

An Analysis of Student Learning Style in Learning English in Sekolah Indonesia Kuala Lumpur, Malaysia

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Abstract

Learning style preferences are an important aspect of the learning process, as they can affect how students engage with and retain information. The VARK model, which categorizes learning preferences as visual, aural, read/write, and kinesthetic, is a useful tool for understanding and maximizing students' learning styles. However, little research has investigated learning styles in the context of English as a Second Language (ESL) education. To address this gap, this study aimed to identify the learning styles employed by students and the dominant learning style in use at *Sekolah* Indonesia Kuala Lumpur, Malaysia for learning English. The study utilized a descriptive quantitative research method and collected data from 28 participants. The findings revealed that students in the ESL context tended to use a combination of unimodal and bimodal learning styles, with the kinesthetic learning style being the most dominant. These findings suggest that ESL teachers should design English learning activities that align with students' preferred learning styles, particularly by emphasizing hands-on, experiential learning that allows students to engage directly with the material. Furthermore, a student-centered approach to teaching should be prioritized to help students reach their language learning objectives more effectively. Future research could investigate how individual differences in learning styles impact ESL learning outcomes and identify effective teaching strategies for diverse learning styles in the ESL context.

Keywords: Learning Style, Learning English, ESL, EFL, SIKL.

INTRODUCTION

Learning style is one way to find out a person's most comfortable way in the learning process being carried out. Research on learning styles has been carried out by several researchers; first, Widharyanto & Binawan (2020) their research explains that of the five ethnic groups, it was found that they were dominant in aural, kinesthetic, and various learning styles in bimodal and trimodal forms. Second, Baihaqi et al., (2020) his research revealed that students' confidence in learning pronunciation can be achieved and increased through learning styles by practicing listening to songs, watching, and reading books in English. Third, Maryono & Lengkanawati (2022) the result of this research is the learning

process from a distance can also be useful for teachers and students EFL to find out student learning styles during learning. Fourth, Suparman's result showed that cognitive learning styles are very influential in the process of teaching vocabulary, so cognitive learning styles influence students' reading comprehension contextually. From the explanation above, mostly they were investigating learning styles in the English as a Foreign Language (EFL) context. Thus, the gap in this research is the investigation of learning style in the English as a Second Language (ESL) context. This research was conducted in *Sekolah Indonesia Kuala Lumpur* (*SIKL*), Malaysia.

During the learning process, a person's learning style easily combines, organizes, and processes the obtained information (Albeta et al., 2021; Bire et al., 2014). Learning styles lead to the way that individuals prefer to assemble information and ways of thinking, remembering, or solving unique problems (Abante et al., 2014). Learning style is a strategy in which students prefer to interact, give statements and respond to the student learning environment (Ehrman et al., 2003; Khalid et al., 2017; Norliani, 2022; Pourhosein Gilakjani, 2011; Zhou, 2011). Meanwhile, students have their own learning style preferences in learning styles (Aisyah M.S, 2017).

Learning modality or commonly called learning style is a way of a person's brain system to create experiences and seek information. This explanation, gave rise to various theories and also research on the influence of learning styles, thus showing many things that affect students in education and learning in general (Cook, 2005; Stephenson, 2019). Before carrying out learning, learning modality is one of the characteristics that must be known (Farman et al., 2021).

Learning something is not only related to the learning process at the school but also other things, how far students believe in knowledge and learning (Nur Ghufron & Suminta, 2020). According to (Federico, 2000) student learning objectives can be obtained easily when pedagogically provided facilities by the differences of each student, even though each student has a different learning pressure adapted to learning styles (Hendry et al., 2005). Each individual is different when learning and has their way of learning (Willingham et al., 2015).

Learning styles are categorized into six styles; learning style visual, auditory, kinesthetic, tactile, group, and personal (Ghaedi & Jam, 2014; Maryono & Lengkanawati, 2022; Sabeh et al., 2011; Şener & Çokçalışkan, 2018). Additionally, students who use visuals prefer learning with presentations using graphs, etc. Students who use auditory by using listening. Students with reading/writing are more directed to reading and writing activities. Students who use kinesthetics in the learning process are very interested in moving, etc. While students who use tactile activities do what they do directly. In addition, students who use groups are students who like to socialize with the environment. Moreover, students who use study privately are more comfortable studying alone (Dunn et al., 2002; Maryani et al., 2017; Renou, 2005; Stephenson, 2019).

In another hand, (N. D. Fleming, 1995) categorized learning style modes into VARK, namely; visual, auditory, read/write, and kinesthetic. VAK is visual, auditory, and kinesthetic which are new models in the development of existing learning styles (Bakri et al., 2019; S. Gholami & Bagheri, 2013; Sreenidhi & Tay Chinyi, 2017; Willis, 2017). Fleming distinguishes (visual) from modality (read/write) because the two models have different styles (N. Fleming et al., 2006). Since then learning styles have had four models, namely VARK. Then

from this, Fleming's learning style has four preference models VARK (Balasubramaniam & K, 2016; N. D. Fleming & C. Bonwell, 2019; Payaprom & Payaprom, 2020; Wehrwein et al., 2007; Widharyanto & Binawan, 2020). Choudhary et al., (2011) states that VARK enters or seeks information is a category of learning process with the priority nervous system.

Meanwhile, effective learning is when students like learning styles according to their interests, one of which is a process approach that includes tendencies in student learning styles in learning (Wehrwein et al., 2007). According to Hawk & Shah (2007) using one or more learning styles with instruments can assist students in compiling student learning activities. By analyzing the learning styles of students, educators can adjust the learning styles of the students being taught.

