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การสำรวจกลยุทธ์การเรียนรู้คำศัพท์ของนักศึกษาไทยในสถาบันเทคโนโลยีไทย-ญี่ปุ่น

A SURVEY ON VOCABULARY LEARNING STRATEGIES OF THAI STUDENTS AT THAI-NICHI INSTITUTE OF TECHNOLOGY

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งานวิจัยนี้มีวัตถุประสงค์เพื่อ 1) ศึกษาพฤติกรรมการเรียนรู้คำศัพท์ 2) ศึกษาความสัมพันธ์ระหว่างพฤติกรรมการเรียนรู้คำศัพท์กับแผนการศึกษาในระดับมัธยมศึกษาของนักศึกษาชั้นปีที่หนึ่งสถาบันเทคโนโลยีไทยญี่ปุ่น เครื่องมือที่ใช้เก็บข้อมูลได้แก่ แบบสอบถามการใช้พฤติกรรมการเรียนรู้คำศัพท์และการสัมภาษณ์แบบกึ่งโครงสร้าง กลุ่มตัวอย่างประกอบด้วยนักศึกษาระดับชั้นปีที่หนึ่งสถาบันเทคโนโลยีไทยญี่ปุ่นจำนวน 100 คนซึ่งได้มาจากการสุ่มอย่างง่าย สถิติที่ใช้ในการวิเคราะห์ข้อมูลจากแบบสอบถามคือ ความถี่ ค่าเบี่ยงเบนมาตรฐานและการทดสอบค่าที ส่วนสถิติที่ใช้ในการวิเคราะห์ข้อมูลจากการสัมภาษณ์แบบกึ่งโครงสร้างคือ การวิเคราะห์เนื้อหา

ผลการวิจัยพบว่าโดยภาพรวมนักศึกษาสถาบันเทคโนโลยีไทยญี่ปุ่นใช้กลยุทธ์ในการเรียนรู้คำศัพท์ระดับปานกลาง (ค่าเฉลี่ย = 3.06) กลยุทธ์ที่ใช้บ่อยที่สุดคือ กลยุทธ์การเดา กลยุทธ์แบบพึ่งพาตัวเองและกลยุทธ์การใช้ดัชนีชี้แนะ และผลการวิจัยแสดงให้เห็นว่าการใช้พฤติกรรมการเรียนรู้คำศัพท์ของนักศึกษาแผนวิทย์และแผนศิลป์ไม่แตกต่างกันอย่างมีนัยสำคัญ

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Abstract

This study aims 1) to investigate vocabulary learning strategies and 2) to discover whether there are differences in vocabulary learning strategies used by science and art students of Thai first-year students at Thai-Nichi Institute of Technology. The main instruments were the use of vocabulary learning strategies questionnaire and semi-structure interview. Simple random sampling was employed to select a sample of 100 Thai EFL students from Thai-Nichi Institute of Technology. The data from questionnaires were analyzed using mean score, standard deviation and t-test analysis and the data from semi-structure interview were analyzed using content analysis.

The findings revealed that the overall usage of vocabulary learning strategies of Thai-Nichi Institute of Technology students was at a moderate level (mean = 3.06). They mostly used strategy of guessing, autonomy and dictionary to learn vocabulary and no significant differences existed in vocabulary learning strategies usage between the science and art students.

คำสำคัญ: กลยุทธ์การเรียนรู้คำศัพท์/ การเรียนรู้ด้วยตนเอง/ กลยุทธ์การเดา/ กลยุทธ์แบบพึ่งพาตัวเอง/ กลยุทธ์การใช้ดัชนี

