A STUDY ON LANGUAGE LEARNING STRATEGIES AND THEIR RELATIONSHIP WITH ACADEMIC ACHIEVEMENT

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Abstract

The goal of this study was to investigate how first-year Electrical Engineering Technology students at Thai Nguyen University of Technology in Vietnam applied language learning strategies and the relationship between their language strategy use and their academic achievement. The study used Oxford's Strategy Inventory for Language Learning (SILL, version 7.0) published in 1990. The data demonstrated that the students' overall approach utilization was moderate. Cognitive techniques were found to be used the most frequently, whereas compensating strategies were used the least. In comparison with social strategies, memory, metacognitive, and affective strategies were employed at a lower frequency. Significantly, it was revealed that there was a positive relationship between the students' strategy use and their academic achievement. Finally, the complete data on each use approach offer the teacher with relevant information that serves as the foundation for suggested implications.

Keywords: language learning strategies, academic achievement, strategy inventory for language learning (SILL), strategy use

1. INTRODUCTION

Since the 1970s, language learning strategies have received more attention in language research. Much of the focus has been on finding what good language learners describe doing to learn a second or foreign language or, in certain circumstances, are seen doing while learning a second or foreign language," according to Rubin and Wenden [1. (p.19). Students' learning practices have been discovered to affect learning while learning a second language [2]. Learning strategies, according to O'Malley and Chamot [3], are "techniques, methods, or deliberate acts taken by students to facilitate the learning and recall of both linguistic and content area information." (p.1). Language learning strategies are "behaviors or actions that learners utilize to make language learning more successful, self-directed, and pleasant," according to Oxford [4]. Different classification systems have been used to categorize language learning strategies. Rubin [2] proposed a classification method that divided strategies into those that have a direct impact on learning and those that have an indirect impact on learning. Wong-Fillmore [5] investigated successful language learners' social tactics and found that social and communication strategies are linked to learning strategies. It was discovered that competent language learners employ a variety of learning strategies, often in a complex manner, to aid in the comprehension and retention of new material. Chamot and O'Malley [6] classified language learning strategies into three categories: metacognitive strategies, cognitive strategies, and social-affective strategies. According to Oxford [4], the strategies are divided into two categories: direct and indirect strategies. Direct strategies include memory techniques, cognitive strategies, and compensating methods, whereas indirect strategies include metacognitive strategies, emotional strategies, and social strategies.

The importance of language acquisition strategies cannot be overstated. Learning strategies, according to Rubin [7], "contribute to the formation of the linguistic system that the learner creates and directly affect learning" (p.23). According to Weinstein and Mayer [8], strategy utilization influences a learner's motivational or affective state, as well as how the learner picks, acquires, organizes, or integrates new information. Research on language learning approach is vital, according to Chamot [9], for two reasons. Its first goal is to discover
and compare the learning strategies employed by successful and unsuccessful language learners. Second, it offers training to less successful language learners in order to assist them improve their language skills (pp.25-26).

Teachers, educators, and researchers have given language learning techniques a lot of thought since they play such an important part in language learning. "Appropriate learning strategies should be among the first concerns of any ESL/EFL instructor or researcher who seeks to promote student learning," according to Oxford [4]. (p.40). Numerous research have been undertaken with the goal of learning about students' language learning strategies, as well as training and applying strategies to language teaching and learning. Since the early research on good language learners [2, 10-11] in the 1970s, a number of studies on language learning techniques have been done with the goal of comparing the tactics used by effective and ineffective language learners [12-16].

Following a review of the literature on language learning techniques and their importance in language learning, the author decided to conduct a survey to learn about her students' language learning tactics. This is also the first step Chamot [17] recommended teachers take to help their students improve their English skills (p.81). The original goal of the study was to compare and contrast the learning processes of proficient and less proficient students. However, after reviewing the students' English results, she was surprised to see that the majority of them had not done well in the previous semester. Only two students in the class gained 7.0 on a 10-point scale. The majority of students received a grade of less than 4.0, which was significantly lower than the average. Thus, the researcher shifted to explore the students' strategy use and the relationship between their strategy use and academic achievement.

