

Language Learning Strategies: A Cross Sectional Survey Of Vocational High School Students

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Abstract: The use of language learning strategies might be influenced by many factors such as gender, background cultures, career orientation and learning settings. In vocational setting, career orientation become an issue that needs a concern. The choice of department as career orientation is suspected to affect different strategies in learning English. This study aimed to identify the language learning strategies employed by the vocational high school students and to find out the differences in strategy use between two majors. This study involved 95 students from automotive engineering and electrical engineering of vocational high school students. Strategies Inventory for Language Learning (SILL) questionnaire which was constructed by Oxford (1990) was used in this study. Six domains were included in this questionnaire: Memory, Cognitive, Compensatory, Metacognitive, Affective, and Social. There are 50 items with 5 likert points in data completion. To analyze the data, SPSS and Microsoft Excel were used by the researcher. Results showed that there was a difference ($M=9.168$) in language learning strategies use of electrical engineering and automotive engineering students. Furthermore the metacognitive strategy was the most used while the memory strategy was the least used by the students.

Keywords: Language Learning Strategies, Vocational High School, SILL

BACKGROUND

Indonesia as an expanding circle country has put English in the curriculum from junior high school to vocational high school equivalent. Even if they have been learning English for years, there are many students' English skills are considered low. This could be caused by many factors such as teachers' proficiency, students' motivation and students' awareness on how important it is to master English language. Furthermore, the success of students' learning is also influenced by many factors, and one of the most influential factors is students' language learning strategy. Due to the unfamiliarity about language learning strategies (Tanjung, 2018), language learning strategies have not been well considered by both teachers and students in Indonesia.

Foreign language learning is a rough work. The finding about language learning strategies in relation to many elements has been increasing over four decades. Since many previous studies encompass on language learning strategies and students' achievement, it was discovered that there has been no study accentuate on the difference of language learning strategies and school type.

Learning strategy is associated to manner and technique intended to support the learning purposes. When learning different things, sometimes people use different ways. For example when learning speaking, the strategy that is used is different to strategies that is used in learning reading. Learning strategy indicate how learners cope with the learning challenge. Language learning strategies are steps and techniques that is used by the learners to help better understanding and make language learning more enjoyable (Oxford, 1990; Oxford & Crookall, 1989). Further, Hismanoglu (2000) argues that language learning strategies are either consciously or unconsciously used by all learners in the learning process. O'Neil (1978) differentiates two classes of strategies, primary and support

strategies. In primary strategies, the learners must be capable to distinguish the main and the rough parts of the subjects, employ tactics to help comprehension and remembering information. Strategies that help the primary strategies run productively are included in support strategies.

Oxford (1990) distinguishes the language learning strategies into two major classes: direct and indirect. Direct strategies are language learning strategies which employed the target language directly. Direct strategies consist of three strategies: memory (get information back easily anytime needed), cognitive (comprehend the learning resources), and compensatory (cope with cognition limit). On the other side, students who employ indirect strategies are maintaining and handling the language learning without directly engaging the target language. This indirect strategy also consists of three strategies: metacognitive (employ and harmonize various learning process), affective (cope with emotion and motivation), and social (gain benefits from others through communication). Furthermore, Oxford (1993) highlights the major influencing factors in language learning strategies choice like motivation, gender, cultural background, type of task, learning style, age and L2 stage. Learners who are more motivated tend to use more than one strategy than the learners who are less motivated. Some researchers reported female as a gender that has the greater strategy than male. Along with motivation and gender, cultural background also matter. Type of task also may affect the different strategies that's being used. While talking about age, the older learners usually use more complicated strategies than younger learners.

