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The Development of Task-Based Learning (TBL) and Communication Strategies (CSs) Instructional Model to Enhance English Speaking Skill for Public Health Students

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Abstract

The purposes of this study were: 1) to develop an instructional design model based on Task-Based Learning (TBL) and Communication Strategies (CSs) to enhance English speaking skill for public health students (PDSA Model, 2) to investigate an effectiveness of the newly developed PDSA Model, 3) to compare students' English speaking skill before and after the treatment using PDSA Model, 4) to explore students' satisfaction toward the PDSA Model. The research participants consisted of 40 second-year students majoring in Public Health at Mahidol University (Nakhonsawan Campus) who enrolled in English for Specific Purposes for a semester. The instruments were a learning exercise plan, the English speaking test, learning log, think-aloud protocols and forms for evaluating the instructional model. The collected data were quantitatively analysed by using mean, percentage, standard deviation, coefficient of variation, and Paired T-Tests. Qualitative data was collected for their individual communication strategies by observing and recording. The results revealed that the newly developed PDSA Model consisted of 4 components including planning task (P), doing task (D), speaking analysis (S), and assessing speaking activities (A). The effectiveness of the newly developed PDSA Model (E1/E2) was at a high level (81.44/84.13). After using PDSA model, post-test mean score of the students' English speaking skill was significantly higher than the pretest mean score. Overall satisfaction toward PDSA Model was at a high level. The five experts agreed that the PDSA model was appropriate at an excellent level.

Keywords: Task-based learning, communication strategies, English speaking skill for public health students

1. Introduction

The 21st century is the age of knowledge societies because humans need to use knowledge as a tool for their social development due to natural resources not being enough for development. As a result, the vision of ASEAN focuses on the importance of education for human development. People have access to various development opportunities such as lifelong learning, training, innovation, quality assurance, and technology. The underlying key issues of academic cooperation in developing education are culture, and public health. In addition, ASEAN has been working to manage social problems and other threats such as environmental problems, disasters, and epidemic diseases.

The visions of the ASEAN leaders are to create an ASEAN Community that is highly competitive, has clear rules and people-centered development. Cooperation in economic, social, political and cultural aspects which emphasize coexistence based on

differences are needed. As a region of peace and stability, the change in the ASEAN region results in understanding, recognition, adaptation, and living happily together. This is especially true for communication with the Lingua Franca language of the ASEAN region being "English". This is defined clearly in the Charter of the Association of Southeast Asian Nations. Under the ASEAN Charter, Article 34 (Pinyonatthagarn, 2013) states that "the working language of ASEAN shall be English. English is compulsory in school curricula in elementary schools in many countries. And more and more teaching materials are being introduced in English". Thus, English is very important for the ASEAN community.

After creation of the ASEAN Community, an impact on public health in Thailand has been to invest more in healthcare and hospital facilities to serve our customers in ASEAN countries. Moreover, there have been several problems in the past 20 years such as social problem, drugs, crime, communicable diseases, and Emerging Infectious Diseases (EID), and it is predicted that there will be further threats to humanity in the future. Globally, there is a need for accurate and complete communication of spoken language to control the broadening of public health issues in accordance with new-age skills in the 21st century. The education must be linked to the needs of society (Bellance & Brandt, 2011) and cooperation conducted under the ASEAN Framework. Free flow of services and skilled labor including healthcare services, medical practitioners, dental practitioners, and nursing services are in the Mutual Recognition Agreements (MRAs). For this reason, people can freely travel among ASEAN countries (Office of the Permanent Secretary Ministry of Public Health, 2011). Therefore, the public health practitioners urgently need to improve their English speaking skills in accordance with the 21st century. These learners must pay great attention to developing life and work skills that will enable them to live a complex life in the highly competitive age (Trilling & Fadel, 2009).