The study targeted at identifying the strategy use of the first-year students of Electrical Engineering Technology (EET), and to explore the relationship between the students' use of language strategies and their academic achievement. Thus, the research questions were as follows:

- What are the first-year EET students' language learning strategies?
- Is there a relationship between the students' language learning strategies and their academic achievement?

2. METHODOLOGY

2.1. Subjects

The participants were 48 first-year students from Thai Nguyen University of Technology in Vietnam, who were majoring in Electrical Engineering Technology. They were between the ages of 18 and 21. There were 46 male students and 2 female students who had completed a semester of English at university and were eager to participate in the study. The goal of the study was explained to them, and the researcher intended to get accurate responses.

2.2. Instruments

The study used the Oxford (1990) Strategy Inventory for Language Learning (SILL) version 7.0 for EFL/ESL learners, which consists of 50 Likert-type statements. As "a standardized measure with variations for ESL students and students of a variety of foreign languages" [9], a trustworthy measure [18-20], it is one of the most often used instruments in the examination of language learning processes. The survey is regarded as "the most influential tool in the field of language learning techniques" and "lays forth the most exhaustive hierarchy of learning strategies to yet [21]."

Memory, cognitive, compensatory, metacognitive, affective, and social strategies are among the six categories in the self-report questionnaire. A Vietnamese translation was provided to the attendees in order to avoid any misunderstandings. According to Oxford [22], language learning strategies may be divided into three levels: "high usage" (ranging from 3.5 to 5.5), "mid usage" (ranging from 2.5 to 3.4), and "low usage" (ranging from 2.5 to 3.4). (ranging 1.0-2.4). Within 5 days, the questionnaire was completed and returned.

Moreover, the students' last semester exam results were used to gather data.

2.3 Data analysis
SPSS Version 20 was used to analyze the data (Statistical Packages for the Social Sciences). In this investigation, descriptive statistical approaches were employed.

3. RESULTS AND DISCUSSION

3.1. Students’ strategy use

The analyses that follow will provide specific information on how students used six different types of language acquisition methods: memory, cognitive, compensatory, metacognitive, affective, and social strategies.

Table 1. Descriptive Statistics of Overall Strategy Use

<table>
<thead>
<tr>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILL</td>
<td>50</td>
<td>1.96</td>
<td>3.40</td>
<td>2.69</td>
</tr>
</tbody>
</table>

Table 1 displays the descriptive statistics of the language learning strategy use of the students. It is indicated that the students used learning strategies at medium level (M=2.69, SD=.232). However, as mentioned above, “medium usage” ranges from 2.5 to 3.5, which implies that the strategy use of the students received a relatively low frequency. The descriptive statistics of six categories of SILL used by the students are demonstrated in Table 2. Six groups of strategies including memory, cognitive, compensation, metacognitive, affective and social strategies were all employed at medium level of usage. According to the table, compensation strategies were applied at the lowest frequency (M=2.59, SD=256), while cognitive strategies obtained the highest mean scores (M=2.86, SD=.210).

Table 2. Descriptive Statistics of Six Categories of SILL

<table>
<thead>
<tr>
<th>Categories</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
<td>Memory</td>
<td>9</td>
<td>2.58</td>
<td>3.00</td>
<td>2.73</td>
<td>.124</td>
</tr>
<tr>
<td>Cognitive</td>
<td>14</td>
<td>2.52</td>
<td>3.40</td>
<td>2.85</td>
<td>.210</td>
</tr>
<tr>
<td>Compensation</td>
<td>5</td>
<td>2.19</td>
<td>2.79</td>
<td>2.59</td>
<td>.286</td>
</tr>
<tr>
<td>Metacognitive</td>
<td>9</td>
<td>2.54</td>
<td>3.02</td>
<td>2.77</td>
<td>.161</td>
</tr>
<tr>
<td>Affective</td>
<td>6</td>
<td>1.96</td>
<td>3.10</td>
<td>2.72</td>
<td>.602</td>
</tr>
<tr>
<td>Social</td>
<td>6</td>
<td>2.71</td>
<td>3.10</td>
<td>2.84</td>
<td>.156</td>
</tr>
</tbody>
</table>

Further information on the students’ use of the strategy is presented in more detail below.