Previous studies on language learning strategies unfold that the first method of data collection in assessing students' learning strategies was by using diary study report (Nyikos, 1987). However, in 1989, Chamot, et.al. found that diary study report was ineffective due to it did not accommodate all types of learners. Despite that, they found that quantitative measurement through frequency and ranges were more effective to assess language learning strategies of their students. Thus, in the same year, Oxford (1989) developed the questionnaire to measure language learning strategies. This become our consideration to employ survey as our research methodology. In terms of the dimensions in language learning strategies, there are some factors that need to be considered (Oxford, 1989). Those are age, learning style, and gender. To this extent, age was found not to become a strictly influential factors. The most recognized issue was more into learning style, of which students' conscious and unconsciousness to self-regulate themselves during learning process. However, knowing that learning style become an issue, it covers problem solving as one of the components. Whereas, in Indonesia context, problem solving strategies are mostly applied in vocational high school students. However, little did research comply with the issue of language learning strategies in vocational high school context. In previous research there are many studies exposing the relation between language learning strategies and proficiency (Kunasaraphan, 2015; Su, 2005; Chand, 2014; Solak & Cakir, 2015; Magogwe & Oliver, 2007), language learning strategies and motivation (Nikoopour et al, 2012; Lin, Zhang & Zheng, 2017; Nasihah & Cahyono, 2017), language learning strategies and students' self-efficacy (Anam & Stracke, 2016), language learning strategies with emotional intelligence (Zafari & Biria, 2014), language learning strategies and learners' need (Sadeghi, Hassani, & Hessari, 2014), factors affecting language learning strategies choice (Ehrman & Oxford, 1989; Oxford & Ehrman, 1995; MacIntyre & Noels, 1996; Oxford, Nyikos & Ehrman, 1988), and language learning strategies with multiple intelligences (Akbari & Hosseini, 2008; Hajhashemi, Shakarami, Anderson, Amirkhiz, & Zou, 2013; Hajhashemi, Ghombavani, & Amirkhiz, 2011).

Vocational secondary schools are schools that aim to create candidates for middle-level workforce who are also able to create independent employment opportunities. There are 9 areas of expertise in Indonesia vocational schools. Each of these areas of expertise consists of several expertise programs with various expertise competencies. Due to its orientation to job environment, language and communication ability become important skills that must be mastered. Moreover, the approach used in teaching English in vocational high schools is different. ESP is the most appropriate way to teach English based on their fields. Hutchinson & Waters (1987) argues that ESP must be seen not as a

product, but as an approach. ESP are differentiated based on the requirements into EAP (English for Academic Purposes) and EOP (English for Occupational Purposes). In vocational high school, EOP is more recommended to be taught (Hutchinson & Waters, 1987). The English material that being used is in particular context, thus the students are allowed to be familiar with the target situation. For example, the hotel words are taught to tourism students. Breznica, Pllana, & Pllana (2017) also stated that by using ESP, the students are supplied with applicable vocabulary and language skills for their professional context. In conclusion, ESP is the most suitable approach that allow students to decide their own expertise since the beginning of vocational high school and allow students to have practice more than understanding the materials. Thus this research aims to contribute to the field of language learning strategy for secondary high school students both theoretically and practically. This research enhances language learning strategies employed in the classroom, likewise, the results of this study would add teachers' consideration in terms of teaching strategies which in line with students' learning strategies. For empirical contribution, the result of this study could append the additional insight about the difference of language learning strategies in vocational high school context with different majors or department.

After considering the significance, the problems are formulated into:

1. What are language learning strategies used by the students of Engineering Vocational High School?
2. What are statements with the highest and the lowest mean difference of language learning strategies?

METHOD

This research employed quantitative study, specifically survey study. The data collection in this method resulted numeral data which analyzed through statistical software such as SPSS. Survey study carries numeral result of trends in a population through its sample. According to the data collection time, survey can be distinguished into longitudinal and cross-sectional. In contrast with longitudinal, cross sectional study explore finite populations which is presented at one-shot or in a short moment (Creswell, 2009; Prince, 1998; Levin, 2006; Johnson, 2010). Furthermore, the comparison with other populations can be discovered through cross sectional study thus this study particularly applied cross sectional survey.

This research aimed to reveal language learning strategies used by the students of Engineering Vocational High School and discover the statements with the highest and the lowest mean difference of language learning strategies. The participants of this study were vocational high school students. Vocational high school refers to school which prepares the student to have reliable knowledge and skill as particular workforce (Sumbodo, Pardjono, Samsudi, & Rahadjo, 2018; Muladi, Wibawa, & Moses, 2018). According to government, there are 9 areas of expertise which cover 146 expertise competence (Indonesia Ministry of Education and Culture, 2008). There were 95 students of 12th grade public vocational high school which belongs to technology group. The participants were from different majors, automotive engineering and electrical engineering who did not take an internship at the beginning of academic year 2019/2020.

The Indonesia translation version of Strategy Inventory for Language Learning 7.0 was used after an expert judgement consultation in this research. There are 50 items that will be employed in this study. The 50 items consist of 9 items for memory strategy (item number 1-9), 14 items for cognitive strategy (item number 10-23), 6 items for compensatory strategy (item number 24-29), 9 items for metacognitive strategy (item number 30-38), 6 items for affective strategy (item number 39-44), and 6 items for social strategy (item number 45-50). This questionnaire use five-point likert scale ranging from 1 to 5. The number indicates how often the learner uses the strategies. As 1 means 'never or almost never true of me', 2 means 'usually not true of me', 3 means 'somewhat true of me', 4 means 'usually true of me', and 5 means 'always or almost always true of me'.