KEYWORDS: VOCABULARY LEARNING STRATEGIES / SELF-DIRECTED LEARNING / GUESSING / AUTONOMY / DICTIONARY STRATEGIES

Introduction

Vocabulary learning has been of great interest to many researchers, scholars, and teachers in the linguistic fields since the late 1970s due to its indispensable role in second language learning and teaching (Liu, 2010). A rich knowledge of vocabulary is highlighted as crucial to language use because of its helpfulness in enhancing learners' comprehension and production of language. However, the result of insufficient vocabulary knowledge will be an obstacle in language learning, preventing learners from developing receptive and expressive language skills (Amirian & Heshmatifar, 2013). These, in turn, will affect negatively on learners' language proficiency especially among handicapped learners who already have difficulties in language learning (Manzo, A.V., Manzo, U.C., & Thomas, M.M. (2006). In brief, it can be clearly seen that vocabulary has a fundamental role in language learning. Thus, mastering a great deal of vocabulary will become an essential component of second language acquisition. Just as McCarthy mentioned that communication in either your own language or any language will not be achieved successfully by simply knowing grammatical rules or the sounds of a language, but knowledge of vocabulary as well (McCarthy, 1990). Consequently, a number of researchers, scholars and educators (Erten & Tekin, 2008; Amiryousefi & Ketabi, 2011; Siriganjanavong, 2013) have placed a great interest on how to enhance second language vocabulary acquisition among English as a Second Language or English as a Foreign Language learners. Although vocabulary learning has received wide attention in second language acquisition field, vocabulary instruction is still limited in the classroom setting (Taylor, Mraz, Nichols, Rickelman & Wood, 2009). This has placed a large

burden on English learners who have already struggled with a large number of unfamiliar vocabulary. Vocabulary learning, therefore, becomes a bottleneck for many English language learners including Thai learners (Jenpattarakul, 2012).

In Asian countries, little attention is paid to vocabulary instruction which is the same in Thailand. Most university's curriculum generally emphasize on four language skills such as listening, speaking, reading and writing. However, vocabulary is left to be learned incidentally by students (Fan, 2003). Concerning this issue, vocabulary learning strategies, therefore, have been suggested as an approach to help learners optimize their vocabulary knowledge and overcome difficulties from vocabulary learning. Vocabulary learning strategies not only enable learners to have self-directed learning (Nation, 2001; Oxford, 1990), the effective employment of vocabulary learning strategies will also raise learners' language proficiency, including helping learners to be more confident (Oxford, 1990).

Therefore, the present study would like to investigate vocabulary learning strategies a group of Thai students uses as well as examining if there is any difference between science and art students' vocabulary learning strategies usage. There are two research questions in this study: what are the vocabulary learning strategies of Thai first-year students at Thai-Nichi Institute of Technology in learning English language? And do the science and art students use different vocabulary learning strategies? The research will be useful to both teachers and learners. For teacher, an understanding of vocabulary learning strategies used among students will help teachers understand how students learn vocabulary. This information will enable teachers to plan and develop vocabulary instruction to suit with the needs and preferences of students from different academic backgrounds. For students, the list of vocabulary learning strategies will be a useful guideline for students to incorporate in their learning so that they can learn the target language more effectively and efficiently.

Definition of Learning Strategies

The definition of learning strategies has been defined and interpreted by different scholars in several ways based on their understandings and perspectives. For example, Tarone (cited in O'Malley & Chamot, 1990: 43) defines "learning strategies as an attempt to develop linguistic and sociolinguistic competence in the target language".

Moreover, Stern (cited in Ellis, 1994: 531) describes definition for learning strategies that "strategy is best reserved for general tendencies or overall characteristics of the approach employed by the language learner, leaving techniques as the term to refer to particular forms of observable learning".

Additionally, O'Malley and Chamot (1990: 1) view that learning strategies are "the special thoughts or behaviors that individuals use to help them comprehend, learn, or retain new information".

Similarly, Oxford (1990: 1) defines learning strategies as “actions, behaviors, steps, or techniques students use, often unconsciously, to improve their progress in apprehending, internalizing, and using the L2”.

Likewise, Ellis (1994: 530) explains a general definition of learning strategies as “A strategy consisted of mental or behavioral activity related to some specific stage in the overall process of language acquisition or language use”.

It can be concluded that the term vocabulary learning strategies has been used to refer to the particular ways of learning that learners use intentionally to facilitate their language learning and help them overcome problems from their learning.

Taxonomies of Vocabulary Learning Strategies

Although many researchers have been proposed the classifications of vocabulary learning strategies (Oxford, 1990; O'Malley & Chamot, 1990; Gu & Johnson, 1996; Schmitt, 1997; Nation, 2001), the categorization of vocabulary learning strategies developed by Jones (2006) has been applied in this study because his taxonomy is comprehensive, simple and concise which is appeared to be well understood by non-English major students. In his taxonomy, he classified the strategies into eight main groups as follows:

- 1) *Dictionary strategies* refer to looking up word meaning by using either monolingual or bilingual dictionary to discover the explicit and implicit meaning of words in the text, including part of speech and their functions in the sentences as well.
- 2) *Guessing strategies* refer to making use of existing or background knowledge, context clues to discover word meaning instead of asking others for help or looking up word definition in the dictionary.
- 3) *Study preferences* refer to determining the preferable way to study vocabulary, for example, by working independently, cooperating with others or consulting with the dictionary.
- 4) *Memory strategies* refer to a set of techniques which is used to help one store and retrieve vocabulary such as rehearsal and encoding strategies. A rehearsal strategy is a practice which involves recording a new vocabulary in the notebooks or cards, repeating words aloud and writing words repeatedly. While an encoding strategy is a practice which involves associating a new vocabulary that has a similar spelling or sound with a known vocabulary, using visual imagery, studying word-formation rules by looking at the word's prefixes, roots and suffix, grouping words based on categories (e.g., animal, food, weather), and remembering sentence in which word is used. Moreover, other strategies involve testing oneself by looking at either English word or its translation, translating English words into their language, and remembering the English definition.
- 5) *Autonomy* refers to taking charge of his or her own learning by exposing himself or herself to English environment outside of class such as reading English books, listening to English

music, watching English movies, or using learned words to talk to someone outside of class.

- 6) *Note-taking strategies* refer to making a note of words such as a commonly used word, word that is of interest to learners or word that is useful to learners. Also, included information such as word meaning, grammatical information, collections and example of words usages are noted down. The definitions of words can be written either in English or learner's first language.
- 7) *Selective attention* refers to taking responsible for their own learning processes such as setting a schedule for learning vocabulary, monitoring oneself progress in learning vocabulary and deciding which words are essential for learning language.
- 8) *Social strategies* refer to interacting with other people such as teachers, classmates or native speakers for definition of words.

Research into the Vocabulary Learning Strategies

A large number of researchers have been largely emphasized on how vocabulary is learned and what kind of vocabulary learning strategy does second or foreign language learners employ. In order to identify vocabulary learning strategy used among English as a Second Language or English as a Foreign Language learners, many researchers have conducted a study using either quantitative or qualitative approaches to collect data. Gu (2002) explored the pattern of strategy usage among 648 Chinese learners in their study, including investigating the relationships between the use of vocabulary learning strategies and two independent variables: gender and academic major. It was found that female learners employed more vocabulary learning strategies than male learners did. However, academic major was not a robust factor in determining vocabulary learning strategies usage among learners. Arts students only employed more note-taking strategies than science students. Science students, though, used analysis of word structure more than arts students.

Wu (2005), in a study involving 303 Taiwanese EFL learners, conducted a survey based upon Schmitt's (1997) study. The study found that three popular learning strategies used by Taiwanese students were electronic bilingual dictionaries, bilingual dictionaries and contextual guessing. Another researcher who conducted a study in a similar context was Liu (2010). She investigated vocabulary learning strategies used by 390 Chinese learners and its relationship to genders, grades and English proficiency. The results showed that the most used strategies for discover meaning were bilingual dictionary, vocabulary of the textbook, and resort to dictionary after guessing word meaning. While written repetition, oral repetition, and read word aloud and then write it were the most frequent used for consolidating meaning by all learners. Also, female students were appeared to employ more strategies than male counterparts. Furthermore, it was evidenced that strategy was more frequently used among high-achievers compared to low-achievers. Moreover, the researcher

found that grade of learners correlated positively with the use of vocabulary learning strategies since higher grade learners tended to employ more learning strategies than lower grade learners did.

In another survey research projects, vocabulary learning strategies usage among 95 Turkish learners were investigated by Celik and Toptas (2010). The findings revealed that the most commonly used strategies were determination strategies while the least commonly used strategies were cognitive strategies. In addition, the following researcher adopted the qualitative research design-an open-ended interview-to get a better understanding toward the strategy use. Asgari and Mustapha (2011) examined vocabulary learning strategies used among 10 Malaysian ESL students at University Putra Malaysia. The researchers found that the strategies such as guessing from the context, using monolingual dictionary, using media such as song, movie or TV to learn English language, and using newly learned words in everyday life were utilized frequently by English as a second language learners.

Additionally, Seddigh and Shokrpur (2012) tried to investigate the vocabulary learning strategies use by 120 university students in Iran. It was found that the learners used guessing and dictionaries strategies more than other strategies. Besides, it was found that female used more vocabulary learning strategies than male did. In a more recent experiment, Amirian and Heshmatifar (2013) made an investigation into vocabulary learning strategies of 74 Iranian EFL students at Hakim Sabzevari University. In their study, they concluded that contextual guessing and dictionary use were the most commonly used strategies, while asking teachers or peers for meaning was the least frequently used strategies.

