

A SECI Model-Based Instruction System for Teaching English to High School Students of The Phrapariyattidham School General Education Section, Group One

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Abstract

This research and development aims to 1) study the current situation and needs for developing English of high school students of the Phrapariyattidham School general education section, Group One, 2) design and develop an English learning management model by applying a SECI model based instruction system, 3) evaluate the effectiveness of applying a SECI model based instruction system by studying academic achievement before and after implementation and studying the attitudes toward applying a SECI model. The instruments used are interviews, questionnaires, knowledge management learning plans (KM), learning logs, observation logs, and achievement tests. Data were analyzed using frequency, percentage, mean, and standard deviation, including statistics used in testing dependent sample t-tests and content analysis.

Results were shown as follows:

1. The current conditions and needs of students regarding English language development by applying an SECI model. It was found that the overall average was 4.18, which was high. The item with the highest average was item no.5. Students' English language development needs, ($\bar{x} = 3.77$, S.D. = 0.49). The lowest level was no. 2. Issue learning English, ($\bar{x} = 3.48$, S.D. = 0.52).

2. The evaluation of the appropriate and consistent model, it was found that the overall average was 4.54, which was a very satisfied level. The item with the highest average was item no. 1. The corresponding relationship of each element of the model, and item no. 2. The learning process according to the model has consecutive steps, ($\bar{x} = 5.00$, S.D. = 0.00). The lowest level was no. 7. The model is consistent with the objectives for improving English, and item no. 8. Knowledge management principles are consistent with the objectives of the model, ($\bar{x} = 4.20$, S.D. = 0.83), respectively.

3. The effectiveness of applying a SECI model-based instruction system for teaching English to high school students of the Phrapariyattidham School general education section, Group One. It is found that the pupils who have the score post-test of using the model of a SECI model-based instruction system for teaching English, ($\bar{x}$ = 32.40, S.D. = 2.84) are higher than the pre-test of the score pre-test of using the model of a SECI model-based instruction system for teaching English. ($\bar{x}$ = 24.60, S.D. = 3.90) as statistically significant at 0.1. It is found that the students' attitudes towards learning management by applying a SECI model-based instruction system for teaching English to high school students. The average score was 4.37, which is an excellent level. The highest average score was the benefits received ($\bar{x}$ = 4.72, S.D. = 0.42), the lowest average score was the process of organizing learning activities ($\bar{x}$ = 4.43, S.D. = 0.72), respectively.

Keywords: SECI Model; Instruction System; Teaching English

Introduction

Thailand is currently entering a situation where it has to face the globalization trend that has rapidly changed and become increasingly complex in every aspect of the country. As can be seen, the government sector is very alert in preparing to create a new global economic environment in the 21st century, where the population will be the most important resource to compete in the modern economic world. Because the population is a user of modern technology and science, human values have been raised by setting the goal to develop Thai people into complete human beings in the 21st century, along with being Thai 4.0 in the first world. And when this situation goes like this human development begins with education. Education is considered the cornerstone of national development. Therefore, the tools that will make Thai society's progress suitable for a society of wisdom and learning are the quality and efficiency of education and the education management system, knowledge management, and wisdom have been used as important tools in Capacity building and the ability to compete with other countries. In the economic and social age of wisdom and learning (Knowledge-based economy/society) which has much new knowledge occurring all the time. (Office of the National Economic and Social Development Board, 2007). English is the most crucial factor for learning in this era because of the academic research and communication with various people in the modern world without borders, most English is necessary. Teaching English as a foreign language (TEFL) or teaching English as a second language (TESL) all over the world today focuses on communicative competence. Teaching and learning that focuses on language students are able to use language to communicate in a global society and develop language learners with knowledge of the language (Form) along with proper use of language (Use) in a variety of contexts. The teacher acts as a facilitator, advises, and is