The numerical data obtained from the questionnaire were analyzed through SPSS. The t-test analysis for independent group was used since the normality was guaranteed.

The statistics carried were conveyed into tables then portrayed.

FINDINGS AND DISCUSSION

The data were computed and analyzed through SPSS version 20. The normality test named Shapiro-Wilk was done firstly to decide whether the data is distributed normally or not. Further, Shapiro Wilk test results are shown on the table above. P value (Sig) of Shapiro Wilk test on electrical engineering was $0,566 > 0,05$ and $0,734 > 0,05$ for automotive engineering. From the results it can be concluded that both majors were distributed normally through Shapiro Wilk test. After conducted the normality test, then the researcher conducted t-test to compute the difference between the mean of two groups. The results were shown on the table below.

Table 1. Normality Test (Shapiro-Wilk)

Majors	Statistic	df	Sig.
Electrical Engineering	.979	47	.566
Automotive Engineering	.984	48	.734

Table 2. T-test Result

		Independent Samples Test						
		t-test for Equality of Means					95% Confidence Interval of the Difference	
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Nilai	Equal variances assumed	2.121	93	.037	9.168	4.322	.585	17.752
	Equal variances not assumed	2.131	78.041	.036	9.168	4.301	.605	17.732

For the t-test (blue square), the t value result was 2,121 and the t-table was 1,985. Thus it can be concluded that there were language learning strategies differences between electrical and automotive engineering. The green square was used to determine the mean difference. The mean difference was 9.168 which showed the difference between the average means of automotive and electrical engineering.

Table 3. The highest and the lowest statement

Majors	1st Highest	2nd Highest	1st Lowest	2nd Lowest
Combined	statement. 32 M=3.61 SD=0.87	statement. 45 M=3.56 SD=0.96	statement. 43 M=1.49 SD=0.76	statement. 6 M=1.78 SD=0.73
Electrical	statement. 32 M=3.60 SD=0.83	statement. 38 M=3.60 SD=0.97	statement. 43 M=1.72 SD=0.85	statement. 6 M=2.00 SD=0.66
Automotive	statement. 32 M=3.63 SD=0.91	statement. 45 M=3.60 SD=1.03	statement. 43 M=1.27 SD=0.57	statement. 6 M=1.56 SD=0.74

From the overall results, the most used strategies was statement number 32. “I pay attention when someone is speaking English.” which included into metacognitive strategies. The results also consistent with study conducted by Sukarni (2018) which investigate the language learning strategies in senior high school and vocational high school. To be specific, the statement no 32. “I pay attention when someone is speaking English.” was also the most used strategy in automotive engineering (M=3.63 SD=0.91). On the electrical engineering, the most used strategy was exactly the same with automotive engineering with statement number 32. “I pay attention when someone is speaking English.” (M=3.60 SD=0.83). Thus, the most employed strategy in electrical engineering,

automotive engineering, and the combined version were from the same statement which automatically came from the same metacognitive domain.

The second most used strategies of both majors were also different. In automotive engineering, the second highest strategy was social strategy with statement number 45. "If I do not understand something in English, I ask the other person to slow down or to say it again." (M=3.60 SD=1.03) which included into social strategy. While in the electrical engineering, the second highest strategy was from the same metacognitive domain with statement number 38. "I think about my progress in learning English." (M= 3.60 SD= 0.97). These findings were supported by study conducted by Mahbub (2018) which revealed that most students of computer and networking major (TKJ) in vocational high school were prefer dialogue as a form of listening input.

The two least used strategies for automotive engineering, electrical engineering, and the combined majors were from different domains. From the combined majors, the least used strategy was from affective domain with statement number "43. I write down my feelings in a language learning diary." (M=1.49 SD=0.76). While the second least strategy was 6. "I use flashcards to remember new English words." (M=1.78 SD=0.73). In both majors, the least and the second least strategies were on the same statement. The least used strategy was from the affective domain with statement number 43. "I write down my feelings in a language learning diary." with M=1.27 SD=0.57 for automotive engineering and M=1.72 SD=0.85 for electrical engineering. The second least used strategies in both major were also same. Statement number 43. "I write down my feelings in a language learning diary." from memory strategy was the second least used with M= 1.56 SD= 0.74 for automotive engineering and M= 2.00 SD=0.66 for electrical engineering. Likewise, the study administered by Orellano (2017) was also discovered that most of vocational students were never use flash cards in their learning. These results also in line with study conducted by Altunay (2014) which revealed that university students were also rarely used flashcards as their learning strategy.

