

RELATIONSHIP BETWEEN LANGUAGE LEARNING STRATEGIES USED BY PEKANBARU SENIOR HIGH SCHOOL STUDENTS AND THEIR ACADEMIC FACTORS

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ABSTRACT

This study is a mixed research of quantitative paradigm and qualitative paradigm. The objective of this study is to identify the relationship between language learning strategies used and academic factor by Pekanbaru senior high school students. An additional objective is to look at the difference language learning strategies used by students' academic background. The respondents (samples size) of this study are 400 senior high students in Pekanbaru. Ten students from the samples are chosen for the interview purposes. Quantitative data was collected by using Strategy Inventory for language Learning (SILL) by Oxford (1989). Descriptive and inferential statistics are used to analyze the quantitative data. The research finding reveals that there a significant difference among students' academic background in language learning strategies. The qualitative data gives additional information about the respondents' strategies to learn English in general and individual skills of English. The implication of this study is that although students are aware of several language learning strategies, they may need to be explicitly taught to use them.

BACKGROUND

The language learners with academic background –limited to the senior high school students– concentrated on two important language learning targets: a) the use of English and b) the score in the final national examination (2004 GBPP). Referring to the development of the ability of using the language, the current curriculum provides a framework to follow. They have to adopt the genre of the text–descriptive, narrative, procedure, explanation, discussion, exposition, review, news item, etc., before they practice speaking and writing (2006 GBPP). In addition, they are also required to master the materials offered in the final national examination (35 items for reading and 15 items for listening). To achieve both targets, the students employ certain language learning strategies in the classroom, out of the class, and in the national examination.

They commonly follow what the teachers assign them to do, for instance–underlining the variety of language expression in the text book, finding out the meaning of certain words (conceptual, structural, and contextual words) in the dictionary (Nuttall; 1980), and identifying types of questions linked to the written text. They are also asked to read authentic materials form certain English newspapers (*The Jakarta Post*, *The Indonesia Times*) and magazines (*Hello*). Besides, they are provided a break-through program, usually a few months before the national examination.

In other words, ways of learning English in Indonesia have been explicitly determined by the suggested approach of teaching from period by period of the curriculum practices (Tomlinson, 1990). For example, the students were asked to concentrate on correct practice in the classroom even though such kinds of practices were not acknowledged in workplaces (Prabhu: 1994). Another example was that the students memorized the meaning of the words in the text book in order to understand the content of the text and its vocabulary items. This way was followed by memorizing short dialogues in the text book for the purpose of speaking activities in the classroom. For the writing activity, the students imitated a certain model of written text in order to compose his/her own writing. For listening, the students read the transcription of the spoken text. In addition, the spoken texts were spelled out more than one time until they understood the ideas of the text.



Several recent studies have shown that the practices of language learning strategies have made learning language (including English) more efficient and produced a positive effect on learners' language use (Wenden & Rubin 1987; O'Malley & Chamot 1990; Chamot & O'Malley 1994; Oxford 1996; Cohen 1998). In line with it, the right choice of language learning strategies leads language learners to improve proficiency or overall achievement or in specific language skill areas (Wenden & Rubin 1987; Oxford & Crookall 1989; O'Malley & Chamot 1990).

RESEARCH OBJECTIVE

The objective of this study is to determine whether there are significant differences among students from social science, natural science, language science, engineering science, and entrepreneur science background in language learning strategies use.

RESEARCH QUESTION

This study is designed to answer the following research question (RQ): Is there any significant difference among students from social science, natural science, language science, engineering science, and entrepreneur science background in language learning strategies use?

HYPOTHESIS

There are no significant differences among students from social science, natural science, language science, engineering science, and entrepreneur science background in language learning strategies use.

LANGUAGE LEARNING STRATEGIES (LLS)

1. Definition

A very basic element in defining language learning strategies is the concept of the strategy itself (Chesterfield & Chesterfield 1985). Based on this, there are various definitions of language learning strategies formulated by researchers in relation to English as a second language (L2) or foreign language (FL). The terms of learning strategies and learning behaviors can be interchangeably used in this study (Mohamed Amin Embi 2000). On the other hand, learning strategies and learning techniques may not be used for similar purpose(s) (Stern 1983).