From the above discussion, the researcher as an instructor in English for Specific Purposes course is interested in developing an instructional design model based on Task-Based Learning (TBL) and Communication Strategies (CSs) to enhance English speaking skill for public health students. The students are the 2nd year students majoring in Public Health at Mahidol University (Nakhonsawan Campus). Most previous research about an instructional model based on TBL and CSs was designed for improving English reading and writing skills. However, there is little research on English speaking skill, especially improving it among public health students. The researcher expects that the pattern of teaching English speaking in the public health field will be useful for the students to efficiently communicate in English language. Moreover, the research is also concerned with designing learning methods which are suitable and close to the real situation (Panich, 2010). These techniques are for all teachers, and instructors should be concerned about them to improve the students use of English and communication in real life. Classroom research based on TBL and CSs instructional models is rare, especially research concerned with improving Speaking for public health students. Thus, a PDSA instructional model was created for improving the public health students' speaking ability.

This was needed due to the increased movement of people in ASEAN and the need to effectively communicate with them.

2. Background of the Study

In TBL, the learner can apply any pattern to communicate and that is the strength of task-based language learning. Also, task-based language learning can enable the learner to use a foreign language in daily life and do their work piece based on their own interest. Language learning derives from the learner's need which is through challenging activities. In this learning pattern, the learner is both a sender and receiver simultaneously. However, a drawback of the task-based language learning is preparation of a suitable room including a facilitator because the learner might make a disturbance while they are in the classroom completing their work (Willis, 1996). Willis also defined the "task-based language learning" as allowing the learners to use the language for communication to accomplish a piece of work to attain an objective. In addition, Willis and Wills (2007) originated six main types of work: 1) Listing (e.g. brainstorming, fact-finding, quizzes games, memory and guessing); 2) Ordering and Sorting (e.g. sequencing, ranking ordering, classifying); 3)Comparing (e.g. Games finding similarities and differences Graphic organizers); 4)Problem Solving (e.g. logic problem prediction); 5) Sharing personal experience: storytelling, anecdotes, reminiscences; and 6) Matching (e.g. words and phrases to pictures).

A suitable approach is supporting the learner who will use the language for communication in a real situation. This will allow the learner to complete a piece of work through different interactions in various processes in the classroom. For instance, interaction and finding meaning are the basis for effective language learning. (Nunan, 2 0 0 6) has found that a worthy piece of work is needed to accomplish the obvious objectives under appropriate timing. The important principle of task-based language learning is that the learner is able to comprehend the piece of work and then uses the language in order to communicate to fulfill the objectives. Finally, the learner completes the piece of work for which the outcome is they will get motivation for further work (ibid, 2006).

Scholars like Canale and Swain (1980) argue that strategic competence plays an important role in language learning. They state that task-based teaching can develop students' communicative competence, and that it can be classified as grammatical competence, sociolinguistic competence, discourse competence, and also strategic competence. Canale and Swain's study focuses on the strategic competence aspect that refers to a speaker's ability to adapt their language use. Tarone (1980) argued that strategic competence seems to have some widespread aspects in use of all languages, which agrees with Bachman (1990) who divided communicative language ability into three components, language competence, strategic competence, and psycho physiological mechanisms, and he defined strategic competence as an important tool for achievement their communicative objectives with their real world language knowledge.

Communicative strategies come in various forms. Tarone (1980, p. 429) summarizes under five main categories, (Paraphrase, Transfer, Appeal for Assistance, Mime, and

Avoidance). The first main category was paraphrase which has one main subcategory, and includes three subcategories which are approximation: The use of a target language vocabulary item or structure, which the learner knows is not correct, but which shares semantic features with the desired item to satisfy the speaker. The second subcategory is word coinage: The learner's making up a new word in order to communicate a desired concept and finally circumlocution: The learner's describing the characteristics or elements of an object or action instead of using the appropriate teaching language structure. Faerch and Kasper (1 9 8 3) suggest that communicative strategies are a psychological process, and they believe that communicative strategies are the solution to the individual's problem of processing rather than the speaker's and the hearer's mutual problems. Faerch and Kasper's (1983) point of view is that the achievement of communicative strategies involves hypothesis and the communicator's practical statement and it can promote language acquisition.