In conclusion, there are a number of studies conducted in different countries where English is used as a second or foreign language. Most studies yield a variety of vocabulary learning strategy used among different learners such as dictionaries, guessing from the context and repetition. Thus, the present study aims to investigate Thai-Nichi Institute of Technology students' preference for vocabulary learning strategy usage and examine the differences in the use of vocabulary learning strategy between arts and sciences students so that teachers can employ an effective way of learning and teaching vocabulary in the classroom setting which can help learners improve vocabulary acquisition.

Objectives

1. To investigate vocabulary learning strategies used by the first-year students at Thai-Nichi Institute of Technology.
2. To discover whether there are differences in vocabulary learning strategies used by science and art students.

Methodology

Participants

The study employed both quantitative and qualitative research method to investigate the vocabulary learning strategies of Thai first year students at Thai-Nichi Institute of Technology. The population of this study was 1,201 first-year students who enrolled in intermediate English Course (ENL-101) on the first semester of the academic year of 2014. ENL-101 was a first year compulsory course offered for students who have already passed English Foundation Course. The class run twice a week for 1.30 hours at a time. The total sample of this study was 100 students who were selected from simple random sampling technique.

Table 1

Participant Distribution between students of arts and sciences

Arts	Sciences
Faculty of Business Administration	Faculty of Engineering
	Faculty of Information Technology
N = 50	N = 50

Research instruments

There were two research instruments used for collecting data. The first instrument was questionnaire and the second instrument was semi-structure interview.

The usage of Vocabulary Learning Strategies Questionnaire

The questionnaire was made use of vocabulary learning strategies adopted from Jones's (2006) study which was developed based upon other researchers (Fan, 2003; Gu & Johnson, 1996; Nation, 2001; O'Malley & Chamot, 1990; Oxford, 1990; Schmitt, 2000). There were

41 items in the questionnaire which were classified under eight categories as dictionary strategies, guessing strategy, study preferences, memory strategies, autonomy, note-taking strategies, selective attention and social strategies. The participants were asked to indicate if they used the particular strategy in the form of five-point likert scale ranging from I never or almost never do this (1) to I always or almost always do this (5).

Semi-structured Interview

Semi-structured interview was designed to obtain deeper understanding of the participant's vocabulary learning strategies usage as well as find out how vocabulary learning strategies should be taught and included in classrooms. The semi-structured interview consisted of 12 open-ended questions which were validated by three experts in English as

a Foreign Language field. The interview was conducted in Thai and audio-recorded with ten students at Thai-Nichi Institute of Technology.

Research Procedure

Data collection was carried out using questionnaire and semi-structure interview. The questionnaires were administered on August 14th, 2014 which took approximately 20 minutes of class time. In the beginning of the study, the questionnaires were distributed to 100 participants in order to identify their vocabulary learning strategy usage. The purpose of the survey and instructions on how to complete questionnaire were provided to ensure that all participants have a clear understanding of the questionnaire and can follow directions correctly. Moreover, the researcher informed the participants that their responses to the survey will be kept confidential and anonymous to reduce the likelihood that participants' responses will result from their expectations rather than their honest opinions. After that, ten participants were randomly and voluntarily selected for the follow-up interviews which were conducted in Thai to affirm participants' comprehension of the questions.

Data Analysis

After collection the data were computed using 20.0 version of Statistical Package for Social Sciences. The descriptive statistics was conducted to calculate mean score and standard deviation of overall vocabulary learning strategy usage. The means range of vocabulary learning strategy usage were interpreted using the criteria adopted from Best (1981) as follows.

Mean range	Level	Interpretation
1.00-1.49	Lowest	Students had the lowest usage of VLS
1.50-2.49	Low	Students had low usage of VLS
2.50-3.49	Moderate	Students had moderate usage of VLS
3.50-4.49	High	Students had high usage of VLS
4.50-5.00	Highest	Students had the highest usage of VLS

Then, T-test analysis was conducted to compare the mean score of the vocabulary learning strategies usage between students of arts and sciences. After that, the data obtained from semi-structure interview were analyzed using content analysis.

Results

The findings of the study were summarized into three parts: the vocabulary learning strategies used by Thai first-year students at Thai-Nichi Institute of Technology, comparison of vocabulary learning strategy usages between respondents with difference academic major and the results of semi-structure interview.