Tarone (1983) based her definition on the context of the use of communication strategies in which mutual attempt of two interlocutors agree on a meaning in situations where requisite meaning structures do not seem to be shared. Then, she differentiates communication strategy from production strategy in which one linguistic system is used efficiently and clearly. She also makes clear the distinction between communication strategy and learning strategy by which developing linguistic and socio-linguistic competence occurred in the target language. On the other hand, Tarone (1987) ascertains the impossibility of separating communication strategies and learning strategies because of the following reasons: (a) it is difficult to measure the individual's purposes whether it is communication or learning; (b) the purpose might be both; and (c) even if the person just wants to communicate and not to learn, learning often occurs anyway.

Some researchers use more terms for the word 'strategy' like: (a) steps and operations (Oxford 1989); and (b) any specific action (Oxford 1990b). On the other hand, to a certain extent, the same can be said about other researchers (Ehrman 1989; Nyikos 1989 & 1990; Chamot 1987 & 1990; Donato & McCormik 1994; Abdullah Hussein El-Saleh El-Omari 2002).

Rubin (1975) defines language learning strategies as the techniques or devices that learners use to acquire second language knowledge. According to Stern (1975) Language Learning Strategies are some general order higher approaches to learning which govern the choice of specific techniques. In addition, Naiman *et al.* (1978) define Language Learning Strategies as generally more or less deliberate approaches to learning. Rubin (1987) states that Language Learning Strategies are set of operation, steps, plans, and



routines of what learners do to facilitate the obtaining, storage, retrieve, and use of information to regulate learning. Wenden (1987) refers to language learning strategies as behaviors where learners engage in, and regulate a second language learning. Chamot (1987) define LLS as techniques, approaches, or deliberate actions that students take in order to facilitate the learning and recall of both linguistic and content area information.

2. Characteristics of Language Learning Strategies

In several noted of research activities, the term language learning strategies reveals at least in three different expressions: (a) learner strategy (Wenden & Rubin 1987) (b) learning strategies (O'Malley & Chamot 1990; Chamot & O'Malley 1994), (c) language learning strategies (Oxford 1990a, 1996; Abdullah Hussein El Saleh El-Omar 2002); learning strategies and/or learning behaviors (Mohamed Amin Embi 2000). In addition, there might be two basic ways of classifying the language learning strategies: (a) six major characteristics created by Wenden (1987) and (b) four new modification characteristics formulated by Lessard-Clouston (1997).

Wenden (1987) classifies the characteristics of language learning strategies into at least six elements: (a) specific actions or techniques; (b) observables activities; (c) problem oriented; (d) contribute directly or indirectly to learning; (e) automatized employment after a prolonged period; and (f) amenable behaviors to change. Similarly, Lessard-Clouston (1997) created four criteria which refer to : (a) learner generated activities (steps taken by the learners); (b) learner enhanced language learning or help develop language competence; (c) learners' visible actions (behaviors, steps, techniques, etc.) or unseen things (thought and mental processes); (d) the involvement of information and memory of the learners. In line with the two groups of classifications, Oxford (1990a) introduces more components which allow learners to become more self-directed, expand the role of language teacher to problem-oriented, involve in many aspects (cognitive, metacognitive, and socio-affective strategies). Reviewing the above characteristics, we might be able to predict the types of language learning strategies used by the secondary school students of Pekanbaru.

Oxford (1990) characterized language learning strategies as i) contribute to main goal, communicative competence, ii) allow learners to become self-directed, iii). expand the role of teachers, iv) problem-oriented, v) are specific actions taken by the learner, vi) involve many aspects of the learner, not just the cognitive, vii) support learning both directly or indirectly, viii) are not always observable, ix) are often conscious, X) can be taught, xi) are flexible, and xii) are influenced by a variety of factors.

3. Factor affecting language learning strategies

Indonesian secondary schools are divided into three types: general schools, vocational schools, religious (commonly Islamic) schools. In general schools, three majors can be chosen: natural science, social science, and language. In vocational schools, several majors are offered-economics, home industry, and technical skills. While under the Islamic schools-three majors are also offered-religious education, social science, and natural science based by several religious subjects. In this study, the chosen majors by the students will be investigated under the academic factors that affect LLS.

English is offered to all majors-90 minutes per-week for sixteen weeks in one semester. To a certain extent, the allocation of time is not so sufficient in order to increase the students' English proficiency. However, the schools may provide extra hours of classes. Three months before the national final examination, the schools run a special program which concentrates on reading skills and listening skills(the decree of Ministry of Education number 45, 2006/2007).