The advantages of communication strategies are that they allow learners to develop their own communication skills, not relying on other learners and also develop self-control. Communication Strategies improve speaking ability of the learner to speak more fluently. This study synthesized the types of communication strategies of relevant researchers, such as Ellen and Frohlieh (1980), Tarone (1981), Faerch and Kasper (1984), Malley (1985), Rubin (1987), Willems (1987), Si - Qing (1990), Oxford (1990), Stern's (1992), Bygate (1995), Gasparro (1996), Brown (2000), Nakatani (2006), Sutthinee and Kanchana (2009), Abunawas (2012). From the previously mentioned studies, those 12 important strategies were as follows:

- 1) Approximation Strategy. This strategy refers to learners saying words or phrases which almost exactly coincide or have similar meanings (synonyms). The learners try to keep the conversation going smoothly without interruptions while they are speaking. Learners might refer to words such as a "sailboat" as a boat, "Sailboat" as a "Ship", "water pipe" as a pipe and "silkworm" as a worm.
- 2) Word coinage Strategy. This strategy refers to how learners create new words or phrases to replace words they do not know exactly. Coinage is the word formation process in which a new word is created either deliberately or accidentally. For example, a learner might refer to an "art gallery" as a picture place, "zoo" as an "animal garden, and "Vegetarian" as "A vegetable eater or fruit eater", and so on.
- 3) Circumlocution Strategy. This strategy refers to learners using different words or phrases to express their intended meaning. For example, if learners do not know the word "grandfather", they may paraphrase it by saying my father's father; or the word "onion" as the red vegetable that makes you cry when you cut it. For a "shopping basket", "a basket for buying things in the market" can be used, and so on.
- 4) Appeal for Assistance Strategy or Asking for clarification strategy. It refers to the asking of an interlocutor for the correct word or some help during a discussion. This strategy will be used when a speaker cannot express or understand some difficult words.

Therefore, phrases such as "What's this?", "What is that again?", "Sorry, can you say that again?", and so on will be used by the speaker.

- 5) Repetition Strategy. It is a strategy of some particular words that a speaker does not know the meaning of. When the speaker is not sure of the words, he or she will say something like "Do you know what an emperor is?" or repeat the unfamiliar words after hearing them.
- 6) Surfing Strategy. It is a strategy that refers to words that either have or don't have meanings in order to tell the audience that the speaker has not finished speaking yet. This is either because the speaker is having a difficulty in communication, or they are planning to continue speaking. Words like "Er ...", "Erm ...", "Uh ...", "Well ...", "I mean ...", "You know ...", "Ah, now ...", "Let me see ...", "Let me have a look...", and so on, are used.
- 7) Nonlinguistic Strategy. This strategy is referred to the use of gesture and mime to augment or replace verbal communication. The strategies that speakers use are, motions (gesture) or sound (sound imitation) instead of expressing the words. For example: The student may show his/her 2 fingers instead of replying, "two times a day" to question of "how many times a day?"
- 8) Self-repair Strategy. It is a strategy that a speaker uses when realizing that he/she makes a mistake. The expressions of this type of strategy are "Well", "What I mean to say is...", "On the other hand, ...", "Am I right?", and so on.
- 9) Literal Translation Strategy. This is a strategy which is used because of the literal translation from the speaker's mother tongue into a target language. Some of the examples are phrases like, "Close the lights." instead of saying, "Turn off the lights."
- 10) Languages-switch strategy. It is a strategy used when a Thai learner may insert Thai words or phrases into an English sentence with a hope that his/her interlocutor will understand it. For example, using "Muay Thai" instead of the word "Thai boxing"., Pad Thai Gung Sod which is transliterated as "Thai fried noodles with prawns".
- 11) Fluency-oriented strategy. This strategy is used when the speaker needs to focus on the rhythm and clarity of speech. A speaker provides a more fluent conversation flow in order to call the attention of the listener.
- 12) Avoidance and Abandonment Strategy. This strategy takes multiple forms but has been identified as a communication strategy. It happens when ESL/EFL learners avoid talking about any particular topic that they lack some necessary vocabulary.

3. Research Objectives

The purposes of this study were: 1) to develop an instructional design model based on TBL and Communication Strategies (CSs) to enhance English speaking skill for public

health students (PDSA Model), 2) to investigate an effectiveness of the newly developed PDSA Model, 3) to compare students' English speaking skill before and after the treatment of using PDSA Model, and 4) to explore students' satisfaction toward PDSA Model.