The students’ use of memory strategies is reported in Table 3. As it can be seen from the table, not many students remembered new English words by using them in a sentence (M=2.56, SD=.796) or making a mental picture of a situation where the word might be used (M=2.58, SD=.964). Additionally, using flash cards and rhymes to remember new English words were found not to be preferred by the students (M=2.71, SD=.651; M=2.71, SD=1.010) and the reviewing of English lessons was not done regularly (M=2.63, SD=.672).

The descriptive statistics of cognitive strategies are described in Table 4. Among 14 strategies, the highest mean score falls on item 15, which indicates that the students watch TV shows or go to movies in English rather often (M=3.40, SD=8.18). The reason for this might be related to the students’ favorite pastime as young people are interested in American movies and TV shows. With regard to speaking English, the students seemed not to be highly active in participating in conversation in English (M=2.54, SD=.651), although talking like native speakers obtained slightly higher mean scores from them (M=2.71, SD=.651). Concerning reading, the students’ responses show that reading in English was not pleasure for many students (M=2.65, SD=.758). Also, not a large number of students chose to skim before reading carefully when they read in English (M=2.63, SD=.981).

Table 3. Descriptive Statistics of Memory Strategies

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
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</thead>
<tbody>
<tr>
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<td>48</td>
<td>1</td>
<td>5</td>
<td>2.63</td>
<td>.859</td>
</tr>
<tr>
<td>2</td>
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<td>1</td>
<td>4</td>
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<td>.796</td>
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<td>3</td>
<td>48</td>
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<td>5</td>
<td>2.65</td>
<td>.959</td>
</tr>
<tr>
<td>4</td>
<td>48</td>
<td>1</td>
<td>5</td>
<td>2.58</td>
<td>.994</td>
</tr>
<tr>
<td>5</td>
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<td>5</td>
<td>2.71</td>
<td>1.010</td>
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<td>1</td>
<td>4</td>
<td>2.71</td>
<td>.651</td>
</tr>
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<td>7</td>
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<td>1</td>
<td>5</td>
<td>2.65</td>
<td>.934</td>
</tr>
<tr>
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<td>4</td>
<td>2.63</td>
<td>.672</td>
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<tr>
<td>9</td>
<td>48</td>
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<td>5</td>
<td>2.67</td>
<td>.975</td>
</tr>
</tbody>
</table>

Table 4. Descriptive Statistics of Cognitive Strategies

<table>
<thead>
<tr>
<th>Statement</th>
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<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>48</td>
<td>1</td>
<td>4</td>
<td>2.69</td>
<td>.689</td>
</tr>
<tr>
<td>11</td>
<td>48</td>
<td>1</td>
<td>4</td>
<td>2.71</td>
<td>.651</td>
</tr>
<tr>
<td>12</td>
<td>48</td>
<td>2</td>
<td>5</td>
<td>2.54</td>
<td>.598</td>
</tr>
<tr>
<td>13</td>
<td>48</td>
<td>1</td>
<td>4</td>
<td>2.65</td>
<td>.758</td>
</tr>
<tr>
<td>14</td>
<td>48</td>
<td>1</td>
<td>4</td>
<td>2.54</td>
<td>.651</td>
</tr>
<tr>
<td>15</td>
<td>48</td>
<td>2</td>
<td>5</td>
<td>3.40</td>
<td>.818</td>
</tr>
<tr>
<td>16</td>
<td>48</td>
<td>1</td>
<td>5</td>
<td>2.65</td>
<td>.758</td>
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<td>17</td>
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<td>4</td>
<td>2.59</td>
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<td>1</td>
<td>5</td>
<td>2.58</td>
<td>.612</td>
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<td>20</td>
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<td>4</td>
<td>2.62</td>
<td>.679</td>
</tr>
<tr>
<td>21</td>
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<td>1</td>
<td>5</td>
<td>2.75</td>
<td>.615</td>
</tr>
<tr>
<td>22</td>
<td>48</td>
<td>1</td>
<td>4</td>
<td>2.38</td>
<td>.761</td>
</tr>
<tr>
<td>23</td>
<td>48</td>
<td>1</td>
<td>4</td>
<td>2.52</td>
<td>.825</td>
</tr>
</tbody>
</table>

Comparatively low mean scores (M=2.50, SD=.825) were given to writing notes, messages, letters or reports in English, which implied that the students wrote in English...
at a rather low frequency. Similarly, making summaries of information that you hear or read in English was not applied frequently by the students (M=2.52, SD=.922). Translating word for word was preferred and employed by most of the students as “I try not to translate word for word” got the lowest mean scores (M=2.38, SD=.761). The items that obtained the highest mean scores include 19 and 20, which reveals that the students looked for words in their own language that are similar to new words in English and looked for patterns in English to a certain degree (M=2.98, SD=.812, M=2.92, SD=.679, respectively).

