample Group: The researcher used random sampling of Accidental Selection of the target group of 100 people, namely community enterprise members, Ban Ton Jok (Kham Sao) Occupational Promotion Group, San Kamphaeng district, San Kamphaeng sarong weavers, a group of products from San Kamphaeng sarong fabric, and tourists around San Kamphaeng area.

How to conduct research

The researchers have 3 steps to design and develop the product as follows:

Step 1 Basic information study is intended to study related information. The details are as follows:

1.1 General information on products, original product designs, and development needs of sarong or sinh fabric of Kamphaeng product by studying data from Baan Ton Jok Community Enterprise Group (Kham Saw), San Kamphaeng Sub-district, San Kamphaeng District, Chiang Mai Province.

1.2 General information on making products from sarong fabric of San Kamphaeng, identity, meaning of fabric product design, materials, equipment, and educational procedures from documents, books, and websites.

1.3 Product design concepts and processes by studying data from related documents and research.

Step 2 Analysis of data for design and development. After studying basic data, the researchers analyzed the data by setting the concept and scope of development of the San Kamphaeng products to be modern, beautiful, and unique. The researchers created a design for 6 members of the group to prototype the San Kamphaeng products.

Step 3 Testing the acceptance of the target group of consumers towards San Kamphaeng sarong fabric products by having 6 specialists in specific areas to evaluate the product development results and a member of the Community Enterprise, Ban Ton Jok (Kham Sao), San Kamphaeng weaver and a group of products from San Kamphaeng fabric and 100 tourists around San Kamphaeng accidentally assessed the beauty of product, product development and usability, to summarize the results of the product development of bag products from San Kamphaeng sarong fabric.

Research tools

The researcher collects data using research tools in the process of performing the following research objectives:

The study process of the San Kamphaeng's sarong fabric. The researchers created an interview to collect data from manufacturers on the original product model and the development requirements of the San Kamphaeng's sarong fabric using closed-end interviews to obtain clear information about the prototype.

The target audience's acceptance test process for the San Kamphaeng's sarong fabric. The researchers created a model to evaluate the satisfaction of the target consumers

with the San Kamphaeng's sarong fabric. The evaluation was conducted on beauty, product development, and usage. The average satisfaction level was divided into 5 levels (Puentia, 1993).

5	means	Satisfaction at the highest level
4	means	A high level of satisfaction
3	means	Moderate satisfaction
2	means	A low level of satisfaction
1	means	The lowest level of satisfaction

Collection of information

The researchers performed data collection in accordance with the following steps.

The process of studying San Kamphaeng's sarong fabric, the researchers collected data from documents, books, articles, research related to this study, and the researchers collected specific information using the method of interviewing 6 group members based on the researcher's choice.

The process of testing the acceptance of target consumers to the San Kamphaeng products. The researcher collected data randomly by distributing evaluation forms to a sample of 100 people from Community Enterprise members, Ban Ton Jok (Kham Sao) Occupation Promotion Group, Sam Kamphaeng district, San Kamphaeng weavers and a group of products from San Kamphaeng sarong fabric and tourists around San Kamphaeng area.

Data Analysis

The researchers analyzed the data from the study of documents, books, articles, and related research using content analysis, presented in descriptive form. The researchers then analyzed the data from the interview by presenting it in descriptive form and analyzing data from the assessment. The researchers used a score range as follow:

Average score range	≥	4.51 – 5.00	Equal to the most
Average score range	≥	3.51 – 4.50	Equal to a lot
Average score range	≥	2.51 – 3.50	Equal to moderate
Average score range	≥	1.51 – 2.50	Equal to less
Average score range	≥	0.00 – 1.50	Equal to the lowest

Results

1. Development of the sarong fabric of San Kamphaeng. According to interviews with group members, members wanted to have a geometric identity and a different product style, but still had the unique value of the sarong or sinh fabric of San Kamphaeng. The researchers created 3 prototypes: handbags, bags, and backpacks.