4. Research Methodology

4.1 Research subjects

The participants consisted of 40 students as the 2nd year students majoring in Public Health in Mahidol University (Nakhonsawan Campus, Nakhonsawan province, Thailand) who enrolled and studied in English for Specific Purposes for a semester. The sample size was determined by the total number of participants. Participants were Thai public health students aged between 18-20 years, and they were 8 males and 32 females. They were studying English for specific purposes (Public Health) subject in the second year and took two English subjects in the first year. The PDSA Model of English speaking in public health consists of Primary healthcare (PHC) and refers to 1) Disease prevention, 2) Health promotion, 3) Medical treatment, and 4) Rehabilitation.

4.2 Research instruments

There are six instruments in total which are the model handbook, lesson plans and speaking exercises, the English speaking test, learning log, and think-aloud protocols. The first instrument is the handbook which tells how to use the PDSA model. The second instrument is lesson plans showing material to be taught and the procedure. Third are the speaking exercises for learners to use the material and strategies from the lesson. Fourth is the English speaking test to evaluate use of speaking strategies learned in class. Fifth, the learning log is a form for learners to record which strategies they used. Finally, think aloud protocols involve students saying exactly what they are thinking when performing the tasks in class. These instruments are for validation process of the lesson plans (including forms for checking, and analyzing communication strategies, English speaking skills test, and evaluating satisfaction towards instructional model). To ensure reliability and validity, all instruments were verified for content validity by the advisor, and they were validated by 3 experts using the Index of Congruence (IOC).

To certify the model of Task-Based Learning (TBL) and Communication Strategies (CSs) to enhance English speaking skill for public health students (PDSA Model), five experts were used. These 5 are experts in the management of English language teaching in three higher education institutions, one in the public health education and one in higher education research. They use a rating scale of 5 levels. The criteria for considering the level is based on John W. Best (Best, 1981). The mean score of 1.00 - 1.49 is very low level. The mean score of 1.50 - 2.49 is low level. The mean score of 2.50 - 3.49 is medium level. The mean score of 3.50 - 4.49 is high level. The mean score of 4.50 - 5.00 is very high level.

5. Data Collection

The processes of data collection were divided into five phrases as follows:

Phase 1: Analysis of problems and surveying of information, studying of theories or concepts related to education are carried out. Analysis which explores needs and background information for constructing and developing the PDSA model is also done.

Phase 2: The model, process, teaching and learning media activity equipment are developed as well as an instructional model based on Task-Based Learning (TBL) and Communication Strategies (CSs) to enhance English speaking skill for public health students at Mahidol University, Nakhonsawan Campus are designed and developed.

Phase 3: The model is implemented, and then improved to conduct the research by using the instructional model based on TBL and CSs to enhance English speaking skill for public health students at Mahidol University, Nakhonsawan Campus.

Phase 4: Evaluation and Verification which analyzes and interprets the collected data after using the instructional model based on TBL and CSs to enhance English speaking skill for public health students at Mahidol University, Nakhonsawan Campus.

Phase 5: Model accreditation was evaluated to certify the model by 5 experts with a rating scale (5 levels of appropriateness or consistency) which considered from the principles and objectives of the model, the teaching process of the model, and important conditions for using the model. The results of the model accreditation must be at a higher level in order to be able to be used in teaching.

6. Data Analysis

Data were collected through qualitative and quantitative methods. For quantitative data, descriptive statistics used were mean, percentage, standard deviation, and coefficient of variation and inferential statistics used were Paired T-Test (for comparing the pre-test and the post-test mean score of the students at significance level of 0.05) and One-Sample T-Test (for comparing overall satisfaction mean toward PDSA Model to 3.5 scores at significance level of 0.05).

Qualitative data was collected by forms and observed though activities in class in order to analyze the students' individual communication strategies. The instrument used were a learning exercise plan, the English speaking test, learning log, think around and forms of evaluating the instructional model (including forms for checking, and analyzing communication strategies, English speaking skills test, and evaluating satisfaction towards the instructional model).