Kalyānamittatā who encourages students to learn effectively and efficiently through various learning activities. In developing English language skills for students, this is because the teaching style that leads to learning is dynamic, that is, it changes according to the changing context and era. (Fitz-Gibbon, C. & Morris, L., 1987). The challenging question for educators in the 21st century is: What process will there be to make the education system consistent with the changing times? especially to be consistent with the changing context of students. The person who plays a vital role in leading students to learning in the 21st century is the teacher, who must be alert and prepared in organizing learning to prepare students with skills to go out to live in the world of the 21st century, the most important thing is learning skills. From the research and development of work system structure and mechanisms for driving the National Qualifications Framework into practice, important principles related to teaching and learning have been suggested: there shall be teaching and learning arrangements that support and promote the development of teachers, media, and teaching tools to prepare educational institutions for organizing teaching and learning that responds to the needs of students (Allport, G., & Attitudes, W., 1935). and increasing the potential and capacity of educational institutions in administering and organizing education, including developing the potential of administrators, teachers, and educational personnel to have knowledge, understanding, and be able to organize teaching and learning in a variety of formats by emphasizing professional competency analytical thinking and problem-solving skills. This is consistent with the concept of "competency". In educational reform, teaching and learning should be organized that emphasize enabling students to apply the knowledge and skills they have learned to benefit their daily lives. Therefore, in developing learning management to develop English skills for students, it must focus on English skills in terms of language competency. That is, the guidelines for organizing English teaching must be designed so that students gain Knowledge (K), Skills (S), and attitudes or desirable characteristics (A) and can apply these 3 elements in daily living and furthering education, (Davenport, T. H., & Prusak, L., 1998) including having a career to create excellent work in that job as well. Consequently, learning management so that learners can create new knowledge by themselves is the main task of teachers to change their paradigms and roles from teachers to support and promote learning for learners by organizing a learning process that allows students to practice on their own in real situations. Learners can seek knowledge, create knowledge, and apply that knowledge to solve problems effectively. In addition, the practice of systematic thinking process skills, management, coping with learning situations, and applying knowledge are used to prevent and solve problems through a variety of activities according to aptitude and interests, responding to differences between individuals to enhance their characteristics. Language teaching that emphasizes using the language in

suitable communication situations through various communicative activities is considered an English language learning management that is consistent with the needs of today's society that wants to develop Thai students' English language skills at a sufficient communication level regarded as an essential resource for national development in line with national development concepts in Thailand 4.0. In the same way, teachers have to change their role from being knowledge transfer providers to learners who are just recipients of knowledge to being a learning environment that encourages learners to create knowledge and “Learn How to Learn” that can develop a thought system and know how to seek knowledge by oneself from various sources of knowledge and especially the use of thinking to develop knowledge and solve problems in daily life knowingly socially and not falling into social. A good and respectful teacher will help to attract and motivate students to be interested in learning. Students are happy physically and comfortably without stress in learning because there are teachers to help the advice act as Kalyāṇamittatā. Teachers encourage students to openly uncover the mistakes they make in their learning and know how to speak or point out so that students can understand including giving advice and admonishing and being a good adviser and a good listener to criticisms, patiently listening without boredom and not being angered. In the end, those who use knowledge must have good friends that may be a lecturer outside the classroom or even classmates as friends with each other in learning. In the same way, systematic thinking is the master key to open the lock or as a guideline to find out the ways of life. Both students and teachers can learn at the same time (Anderson, D. E., Hiebert, J. and Scott, I. W., 1985).

Teaching and learning arrangements for the development of English language skills of students at Phrapariyattidham School, general education section which is under the office of Phrapariyattidham education, general education section. The efficiency and effectiveness of education do not comply with the national educational standard framework set forth which impacts the quality and standards of education at Phrapariyattidham School, especially in the knowledge and skills of the students. It may be caused by many factors, including the students, the teacher, and their fluency or expertise in adapting teaching media including various environments. It is consistent with the results of the National Basic Educational Test (O-NET) of Mathayomsuksa, academic year 2023, which indicates the results of the evaluation compared to subjects in the English language subject group of schools affiliated with the National Office of Buddhism (B.E.). It can be seen that the English language subject has an average score ranked 4th at 20.29 percent out of 5 general subjects (Dewey, J., 1938). The results, when compared with academic achievement, are still not consistent with learning standards and indicators as specified in the Basic Education Core Curriculum 2008, which determines the quality of

learners at the end of Mathayomsuksa, they must have the ability to use English in various aspects, such as following the instructions in the manual, various uses, explanation of what is heard and read, read aloud correctly according to reading principles, capturing the main idea, analyzing, summarizing, interpreting, and expressing opinions from listening and reading, including giving reasons and giving examples, etc. (Block, C. C., Gambrell, L. B. and Pressley, M., 2002).