Part 1: The vocabulary learning strategies used by Thai first-year students at Thai-Nichi Institute of Technology

Table 2

Descriptive statistics for each Vocabulary Learning Strategy used by research samples

Strategies	Mean	SD	Level
Dictionary Strategies	3.18	.49	Moderate
Guessing Strategies	3.49	.99	Moderate
Study preference	3.16	.66	Moderate
Memory Strategies	2.99	.52	Moderate
Autonomy	3.19	.82	Moderate
Note-taking Strategies	2.94	.74	Moderate
Selective attention	2.79	.73	Moderate
Social Strategies	3.03	.82	Moderate
Total	3.06	.47	Moderate

Table 2 showed the descriptive statistics of the eight categories of vocabulary learning strategies used by research samples. The finding showed that all research samples used all vocabulary learning strategies at a moderate level ($\mu = 3.06$). The three most frequently used strategies were Guessing Strategies ($\mu = 3.49$), Autonomy ($\mu = 3.19$) and Dictionary Strategies ($\mu = 3.18$), followed by Study Preference ($\mu = 3.16$), Social Strategies ($\mu = 3.03$), Memory Strategies ($\mu = 2.99$) and Note-taking Strategies ($\mu = 2.94$) respectively. However, the least frequently used strategy was Selective Attention ($\mu = 2.79$).

Part 2: Comparison of vocabulary learning strategy usages between respondent with difference academic major

Table 3

Descriptive statistics for Vocabulary Learning Strategies based on academic major

Variable	Academic major	N	Mean	S.D.	t	Sig.
Dictionary Strategies	Science	50	3.18	.443	-.087	.931
	Arts	50	3.19	.541		
Guessing Strategies	Science	50	3.38	.987	-1.101	.273
	Arts	50	3.60	1.010		
Study preferences	Science	50	3.17	.650	.100	.920
	Arts	50	3.15	.677		
Memory Strategies	Science	50	3.04	.396	.812	.419
	Arts	50	2.96	.637		
Autonomy	Science	50	3.17	.768	-.268	.789

	Arts	50	3.21	.868		
Note-taking	Science	50	3.04	.620	1.432	.156
Strategies	Arts	50	2.83	.832		
Selective Attention	Science	50	2.91	.649	1.620	.108
	Arts	50	2.68	.785		
Social Strategies	Science	50	2.99	.829	-.486	.628
	Arts	50	3.07	.817		

**Statistical Significance at 0.5 level*

Table 3 showed the mean frequency of vocabulary learning strategies usage of the students from different academic background: arts and sciences. The result revealed that there were no statistically significant differences between respondents with difference academic major at 0.05 significant level.

Part 3: the results of semi-structure interview

According to semi-structure interview, nine of ten interviewees indicated using bilingual dictionary to find the meaning of new words and only three of them indicated using bilingual dictionary to find other information such as parts of speech, synonyms and example sentences. They gave their opinions that dictionary was reliable, quick and easy to understand. As one of students claimed that dictionary provided information that was one hundred percent correct. Similarly, nine interviewees reported using contextual guessing to discover meanings of unknown words. Some noted that they used the whole sentence as a guideline for guessing word meaning while some used sentence before and after a word that they didn't know as a cue. Another preferred vocabulary learning strategy of interviewees was study preference. More than half of them (N = 8) stated that asking friend for help was considered as the most preferable while only two of them indicated asking their parents or siblings. Additionally, the memory strategy "repeating a word to myself" was reported as the most frequently used by respondents (N = 8) compared to "grouping words based on categories" (N = 3) and "associating new vocabulary with known vocabulary" (N = 6). Autonomy, though, received little attention from interviewees (N = 5). Next, note-taking strategies were employed by all interviewees. One of them claimed that taking note can help her review words that she still cannot remember. However, selective attention strategies were rarely used by interviewees. Only two out of ten interviewees indicated planning how to learn vocabulary. One claimed that she memorized 5-10 new vocabulary per day. For social strategies, most of interviewees preferred studying with dictionary to themselves or friends. One of them mentioned that dictionary was more preferable as it gave more information than friends. Moreover, one interviewee claimed that she liked to use dictionary because it was on hand as she can pick it up whenever she wished to.

Additionally, interviewees gave their opinions toward vocabulary learning strategies instruction that teachers should teach how to use vocabulary learning strategies and let students try it out in class. After that, teachers should evaluate whether students understand and are able to perform it or not. If not, teachers should explain and give another chance to let students do it again. Some interviewees recommended that teacher should simply teach vocabulary learning strategies in class and then let students practice using it at home while some proposed that teachers should teach vocabulary learning strategies through music. However, some students pointed out that they wanted teachers to teach particular strategies that they were interested in such as memory strategies or note-taking strategies.