The information about the students’ use of compensation strategies is demonstrated in Table 5 with relatively low mean scores ranging 2.13 – 2.79. It can be recognized that guesses were not made regularly by the students when they tried to understand unknown words (M=2.60, SD=.818). Also, the students utilized synonyms at a low level of “medium usage” (M=2.60, SD=2.65). Surprisingly, “I make up new words if I do not know the right ones in English” belongs to “low usage” (M=2.48, SD=1.010). Furthermore, looking up new words was the students’ preference when they read (M=2.13, SD=.761). Noticeably, the responses of this item range in merely three numbers 1-3, which discloses that when reading, the students looked up new words at a rather high frequency.

The descriptive statistics of metacognitive strategies are specified in Table 6. The demonstration expresses that the students utilized the information about their mistakes to assist them in learning English at a medium frequency (M=2.90, SD=1.1016). Similar mean scores fall on item 32, which indicates that the students did notice when someone was speaking English to a certain degree (M=2.90, SD=.994). However, the students’ motivation to learn English seemed not to be at a high level as they did not often try to look for the ways to learn the language better or think about their improvements in learning it (M=2.73, SD=.818; M=2.67, SD=.883, respectively). Besides, not many students set clear goals for improving their skills (M=2.67, SD=.883) or planned schedule to have adequate time to study English (M=2.60, SD=.844).

It can also be inferred from the table that the students were shy to look for people to talk with in English or they might not be aware of the importance of the strategy (M=2.50, SD=.899). Correspondingly, opportunities for reading was not what the students were frequently looking for (M=2.58, SD=.739).

The students’ use of affective strategies is shown in Table 7. The highest mean value was given by Statement 42, which denotes that the students felt nervous when they were studying or using English (M=3.38, SD=.866). Also, most of the students did not speak English as they were afraid of making mistakes (M=2.52, SD=.772). Remarkably, the respondents revealed that they did not keep a language learning diary (M=1.96, SD=.849). This strategy was also applied at the lowest frequency by the students.

The descriptive statistics of social strategies used by the students are specified in Table 8. It is noted that the students approved to ask people to slow down or say
again if they did not understand something in English (M=2.94, SD=1.019). However, they experienced shyness when asking native speakers to correct or help them in learning English (M=2.62, SD=.962; M=2.52, SD=.772, respectively).

Conspicuously, the students practiced English with others at a rather low frequency (M=2.63, SD=.981). In addition, not many students were willing to learn about the culture of English speakers (M=2.75, SD=.863).

### 3.2. Correlation

The correlation coefficient is a numerical indicator that ranges from -1.00 to 1.00 and represents the degree and direction of a linear relationship between two variables. The number's absolute magnitude represents the correlation's strength, while the sign (positive or negative) indicates the relationship's direction.

It can be recognized from the Table that Memory strategies (r=0.512 and p<.01), Metacognitive strategies (r=0.384 and p<.01), Compensatory strategies (r=0.298 and p<.05), Social strategies (r=0.303 and p<.05) and academic achievement all have a positive and significant correlation. Remarkably, with a Pearson’s coefficient of 0.512, memory strategies show the strongest correlation with academic achievement. With a Pearson’s coefficient of 0.298, compensation techniques have the weakest link to academic achievement. In addition, academic accomplishment has a positive but insignificant association with metacognitive and affective strategies. In general, it can be drawn that there is a relationship between the students’ language strategy use and their academic achievement.