Running such a program has at least two objectives: (a) to achieve a minimum passing rate in the national final examination, and (b) to obtain the TOEFL score of 450 at higher education (e.g. University of Riau, Pekanbaru, Indonesia). The mastery of those two skills (structure and vocabulary items) allows the students to get ideas of texts written in English in their own field of study at tertiary



levels.

RESEARCH INSTRUMENT

Research Instrument for Quantitative Data

Strategy Inventory for Language Learning (SILL) (Oxford, 1989) is used to collect the data of how respondents learn English at Pekanbaru senior high schools.

Research Instrument for Qualitative Data

Interview is done in order to get additional information on how selected respondents (10 respondents) learn English in general and individual skills of English.

ANALYSIS OF DATA

1. Analysis of Quantitative Data

To analyze the collected data, several procedures were followed. First of all, scoring the response of the respondents in the given questionnaires, and interviews. Afterwards, it shows the relationship between academic factors and language learning strategies use.

Scoring the Response of the Respondents in the Given Questionnaire

The questionnaire used is Strategy Inventory for Language Learning (SILL). The SILL produced by Oxford (1990). Each statement has five choices : 1. Never or almost never true of me; 2. Generally not true of me; 3. Somewhat true of me; 4. Generally true of me; and 5. Always or almost always true of me. The answers of the respondents were scored as the following. Choice 1 is scored 1, 2 is 2, 3 is 3, 4 is 4, and 5 is 5. The SILL consists of 6 parts with 50 statements. The sum of the whole parts is divided into 50 in order to get the average of the respondent's response.

The Use of Descriptive Statistics Analysis

Descriptive statistics was used in order to get the central tendency (mean, median, and mode) (John W. Cresswell: 2005) of the response of the respondents in using the category of language learning strategies (memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies, and social strategies).

The mean score of the respondents' level of each Language Learning Strategies was calculated and this mean score indicated the respondents' overall self-report on their own level of strategy used. In order to interpret the mean score, this study refers to interpretation of Likert scale in Strategy Inventory for Language Learning (SILL) by Oxfords (1989) as shown in Table 1.

Table 1. Interpretation of Mean Score

Mean Score	Interpretation
3.5 to 5.0	High
2.5 to 3.4	Medium
1.0 to 2.4	Low

Language Learning Strategies, what every teacher should know, Rebecca L. Oxfords (1989), Boston, Massachusetts.

The students' mean score of each item and construct collapse into three new groups, as seen in Table 1 Mean score within 1.00 to 2.4 is categorized as low level in language learning strategies, and mean score within 2.5 to 3.4 falls under the medium level. If the mean score falls within 3.5 to 5.0, the level of learning strategies is high.

The Use of Inferential Statistic Analysis

Inferential statistics was used to investigate the phenomenon of relationships and differences

among different characteristics of the sample. The inferential statistics analysis used in this study includes One-Way ANOVA. The Use of One Way ANOVA.

ANOVA was used to test hypothesis 2 and hypothesis 5 in comparing the differences among three or more independent variables on a single variable in each hypothesis (see the earlier research design). The alternative hypothesis is accepted (see 1.5 in Chapter One) if the calculated value is smaller than table value with the level of significance $p < .05$ (Ferguson: 1976 & Gall *et.al*: 2003).

2. Analysis of Qualitative Data

The 10 students as purposive sampling were interviewed about the ways they learn English in general and language skills (listening, speaking, reading, writing, structure and vocabulary). Most of the given responses were in Bahasa Indonesia, and some, in the local language. The taped-interview was transcribed into Bahasa Indonesia or local language as necessary. The transcript was translated into English.

Steps of Qualitative Analysis

The findings were saliently used to support the quantitative data. The analysis investigated indicators related to language strategies used by the students. In general, the steps of analysis taken were referred to Miles & Huberman (2004:9). They stated that qualitative analytic practices and techniques follow the steps below; affixing codes, noting reflections or other remarks, sorting and shifting ...to identify similar phrases, relationships between variables, patterns, themes, distinct differences between subgroups and common sequences, isolating these patterns and processes, commonalities and differences, elaborating a small set of generalizations, and confronting those generalization (Miles & Huberman, 2004).

The process of data interpretation was interactive and involved data reduction, examination and conclusion verification by: looking for comments that described the ways language skills were acquired, looking for comments that indicated strategies of language learning, looking for new strategies that might not be included in this study.