7. Results and Discussions

This section reported the results of the study in response to research objectives as follows:

7.1 The result of the development of an instructional design model based on TBL and CSs to enhance English speaking skill for public health students (PDSA Model)

The step of developing the teaching procedures of an instructional design model was based on the theoretical framework of TBL and CSs to enhance English speaking

skill for public health students reviewed in the literature. There are many different ways of using English speaking communication strategies to communicate in order to negotiate various situations. The results showed that there were 12 important communication strategies including 1) Approximation Strategy, 2) Word Coinage Strategy, 3) Circumlocution Strategy, 4) Appeal for Assistance Strategy, 5) Repetition Strategy, 6) Surfing Strategy, 7) Nonlinguistic Strategy, 8) Self-repair Strategy, 9) Literal Translation Strategy, 10) Languages-switch Strategy, 11) Fluency-oriented Strategy, and 12) Accuracy-oriented Strategy.

Moreover, the procedures of the newly developed PDSA Model consisted of 4 components including planning task (P), doing task (D), speaking analysis (S), and assessing speaking activities (A) as follows:

- 1) P: Planning Task. This step is for making sure that students understand about topics of the lesson, communication strategies, task assignments, and all learners understand the key points.
- 2) D: Doing Task. This step is for students to do the task assignments. There are activities that students need to work on as pair or group work. This step provides students with the opportunity to use English for activities; for example, planning, practice for using language correctly in presentations, language development, watching video about speech, presentations, and reports (Task, Planning, Report).
- 3) S: Speaking Analysis. This step, it is for learners to report task performance, evaluate the task by themselves and also communication problem solving. After that, the instructor selects the language problem for analyzing the language and corrects it together with students to improve their own language.
- 4) A: Assessing Speaking Activities. This step is for evaluating student activities by giving feed-back with a short message to assess learner's feelings for the activity, such as telling the likes or dislikes in past activities.

Figure 1 shows the development of the PDSA Model which included 4 components namely planning task (P), doing task (D), speaking analysis (S), and assessing speaking activities (A) with the category of communication strategies. The category of communication strategies was divided into 12 strategies.

Figure 1: TBL and CSs to enhance English speaking skill for public health students (PDSA Model)

THE DEVELOPMENT OF TASK-BASED LEARNING (TBL) AND COMMUNICATION STRATEGIES (CSs) INSTRUCTIONAL MODEL TO ENHANCE ENGLISH SPEAKING SKILL FOR PUBLIC HEALTH STUDENTS

4 Steps Model of Teaching Procedures with 12 Communications



Principle: Task-Based learning and Communication Strategies instructional model can help to develop English speaking skill for public health students and it can encourage students to use it in all situations.

<u>Support System</u>: There are activities that students need to work onas a pair work or group work by using Speaking Language Function. For example, Asking and Giving Information, Giving Reasons for Opinions, Explaining, Expressing Opinions, Clarifying, Guessing and Contrasting. Use speaking communication strategies to help public health students.

7.2 The effectiveness of the newly developed PDSA Model that enhances English speaking skill of public health students based on the assigned criteria 80/80

The effectiveness of the newly developed PDSA Model was calculated by the Brahmawong E1/E2 formula and setting 80/80 as a standard criterion (Brahmawong, 2013). The E1 value was the efficiency of tasks and exercises (the efficiency of the process) which derived from mean of all tasks of all students in every activity and then compared proportion as a percentage. The E2 value was the efficiency of the results of post-test for each unit from using PDSA Model (the efficiency of the product) which derived from mean of all scores from post-test and final activity of all students and then compared proportion as a percentage. It was found that the efficiency of the process for the newly developed PDSA Model (E1) was 81.44 and the efficiency of the product (E2) was 84.13. Therefore, the effectiveness of the newly developed PDSA Model was at 81.44/84.13 which was at a high level and met the assigned criteria 80/80 (as shown in Table 1).

Table 1: The results of the effectiveness of the newly developed PDSA Model

PDSA Model as a Task-Based Learning (TBL) and Communication Strategies	Study Po	The Assigned		
(CSs) Instructional Model	During Tasks Test	Post-Test	Criteria 80/80	
The efficiency of the process (E1)	81.44		80.00	
The efficiency of the product (E2)		84.13	80.00	

7.3 The comparison of students' English speaking skill between the mean scores of pre-test and post-test after using PDSA Model

The test of students' English speaking skill was evaluated by speaking rubric scores for fluency activities with 4-rating scales. After using PDSA model, the results shown that the pre-test mean score of the students' English speaking skill was 1.40 with standard deviation of 0.50 and post-test mean score was 2.80 with standard deviation of 0.52. It was found that the post-test mean score of the students' English speaking skill was significantly higher than the pre-test mean score at a level of 0.05 (t=17.85, P=0.000, n=40) as shown in Table 2.

