ANALYSIS OF ENGLISH LEARNING STRATEGIES OF TAIWANESE STUDENTS AT NATIONAL TAIWAN NORMAL UNIVERSITY

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Abstract

This study was conducted in order to investigate the language learning strategies used by undergraduate students at National Taiwan Normal University- NTNU (ROC) Taipei, Taiwan. The study sample consisted of 330 students (212 English education major students and 118 non-English education major students.). The research instrument was the Strategy Inventory for Language Learning (SILL) questionnaires (Oxford, 1990). The data obtained from the returned surveys were analyzed using descriptive statistics and independent sample t tests. This study concluded that: (1) Students majoring in English used learning strategies more frequently than students majoring in other subjects. (2) Meta-cognitive strategy was the most effective and Affective strategy was the least effective strategy used by both groups. (3) There were significant differences among the strategies used between English and non-English education majors. English education majors appeared to use strategies more than other majors. (4) The effectiveness of learning strategy used between English and non-English education major students was significantly different. English education majors were more effective using strategies than students majoring in other subjects. From the results of this study, the researcher suggests that teachers should be aware of and understand their student's learning strategies in order to introduce effective strategies to students and motivate them to use different learning strategies. Especially for non-English education major students, teachers should provide and instruct them to use learning strategies more frequently and effectively to reach their desired English level.

Key words: Learning Strategies, Taiwanese University Students

Introduction

English is the dominant global language at the beginning of the twenty-first century. It has provided viability and practicability as a common global language to people worldwide. There are now more non-native speakers than native-speakers who regularly communicate in English. The global language feature of English can be seen to open doors, which fuels a 'demand' for English.

In Taiwan, as elsewhere in the globalized world, English has gained an important role in different areas of life over the last decades. This is evident by the increasing number of English schools from children to adults in Taiwan. At the moment, the market for learning and teaching English in Taiwan is so vast that many universities offer English

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classes. Research shows that Taiwanese students' English proficiency usually drops after they enter college or university. Once the students enter university, they seldom have any chance to learn or use English, apart from taking the required general education English course in their freshmen year. Taiwan's government has made English an important vehicle for promoting an open and democratic society in Taiwan. The growth in demand for English is the result of recognition both by the Taiwanese government and individual citizens to the unique role of the language and Taiwanese response to globalization and modernity.

Learning strategy refers to the method that learners used to assist their progress in developing the second or foreign language skills, such as questions during lectures, reflection after reading, etc. In studying a language, learning strategy is a specific action or technique that learners use. Learning strategies consist of six categories, according to Oxford (1990). They are Memory, Cognitive, Compensation, Meta-cognitive, Affective and Social strategies. The task requirements will help students to determine what strategies they should choose. Many researchers emphasized the importance of the use of learning strategy which makes good language learners. Researchers suggested that strategies of successful language learners could provide a basis for aiding language learners. If ESL teachers know more about effective strategies that successful learners use, they may be able to apply these effective strategies to less proficient learners to enhance their language skills (Yang, 2007). How to use learning strategies efficiently and successfully is the main concern of most English teachers and learners. In Taiwan, the importance of learning strategy is also received a good consideration. Analyzing the learning strategies of Taiwanese students at

National Taiwan Normal University who are English and non-English education majors will be carried out as an effort to make a small contribution to the understanding and improvement of Taiwanese English learning ability. What the learning strategies that Taiwanese students most use when they learn English at the University level is an interest topic of many researchers and it is the rationale of this study.

Objectives

1. To investigate the strategies that Taiwanese students use when they study English.
2. To find out how well the learning strategies helped Taiwanese students learn English.
3. To compare the learning strategies used between English and non-English education major students.
4. To compare the effectiveness of learning strategies as perceived by English and Non-English education major students.

Methodology

Participants: With purposive sampling, the volunteer participants in this study were 330 undergraduate students, English teaching major (212) and non-English teaching major (118), at NTNU (R.O.C).

Study variables: Independent variable was the students' majors. The majors in this study were divided into two types: English and non-English education.