Figure 1 Original San Kamphaeng Products of the Community Enterprise Group, Ban Ton Jok Career Promotion Group (Kham Saw) (Source : Researcher, 2023)



Figure 2 Storage Enclosures and Demand Surveys
(Source : Researcher, 2023)

2. Data analysis Evaluation results of products from sarong fabric of San Kamphaeng by specialists analyzing data for design and development. After studying basic data, the researchers analyzed the data by setting the concept and scope of development of San Kamphaeng products to be modern, beautiful, and unique. The researchers drafted a design for a specific of 6 people to select. Please see the results in Table 1 including the results of the acceptance test of Community Enterprise members, Ban Ton Jok (Kham Sao) Occupation Promotion Group, Sam Kamphaeng district, San Kamphaeng weavers and a random sampling group of 100 tourists in San Kamphaeng area. The evaluation of beauty, product development and usability, see the results in the Table 2 as follows:

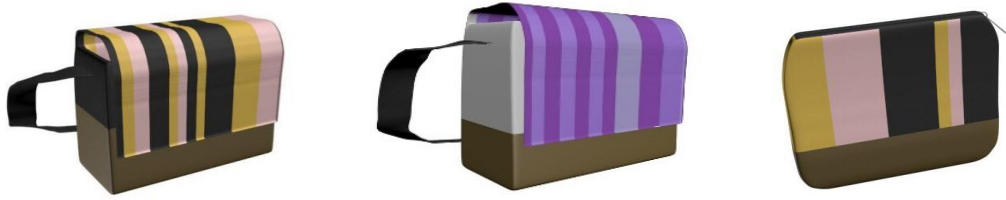


Figure 3 The three-dimensional image used in the design.
(Source : Researcher, 2023)



Figure 4 A prototype of handbags, shoulder bags, and backpacks
(Source : Researcher, 2023)

Table 1 Evaluation results of San Kamphaeng products by experts

Evaluation List	Handbag			Shoulder bags			Backpacks		
	\bar{x}	S.D.	Translate	\bar{x}	S.D.	Translate	\bar{x}	S.D.	Translate
1. It is appropriate to use the pattern of the sarong (sinh) fabric.	4.67	0.58	Most of all	3.67	0.58	A lot	4.33	0.58	A lot
2. Appropriateness of the use of sarong (sinh) fabric as a product.	4.67	0.58	Most of all	4.67	0.58	Most of all	4.66	0.58	Most of all
3. The material used to make the product is suitable.	4.67	0.58	Most of all	4.67	0.57	Most of all	4.66	0.58	Most of all
4. The product has a unique identity of the sarong (sinh) fabric.	5.00	0.58	Most of all	4.00	1.00	A lot	4.33	0.58	A lot
5. The colors used in the production are suitable.	4.33	0.58	A lot	3.33	0.58	Moderate	3.33	0.58	Moderate
6. The size of the product is appropriate.	4.00	0.00	A lot	3.67	0.58	A lot	3.67	0.58	A lot
7. Appropriateness of utility	4.67	0.58	Most of all	4.33	0.58	A lot	5.00	0.00	Most of all
8. Products can generate additional revenue based on the concept of creative economy.	4.67	0.58	Most of all	4.44	0.58	A lot	4.67	0.58	Most of all
9. Overall satisfaction of the sarong (sinh) fabric products	4.67	0.58	Most of all	4.00	1.00	A lot	4.67	0.58	Most of all
Sum	4.59	0.45	Most of all	4.09	1.67	A lot	4.37	0.52	A lot

Evaluation results of the woven sarong products of San Kamphaeng from experts found that San Kamphaeng sarong products that have been developed with an overall average of 4.35, in a very satisfied level handbag products had the highest average score, with an average score of 4.59, in the most satisfied level, followed by backpack products, with an average score of 4.37, in a very satisfied level. The shoulder bag products had an average score of 4.09, in the very satisfied level, respectively. In addition, experts have further suggested that product development ideas can be further commercialized. The products are more diverse and should study fashion trends to keep the products up-to-date.