Table 4. Highest and lowest mean difference

Category of Mean Difference	Statement number	Electrical Engineering	Automotive Engineering	Mean Difference
1st highest	46	3.15	2.38	0.77
2nd highest	41	2.11	2.79	0.68
1st lowest	1	3.28	3.27	0.01
2nd lowest	4	3.19	3.17	0.02

From the two majors it was found that there were statements with the highest and the lowest mean differences. The first highest mean difference was from social strategy with statement number 46. "I ask English speakers to correct me when I talk." with 0.77 difference. The mean of electrical engineering was 3.15 while the automotive engineering mean was 2.38. The second highest mean difference was 0.68 from statement number 41. "I give myself a reward or treat when I do well in English." which included into affective strategy. The mean of electrical engineering was 2.11 and the mean of automotive engineering was 2.79. On the other side, the two lowest mean differences were both came from memory strategy. The lowest statement was number 1. "I think of relationships between what I already know and new things I learn in English." with mean difference 0.01 where the automotive engineering mean was 3.27 and the electrical engineering mean was 3.28. The second lowest mean difference was the statement number 4. "I remember a new English word by making a mental picture of a situation in which the word might be used." with mean difference was 0.02. The mean of electrical engineering was 3.19 and the

mean of automotive engineering was 3.17. Through SPSS calculation, the average mean difference was found 9.168. According to Lane (n.d) the importance is on whether there is a difference in means populations or not without focusing on its value. Thus, from the mean difference value, it can be concluded that there is a difference in the language learning strategies usage between the two majors.

CONCLUSION

From the results, it can be concluded that there was a difference in language learning strategies usage between electrical engineering and automotive engineering due to mean difference value of 9.168. The differences were found in all statements, however statement with highest mean difference was found in statement 46. "I ask English speakers to correct me when I talk.", while the lowest in statement number 1 "I think of relationships between what I already know and new things I learn in English.". Thus, even the students from both majors were mostly used the same strategies, statistically it was considered that there was a difference.

REFERENCES

- Akbari, R., & Hosseini, K. (2008). Multiple intelligences and language learning strategies: Investigating possible relations. *System*, 36, 141-155.
- Altunay, D. (2014). Language Learning Strategies used by distance learners of English: A study with a group of Turkish distance learners of EFL. *Turkish Online Journal of Distance*, 15(3), 291-205.
- Anam, S., & Stracke, E. (2016). Language learning strategies of Indonesian primary school students: In relation to self-efficacy beliefs. *System*(60), 1-10.
- Breznica, M. P., Pllana, Z., & Pllana, F. (2017). Overview of English for Specific Purposes in a Technical High School "Lutfi Musiqi" in Vushtrri. *Journal of Educational and Social Research*, 7(2), 133-140.
- Chand, Z. A. (2014). Language learning strategy use and its impact on proficiency in academic writing of tertiary students. *Procedia - Social and Behavioral Sciences*, 118, 511 - 521.
- Ehrman, M., & Oxford, R. (1989). Effects of Sex Differences, Career Choice, and Psychological Type on Adult Language Learning Strategies. *The Modern Language Journal*, 73, 1-13.
- Hajhasemi, K., Shakarami, A., Anderson, N., Amirkhiz, S. Y., & Zou, W. (2013). Relations Between Language Learning Strategies, Language Proficiency And Multiple Intelligences. *Academic Research International*, 4(6), 418-429.
- Hajhashemi, K., Ghombavani, F. P., & Amirkhiz, S. Y. (2011). The Relationship between Iranian EFL High School Students' Multiple Intelligence Scores and their Use of Learning Strategies. *English Language Teaching*, 4, 214-222.
- Hismanoglu, M. (2000, August 1). Language Learning Strategies in Foreign Language Learning and Teaching. *The Internet TESL Journal*, 6(6). Retrieved from iteslj.org: <http://iteslj.org/Articles/Hismanoglu-Strategies.html>
- Hutchinson, T., & Waters, A. (1987). *English for Specific Purposes A learning-centered approach*. Cambridge: Cambridge University Press.
- Indonesia Ministry of Education and Culture. (2008, June 7). *Keputusan Direktur Jenderal Manajemen Pendidikan Dasar dan Menengah NOMOR : 251/C/KEP/MN/2008 TENTANG SPEKTRUM KEAHLIAN PENDIDIKAN MENENGAH KEJURUAN*. Retrieved November 18, 2019 from <https://psmk.kemdikbud.go.id/konten/473/spektrum-keahlian-pendidikan-menengah-kejuruan->
- Kunasaraphan, K. (2015). English Learning Strategy and Proficiency Level of the First Year Students. *Social and Behavioral Sciences*, 197, 1853-1858.
- Lane, D. M. (n.d.). *Online Statistics Education: An Interactive Multimedia Course of Study*. Retrieved from Sampling Distribution of Difference Between Means: http://onlinestatbook.com/2/sampling_distributions/samplingdist_diff_means.html
- Lin, Chin-His., Zhang, Y., Zheng, B. (2017). The roles of learning strategies and motivation in online language learning: A structural equation modeling analysis.