Dependent variables were Taiwanese student's English learning strategies and the effectiveness of the learning strategies. In this study, the learning strategies ware the strategies that Taiwanese University undergraduate students at NTNU used

when they learned English. There were six learning strategies: Memory, Cognitive, Compensatory, Meta-cognitive, Affective, and Social. The Memory strategy referred to the method to learn and retrieve information in an orderly string, Cognitive strategy referred to the guiding procedure that students used to help them complete less-structure task. Meta-cognitive referred to the method that is employed for managing the overall learning process. Compensatory Strategy referred to the method that helped the learner makes up for missing knowledge. Affective strategy referred to the method that identified one's mood and anxiety level, and Social strategy referred to the method that helped the learner to work with others and understand the target culture as well as the language. The effectiveness of the learning strategies referred to the opinion of students to identify the degree or level of their learning success from those strategies.

Instruments and Data Collection:

1. Instruments: The instrument used for this study was the Oxford Strategy Inventory Language Learning (SILL).
Validity and reliability of the instrument
The ESL/EFL SILL has been used worldwide for students of second and foreign languages in settings such as university, school and government. The internal consistency reliability of the SILL is .94 based on a 505 - person sample (Yang, 1993) and .92 based on a 315 - person sample (Watanabe, 1990). Content validity is .99 based on independent raters (Oxford, 1990).The questionnaires were considered by 6 experts in Teaching English as a Second Language.
The SILL instrument contained 36 short statements each describing the use of one strategy. These statements were further grouped into six categories according to Oxford's strategy system described earlier in this paper: Memory, Cognitive, Compensatory, Meta-cognitive, Affective, and Social. Subjects had to respond to each statement on a 4-point Likert Scale ranging from 1 ("Never true of me") to 4 ("Always true of me").

2. Data collection: The questionnaires were administered to all subjects by English teachers during the English class from 3rd to 7th of March, 2008 (second semester) at NTNU, Taipei, Taiwan. A brief explanation of the purpose of the study was given. The students were informed that their responses to the questionnaires would be kept confidential and would have no effect on their course grade.

Data analysis: Descriptive statistics were used to analyze the data collected by questionnaires such as Mean ( ), Standard Deviation (SD), t test for the data analysis. The criteria for interpreting the mean of learning strategies used were set as follows: Always true of me: $3.51 - 4.00$; Usually true of me: $2.51 - 3.50$; Usually not true of me: $1.51 - 2.50$; Never true of me: $1.00 - 1.50$. The criteria for interpreting the mean of the effectiveness of the strategies were set as follows: Very useful: $3.51 - 4.00$; Somewhat useful: $2.51 - 3.50$; Not very useful: $1.51 - 2.50$; Not at all useful: $1.00 - 1.50$.

Results

1. After investigating the learning strategies that Taiwanese students (both English teaching major and non-English teaching major students) used when they studied English, it was found that the participants used learning strategies at the usually true level. It was also found out that Compensatory strategy was the top choice. The second choice was Cognitive

strategy. The following learning strategies were Meta-cognitive, Social and Memory strategies, which were third, fourth and fifth, respectively. Affective strategies were the least used by the participants.

Table 1 The means, standard deviations and ranks of the learning strategies that Taiwanese students used when they studied English (n = 330)

Strategies	Learning strategies		
	$\overline{X}$	SD	Rank
1.Memory	2.68	0.47	5
2.Cognitive	2.92	0.50	2
3.Compensatory	2.96	0.48	1
4.Meta-cognitive	2.92	0.58	3
5.Affective	2.55	0.56	6
6.Social	2.76	0.61	4
Total	2.80	0.42	

1.1. Among the English major students, it was found that Compensatory was the top choice, Cognitive strategies were the second choice, Meta-cognitive strategies were the third choice, Social strategies were the fourth choice, Memory strategy were the fifth choice, and Affective strategies were the least used by the participants.

