

LEARNING STRATEGY USES AMONG THE STUDENTS OF DIFFERENT COGNITIVE STYLES AND PROFICIENCY

Syafi'ul Anam*

Abstrak: Artikel ini mengkaji strategi belajar membaca bahasa Inggris yang digunakan mahasiswa dengan tingkat profisiensi dan gaya kognitif yang berbeda. Hasil penelitian ini menunjukkan bahwa beragam strategi belajar digunakan subjek, dengan strategi kompensasi dan metakognitif sebagai strategi yang paling sering dipakai. Subjek yang profisien dan kurang profisien memiliki perbedaan dalam penggunaan strategi memori, kompensasi, kognitif, dan metakognitif. Sebaliknya, tidak ada perbedaan startegi belajar antara mahasiswa bergaya kognitif ektenik dan sinoptik.

Kata kunci: strategi belajar, gaya kognitif, profisiensi.

INTRODUCTION

The shift of the pedagogic paradigm from teacher-centered to learner-centered has brought about implications on the language instruction, one of which that learners with their uniqueness have received much attention. According to Leaver et al, one of the learners' individual uniqueness is language learning strategies (2003). The notion of language learning strategies (LLS) refers to operations or specific actions employed by learners to aid the acquisition, storage, retrieval, and use of information in order to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations (Oxford. 1990:8). Referring to Oxford' taxonomy, LLS consist of memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies, and social strategies (Oxford.1990:155).

There have been numerous prior studies conducted within the language learning strategies in EFL context. The studies deal with the language learning strategies (LLSs), the relation between LLSs and individual differences, such as proficiency and learning styles or cognitive styles. A study conducted by Lee Kyong Ok (2003) showed that the students' sex, school year, and proficiency had a significant relationship on their use of learning strategies. Research conducted by Xiaoqing and Li Jie (2006: 67-90) indicated that learning styles had a significant influence on learners' learning strategy choices. They further proved that high achievers, compared to low achievers, were more capable of exercising strategies associated with their non-preferred styles.

In their study, Lian Wong, Mary Siew (2005) explored graduate pre-service teachers' language learning strategies and language self-efficacy and the relationship between these two constructs in a teachers' college in Malaysia. The findings show a significant positive relationship between

* Syafi'ul Anam adalah dosen Bahasa Inggris Universitas Negeri Surabaya

language learning strategies and language self-efficacy. High self-efficacy preservice teachers used language learning strategies more frequently than low self-efficacy pre-service teachers did. Furthermore, the study by Wu Man-Fat (2007) show that Language Learning Motivation (LLM) is positively associated with the use of Metacognitive Language Learning Strategies (MCLLS), and integrative motivation is a predictor of the use of MCLLS among Chinese-speaking ESL learners at a vocational education institute in Hong Kong.

Furthermore, prior studies on language learning strategy focus on reading in ESL/EFL contexts, among other things are as follow. Zang (2002) focused on the possible differences between high scores and low scores in metacognitive awareness of reading strategies employed by ESL learners in Singapore by using questionnaires. Ozek and Civelek (2006) examined 185 ELT students' cognitive reading strategies by using Think-Aloud Protocol and self report questionnaire. Ghonsooly and Eghtesadee (2006) investigated the role of cognitive style of field-dependence/independence (FD/FI) in using metacognitive and cognitive reading strategies in novice and skilled readers by using think-aloud protocol as data collection technique.

Despite the presence of studies on LLSs, only few have been done in LLSs for reading and have linked the strategies with the individual differences. The attempt to link LLSs with learner variables, especially cognitive or learning styles, is in accordance with what Cohen (1996) asserts that learning strategies do not work by themselves, but rather are directly related to the learners' underlying learning styles. Cognitive style, commonly used exchangeably with learning style, is the consistent and pervasive way in which people process information (Dornyei in Ellis, 2008: 660).

The study, therefore, was mainly intended to explore the learning strategies in EFL reading used by the students of the English Department of the State University of Surabaya and their relationship with the students' cognitive styles and reading proficiency. In particular, the objectives of the current study were; (1) to describe the types of learning strategies in EFL reading employed by the English Department students of Unesa; (2) to find out the existence of the differences in the strategy use means related to proficiency and cognitive styles.

RESEARCH METHOD

The subjects were 58 undergraduate students majoring in the English Department of the State University of Surabaya who took reading courses in the academic year 2009-2010. The instruments employed were questionnaires (i.e. reading strategy questionnaire and E&L Learning Style questionnaire 0.2) and test papers. There were two sets of questionnaires used in this study; questionnaire for learning strategies in reading and E&L Learning Style questionnaire 0.2. The instrument of reading comprehension test papers was adopted from TOEFL model test developed to assess the subjects' English reading skill. The two sets of questionnaires were circulated among the respondents by the researcher and the reading test was conducted before the completion of the questionnaires. Descriptive statistics and t-test were used to analyze the data.