Knowledge management (KM) is a science that corresponds to student centered learning because it is a concept that focuses on the development of knowledge and abilities according to the potential of individuals with the idea that people in society or in the organization can use knowledge appropriately by taking action based on an understanding of knowledge sharing and exchange of knowledge that can lead to new innovations for that society or organization (Flower, L., 1989). Therefore, the application of knowledge management concepts in the management of English language learning by organizing activities to be consistent with student-centered learning together with encouraging students to have the ability to learn, seek knowledge from various sources, and realize the importance and necessity of learning as well as encouraging students to create their own learning goals. Especially in the current situation, it is a time of facing the knowledge economy era and knowledge-based competition. This means that the success of today's organizations is no longer dependent on production processes and financial capital assets. However, it requires creating value from assets such as knowledge or intellectual capital, which is an intangible asset. In this regard, education for modern organizations must emphasize 50-90 percent of intellectual capital, while financial capital is only 10-50 percent (Arapoff, N., 1967).

The researcher realized the value and importance of such knowledge management and researcher as an English language teacher for high school students of Phrapariyattidham School, General Section which is considered a school established for education and training for the young men who enter to practice Buddhism by using the doctrine of Buddhism as a training course for the trainees to have morals, morality, and ethics as Thailand is a city of Buddhism. The Phrapariyattidhamma School has been designated to have the Phrapariyattidham Educational Service Area Office, General Education Department, 2020, which was announced on 10 September 2020, divided into 14 educational zones, especially in the educational zones 1 that consists of Bangkok, Nakhon Pathom, Pathum Thani, Samut Prakan, Nonthaburi, Samut Sakhon, and Samut Songkhram provinces. At present, the education of the monk faculty in Thailand has there are 3 sections: 1. Dharma sections 2. Pali sections, and 3. General education sections. Especially the general education sections, which is a combination of education, both the Dharma course, the Pali department, and the general education curriculum of the Ministry

of Education. But the Dhamma-Pali course is not intensive. However, still has more content about Buddhism than in general schools (Best, J. and Janes. V. K., 1993). Therefore, is a course suitable for today's youth because it can integrate the education of all 3 departments into one which is the only education department that everyone would accept as the basic education of the Thai monk clergy. In the same way, the development of the language skills of the novice who is a student aside from having the main objective of learning for self-development in important language skills for academic studies in Buddhism such as Pali, Sanskrit, etc. (Binder, C., 2001). Learning and developing English language skills to keep abreast of the world and situations. It is still considered important to learn in order to understand correctly and to spread the teachings of Buddhism including precious arts and culture in temples or important Buddhist places as a tourist attraction to foreigners and will also spread knowledge to the people in nearby communities (Brown. H. D., 2014). Therefore, the researcher is interested in developing their own teaching and management of the English language teaching at the school better, and all students are novices who have basic knowledge of Buddhism at the Dhamma scholar advanced level, which is regarded as having an excellent knowledge of Buddhism, suitable for applying Dharma content or Buddhist principles to apply and design activities for teaching English in parallel with knowledge management science. Especially the concept of the "Knowledge Creation Process SECI Model" which is used in the management of English language learning for students of Phrapariyattidham School. The process of creating such a knowledge management model (KM) which is the SECI Model by Professor Ikujiro Nonaka of the Graduate School of International Corporate Strategy, Hitotsubashi University, and Professor Hirotaka Takeuchi. The SECI knowledge creation process consists of 4 steps as follows 1. Socialization is an exchange of knowledge 2. Externalization is the extraction of tacit knowledge to explicit knowledge. 3. Combination is knowledge integration through knowledge management systematically and 4. Internalization is bringing that knowledge to practice. However, in learning and teaching management by using the knowledge management model, the researcher has designed the learning management activities to be consistent and appropriate according to the SECI model and needs to integrate learning management thoroughly and cover all four skills, namely listening skills, speaking skills, reading skills, and writing skills in order to create learning and create new knowledge from a story or topic that students are interested in and close by themselves which is to promote and create opportunities for learners and develop oneself to the maximum potential and continue to achieve the goal of learning at their own (Gardner, R. C. & Lambert, W., 1972). The application of the SECI Model based instruction system for teaching English to create knowledge from teaching activities created by the researcher. It is the knowledge-creating process in learning management

that can be regarded as promoting meaningful and systematic learning which is consistent with the concept of teaching and learning that focuses on student-centered learning. Because of this, the learning process takes place in the learner by starting with the learner setting goals for his or her learning and doing various activities that emphasize the importance of knowledge sharing and then storing knowledge systematically leading to innovations in English language learning. From these processes, the researcher hoped that students will be able to develop their English language skills well after practicing this model framework and students will take pride in their knowledge or a repository of knowledge gathered from the exchange of knowledge with each other as well as apply the new knowledge gained to practice or apply in the future which will make students feel see the value of self-learning as well (Gardner, R. C., 1975).