1.2. Among the non-English education major students, it was found that Compensatory strategies were the top choice, Cognitive strategies and Meta-cognitive were the second and third choice, Memory strategies were the fourth choice, Social strategies were the fifth choice, and Affective strategies were the least one to be used by the participants.

Table 2 The means, standard deviations and ranks of the learning strategies that English education majors (n=212) non-English education majors (n = 118) used when they studied English

Strategies	EM	NEM	EM	NEM	EM	NEM
	$\overline{X}$		SD		SD	
1.Memory	2.73	2.61	0.43	0.51	5	4
2.Cognitive	3.05	2.70	0.44	0.53	2	2
3.Compensatory	3.01	2.88	0.45	0.53	3	1
4.Meta-cognitive	3.06	2.67	0.52	0.61	1	3
5.Affective	2.61	2.42	0.52	0.61	6	6
6.Social	2.92	2.48	0.51	0.67	4	5
Total	2.89	2.63	0.36	0.46		

Note: EM: English education major, NEM: Non-English education major

To find out how useful the learning strategies help Taiwanese students (both English and non-English education major students) learn English, the results indicated that the strategies effectiveness was ranked at the somewhat useful level. In detail, Meta-cognitive strategies were the top effective strategies at somewhat useful level toward the participants' English learning. Then, Cognitive, Compensatory Social, , and Memory strategies, followed in decreasing order of effectiveness. Affective strategies were the least effective strategy used by the participants.

Table 3 The means, standard deviations and ranks of the effectiveness of learning strategies that Taiwanese students used when they studied English (n = 330)

Strategies	The effectiveness of learning strategies		
	$\overline{X}$	SD	Rank
1.Memory	2.89	0.50	5
2.Cognitive	3.11	0.54	2
3.Compensatory	2.97	0.52	4
4.Meta-cognitive	3.13	0.61	1
5.Affective	2.70	0.64	6
6.Social	3.01	0.66	3
Total	2.97	0.48	

Among the English education major students, the results indicated that the strategy effectiveness was ranked at the somewhat useful level. Meta-cognitive strategies were the most effective strategies toward the participants' English learning, Then Cognitive, Social, Compensatory, Memory and Affective followed in decreasing order of effectiveness.

Among the non-English education major students, we found out that the strategies effectiveness was ranked at the somewhat useful level. Then Cognitive, Meta-cognitive, Compensatory, Memory, Social, and Affective. followed in decreasing order of effectiveness.

Table 4 The means, standard deviations and ranks of the effectiveness of learning strategies that the English education majors (n=212) non-English education majors (n = 118) used when they studied English

Strategies	EM	NEM	EM	NEM	EM	NEM
	$\overline{X}$		SD		SD	
1.Memory	2.95	2.77	0.44	0.57	5	4
2.Cognitive	3.22	2.91	0.42	0.67	2	1
3.Compensatory	3.01	2.89	0.47	0.59	4	3
4.Meta-cognitive	3.25	2.90	0.50	0.71	1	2
5.Affective	2.77	2.57	0.55	0.77	6	6
6.Social	3.17	2.72	0.50	0.80	3	5
Total	3.06	2.79	0.36	0.60		

The independent samples t test results in table 4 revealed that between English education major and non-English education major students, in general there were significant differences

among the learning strategies used. There were significant differences among Memory, Cognitive, Compensatory, Meta-cognitive, Affective, and Social strategies.

Table 5 Learning strategies differences: Independent-Samples t test on the mean of Strategy Category of English education majors (n = 212) and non English education majors (n = 118) (*p<.05)

Strategies	Major	n	$\overline{X}$	SD	t	p
Memory	English	212	2.73	0.43	2.26*	.025
	Non-English	118	2.61	0.51		
Cognitive	English	212	3.05	0.44	6.36*	.000
	Non-English	118	2.70	0.53		
Compensatory	English	212	3.01	0.45	2.33*	.020
	Non-English	118	2.88	0.53		
Meta-cognitive	English	212	3.06	0.52	6.05*	.000
	Non-English	118	2.67	0.61		
Affective	English	212	2.61	0.52	3.00*	.003
	Non-English	118	2.42	0.61		
Social	English	212	2.92	0.51	6.13*	.000
	Non-English	118	2.48	0.67		
Total	English	212	2.89	0.36	5.43*	.000
	Non-English	118	2.63	0.46		

Independent samples t test also indicated the significant differences between the effectiveness of learning strategies used between the English education major and non-English education major students. In general, there were significant differences among the effectiveness of all strategies used.