Respondents' Profiles

Table 2 Distribution of Respondents by Academic Background

No	Academic Background	Frequency	Percentage
1.	Natural Science	120	30.0
2.	Social Science	120	30.0
3.	Language Science	40	10.0
4.	Engineering Science	60	15.0
5.	Entrepreneurial Science	60	15.0
	Total	400	100.0

Table 2 shows the five different majors involved in this research. There were 120 students each from Natural Science and Social Science, 60 from Engineering Science and Entrepreneurial Science and 40 from Language Science. The total number is 400 students. The interview respondents are selected 10 students from the sample size.

QUANTITATIVE DATA ANALYSIS AND FINDINGS

Table 3. Analysis ANOVA field of Study Across Learning Strategies

Table 3 displays that the different of mean score of cognitive strategies was different between social science students and entrepreneurship science students. Social science students obtained higher mean score in cognitive strategy than entrepreneur science students (mean difference = .098, sig. = .047 < .05). However, there is no difference in using cognitive strategies between other groups of students. The findings

Table 3. Analysis ANOVA field of Study Across Learning Strategies

Dependent Variable	Science Group	Mean	Source	Sum of Squares	DF	Mean Square	F	Sig.
Memory	Natural	3.06	Between Groups	.172	4	.043	.707	.588
	Social	3.06	Within Groups	24.050	395			
	Language	3.03	Total	24.222	399			
	Engineering	3.00						
	Entrepreneurial	3.03						
	Total	3.04						
Cognitive	Natural	3.17	Between Groups	.327	4	.158	2.73	.029
	Social	3.21	Within Groups	38.741	395			
	Language	3.22	Total	39.068	399			
	Engineering	3.13						
	Entrepreneurial	3.11						
	Total	3.17						
Compensation	Natural	3.12	Between Groups	.327	4	.082	.833	.505
	Social	3.16	Within Groups	38.741	395			
	Language	3.20	Total	39.068	399			
	Engineering	3.10						
	Entrepreneurs	3.14						
	Total	3.14						
Meta-Cognitive	Natural	3.21	Between Groups	.283	4	.071	.999	.408
	Social	3.21	Within Groups	27.942	395			
	Language	3.16	Total	28.225	399			
	Engineering	3.18						
	Entrepreneurial	3.14						
	Total	3.19						
Affective	Natural	3.06	Between Groups	.684	4	.171	1.60	.173
	Social	3.06	Within Groups	42.222	395			
	Language	3.03	Total	42.907	399			
	Engineering	3.00						
	Entrepreneurial	3.03						
	Total	3.04						
Social	Natural	3.17	Between Groups	.265	4	.066	.605	.659
	Social	3.21	Within Groups	43.208	395			
	Language	3.22	Total	43.472	399			
	Engineering	3.13						
	Entrepreneurial	3.11						
	Total	3.17						
Lang. Learning Strategies	Natural	3.12	Between Groups	.156	4	.039	2.63	.034
	Social	3.16	Within Groups	5.827	395			
	Language	3.20	Total	5.983	399			
	Engineering	3.10						
	Entrepreneurial	3.14						
	Total	3.14						



also show that social science students obtained higher mean score of overall learning strategies than entrepreneurial science students (mean difference=.058, sig.=.045<.05), yet there is no difference in mean score of overall language strategy among others group of students according to field of study.

Table 4. *Pos Hoc Test* of ANOVA: The Differences in Language Strategy Between Students According to Fields Of Study

Dependent Variable	Field(I)	(J) Field	Mean Difference	Std.Error	Sig.		
Cognitive	Natural Science	Social Science	-.044	.031	1.00		
		Lang. Science	-.054	.043	.980		
		Eng. Science	.042	.038	1.00		
		Entr. Science	.054	.038	.980		
	Social Science	Lang. Science	-.009	.043	1.00		
		Eng. Science	.086	.038	.227		
		Entr. Science	.098*	.038	.047		
	Lang. Science	Eng. Science	.096	.049	.501		
		Entr. Science	.108	.049	.278		
	LLS	Eng. Science	Entr. Science	.011	.043	1.00	
			Natural Science	Social Science	-.024	.015	1.00
				Lang. Science	-.014	.022	1.00
Eng. Science				.018	.019	1.00	
Entr. Science		Lang. Science	.030	.019	1.00		
		Social Science	.009	.022	1.00		
Social Science		Lang. Science	.009	.022	1.00		
		Eng. Science	.042	.019	.263		
		Entr. Science	.054*	.019	.045		
Lang. Science		Eng. Science	.033	.024	1.00		
	Entr. Science	.045	.024	.662			
Eng. Science	Entr. Science	.012	.022	1.00			

Table 5. The Summary of Hypothesis Testing

HYPHOTESIS	TYPE OF ANALYSIS	DECISION
There is nosignificant difference among students from social science, natural science, language science, engineering science, and entrepreneurial science background and language learning strategies use.	Two-ways ANOVA	Rejected

QUALITATIVE DATA ANALYSIS AND FINDINGS

Table 6 presents several important data about how to learn English in general. First of all, the natural students use the strategy of being active in various activities as the highest frequency among all strategies. While, the social science student practice the strategy of discussing lesson with English teacher



and friends as the highest frequency.