Research Questions

1. What is the current situation and needs for English development among high school students in the general education section of Phrapariyattidham School, Group One?

2. What are the elements and formats involved in designing and developing an English learning management model that applies a SECI model-based instruction system for teaching English to high school students in the general education section of Phrapariyattidham School, Group One?

3. How effective is it to apply a SECI model-based instruction system for teaching English to high school students in the Phrapariyattidham School general education section, Group One?

1) Is academic achievement higher after applying a SECI model-based instruction system for teaching English to high school students in the Phrapariyattidham School general education section, Group One, than before studying?

2) What are students' attitudes toward applying a SECI model-based instruction system for teaching English to high school students in the Phrapariyattidham School general education section, Group One?

Research Objectives

1. To study the current situation and needs for developing English of high school students of the Phrapariyattidham School general education section, Group One.

2. To design and develop an English learning management model by applying an SECI model-based instruction system for teaching English to high school students of the Phrapariyattidham School general education section, Group One.

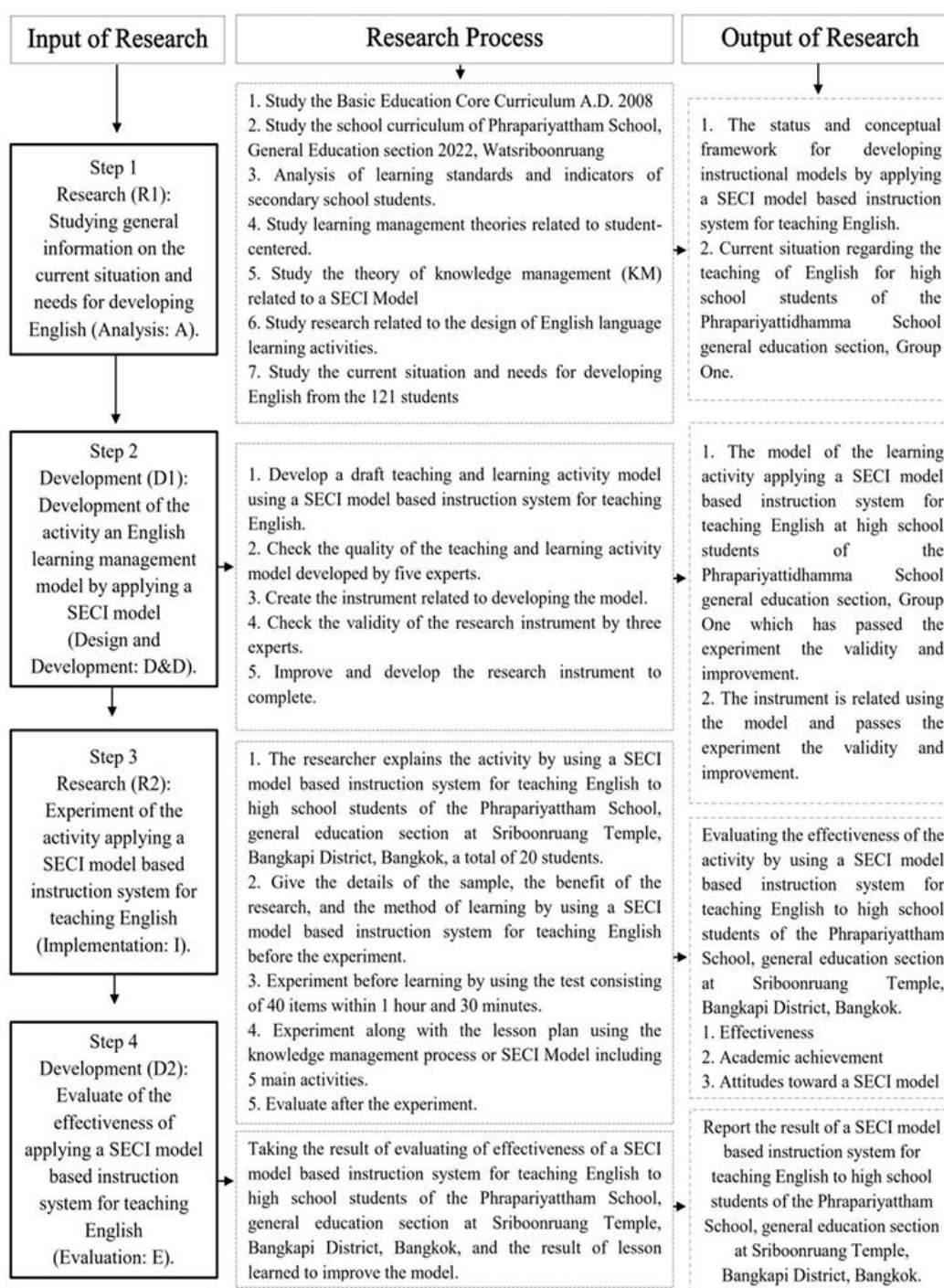
3. To evaluate the effectiveness of applying a SECI model-based instruction system for teaching English to high school students of the Phrapariyattidham School general education section, Group One, with specific objectives as follows:

1) Academic achievement before and after applying a SECI model-based instruction system for teaching English to high school students of the Phrapariyattidham School general education section, Group One.

2) To study the attitudes toward applying a SECI model-based instruction system for teaching English to high school students of the Phrapariyattidham School general education section, Group One.

Methodology

The research study is a SECI model-based instruction system for teaching English to the high school students of the Phrapariyattidham School general education section, group one. This study is the Research and Development (R&D). In experiments, the researcher used a pre-experimental design by using a one-group pretest-posttest design. The researcher has explained the details and the process of researching as follows: 3.1 Research (R1): To study the current situation and needs for developing English of high school students of the Phrapariyattidham School general education section, Group One (Analysis: A). 3.2 Development (D1): To develop the activity an English learning management model by applying a SECI model-based instruction system for teaching English to high school students of the Phrapariyattidham School general education section, Group One (Design and Development: D&D). 3.3 Research (R2): To experiment with the activity of applying a SECI model-based instruction system for teaching English to high school students of the Phrapariyattidham School general education section, Group One (Implementation: I). 3.4 Development (D2): To evaluate the effectiveness of applying an SECI model-based instruction system for teaching English to high school students of the Phrapariyattidham School general education section, Group One. (Evaluation: E) The research process in using a SECI model-based instruction system for teaching English to the high school students of the Phrapariyattidham School general education section, group one. The researcher has presented and shown in Figure 3.1 as follows.



Research Results

The study of the current conditions and needs of students regarding English language development by applying a SECI model-based instruction system for teaching English to high school. The current conditions and needs of students regarding English language development by applying an SECI model: Classified by aspect illustrates that the

current conditions and needs of students regarding English language development by applying an SECI model by classified by aspect. It was found that the overall average was 4.18, which was high. If it was separated individually as an aspect, it was found that the item with the highest average was item no.5 Students' English language development needs ($\bar{x} = 3.77$, S.D. = 0.49), and the second item was no. 4 measuring and evaluating learning outcomes ($\bar{x} = 3.69$, S.D.= 0.51), and the third item was no.1 issue learning English ($\bar{x} = 3.61$, S.D.= 0.51), and the lowest level was no. 2 issue learning English ($\bar{x} = 3.48$, S.D. = 0.52), respectively. In conclusion of the current conditions and needs of students regarding English language development by applying a SECI model by classified by aspect, which was at high level. The current conditions and needs of students regarding English language development by applying a SECI model: Issue learning English. illustrates the current conditions and needs of students regarding English language development by applying a SECI model: Issue learning English. It was found that the overall average was 3.61 which was a high level. If it was separated individually as an aspect, it was found that the item with the highest average was item no. 10. The teaching media is not up to date ($\bar{x} = 3.76$, S.D. = 1.01), and the second item was no. 3. Have problems with pronunciation or use an English accent ($\bar{x} = 3.72$, S.D. = 0.99), and the third item was no. 2. The content used in teaching is too much and difficult ($\bar{x} = 3.71$, S.D. = 1.05), and the lowest level was no.1. Insufficient knowledge of English vocabulary ($\bar{x} = 3.22$, S.D. = 1.22), respectively. In conclusion of the current conditions and needs of students regarding English language development by applying an SECI model to issue learning English, which was at high level. The current conditions and needs of students regarding English language development by applying a SECI model: Attitude or motivation for learning English. illustrates the current conditions and needs of students regarding English language development by applying a SECI model: attitude or motivation for learning English. It was found that the overall average was 3.48, which was a moderate level. If it was separated individually as an aspect, it was found that the item with the highest average was item no. 3. English helps develop and encourage self-expression ($\bar{x} = 3.80$, S.D. = 0.29), and the second item was no. 2. English is an interesting subject to learn. ($\bar{x} = 3.61$, S.D. = 0.10), and the third item was no. 1. English is important and necessary in life ($\bar{x} = 3.59$, S.D. = 0.10), and the lowest level was no. 9. Organizing a variety of activities makes learning ($\bar{x} = 3.25$, S.D. = 0.92), respectively. In conclusion of the current conditions and needs of students regarding English language development by applying a SECI model: attitude or motivation for learning English, which was at moderate level. The current conditions and needs of students regarding English language development by applying a SECI model: Methods for improving English. illustrates the current conditions and needs of students regarding English language development by applying an SECI model: Methods for improving English.