Table 2: The comparison of the pre-tested and post-tested mean scores on English speaking skill (before and after the activity)

Speaking Test	N	$\bar{\mathbf{x}}$	S.D.	t	P-value
Pre-test	40	1.40	0.50	17.85*	0.000
Post-test	40	2.80	0.52		

*P<0.05

Moreover, qualitative data from the learning log forms were also analyzed for the uses of communication strategies. Based on the task-based teaching method, communication strategies were used to analyze the behavior of the strategies used in the speaking analysis recording. This is a form used during the activity and it is a communication strategies record learning from task activities at the end of each chapter. Behavior analysis using strategies from the learning logs refers to the ability to analyze 12 communication strategies skill that learner behave in the classroom. For example,

1) Approximation Strategy

One student said: You have an eye allergy problem. (Provides advice on the symptoms of the disease to the patient.) Based on the analysis of the use of strategies, students used "eye allergy problem" instead of the word "Stye".

2) Word coinage Strategy

One student said: *In my opinion, you should be a vegetable eater*. Based on the analysis of the use of strategies, students used "vegetable eater" instead of the world "vegetarian"

3) Circumlocution Strategy

One student said: *steam go to the cloud* (Describe environmental health) Based on the analysis of the use of strategies, students are used student try to explain that the water has evaporated into the air and then drifted into the air.

4) Appeal for Assistance Strategy or Asking for clarification strategy

One student said: *Sorry, can you say that again?* (When the conversation is not clear) Based on the analysis of the use of strategies, students ask for help from a partner to say it again.

5) Repetition Strategy

One student said: *Do you want to lose your weight? Are you sure?* Based on the analysis of the use of strategies, "Do you want to lose your weight?" speaker wants to repeat it again to be sure it was heard correctly or not.

6) Surfing Strategy

One student said: Erm... well... Do you vomit? (Buzzing before asking questions) Based on the analysis of the use of strategies, "Erm... well.." is used to think about what to ask next.

7) Nonlinguistic Strategy

One student said: Hold two fingers (Instead of talking to a partner to answer the question how many times a day) Based on the analysis of the use of strategies, Students use two fingers. It is a gesture to say over two times a day or twice a day.

8) Self-repair Strategy

One student said: "You have to use crocodile gel, what I mean to say is, use skin cream to protect your skin." (Explain the care) Based on the analysis of the use of strategies, "what I mean to say is" To correct the word used in the conversation.

9) Literal Translation Strategy

One student said: Yes, but I cannot speak English good. (Answer the question, Can you speak English?) Based on the analysis of the use of strategies, Yes, but I cannot speak English good. It's a Thai structure instead of Yes, but I'm not good in speaking English.

10) Languages-switch strategy

One student said: *Today's special menu is Pad Thai Gung Sod*. Based on the analysis of the use of strategies, Pad Thai Gung Sod, Thai transliteration instead of, Thai Fried Noodles with Prawns, which is English word.

11) Fluency-oriented strategy

One student said: "Excuse me. What is the worst disease in your opinion?" (Stress the first word) Based on the analysis of the use of strategies, "Excuse me" The speaker tries to speak in the right pitch and tone so that the listener is interested.

12) Avoidance and Abandonment Strategy

One student said: "Ha... I am not sure. But... maybe... I don't know how to say in English." (Say with a laugh) Based on the analysis of the use of strategies, I don't know how to say in English. The speaker wants to change the subject, speak or stop talking because he does not know the subject or words to continue.

On the analysis used in the sample, the students were able to use English speaking strategies to perform their work in public health.