It seems that most natural students also use the discussion strategies together with attending class meeting regularly strategies. Attending class regularly strategies are compulsory strategies to be done at Pekanbaru senior high school. The discussion strategies can be regarded as creative activity of the students when they are joining any classroom program.

The same strategy is used by the natural students as the second priority. In similar, the social science students practice the strategy of reading various English sources as the second one. In line with

Table 6. Strategies used by the respondent in learning English in general based on academic background.

Natural Science									Social Science						
No	Strategies used	R1	R3	R4	R5	R9	R10	F	No	Strategies used	R2	R6	R7	R8	F
1	Keep studying English outside school and at school	1		1	1		2	5	1	Keep studying English outside school and at school	1	1	1		3
2	Singing a song	1						1	2	Searching various English sources	2	1	2		5
3	Discussing lesson with English teacher and friends	2	2	1	1	2	1	9	3	Concentrating to the lesson	1	1		1	3
4	Listening to various learning sources	1	1	1		1	2	6	4	Reading various English sources	1	2	2	2	7
5	Concentrating to the given lesson	1	2	1	1		1	6	5	Discussing lesson with English teacher and friends	3	1	2	2	8
6	Reading various English sources	1	1	1	2			5	6	Joining an English course		1	1		2
7	Finding various English sources	2	1	2	1	1		7	7	Practicing by doing exercise		1	1		2
8	Being active in various activities		3	4	5	2	2	16	8	Getting more English competence				1	1
9	Enriching new English words		1		1	1		3	Total						31
10	Joining an English course			1			1	2	Average						7.8
11	Making a short comic, cartoon, and using English in the conversation				1			1							
12	Writing vocabulary in a small paper				1			1							
13	Reading the framework of the text					1		1							
14	Watching lot of movies					1		1							
15	Blending multiple sources into one package					1		1							
Total								65							
Average								10.8							

the practices of those strategies, both group of students use the same strategy to learn English in general like joining an English course and keeping studying English outside school and at school but in less frequency.

The strategies of joining English course outside school are one the most popular strategies among students in Pekanbaru senior high school. Most students regard that taking English course is a short way strategy to cope the basic problem in learning English. Even, in certain occasion, taking English course is more effective to master basic English compared to joining English lesson regularly in the class.

In addition, the natural science students use 10.8 strategies in average while the Social Science students practice as many as 7.8 strategies. It means that the natural science students used more strategies compared to the social science students do.

In short, it can be restated that the students use several preferred strategies to learn English in general. The strategies are discussing lesson with English teachers and friends, trying to be active in any discussion, joining an English course, listening to music and, singing a song.

Due to the limited pages suggested by the committee, tables which present the qualitative data about the use of language learning strategies in listening, speaking, reading, writing, vocabulary, and structure are not performed.

Strategies used by the respondent in learning listening skill based on academic background

Several important aspects for the natural science students and the social science students to listening skill. Both groups of students tend to choose a little bit similar strategies as the highest frequency. The strategies are focusing on listening ideas of listening text (by the natural science students) and concentrating to the spoken text (by the social science students). In addition, the two groups of students also choose a little similar strategies as the second prior strategies. The strategies are answering the question correctly (by the natural science students) and answering the question related to the information (by the social science students).

The students from both group – nature science and social science – put emphasis on understanding ideas of a spoken text to learn listening. The strategy is supported by various activities like acknowledging different voice in a conversation, paying attention to gesture, especially in a conversation – and knowing the aim of the questions related the spoken text.

In term of the average number of strategies practice, by Natural Science students use 5.8 strategies while the Social Science students practice only 5 strategies. It means the Natural Science students used more strategies compared to the Social Science students.