It was found that the overall average was 3.58, which was a high level. If it was separated individually as an aspect, it was found that the item with the highest average was item no. 9. Using Facebook or online media for learning stimulates learning ($\bar{x} = 3.70$, S.D. = 1.08), and the second item was no. 10. Setting common goals before studying helps students be committed to learning ($\bar{x} = 3.68$, S.D. = 1.09), and the third item was no. 8. Interviewing successful people creates motivation to study ($\bar{x} = 3.63$, S.D. = 0.97), and the lowest level was no. 1. The textbooks used for studying are not yet suitable for use in life ($\bar{x} = 3.46$, S.D. = 1.00), respectively. In conclusion the current conditions and needs of students regarding English language development by applying a SECI model: Methods for improving English, which was at a high level. The current conditions and needs of students regarding English language development by applying an SECI model: Measuring and evaluating learning outcomes. illustrates the current conditions and needs of students regarding English language development by applying an SECI model: Measuring and evaluating learning outcomes. It was found that the overall average was 3.69, which was a high level. If it was separated individually as an aspect, it was found that the item with the highest average was item no. 9. The academic results match the feelings of the students ($\bar{x} = 3.80$, S.D. = 0.95), and the second item was no. 5. Have an understanding of tests used for measurement and evaluation ($\bar{x} = 3.78$, S.D. = 1.05), and the third item was no. 2. Have an understanding of the evaluation criteria set by the school ($\bar{x} = 3.74$, S.D. = 1.09), and the lowest level was no. 3. Use evaluation methods consistent with learning objectives. ($\bar{x} = 3.58$, S.D. = 1.03), respectively. In conclusion of the current conditions and needs of students regarding English language development by applying an SECI model: Measuring and evaluating learning outcomes, which was at high level.

The current conditions and needs of students regarding English language development by applying a SECI model: Students' English language development needs. illustrates the current conditions and needs of students regarding English language development by applying a SECI model: Students' English language development needs. It was found that the overall average was 3.77, which was a high level. If it was separated individually as an aspect, it was found that the item with the highest average was item no. 2. Learning that helps students develop thinking and decision-making ($\bar{x} = 3.90$, S.D. = 1.05), and the second item was no. 7. Provide opportunities for students to participate in activities independently ($\bar{x} = 3.89$, S.D. = 1.04), and the third item was no. 10. Using modern and easy-to-understand teaching media ($\bar{x} = 3.88$, S.D. = 1.00), and the lowest level was no. 6. Encourage interaction during learning activities ($\bar{x} = 3.61$, S.D. = 1.01), respectively. In conclusion the current conditions and needs of students regarding English language development by applying a SECI model: Students' English language development needs, which was at a high level.

Design and develop an English learning management model by applying an SECI model-based instruction system for teaching English to high school students of the Phrapariyattidham School general education section, Group One.

1. The development of the activity is an English learning management model by applying a SECI model-based instruction system for teaching English to high school students of the Phrapariyattidham School general education section, Group One, there are the following processes: 1. Take the results of data analysis in step 1, analysis of the curriculum and learning standards according to the Basic Education Core Curriculum 2008 and the school curriculum in the foreign language learning subject area of the Phrapariyattidham School, general education section at Sriboonruang Temple, Bangkok District, Bangkok and results of analysis of the current conditions and needs of students regarding English language development by applying a SECI model including the results of a synthesis of research on the process of knowledge management in teaching as a guideline for determining the elements of the model and organizing activities to encourage students to develop their English correctly and appropriately.