DISCUSSION

A. Types of learning strategies in EFL Reading

The English department students of the State University of Surabaya used various learning strategies in English reading at different magnitudes. As presented in table 1, the mean score of the overall strategy category use is 3.14, meaning that the students used the overall strategies at a medium level. Two strategy categories (i.e. compensation and metacognitive) whose average scores were 3.57 and 3.50 respectively on a scale of 1 to 5 were defined as high use. Cognitive, social and affective strategy categories fell into medium use, with the average scores of 3.30, 3.28, and 3.18 respectively. The low use belonged to the memory strategy category with the mean score of 2.02.

Table 1

Means of Overall Learning Strategies in Reading

Strategy Category	Lowest	Highest	Mean	Rank
Overall Learning Strategies			3.14	
Memory	2.55	3.5	2.02	VI
Cognitive	2.32	4.09	3.30	III
Compensation	3.46	4.09	3.57	I
Metacognitive	2.73	3.82	3.50	II
Social	3.18	3.46	3.28	IV
Affective	2.45	3.45	3.18	V

In particular, there were ten most preferred-learning strategy types the students used in which the mean scores lay between 3.67 and 4.12. However, none of them belonged to memory category. They included cognitive strategies of 'reading for pleasure in English', 'scanning for the answer to some questions', 'going back to read some parts of the passage', compensation strategies of 'predicting the passage' and skipping the unfamiliar words', metacognitive strategies of 'reading the questions before the text', trying to find out how to be a good reader, and 'looking for opportunities to read as much as possible in English', and 'checking the predictions about the text while reading', and affective strategies of 'making positive statements'.

In contrast, the memory strategy of 'making a semantic mapping', 'summarizing the important points of a passage by murmuring or reading aloud' and 'grouping ideas or information' and affective strategy of 'giving oneself a reward after reading' and reading while listening to music' were the least frequently used learning strategies of the students. The cognitive strategies of 'analyzing the generic structure of a text', 'making inferences after reading' and 'summarizing' were also less preferred by the students.

The results of the overall strategy use for reading above reveal that the overall learning strategy use was at medium use ($M=3.14$) in EFL reading context. The findings are in accordance with the other learning strategy studies using Oxford's SILL. The study on 168 third year-students of English major done by Nisbet (2002) showed that the overall strategy use was reported in the medium range. Lee's study (2003) on 325 Korean secondary school students of English as a foreign language which showed that the reported frequency of strategy use by the students was moderate overall also confirmed the current study.

The finding of the strategy uses in EFL reading shows that compensation and metacognitive strategy categories were the most preferred, while the memory was the least preferred. This is in line with Baker and Boonkit's study (2004) which showed that metacognitive and compensation strategies for reading were used more frequently than other strategy categories by Thai university students. Furthermore, research by Lee (2003) revealed that compensation strategies were the most frequently-used strategies by Korean secondary school students. In addition, the findings of the high frequency of compensation and metacognitive strategies and the least frequent use of memory strategies accord with the aforementioned research on the students of English majors by Nisbet (2002). The consistence of the studies implies the significance of the two strategies in academic setting for EFL students. The result of the current research reinforces the findings of the previous research that EFL learners, especially university students, prefer using the two strategy categories to improve their English proficiency.

Metacognitive strategies were one of the most frequently used strategies. The strategies are commonly utilized by EFL learners because metacognitive strategies are general problem-solving strategies in terms of planning, monitoring, and assessing the learning processes so as to achieve the learning objectives (Oxford:1990). The individual metacognitive strategies such as *reading the questions first before reading the text*, *looking for opportunities to read as much as possible in English*, and *checking the predictions about the text while reading* are regarded beneficial to help learners become better readers of English.

B. The differences in the strategy use means by proficiency levels and cognitive styles

B.1 The differences in the strategy uses by proficiency levels

Table 2 shows that the average frequency of the overall learning strategies used by the proficient subjects was 3.46. Four of the six learning strategy categories consisting of memory, cognitive, social and affective strategies were used at medium use level with the average frequencies of 3.16, 3.48, 3.18, and 3.03 respectively, whereas the compensation, metacognitive strategies were used at the high level with the average frequencies of 3.88 and 3.67. It can be seen that the affective strategy was the least used-frequently strategies, whereas, the compensation strategy was the most frequently-used strategy.