7.4 Public health students' satisfaction toward PDSA Model

It was found that the overall satisfaction of public health students toward PDSA Model was at a high level (\bar{x} =4.32, S.D.=0.44, C.V.=0.10). Satisfaction toward the pattern of activities was at a high level (\bar{x} =4.40, S.D.=0.48, C.V.=0.11). Satisfaction toward the content of activities was at a high level (\bar{x} =4.29, S.D.=0.43, C.V.=0.10). Satisfaction toward steps of teaching procedures of the model was at a high level (\bar{x} =4.28, S.D.=0.58, C.V.=0.14) as shown in Table 3.

Table 3: The results of public health students' satisfaction toward PDSA Model

No.	Satisfaction toward PDSA Model	x	S.D.	C.V.	Satisfaction Level	Rank
The A	Activity Focuses on Task-Based					
1	Enhance speaking skills for learners.	4.40	0.67	0.15	high	2
2	Encourage students to use language to interact with friends.	4.40	0.59	0.13	high	2
3	Encourage students to use language to interact with instructors.	4.40	0.50	0.11	high	2
4	Encourage learners to receive assessment information while doing activities appropriately.	4.40	0.59	0.13	high	2
	Total	4.40	0.48	0.11	high	
Conte	ent on Task-Based					
5	Content presentation is appropriate.	4.33	0.57	0.13	high	5
6	The content is clear and easy to understand.	4.25	0.67	0.15	high	7
7	Sorting the difficulty of the content is appropriate.	4.28	0.55	0.13	high	6
8	The content of the activity is focused on the task-based		0.54	0.12	high	3
9	Appropriate difficulty	4.23	0.53	0.13	high	8
	Total	4.29	0.43	0.10	high	
_	of Teaching Procedures of the Model					
15	Planning Task: P	4.15	0.90	0.22	high	11
16	Doing Task: D	4.25	0.78	0.19	high	7
17	Speaking Analysis: S	4.33	0.70	0.16	high	5
18	Assessing Speaking Activities: A	4.40	0.55	0.13	high	2
	Total	4.28	0.58	0.14	high	
	Total of three issues	4.32	0.44	0.10	high	

It also analyzes the students' attitudes after the activity was completed in each chapter. The results from the post-learning questionnaire show what the strengths of the activity are and the opinions and feelings of the activities in the form of Assessing Speaking Activities. One student said that the strength of activities emphasizes task-based learning. We can speak English by using these tactics. When you don't know the words use these strategies as well. While asking for feelings about student activities. Another student said. It makes me feel more confident to speak English. It makes me know how to solve the speaking problems. And one more student said, when I study this class, I am

happy. I know new words to make me speak with friends. I feel happy and fun when I study this class. So that is why, in general, students enjoy activities that emphasize their work and can be used in real life in the future.

Table 4: The result of the PDSA Model validation by 5 experts

	Table 4: The result of the PDSA Wiodel validation by 5 experts							
The Issues	(1)	(2)	Expert (3)	(4)	(5)	$\bar{\mathbf{x}}$	S.D.	Level of Appropriateness
Element 1: Principles and Objectives of the Model								
1. The principles and objectives of the model are consistent with theories and basic concepts.	3	5	4	5	5	4.40	0.89	good
2. The teaching activities are consistent with the objectives.	4	5	4	5	5	4.60	0.55	excellent
3. The purpose is to show what is intended to happen in the classroom.	5	3	5	3	5	4.20	1.10	good
Total	4.00	4.33	4.33	4.33	5.00	4.40	0.37	good
Element 2: The Teaching Proce	Element 2: The Teaching Process of the Model							
1. The teaching activities are consistent with the basic theory and concept.	5	5	5	3	4	4.40	0.89	good
2. The teaching activity step cons	istent	with th	e objec	ctives.				
2.1 Planning Task: P	5	5	5	4	4	4.60	0.55	excellent
2.2 Doing Task: D	3	5	5	4	5	4.40	0.89	good
2.3 Speaking Analysis: S	5	3	5	5	5	4.60	0.89	excellent
2.4 Assessing Speaking Activities: A	4	5	5	5	5	4.80	0.45	excellent
3. The role of the instructor in each step.	5	4	5	5	4	4.60	0.55	excellent
4. The role of the learner in each step.	3	5	5	5	3	4.20	1.10	good
Total	4.29	4.57	5.00	4.43	4.29	4.51	0.30	excellent
Element 3: Important Conditions for Applying the Model								
1. Assign learner roles consistent the principles of the model.	4	5	5	4	5	4.60	0.55	excellent
2. Assign instructor role consistent the principles of the model.	4	5	5	4	5	4.60	0.55	excellent
Total	4.00	5.00	5.00	4.00	5.00	4.60	0.55	excellent
Total of three issues	4.17	4.58	4.83	4.33	4.58	4.50	0.72	excellent