2. Draft a teaching model by applying a SECI model-based instruction system for teaching English to high school students conduct a study of basic information for developing the English language teaching model as follows: 2.1 Learning standards in the foreign language category of high school students according to the learning standards framework for the English course (EN33102), using the process of practicing language skills for communication in listening, speaking, reading, writing, distinguishing, and choosing easy writing correctly according to the relevant structure according to one's interests to provide students with knowledge and understanding in using skills in different areas of foreign languages and apply knowledge in sharing, and exchanging knowledge, ideas, and news in studying, working, and in daily life in an appropriate and timely manner in communicating in various situations. It is a basic tool in seeking knowledge, being disciplined, eager to learn, and having desirable characteristics. Respect other people's opinions and have a good attitude towards using English. 2.2 The results of the analysis of the current conditions and needs of students regarding English language development by applying a SECI model-based instruction system for teaching English to high school students are overall at a high level by student give importance to the development of English language, followed by measuring and evaluating learning outcomes and issue learning English together with methods for improving English and attitude or motivation for learning English sequential as shown in Table C3 in the appendix page 282. 3. Study of theoretical concepts used in developing a SECI model-based instruction system for teaching English to high school students. The researcher has studied and analyzed the following: 3.1 Concepts about developing the model.

3. Evaluate the effectiveness of applying a SECI model-based instruction system for teaching English to high school students of the Phrapariyattidham School general education section, Group One. The analysis of the effectiveness of applying a SECI model-based instruction system for teaching English to high school students of the Phrapariyattidham School general education section, Group One. 1. Analysis and comparison of the average academic achievement of the sample students before and after the experiment as shown in the following table. indicates that comparison between the students' pre-test and post-test in the use of the model of a SECI model-based instruction system for teaching English. It is found that the pupils who have the score post-test of using the model of a SECI model-based instruction system for teaching English ($\bar{x} = 32.40$, S.D. = 2.84) are higher than the pre-test of the score pre-test of using the model of a SECI model-based instruction system for teaching English ($\bar{x} = 24.60$, S.D. = 3.90) as statistically significant at 0.1. 2. Analysis of data from a questionnaire to measure students' attitudes towards learning management by applying a SECI model-based instruction system for teaching English to high school students. It is found that the students' attitudes towards learning management by applying a SECI model-based instruction system for teaching English to high school students. The average score was 4.37, which is an excellent level. If separated by each aspect, the aspect with the highest average score was the benefits received ($\bar{x} = 4.72$, S.D. = 0.42), followed by the learning media ($\bar{x} = 4.68$, S.D. = 0.48), and followed by this, the learning atmosphere ($\bar{x} = 4.66$, S.D. = 0.45). And the aspect with the lowest average score was the process of organizing learning activities ($\bar{x} = 4.43$, S.D. = 0.72), respectively. In summary, the students' attitudes towards learning management by applying a SECI model-based instruction system for teaching English to high school students were at an excellent level.

Discussion

1. Study the current situation and needs for developing English of high school students of the Phrapariyattidham School general education section, Group One. The current conditions and needs of students regarding English language development by applying a SECI model-based instruction system for teaching English to high school students are overall at a high level. In the area of issue learning English, it is at a high level. Most of the students gave their opinions in the same direction, such as the teaching media is not up to date, students have problems with pronunciation or use an English accent, and the content used in teaching is too much and difficult. In the area of attitude or motivation for learning English, it is at a moderate level, with most students stating that English helps develop and encourage self-expression, that English is an interesting subject to learn, and that English is important and necessary in their lives. Methods for improving

English are at a high level. Most students agree that using Facebook or online media for learning stimulates learning and that studying should be given importance. Setting common goals before studying helps students be committed to learning and interviewing successful people creates motivation to study and inspires them to do well. Measuring and evaluating learning outcomes is at a high level. Students clearly stated that the academic results match the feelings of the students, and when the assessment criteria are not passed, the teacher will ask the students to take another assessment and that students have an understanding of tests used for measurement and evaluation. Finally, students' English language development needs are overall at a high level. Most of them stated that learning helps students develop thinking and decision-making and provides opportunities for students to participate in activities independently, including using modern and easy-to-understand teaching media.