- Computers & Education, 113, 75-85.
- MacIntyre, P. D., & Noels, K. A. (1996). Using Social-psychological Variables to Predict The Use of Language Learning Strategies. *Foreign Language Annals*, 29, 373-386.
- Magogwe, J. M., & Oliver, R. (2007). The relationship between language learning strategies, proficiency, age and self-efficacy beliefs: A study of language learners in Botswana. *System*, 35, 338-352.
- Mahbub, M. A. (2018). Teaching in Vocational High School: A Need Analysis. *JEELS*, 5(2), 229-258.
- Muladi, Wibawa, A. P., & Moses, K. M. (2018). A study of the impact of cooperation between vocational high school and industries in Malang City. *Journal of Physics: Conference Series*, 1-9.
- Nasihah, M., & Cahyono, B. Y. (2017). Language Learning Strategies, Motivation, and Writing Achievement of Indonesian EFL Students. *Arab World English Journal*, 8(1), 250-263.
- Nikoopour, J., Salimian, S., Salimian, S., & Farsani, M. A. (2012). Motivation and the Choice of Language Learning Strategies. *Journal of Language Teaching and Research*, 3(6), 1277-1283.
- O'Neil, H. (1978). *Learning Strategies (The Educational Technology Series)*. San Fransisco: Academic Press.
- Orellano, M. T. (2017). Memory Learning Strategies in English as a Foreign Language in Vocational Studies. *Tendencias Pedagogicas*, 29, 229-249.
- Oxford, R. (1989). Use of Language Learning Strategies: A Synthesis of Studies With Implications for Strategy Learning. *System*, 17(2), 235-247.
- Oxford, R. (1990). *Language Learning Strategies: What Every Teacher Should Know*. Boston: Heinle & Heinle Publishers.
- Oxford, R. (1993). Research on Second Language Learning Strategies. *Annual Review of Applied Linguistics*, 13, 175-187.
- Oxford, R., & Ehrman, M. E. (1995). Adults' Language Learning Strategies In An Intensive Foreign Language Program In The United States. *System*, 23, 359-386.
- Oxford, R., & Crookall, D. (1989). Research on Language Strategies: Methods, Findings, and Instructional Issues. *The Modern Language Journal*, 73, 404-419.
- Prince, M. (1998). The cross-sectional survey. *International Review of Psychiatry*, 10, 272-277.
- Sadeghi, B., Hassani, M. T., & Hessari, A. D. (2014). On the Relationship Between Learners' Needs and Their Use of Language Learning Strategies. *Procedia - Social and Behavioral Sciences*, 136, 255-259.
- Solak, E., & Cakir, R. (2015). Language Learning Strategies of Language E-Learners in Turkey. *E-Learning and Digital Media*, 12(1), 107-120.
- Su, Min-hsun Maggie. (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*, 2(1), 44-56.
- Sukarni, S. (2018). Language Learning Strategies Used By Senior And Vocational High School Students And Its Implications For Practice In ELT. *English Language Teaching Learning Conference.3*, page. xxx-xxxvii. Purworejo: Muhammadiyah University of Purworejo.
- Sumbodo, W., Pardjono, Samsudi, & Rahadjo, W. D. (2018). Implementation of partnership management model of SMK (Vocational High School) with existing industries in mechanical engineering expertise in Central Java. *AIP Conference Proceedings*. 1941, pp. 020038-1 – 020038-13. AIP Publishing.
- Tanjung, F. Z. (2018). Language Learning Strategies in English as a Foreign Language Classroom in Indonesian Higher Education Context. *A journal on Language and Language Teaching*, 21, 50-69.
- Zafari, M., & Biria, R. (2014). The Relationship between Emotional Intelligence and Language Learning Strategy Use. *Procedia - Social and Behavioral Sciences*, 98, 1966 - 1974.