Table 6   Effectiveness of strategies differences: Independent-Samples t test on the mean of strategy category between English (n = 212) and non-English education majors (n = 118)

Strategies	Major	n	$\overline{X}$	SD	t	p
Memory	English	212	2.95	0.44	3.07*	.002
	Non-English	118	2.77	0.57		
Cognitive	English	212	3.22	0.42	4.59*	.000
	Non-English	118	2.91	0.67		
Compensatory	English	212	3.01	0.47	2.03*	.044
	Non-English	118	2.89	0.59		
Meta-cognitive	English	212	3.25	0.50	4.75*	.000
	Non-English	118	2.90	0.71		
Affective	English	212	2.77	0.55	2.48*	.014
	Non-English	118	2.57	0.77		
Social	English	212	3.17	0.50	5.62*	.000
	Non-English	118	2.72	0.80		
Total	English	212	3.06	0.36	4.48*	.000
	Non-English	118	2.79	0.60		

*p<.05

Conclusion

1. The participants used learning strategies at the high level (usually true of me). It was also found that Compensatory strategies were the top choice, then were Cognitive, Meta-cognitive, Social strategies, Memory strategies, and Affective strategies.

2. Strategy effectiveness was ranked at the somewhat useful level. Meta-cognitive strategies were the most effective strategy, then were Cognitive, Social, Compensatory, Memory, and Affective strategies. Among English education major students, the strategies effectiveness was ranked at the somewhat useful level. Meta-cognitive was the most effective strategy, then were Cognitive, Social, Compensatory, Memory, and Affective strategies. Among the non-English education major students, the strategy effectiveness was ranked at the somewhat useful level. Cognitive was the most effective strategy for English learning, The following effectiveness ranks were Meta-cognitive, Compensatory, Memory, Social, and Affective strategies.

3. There were significant differences between learning strategies used by the English and non-English education major students. The English education major used the learning strategies more than the non-English education major students.

4. There were significant differences between the effectiveness of learning strategies used between the English, non-English educations major students. The English education major used the effectiveness of learning strategies more than the non-English education major students.

Discussion

1. For the first objective, the findings show that the participants used learning

strategies at the high level (usually true of me). It might come from the fact that Taiwanese students preferred to use strategies to support their learning. The majority of Taiwanese English education major students used Meta-cognitive, Cognitive, Compensatory, Social, Memory, and Affective strategies in decreasing order of preference. This notable result was supported by the finding of Oxford (1990) which noted that Meta-cognitive strategies might be among the most important, especially for learners at beginning or intermediate levels.

2. For the second objective, the results show that the strategy's effectiveness was ranked at the somewhat useful level and Meta-cognitive strategies were the most effective used and Affective strategies were the least effective used by the participants. This might be that English is a foreign language for Chinese students, it is hard to learn so students need to try using any available tool to support them.

Among the English education major students, Meta-cognitive strategy was the most effective used and Affective strategy was the least effective used. Among the non-English education major students, Meta-cognitive strategy was the most effective and Affective strategy was the least effective.

3. For the third objective, the findings indicate that there were significant differences between English education major and non-English education major in use among Meta-cognitive, Cognitive, Compensatory, Social, Memory and Affective strategies. The study shows that Taiwanese English education majors use learning strategies more frequently than non-English education majors. The reason maybe because non-English education major students still are not aware of the learning strategies so they do not know how to use them. Even though they know that the learning strategies can help

them to enhance their learning processes. In contrast, English education major students make better use of learning strategies.