2. The effectiveness of a SECI model-based instruction system for teaching English to high school students of the Phrapariyattidham School general education section, Group One.

1) Students' English learning achievement after learning is higher than before learning using after applying a SECI model-based instruction system for teaching English at high school students statistically significant at the .05 level.

2) Students' attitudes towards learning management by applying a SECI model-based instruction system for teaching English to high school students. For the sample students after the experiment, all aspects were at a high level.

3. The results of the learning logs in which students write reflections on the benefits and what they receive from learning management in all 5 activities and from the observation log by the researcher, who is a teacher, including in-depth interviews. There are several findings that are beneficial to the development of English language teaching using the SECI Model. They can be summarized as follows:

1) Socialization: knowledge creation process, knowledge exchange stage. In this step, students did 2 activities that promote knowledge exchange: 1) Goal setting activities in joint learning (shared vision); and 2) independent writing with instructor participation (free writing). From such activities, students receive benefits in various ways, including learning English from various knowledge sources, practicing skills necessary for working together, including having the courage to express ideas, and developing a good attitude toward learning English. This may be due to the fact that the teacher does not only provide knowledge or assign students to do activities, but they also participated in the activities, which made the learning atmosphere more friendly and fun, and the students were happier in learning, and the teachers themselves play an important role in helping these students by using questions to stimulate students' thinking and showing a

caring and friendly attitude in talking with the students. This can make students feel more relaxed and dare to analyze their needs using English without worrying about saying the wrong thing which facilitates the exchange of knowledge.

2) Externalization: Knowledge creation process (Creating explicit knowledge from tacit knowledge). In the process of creating explicit knowledge from this tacit knowledge, students performed 2 learning activities: 1. Reading and writing a review of the summary work (summary) and 2. Sharing knowledge in the Facebook group: Learning English by P"Maha, in which the activity encourages students to write about their experiences and techniques in learning English on the Facebook group. From the activities of extracting tacit knowledge into explicit knowledge. That can happen through many forms of learning exchange activities. The extraction of such tacit knowledge allows students to reflect on the knowledge they have within themselves by speaking or writing to each other, such as tips on writing a summary that will not only be beneficial to themselves. In the matter of reviewing existing knowledge, it can also be beneficial to others who listen or read. In addition, each student writes about their tips and experiences in learning English in the Facebook group, thus creating a "learning community" for those interested in the same topic to have the opportunity to talk, share, and expand their knowledge. This may be due to the creation of explicit knowledge from tacit knowledge (externalization), which is the change of tacit knowledge to explicit knowledge.

3) Combination: Knowledge creation process (knowledge integration). The knowledge integration process is the process of bringing explicit knowledge to record, categorize, or create knowledge that is raised to the next level. In this basic English course, students have gone through the process of combining knowledge from 3 types of activities: 1. Combining knowledge from telling tips on writing briefs. 2. Combining knowledge from writing in Facebook groups. 3. Combining knowledge from interviewing guests (in-depth interviews). From this activity, students have the opportunity to collect clear knowledge and organize it in the form of online learning media or e-books and knowledge collection documents. Doing all of these activities provides an opportunity for students to practice thinking, synthesizing, categorizing, and organizing information so that it is suitable for preparing documents that can be easily understood and stored as a knowledge repository (knowledge asset) that can be published further. This may be due to knowledge integration activities supporting student-focused learning because it encourages students to learn things by doing things on their own, solving problems, and creating meaningful work for themselves.

Suggestions

1. Should develop a teaching model based on the concept of knowledge management with content in other subject groups or subjects in order to develop learning in schools and sell the results to interested schools.
2. Should study the use of knowledge management strategies to develop teachers in order to achieve best practices in teaching English at the university level.
3. Should be educated regarding behavioral factors, the amount of time spent studying, the learner's learning style, or other environmental factors in order to apply the results to design teaching and learning to be more appropriate.
4. Should study and experiment with teaching methods by applying the SECI Model, which is a knowledge management process to develop students's abilities in other areas that involve 21st-century skills such as critical thinking, problem-solving, analytical thinking, creativity, etc.
5. Teaching subjects related to Buddhist content should be integrated with the learning management process using knowledge management methods to help develop and promote monks and novices to have knowledge and work in producing innovations about Dhamma.
6. Should be studied other variables that affect students' attitudes toward learning English, such as learning management curricula, social context, environment, the director of educational institutions, knowledge and abilities of English teachers, etc.

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