In contrast with the proficient subjects, the less proficient ones used fewer learning strategies which can be seen from the average

frequencies of the overall learning strategy categories, 3.09. However, the strategy use of the less proficient students was also defined as medium. Five out of the six learning strategy categories were used at medium levels. The five categories were cognitive strategy with the mean of 3.16, compensation strategy with the mean of 3.01, metacognitive strategy with the mean of 3.17, social strategy with the mean of 3.48, and affective strategy the mean of 3.46. Meanwhile, the only strategy category of the less proficient subjects which fell into the low use level was memory strategy with the mean score of 2.45.

The results of t-tests indicated the differences in the mean scores of learning strategy uses by the proficient and less proficient students, except in social and affective strategies. The proficient students employed the overall learning strategies more frequently than the less proficient, with the average frequencies of 3.46 and 3.09 at a significant level $p = .000$. The average frequencies of the proficient subjects were higher than those of the less proficient ones at a significant level $p = .000$ for four strategy uses: memory, cognitive, compensation and metacognitive. It means that there are statistically significant differences in the average frequencies of the four strategy categories. On the other hands, the mean scores of the social and affective strategy categories used by proficient and less proficient were differences not of statistical significance ($p = .146$ and $.035$ respectively).

Table 2

Means of Learning Strategies in Reading by Proficiency Levels

Strategy Types	Proficient Students		Less Proficient Students		P (sig.)
	Mean	SD	Mean	SD	
Memory	3.16	.49	2.45	.49	.000
Cognitive	3.48	.26	3.16	.30	.000
Compensation	3.88	.44	3.01	.91	.000
Metacognitive	3.67	.37	3.17	.56	.000
Social	3.18	.72	3.48	.82	.146
Affective	3.03	.79	3.46	.56	.035
Overall strategies	3.46	.20	3.09	.26	.000

The mean difference is significant at the 0.05 level

The finding of the current study reveals that there was significant differences in the average frequencies of overall learning strategy uses in EFL reading and in four of the six categories of the strategies (memory, cognitive, compensation, and metacognitive)

between the proficient and less proficient students. It means that compared to those who were less proficient, the proficient students used the overall learning strategies more frequently. The finding accords with Lee's study (2003) which showed the students who obtained high score in reading reported using learning strategies more frequently than those who got low score. It also confirms Su's study (2005) that the students who reported a higher self-perceived English proficiency level utilized language learning strategies more frequently in EFL context.

The high frequency of strategy uses, especially in metacognitive, cognitive, and compensation strategies, among the proficient students means that they are becoming effective learners. This is because, as Chamot and Kuper (1989:17) said, what differentiate effective learners from less effective learners are the range and the way the strategies are used. It means that effective language learners, including effective readers, use strategies more frequently, more appropriately, and with greater variety so as to help them accomplish their learning tasks. Their high frequent use of metacognitive strategies, for example, indicates that they are more able to organize and regulate their language learning in an efficient way and optimizing their potential in the objectives they have set. In addition, this finding also implies that the more strategies the students use, the more aware they are of the significance of strategies in learning.

B.2 The differences in the strategy uses by cognitive styles

By the cognitive styles of the students, the learning strategies were used at a medium use level, with the strategy use mean of 3.34 for the synoptic students and that of 3.30 for the ectenic ones. The synoptic students used the metacognitive strategy more frequently than the ectenic students with the mean score of 3.61 (high use) for the synoptic students and that of 3.33 (medium use) for the ectenic students. Compared to the synoptic students whose average frequency of 3.47 (medium use), the ectenic students used the compensation strategies more frequently with the average frequency of 3.75 or at a high use level. Both the synoptic and ectenic students used the memory strategy at the medium use level with the average frequency of 2.91 for synoptic students and that of 2.95 for ectenic students. Cognitive strategies were employed both types of students at a medium use, with the average frequency of 3.31 for the synoptic students and 3.28 for the ectenic students. The social and affective strategies were also used at a medium use in which the average frequencies of the synoptic students were 3.28 for social strategies and 3.16 for affective strategies and those of the ectenic students were 3.29 for social strategies and 3.22 for affective strategies.

T-tests showed that the differences among the average frequencies of the synoptic and ectenic students in the overall strategy use and the six strategy categories were of no statistical significances ($p > 0.05$). It means that the learning strategies in EFL reading employed by the synoptic and ectenic students were statistically at the same frequency.