Strategies used by the respondent in learning speaking skill based on academic background

There are several data that support the natural science students and the social students to learn speaking skill. First of all, the natural science students use two strategies as the highest frequency among their strategies. The strategies are doing the best to speak in class and preparing vocabulary as many as possible to speak. One of both strategies is also used as the highest frequency by the social science students that are preparing vocabulary as many as possible to speak. In addition, both groups of students also use a little bit the same strategies as second priority by the social science students and at least frequency by the natural science students. The strategies are practicing speaking whenever possible (by the social science students) and practicing them in speaking.

It seems that understanding the meaning of certain number of vocabulary of vocabulary items is regarded as main strategy to do speaking activity by both groups of students. Based on such understanding the students have strong willingness to express their ideas in spoken form whenever possible. Finding an interesting topic is also an important strategy before they do speaking activity. Practicing what they have



learned is the common strategy to make their speaking better than before.

In term of the average number of strategies practice, the Natural Science students use only 2.8 strategies while the Social Science students practice 7 strategies. It means the Natural Science students used more strategies compared to the Social Science students.

Strategies used by the respondent in learning reading skill based on academic background

Several important data to support the natural science students and the social science students to learn reading skill. The social science students use two kinds of strategies as the highest frequency. The strategies are reading aspects of the text and doing exercise of reading. In line with those two strategies, the natural science students use a little bit similar strategy that is about mastering kinds of ideas of the text (one of the reading aspects). Most of the students from both groups put emphasis on getting ideas of the text as main strategy to learn reading. By then, the students come to the following strategy that is acknowledging the purpose of related questions beneath the text. In this context, the students commonly just relate what a certain component of the question to a specific idea in a reading text.

Strategies used by the respondent in learning writing skill based on academic background

In term of the average number of strategies practice, the Natural Science students use 2.2 strategies while the Social Science students practice only 2 strategies. It means the Natural Science students used more strategies compared to the Social Science students.

There are several valuable data to support the natural science students and the social science students to learn writing skill. First of all, the social science students practice three strategies as the highest frequency. The strategies are gathering sources related to the topics, developing ideas to write, and doing writing procedurally. In line with those practices, one of the strategies is the same as the choice of the natural science students to use as the highest frequency. The strategy is doing writing procedurally. In addition, both two groups of the students use a little bit similar strategies as the second prior choice. The strategies are trying to write and trying to imagine the object and develop it. Besides, both groups use the same strategies as the least frequency. The strategies are making bubble network.

Most of the students from both groups do certain strategies in order to do writing activity. The strategies are gathering ideas, discussing ideas to friends, constructing an outline, and developing two outlines, collecting certain facts to support the statements.

In term of the average number of strategies practice, the Natural Science students use only 4.3 strategies while the Social Science students practice 4.7 strategies. It means the Social Science students used more strategies compared to the Natural Science students. R1- I usually write.

Strategies used by the respondent in learning vocabulary based on academic background

There are some important data to support the natural science students and the social science students to learn vocabulary items. First of all, both groups of the students use the same strategies as the highest frequency. The strategies are using vocabulary in various language activities. In addition, they also use the same strategies as the second prior strategies. The strategies are reading various English sources. Most of the students from both group concentrate to how to enrich the vocabulary items and use them in appropriate context. The two strategies go hand in hand in order to master as many as possible the vocabulary items.

In term of the average number of strategies practice, the Natural Science students use 3.8 strategies while the Social Science students practice 3.5 strategies. It means the Natural Science students used more strategies compared to the Social Science students.



Strategies used by the respondent in learning structure based on academic background

There are several data which support the natural science students and the social science students to learn structure. First of all, both groups of the students use different strategies as the highest frequency. The strategies are doing exercise in the form of answering the questions, combining clauses and composing sentences and correcting mistakes. In addition, they also use a little bit similar strategies as the least frequency. The strategies are reading the sentences and check their patterns (by the natural students) and reading a book and using a book.

Most of the students from both groups make prior strategy to learn the structure by acknowledging the structure construction by checking its structure pattern. In a context of closing the answer, choosing the best one which shows the appropriate element of a sentence is also regarded as an important strategy.

In term the average number of strategies practice, the Natural Science students use 5.2 strategies while the Social Science students practice only 4 strategies. It means the Natural Science students used more strategies compared to the Social Science students.

In short, the strategies are doing the best to speak in class, preparing vocabulary as many as possible to speak, reading aspects of the text, doing exercise of reading, mastering kinds of ideas of the text (one of reading aspects), gathering sources related to the topics, developing ideas to write, and doing writing procedurally, using vocabulary in various language activities, doing exercise in the form of answering the questions, combining clauses and composing sentences and correcting mistakes.