The results found that the five experts agreed that the PDSA model was appropriate at an excellent level (\bar{x} =4.50, S.D.=0.72). Mean of Element 1 Principles and Objectives of the Model was at a good level (\bar{x} =4.40, S.D.=0.37). Mean of Element 2, the teaching process of the model was at an excellent level (\bar{x} =4.51, S.D.=0.30). Mean of

Element 3 Important conditions for applying the model was at an excellent level (\bar{x} =4.60, S.D.=0.55) as shown in Table 4.

8. Conclusion

A PDSA instructional model was created for effectively increasing the public health students' speaking ability. This was needed due to the increased movement of people in ASEAN and also other countries and the need to efficiently communicate with them.

From the findings, it was found that the PDSA Model could develop English speaking skills of the students majoring in public health effectively. It enhances English speaking for public health students in order to use communication strategies to communicate and create negotiation in different situations. It will give students confidence in speaking English and it can be used in real situations. Teachers also can develop task-based activities integrated with communication strategies. Other studies have not used this model with public health students and speaking skills. They were focused on reading and writing. The results were concluded according to the research question as follows:

- 1) In the development of an instructional model integrated with TBL and CSs for enhancing English speaking skill of public health students, the results found that the procedures of the newly developed PDSA Model consisted of 4 components including planning task (P), doing task (D), speaking analysis (S), and assessing speaking activities (A). Moreover, there are many different ways of using English speaking communication strategies to communicate in order to negotiate various situations. The results found that there were 12 important communication strategies: 1) Approximation Strategy; 2) Word Coinage Strategy; 3) Circumlocution Strategy; 4) Appeal for Assistance Strategy; 5) Repetition Strategy; 6) Surfing Strategy; 7) Nonlinguistic Strategy; 8) Self-repair Strategy; 9) Literal Translation Strategy; 10) Languages-switch Strategy; 11) Fluency-oriented Strategy; and 12) Accuracy-oriented Strategy.
- 2) The effectiveness of the newly developed PDSA Model that enhances English speaking skill of public health students based on the assigned criteria was 80/80. The results found that the effectiveness of the PDSA Model (E1/E2) was at a high level (81.44/84.13).
- 3) The comparison of students' English speaking skill between pre-test and post-test after using PDSA Model, found that post-test mean score of the students' English speaking skill was significantly higher than the pre-test mean score. Moreover, qualitative data from the learning log form was also analyzed about the use of strategies. On the analysis used in the sample, the students were able to use English speaking strategies to perform their work in public health.

- 4) Public health students' satisfaction toward the PDSA Model, was found to be at an overall high level. Satisfaction toward the pattern of activities, the content of activities, and steps of teaching procedures of the model were similar at high levels.
- 5) The PDSA model validation results found that the five experts agreed that the PDSA model was appropriate at an excellent level to enhance English speaking skill for public health students. Mean of Element 1 (Principles and Objectives of the Model) was at a good level. Mean of Element 2 (the teaching process of the model) was at an excellent level. Mean of Element 3 (Important conditions for applying the model) was at an excellent level.

The implications of the research are that the PDSA model can give students more confidence in speaking in a workplace situation and can give them suitable strategies to enable them to navigate any communication problem they encounter. The practical nature of task-based learning can create a much more satisfying learning experience for students which should lead to better outcomes.

The results of this research show that the PDSA model can be used to develop English speaking skills for public health students. According to the assumptions, it may be compared to other teaching strategies or integrated with other teaching styles to improve reading, listening, and writing skills to achieve the most effective teaching styles in the future. A limitation of this study is the case study approach of only public health students and focused only on speaking strategies. A suggestion for further research may be to do similar research with different groups of students from different majors.

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