Table 2 Analysis of data from the acceptance test of the target audience, evaluating aesthetics, product development, and usability (N=100)

Evaluation List	\bar{x}	S.D.	Translate
The aesthetic aspect			
1. The use of a sarong fabric pattern is suitable for the product.	4.78	0.46	Most of all
2. The color used in the development of the product is appropriate.	4.69	0.56	Most of all
3. The form of the product is appropriate.	4.68	0.53	Most of all
4. The product model is novel.	4.65	0.56	Most of all
5. The materials used for the decoration are suitable.	4.69	0.51	Most of all
Sum	4.70	0.52	Most of all
Product development			
1. Materials used to make handbags suitable for the product	4.70	0.46	Most of all
2. The size of the handbag product is appropriate.	4.65	0.52	Most of all
3. The product is modern and innovative.	4.62	0.55	Most of all
4. Products can create added value according to the concept of creative economy.	4.55	0.56	Most of all
5. Products can be produced at the community level.	4.65	0.52	Most of all
6. The product is an extension of local wisdom to commercial advantage.	4.66	0.50	Most of all
7. Techniques applied to making handbags refer to maintaining local intelligence.	4.65	0.50	Most of all
8. The materials used to make handbags also convey the local identity.	4.55	0.54	Most of all
9. The product is a good use of local materials.	4.62	0.51	Most of all
Sum	4.63	0.52	Most of all
Application side			
1. Appropriateness of utility	4.46	0.64	Most of all
2. The product is convenient to use.	4.69	0.60	Most of all
3. The product is safe and strong and durable to use.	4.73	0.50	Most of all
4. The form of the product is suitable for use.	4.67	0.53	Most of all
5. Easy to maintain products	4.61	0.62	Most of all
Sum	4.67	0.58	Most of all

Data analysis from the target group's acceptance test. The overall evaluation is based on the highest average score in all aspects. The evaluation of acceptance is based on the acceptance score on the topic of the most appropriate for the product development of fabric products. The researchers designed the product to be practical at the community level with the materials used to make it. It is easy to find in local areas to enhance commercial value for products that can be added to the economic concept. As researchers have developed products that are both practical and beautiful, the results of consumer acceptance tests have been the highest.



Figure 5 Image of the acceptance test evaluation process of the target consumer group (Source : Researcher, 2023)

Discussions

Development of the sarong fabric of San Kamphaeng according to interviews with group members, members wanted to have a geometric identity and a different product style, but still had the unique value of the sarong or sinh fabric of San Kamphaeng. The researchers created 3 prototypes: handbags, bags, and backpacks. Development of San Kamphaeng products to be modern, beautiful, and unique. The acceptance test of Community Enterprise members, Ban Ton Jok (Kham Sao) Occupation Promotion Group, Sam Kamphaeng district, San Kamphaeng weavers and sampling group. According to evaluation of all 6 specialists, the overall average of the product was 4.35 with the highest score of 4.59 with the highest score, the handbags had the highest average score. The next one is backpacks which had average score of 4.37 was very satisfactory, meanwhile the average score of shoulder bags was 4.09 was very satisfactory, respectively. In addition, specialists suggested that the concept of product development can hit commercial sales. The products were more diverse and should be studied in fashion to keep them up-to-date. This study helps to promote careers for the community. Consistent with the research of Inpakdee et al. (2022) development of wicker products from gros michel banana fibers with natural dyes for promote career among the elderly. The acceptance testing results of the target consumers were at the highest level. This is because the products were based on the local wisdom and environmentally friendly as a green product. Therefore, they should be promoted to create more jobs among the elderly as well as interested community members in order to establish community and socio-economic empowerment. Besides, The presentation of the guideline for developing marketing strategies of elderly group's local products suggests that local knowledge should be used to develop and create uniqueness to the products, marketing communication should be improved to make the product well known on online social media, and cooperative networks in product distribution and distribution channels should be established in order to promote the income of elderly from local products and to build a foundation for stronger economic immunity (Sukasukont, 2022).