English education major students use Meta-cognitive, Cognitive, Compensatory, Social, Memory, and Affective strategies, in descending order of effectiveness. Non-English education major students use strategies in a different order, starting with Compensatory, and then in order of decreasing effectiveness: Cognitive, Meta-cognitive, Memory, Social, and Affective strategies. The reason why English education major students use Meta-cognitive the most while non-English education major students use Compensatory strategies the most is an interesting finding which should be interpreted. English education majors may have a better awareness about Meta-cognitive strategies in their learning process.

4. For the forth objective, the results revealed that there were significant differences between English education major and non-English education major students among the effective use of all the strategies: (a) The difference between the effective uses of Memory strategies indicated that although Memory strategies can be powerful contributors to language learning, the more proficient English learners simply do not use this strategy so much, or that students are not aware of how often they actually do employ Memory strategies (Oxford, 1990; Oxford & Nyikos, 1993). (b) The difference between the effective use of Meta-cognitive strategy might be due to the participant's attitude toward English learning. English education major students have a more active learning attitude while non-English education major students might have a passive learning attitude. (c) The difference between the effectiveness of Affective strategies might be because of the ability to understand its usefulness between English and non-English

education major students. English education major students understand that Affective strategies are good techniques that can help them to control their emotions and attitudes towards language learning. In contrast, in a non-English education major student classroom, the teacher usually functions as an information giver; students do not have many chances to speak English, not to mention the chance to speak with native speakers. (d) The significant difference between Social strategies use might come from the fact that the education environments are different between English and non-English education major students. Non-English education major students learn English in an environment where English is not used for communicative needs. (e) The significant difference found between the effective uses of Cognitive strategies might also relate to attitude toward English learning. Cognitive strategies are used directly with the learning materials, and are more specific to learning tasks.

Suggestions

In order to train the students to employ better learning strategies, the researcher would like to suggest some activities: First, the teacher needs to diagnose learners' level of strategy use. Second, the teacher can train learners to know the characteristics, effectiveness, and applications of learning strategies. In this stage, it is essential for the teacher to present each strategy with a specific explanation and help learners know how to use each strategy in a given situation. Third, in order to offer hands-on practice for students to use learning strategies effectively, collaborative work with classmates is effective at this phase. The teacher assigns students into several small groups consisting of at least one native speaker. Fourth, giving students chances to evaluate the usefulness of learning strategies is very necessary. The teacher can apply group or individual interviews, questionnaires, and open-ended questions for learners to express their feelings towards using learning strategies.

For English education major students, even though they have a high awareness or are good at using learning strategies, they still should be trained in the effective combination of those strategies. For non-English education major students, Meta-cognitive strategies should be taught. They should make good use of this strategy to develop successful learning processes that can be applied to solve problems, especially to help students build confidence about their ability to learn. As this confidence builds, effective learning is fostered.

Recommendations for improvement: (1) Since Taiwanese non-English education major students use learning strategies less frequently than English education major students, teachers should be aware of this finding then provide or use different approaches to enhance the effectiveness of non-English education majors use of these kinds of learning strategies to reach their English desired level. (2) Taiwanese English teachers from the Department of English at NTNU should be aware of and understand student's learning strategies in order to introduce different effective strategies to them and motivate them to use different learning strategies when they learn English.

Recommendations for further research: (1) Further studies should be conducted with larger groups of Taiwanese students, with different education levels and from different regions in Taiwan to avoid the limitations of the present study. (2) Future research needs to explore other variables and determine the differences in the use of English learning strategies based on age, gender, length of study, level, learning

style, anxiety, self-esteem, etc. that may influence the use of their language learning strategies. (3) In addition to only survey study, other research methodologies (e.g. interviews, classroom observation, protocols, etc.), can be creatively added to assist students' learning strategies use. There should be a more in-depth study concerning the use of Cognitive strategies. (4) Future studies may search for additional learning techniques, which are more universal and are not identified in the Strategy Inventory for Language Learning (SILL). Because Lo (1999) argued "The respondents' reactions to the Strategy Inventory for Language Learning (SILL) clearly raised questions as to the extent to which such research tools and concepts can transfer across of learning environment".

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