Discussion

According to the first research question, what are the vocabulary learning strategies of Thai first-year students at Thai-Nichi Institute of Technology (TNI) in learning English language? The result of this study showed that all students used vocabulary learning strategies moderately. The three most popular vocabulary learning strategies employed by all students from different academic backgrounds were guessing, autonomy and dictionary strategies respectively. The result was in line with Seddigh and Shokrpur's (2012) study with Iranian EFL learners in that using guessing and dictionary strategies were very popular among learners. Similarly, Wu (2005) concluded that guessing and dictionary strategies was used among Taiwanese EFL learners more frequently than other strategies. This was also consistent with the findings of Liu (2010) that guessing from the context and dictionary were a common strategy used among learners. Guessing strategy was reported as the most frequently used strategies among first-year students at Thai-Nichi Institute of Technology (TNI). The plausible explanation might be because many TNI students already acquired fairly competence in learning English language, therefore, they were likely to employ cognitive strategies such as contextual guessing more than any other strategies. This finding was relevant to what Gu and Johnson (2005) found out that higher proficiency learners were appeared to actively use contextual guessing strategies more frequently than lower proficiency learners did. Moreover, one of the students from the interview mentioned that she preferred guessing from context to consulting friends or using dictionary because this strategy can help her discover word meaning of an unknown word in the situation where she cannot ask others for assistance. Autonomy strategies were viewed as the second frequently used strategies among first-year students at Thai-Nichi Institute of Technology (TNI). This finding was in contrast with Cheng and Dörnyei's (2007) results who found autonomy strategies as the least used strategy in Taiwanese context. However, the popular use of autonomy strategies might be because TNI students had both intrinsic and extrinsic

motivation to learn English because they saw it as meaningful to their lives and future career, therefore, they tended to expose themselves to English environment outside the class. The result was in line with Schmidt and Watanabe (2001) claiming that motivation does affect learners' strategy usage as more motivated learners tend to use a large number of metacognitive strategies. In the interviews conducted in the current study, one of the students mentioned that she often exposed herself to English environment by accompanying her dad to meet foreign clients when dealing business. Regarding dictionary strategies which was ranked as the third most frequently used vocabulary learning strategies. This was because dictionary was the easiest way to find out the word meaning. It provided explanations about particular word in detail, including illustrated word usages in the sentence. This supported Asgari and Mustapha's study (2011) claiming that dictionary was in favor of language learners because dictionary can provide a lot of useful information such as definition, pronunciation, and function of words. One of students mentioned in the interview that, she often opted for dictionary because it was more reliable, quicker and provided a lot of useful information.

According to the second research question, do the science and art students use different vocabulary learning strategies? The result revealed that the academic major did not contribute much to the different use of vocabulary learning strategies. This was supported by Gu (2002) who concluded that academic major was not a potent factor in determining strategies in learning vocabulary among students. However, the finding of the current study was in contrast to Oxford and Nyikos's (1989) study who concluded that academic major was one of the factors influencing on vocabulary learning strategies usage. It might be possible that arts and sciences students didn't have different instruction on vocabulary learning strategies during their studies in high school. Both of them were appeared to have limited knowledge of vocabulary learning strategies as the findings from the interviews showed that interviewees often used basic strategies such as dictionary or memory to learn vocabulary. Moreover, many interviewees showed a doubt when they were asked to identify the type of vocabulary learning strategies they used the most because they didn't realize what they did as a strategy.

In conclusion, students mostly employed guessing strategies, autonomy and dictionary strategies to learn vocabulary. They realized the importance of learning vocabulary and tended to employ various learning strategies to tackle with unknown words even though they didn't realize them as strategies. In addition, there were similarities of vocabulary learning strategies usage between arts students and sciences students.

Recommendation for future research

According to the results discussed in this study, some suggestions are proposed for further study. First, the sample size of population should be bigger to generalize the reliability of the data. Second, other factors should be taken into account when analyzing the relationships between vocabulary learning strategies usage and academic background such as level of language proficiency, gender and age because all these factors might more or less affect the findings of the study. Third, the criteria used to select sample for interview should establish variety of participants' level of proficiency to offset the possibilities that the result will fall over particular group of students.

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