Based on the evaluation of the acceptance test of the target group on the San Kamphaeng products, the overall acceptance rate of the San Kamphaeng products was the highest. The average acceptance rate was 4.67 and the total acceptance rate for the backpack. Overall average of 4.63. Consumer acceptance results on each side of the product are as follows: 1) Handbag products have an average score of 4.70; product development has an overall average score of 4.63; and usage has a total score of 4.67. 2) Shoulder bag products had an average score of 4.67; product development had an overall average score of 4.65; and usage had a total score of 4.69. 3) Backpack products had an average score of 4.66; product development had an overall average score of 4.56; and usage had a total score of 4.67.

In addition, consumers advised to use local materials to make good money for the community. However, fashion trends should be developed to provide consumers with more choices. Emphasis is placed on the participation of the community in joint development of local identity designs. which corresponds to Kitipattanawit (2021) study of grain patterns of wicker basketry Mae Rim and Sankampaeng fabrics for application in developing bags of vetiver according to Sufficiency Economy Philosophy. This research focused on designing and developing several sizes of bag based on community's idea. Consistent with the research of many people who emphasize community participation in co-developing designs based on local identity. Such as Pengiam & Kanahawong (2018) study of local wisdom usage in the way of life at Ban Nong Bo, Ubon Ratchathani's identity silk production, the lukkeaw silk with ebony dye. Jaidee et al. (2021) The Product Development of Embroider Pattern Bag Ethnic Lahu, in Wawi Sub-District Mae Suai District Chiang Rai Province. Sombat & Mahavarakorn

(2022) analyzing and synthesizing a body of knowledge toward Mae Chaem Woven Textile as an intangible heritage for Thai language teaching design, as a foreign language for Chinese students, due to the active learning concept. The in-class knowledge is linked with the out-class experience, which is a method of active learning for students' participant motivation by self-experience and actual practice. Local wisdom, too, are applied in the learning process for increasing the students' knowledge and Thai language skill as well as taking part in Thai local wisdom preservation and continuation. Pinjurai et al. (2021). Design and development of woven fabrics with local wisdom according to identity Of Ban Sap Charoen community, Pang Makha subdistrict, Khanu Worakabsuri district. Intarakerd et al. (2018) conservation and inheritance of phamai madmee cinteandang, ban huasaphan community, phutthaisong district, buriram province from generation to generation. Chinachan (2022) find the product and marketing development guidelines for Jok textile products by using the community's cultural identities. Moreover, the cultural data of the community was also used to develop a story-telling and the infographic in the process of marketing development for Long Li Jok textiles. Burapajatana (2016) to take Identity of Tin chok woven of Mae jam which is a Lan na handicraft of Chiangmai province of Thailand to apply into contemporary style for cultural textile products in home decoration. This is a way to promote and develop national products to public according to creative economy from national culture.

Conclusion and suggestions

Based on this study, the researchers studied from Chalermraja San Kamphaeng Silk Waving Cultural Centre and research results, research projects Revival of the art of San Kamphaeng silk weaving to inherit the culture through local media and strengthen the competitiveness of San Kamphaeng subdistrict communities, San Kamphaeng district, Chiang Mai province. The researcher obtained research results that met the 2 research objectives: 1) to study the needs of entrepreneurs and target group of San Kamphaeng sarong fabric, 2) to develop product designs from sarong (sinh) fabric of San Kamphaeng

Recommendations for Application of Research Results

1. The use of sarong (sinh) fabric of San Kamphaeng to develop various forms should be considered as a product that is desirable and popular among consumers.
2. The development of new products should be promoted continuously through training from government agencies, educational institutions, and private sectors to better match the needs of target customers, as well as to preserve the local wisdom and income of families.

New knowledge and the effects on society and communities

Local communities gain new knowledge about bag product design development and applying various patterns of sarongs from San Kamphaeng have been developed to be diverse and beautiful, unique and can generate income for the community from new products with increased value, create unity and strength in the local area.