THE DISCUSSION OF FINDINGS

The Strategies Used of SILL and English Language Skills

Based on the data presentation in Table 3 shows that the overall mean of using SILL is 3.15 with mean score of each academic background ranges from 3.10 (for engineering students) to 3.20 (for language students). It can be concluded that the null-hypothesis is rejected. This means that there are significant differences among students from social science, natural science, language science, engineering science, and entrepreneur science background and language learning strategies used.

In terms of academic background as indicated in above various tables show that the respondents preferred a number of strategies to learn the various skills of English. The strategies include focusing on listening ideas of listening text, concentrating to the spoken text, finding interesting ideas to explain in class, preparing as many vocabulary as possible to speak for similar level, reading aspects of the text, using vocabulary in various language activities, using the patterns of English, and learning structure through understanding the rule of language.

Based on the data presentation in Table 3 shows that the overall mean using SILL is 3.15 with mean score of each academic background ranges from 3.10 (for engineering students) to 3.20 (for language students). It can be concluded that nul-hypothesis is rejected. This means that there are significant differences among students from social science, natural science, language science, engineering science, and entrepreneur science background in language learning strategies used.

As described by Brint (1998), the schools' demand at present time is rising due to the changes in the kinds of occupation in industrialized societies. Employers began to look for more qualified workers with a good payment for the position of sophisticated problem-solving skills and more specialized intellectual training. Dealing with the schools stream in Pekanbaru, the students from language field of study proved to obtain the highest average score of doing SILL among five academic background. They are more serious in answering the items due to the familiarity of the content of SILL to them. Most of these students want to be qualified language teachers (mostly English teachers) from qualified Language Department of Faculty of Education. Few of them wants to be English lecturers or qualified workers in foreign companies in Indonesia or elsewhere.

In relation to the above finding, some studies reported similar findings and different findings in

worldwide. The similar findings are as follows: Chou Yu-Chen (2002) investigated 474 Taiwanese technological and vocational college students that used SILL. The study found that higher proficient learners use more strategies. He also found that students majoring in foreign language use greater number of strategies compared to nursing major students in Taiwan.

Strategies Used by the Students from Academic Background Factor

Dealing with the earlier five tables, there are several important information can be drawn about how academic background learn individual skill of English at Pekanbaru senior high schools. The qualitative finding of each skill is compared to the related finding of quantitative data:

- (1). Learning listening skill, both groups of students tend to choose a little bit similar strategies as the highest frequency. The strategies are focusing on listening ideas in listening text (by the natural science students) and concentrating to the spoken text (by the social science students). In addition, the two groups of students also choose a little similar strategies as the second prior strategies. The strategies are answering the question correctly (by the natural science students) and answering the question related to the information (by the social science students). The use of those strategies means that both group of students still need a lot of exercise to listen to ideas relationship in the text. By mastering this particular matter, they will be easy to get the focus of the text and any information in it. In term of the average number of strategies practice, by Natural Science students use 5.8 strategies while the Social Science students practice only 5 strategies. It means the Natural Science students used more strategies compared to the Social Science students. The students from both group – nature science and social science – put emphasis on understanding ideas of a spoken text to learn listening. The strategy is supported by various activities like acknowledging different voice in a conversation, paying attention to gesture, especially in a conversation – and knowing the aim of the questions related the spoken text.
- (2). Learning speaking skill, both groups of students tend to choose a little bit similar strategies as the highest frequency. The strategies are focusing on listening ideas in listening text (by the natural science students) and concentrating to the spoken text (by the social science students). In addition, the two groups of students also choose a little similar strategies as the second prior strategies. The strategies are answering the question correctly (by the natural science students) and answering the question related to the information (by the social science students). The use of those strategies means that both group of students still need a lot of exercise to listen to ideas relationship in the text. By mastering this particular matter, they will be easy to get the focus of the text and any information in it.

In term of the average number of strategies practice, by Natural Science students use 5.8 strategies while the Social Science students practice only 5 strategies. It means the Natural Science students used more strategies compared to the Social Science students. It seems that understanding the meaning of certain number of vocabulary of vocabulary items is regarded as main strategy to do speaking activity by both groups of students. Based on such understanding the students have strong willingness to express their ideas in spoken form whenever possible. Finding an interesting topic is also an important strategy before they do speaking activity. Practicing what they have learned is the common strategy to make their speaking better than before.