Means of Learning Strategies in Reading by Cognitive Styles

Strategy Category	Synoptic		Ectenic		P (sig.)
	Mean	SD	Mean	SD	
Memory	2.92	.63	2.96	.53	.779
Cognitive	3.36	.31	3.33	.37	.743
Compensation	3.47	.88	3.75	.45	.119
Metacognitive	3.61	.47	3.33	.52	.039
Social	3.28	.87	3.29	.64	.962
Affective	3.16	.82	3.22	.60	.782
Overall strategies	3.34	.28	3.30	2.9	.634

The mean difference is significant at the 0.05 level

It was revealed that there were no significant differences in the strategy use means between the synoptic and ectenic students. This evidence vividly reinforces what Oxford (1990) stated that successful language learners are capable of combining particular types of language learning strategies in effective ways according to their own learning needs regardless of their learning styles. However, this finding disconfirms the previous study conducted by Li Jie and Xiao Qing (2006) that students with certain cognitive style used more learning strategies than the students with other cognitive styles.

Conclusion

The conclusion drawn from the main findings of the current study are as follows: First, the students used a variety of learning strategies to cope with their learning tasks regardless of their frequency. Out of the six strategy categories, compensation and metacognitive strategies were the most frequently used-strategies, while the memory strategy was the least preferred. Secondly, the statistically significant differences exist in the mean scores of the overall learning strategies and the four categories (i.e. memory, compensation, cognitive, and metacognitive) used by the proficient and less proficient students. On the contrary, there were not statistically significant differences of mean scores in the use of overall learning strategies and the six learning strategy categories between the synoptic and ectenic students. It can be inferred that the increase of the reading proficiency level goes along with that of the learning strategy use, and vice versa. It is very likely that the learning strategy use could be the causes and the outcomes of improved reading proficiency. Hopefully, the less proficient readers could benefit from the strategies used by the more proficient readers.

References

- Baker, William, and Boonkit, K. 2004. Learning Strategies in Reading and Writing: EAP Contexts. *RELC* 35.3. pp. 299-328
- Chamot, A.U. & Kupper. L. 1989. Learning Strategies in Foreign Language Instruction. *Foreign Language Annuals*, 22, 13-24.
- Cohen, D. Andrew. 1996. *Second Language Learning and Use Strategies: Clarifying the Issues*. A revised version of a paper originally prepared for presentation at the Symposium on Strategies of Language Learning and Use, Seville, Spain, December 13-16, 1994.
- Ellis, Rod. 2008. *The Study of Second Language Acquisition*. Oxford: Oxford University Press.
- Ghonsooly , Behzad and Eghtesadee , Ahmad Reza. 2006. Role of Cognitive Style of Field-dependence/ independence in Using Metacognitive and Cognitive Reading Strategies by a Group of Skilled and Novice Iranian Students of English Literature. *Asian EFL Journal*, Volume 8, Number 4. pp. 119-150
- Lee Kyung Ok. 2003. The Relationship of School Year, Sex and Proficiency on the Use of Learning Strategies in Learning English of Korean Junior High School Students. *Asian EFL Journal*, Volume 8, Number 4.
- Lian Wong, Mary Siew. 2005. Language Learning Strategies and Language Self-Efficacy: Investigating the Relationship in Malaysia: *SAGE Publications*. Vol. 36(3) pp. 245-269
- Maggie Su, Min-hsun. 2005. A Study of EFL Technological and Vocational College students' Language Learning Strategies and their Self-Perceived English Proficiency: *Electronic Journal of Foreign Language Teaching*. Vol. 2, No. 1. pp. 44-56
- Nisbet, J., & Shucksmith, J. (2002). *Learning Strategies*. Routledge & K. Paul, Boston.
- Oxford, R. L. 1990. "Language Learning Strategies: What Every Teacher Should Know", New York: Newbury House Harper Collins
- Ozek, Yesim and Civelek, Muharrem. 2006. A Study on the Use of Cognitive Reading Strategies by ELT Students. *The Asian EFL Journal*. August 2006
- Wu Man-Fat, M. 2007. The Relationships between the Use of Metacognitive Language-learning Strategies and Language-learning Motivation among Chinese-speaking ESL learners at a Vocational Education Institute in Hong Kong. *Asian EFL Journal*. Volume 9. Issue 3 Article 5. pp. 93-117
- Li Jie, and Xiaoqing. 2006. Language Learning Styles and Learning Strategies of Tertiary-Level English Learners in China. *SAGE Publications*. Vol. 37(1). pp. 67-90
- Zhang, L. J. (2002). Exploring EFL Reading as Metacognitive Experience: Reader Awareness and Reading Performance. *Asian Journal of English Language Teaching*. 12. pp. 65-90.