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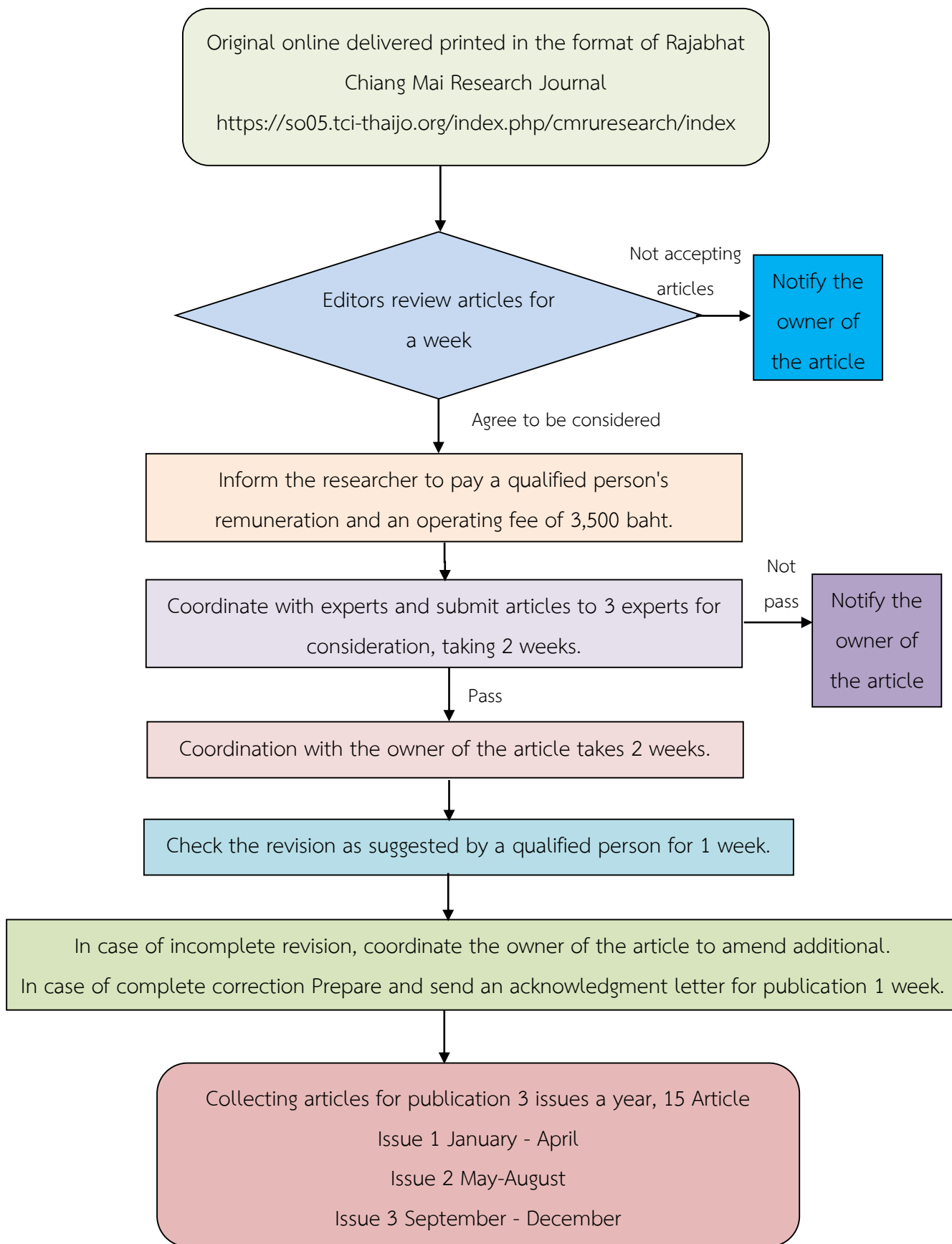
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