- (3). Learning reading skill, the social science students use two kinds of strategies as the highest frequency. The strategies are reading aspects of the text and doing exercise of reading. In line with those two strategies, the natural science students use a little bit similar strategy that is about mastering kinds of ideas of the text (one of the reading aspects). Most of the students from both groups put emphasis on getting ideas of the text as main strategy to learn reading. By then, the students come to the following strategy that is acknowledging the purpose of related questions beneath the text. In this context, the students commonly just relate what a certain component of the question to a specific idea in a reading



text. In term of the average number of strategies practice, the Natural Science students use 2.2 strategies while the Social Science students practice only 2 strategies. It means the Natural Science students used more strategies compared to the Social Science students.

- (4). Learning writing skill, the social science students practice three strategies as the highest frequency. The strategies are gathering sources related to the topics, developing ideas to write, and doing writing procedurally. In line with those practices, one of the strategies is the same as the choice of the natural science students to use as the highest frequency. The strategy is doing writing procedurally. In addition, both two groups of the students use a little bit similar strategies as the second prior choice. The strategies are trying to write and trying to imagine the object and develop it. Besides, both groups use the same strategies as the least frequency. The strategies are making bubble network. The use of those strategies by both group of students means that they need clear ideas in order to write in a good order in a composition. Doing a good composition, they still need support from other persons who have the same problem with them. In term of the average number of strategies practice, the Natural Science students use only 4.3 strategies while the Social Science students practice 4.7 strategies. It means the Social Science students used more strategies compared to the Natural Science students. R1-I usually write. Most of the students from both groups do certain strategies in order to do writing activity. The strategies are gathering ideas, discussing ideas to friends, constructing an outline, and developing two outlines, collecting certain facts to support the statements.
- (5). Learning vocabulary items, both groups of the students use the same strategies as the highest frequency. The strategies are using vocabulary in various language activities. In addition, they also use the same strategies as the second prior strategies. The strategies are reading various English sources. Most of the students from both group still concentrate to how to enrich the vocabulary items and use them in appropriate context. The use of the two strategies goes hand in hand in order to master as many as possible the learned vocabulary items.
- (6). Learning structure, both groups of the students use different strategies as the highest frequency. The strategies are doing exercise in the form of answering the questions, combining clauses and composing sentences and correcting mistakes. In addition, they also use a little bit similar strategies as the least frequency. The strategies are reading the sentences and check their patterns (by the natural students) and reading and using a book. This means both group of students still need clear information about the type of sentence (simple sentence and combination of simple sentence) from various Structure Books. By doing those strategies, they will be easy to do the structure exercises. In term the average number of strategies practice, the Natural Science students use 5.2 strategies while the Social Science students practice only 4 strategies. It means the Natural Science students used more strategies compared to the Social Science students. Most of the students from both groups make prior strategy to learn the structure by acknowledging the structure construction by checking its structure pattern. In a context of closing the answer, choosing the best one which shows the appropriate element of a sentence is also regarded as an important strategy.

THE USE OF SILL BY ACADEMIC BACKGROUND FACTOR AND ITS IMPLICATION

There are significant differences among students from social science, natural science, language science, engineering science, and entrepreneur science background and language learning strategies used with the mean score of each academic background ranges from 3.10 (for engineering students) to 3.20 (for language students).

The implication of this finding is as the following. The students from various academic backgrounds are still possible to enhance their knowledge about the main factors of SILL. They should grasp the ideas of each factor, followed by the detail idea in items, the students will be more flexible to practice the six broad strategies in learning English at school or out of school. The English teachers should explicitly inform the students about the ideas of each item in SILL. In turn, they will obtain higher score of SILL.

THE IMPLICATION OF THE FINDING

The implication of the finding is as follows. The students from academic background use certain strategies to learn individual skills of English. They still highlight some elements like the mastery, structure rules, and ideas of the text as crucial factors to own. Based on the facts, the English teachers should equip them with such amount of knowledge which directly enhance them in order they are able to learn those language skills efficiently. In addition, the students among five group of academic should have a cooperative activities by which they are possible to work together to solve the problems of learning English.

SUGGESTIONS FOR FURTHER STUDY

Besides academic factors that have been investigated in relation to the use of language learning strategies, socio-economic factors (gender, ethnicity, and parents' income), situational school factor (state school and private school), should also be investigated in the near future. It is due to those factors are possible to give positive impact toward the use of language learning strategies in Pekanbaru Senior High Schools.

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