### 4. DISCUSSION AND IMPLICATIONS

#### 4.1 Discussion

The investigation’s findings give the researcher useful, thorough information on the students’ language learning processes. The students used the six kinds of language learning strategies at a "medium usage" level in general. Cognitive techniques were found to be employed with the highest frequency of the six categories, giving a good impression with the highest mean values, however, there are some unique learning strategies that have not achieved average use. Social strategies were awarded the second highest frequency. However, the students' attitudes on asking questions in English, seeking assistance from English native speakers, and learning about native speaker culture were not so positive.

Metacognitive, affective and memory strategies were discovered to be applied at approximately the same level of frequency. The conclusion is that the strategies were not actively employed. Furthermore, other tactics, such as revising courses, locating individuals to speak English with, and having English-language dialogues, received little attention from the students. The study discovered that a lot of students felt worried and fearful when learning and using English, despite the fact that they rarely utilized a language diary. Compensation techniques were found to be used at the lowest rate possible. The students' preference for and frequent use of searching for new terms is noteworthy information regarding this category. Furthermore, predicting the meaning of words was not always done on a consistent basis.

According to the preceding discussions, the students may be unaware of language learning strategies and their importance in language learning. A number of learning strategies have been found to be misused or used seldom, thereby affecting students’ learning outcomes [23-24]. Furthermore, some students undervalued the need of practice or misinterpreted an approach that should be used frequently. Many language learners may suffer unfavorable consequences as a result of these incorrect ideas (p. 292) [25].
Furthermore, there were signs of a lack of enthusiasm among the students, as well as linguistic anxiety. That could be one of the reasons for their poor English learning performance. Based on the findings, certain recommendations were made in the hopes of assisting students in improving their English skills.

Significantly, it has been found that there is a positive relationship between the students' language strategy use and their academic achievement. How the students employed language learning strategies could affect their learning effectiveness, which might serve as a factor contributing to their poor results at the exam last semester.

4.2. Implications

Based on the findings from the study, some recommended implications are introduced with the hope in helping improve the current situation of the class. To begin, the teacher must first raise student knowledge of language learning strategies, as well as their functions and use in English learning. Various language learning tactics should then be introduced to children throughout the learning process. It is the obligation of teachers to include strategy training into their classrooms [3]. In addition, great care should be taken to identify students’ misunderstandings about learning processes and make required corrections. Teachers must provide them with guidance on how to use the tactics and encourage them to apply them to their study.

Teachers are advised to develop student skills in using strategies through cooperative learning tasks, think-alouds or group discussions [26]. In addition, practice opportunities should be provided such as discussion, role playing and peer tutoring [27]. Furthermore, students should be encouraged to identify the strategies that are suitable for them and support them to achieve best results because this is the “key factor leading to success” [28]. Significantly, teachers should guide students and help them to evaluate the use of their own strategies.

Teachers are encouraged to use cooperative learning assignments, think-alouds, and group discussions to help students build their strategy-using skills. In addition, practice opportunities such as debate, role acting, and peer tutoring should be provided [27]. Furthermore, because this is the “important factor leading to success,” students should be encouraged to develop tactics that are appropriate for them and supported to obtain the greatest results. Teachers should also mentor students and assist them in evaluating their own strategies [26-28].

As previously said, numerous students were discovered to be anxious and uninterested in studying English, which should be taken into account. It is claimed that teachers can use a variety of approaches and techniques to increase student motivation. Teachers should create a pleasant, relaxed atmosphere in the classroom where errors are accepted as a natural part [29], develop a good relationship with the learners, and prepare a variety of tasks that are interesting, challenging, and varied to help build on learners’ interest [30].

5. CONCLUSION

The purpose of this study was to look into the strategies used by first-year Electrical Engineering Technology students at Thai Nguyen University of Technology, as well as the link between their strategy use and academic achievement. According to the findings, the students used learning strategies on a "moderate" yet infrequent basis. Cognitive techniques were reported to be the most frequently employed, whereas compensatory tactics were used the least frequently. Besides, the students preferred social strategies above metacognitive, memory, and affective strategies. Specifically, it was discovered that there was a positive relationship between the students’ strategy use and their academic achievement. Based on the findings, some recommendations for improving the students’ existing English learning situations were made.

ACKNOWLEDGMENTS

The authors would like to express their gratitude to Thai Nguyen University of Technology, Vietnam, for their assistance of this project.

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