In addition, student involvement in learning a lesson is very effective so it must focus on developing student learning that involves educational institutions (Marcy, 2001). In addition, students can change their learning habits by following their willingness to learn so that they can help improve student academic achievement (Sinha et al., 2013; Urval et al., 2014). Faisal (2019) states individual characteristics and learning style preferences greatly influence students' language achievement.

Therefore, the researchers are interested and curious in doing this research because the investigation of learning style in the ESL context is limited to finding out the facts about the learning style and to knowing the dominant students' learning style in *Sekolah Indonesia Kuala Lumpur*, Malaysia because students have not known yet the learning style they used. There was a lack of investigation into the learning styles of ESL students so that students did not know their learning styles (Mulalic et al., 2015). This article focuses on answering the following research questions; First, what is the learning style employed by the ESL students in *Sekolah Indonesia Kuala Lumpur*, Malaysia? Second, what is the dominant learning style employed by the ESL students in *Sekolah Indonesia Kuala Lumpur*, Malaysia?

METHOD

The research was conducted using a descriptive quantitative approach. An approach taken to test objective theories by examining the relationships between variables is quantitative research (Creswell & Creswell, 2018). The purpose of this descriptive research is to describe a problem under study. The facts presented in the descriptive research are also presented as they are. Descriptive research aims to describe variables related to the problems and units to be studied (Mulyadi, 2011). Descriptive quantitative is research conducted to analyze data by describing the data obtained properly. This study uses descriptive because it is not to test the hypothesis but to describe the facts that occur in place, especially on students' learning styles in learning English. Therefore, the researcher took a sample of ESL students in *Sekolah Indonesia Kuala Lumpur*, Malaysia.

Participants

There were 28 students involved as participants in this research. The participants in this study were ESL students in *Sekolah Indonesia Kuala Lumpur*, Malaysia.

Instrument

In this study, the instrument used was a questionnaire consisting of 20 questions. The instrument provided is an instrument adopted from (Jumrah, 2022) which deals with types of learning styles by VARK Neil Fleming. The questions given are in the form of questions to

find out 4 types of student learning styles such as; visual, auditory, read/write, and kinesthetic. This instrument used the Likert scale, there are five answer choices, namely; "strongly agree", "agree", "neutral", "disagree", and "strongly disagree".

Data Collection Technique

The data collection technique in this study was a questionnaire, the questionnaire was distributed via Google form and which was shared via Whatsapp. Then respondents are asked to fulfill the questionnaire freely and objectively to identify these preferences.

Data Analysis Technique

The way of processing data to be used as information so that it makes it easier to understand the characteristics of the data and also find solutions to problems in research are data analysis techniques. Researchers used descriptive quantitative analysis to analyze the questionnaire that was given using data tabulations to summarize the data that was obtained. In addition, from the data obtained, the researcher determines the mean (M), median (Me), mode (Mo), and standard deviation (Std). Furthermore, the researcher categorizes each learning style into 3 categories, namely low, medium, and high based on the mean and standard deviation. This researcher also determines the type of learning style and dominant ESL students in *Sekolah Indonesia Kuala Lumpur*, Malaysia.

FINDING AND DISCUSSION FINDING

The findings of this learning style research are presented based on the two parts of the questions that have been formulated previously.

What is the learning style employed by the ESL students in *Sekolah Indonesia Kuala Lumpur*, Malaysia?

The research was conducted on Thursday, December 22th 2022. The research was conducted with 28 ESL students in *Sekolah Indonesia Kuala Lumpur*, Malaysia. The instrument was a questionnaire consisting of 20 statements in the form of a *Google form* application then shared by the *Whatsapp* application to the students' group. Table 1 shows the results of the questionnaire obtained.

Table 1. Summary score of learning style questionnaire

Variable	Score	Frequency	Percentage
Visual learning style	478		68.29%
Auditory learning Style	492	28	70.28%
Read/write learning style	485	20	69.28%
Kinesthetic Learning style	510		72.85%

It can be seen that the kinesthetic learning style has the highest score with a percentage of 72.85%. Auditory with a percentage of 70.28%, read/write with a percentage of 69.28%, and visual with a percentage of 68.29%. The researcher compiled a frequency distribution table and found that the number of class intervals was 6, the data range was 33 (89–54), and the class length was rounded up to 6 (33:6). The summary of the frequency distribution will be drawn as follows:

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Interval Score	Frequency	Percentage	
54—59	4	14%	
60—65	7	25%	
66—71	5	18%	
72—77	5	18%	
78—83	4	14%	
84—89	3	11%	
Total	28	100%	

The researcher calculated the mean, median, mode, and standard deviation by using *Ms. Excel* application. From the calculations, the researcher found that the value of the mean was 70.0, the value of the median was 69.5 the value of the mode was 65, and the value of the standard deviation was 9.73. The researcher also classifies the students' scores into types of learning styles. Table 3 showed the results of the classification that has been found.

Table 3. Classification of Students' learning style

Interval Score	Frequency	Percentage
Kinesthetic — Visual	2	7%
Kinesthetic	17	61%
Kinesthetic — Auditory	1	4%
Auditory	1	4%
Read/Write	4	14%
Visual — Read/Write	1	4%
Visual — Auditory	1	4%
Auditory — Read/Write	1	4%
Total	28	100%

The researcher concluded from the table above that students used one and two learning style preferences. Students who used one of the learning styles were kinesthetic, auditory, and read/write. There were 17 students with the highest percentage, namely 61% kinesthetic. Then there were 4 students reading/writing with a percentage of 14%. There was 1 auditory student with a percentage of 4%. The results showed that 22 out of 28 ESL students used one type of learning style.

Meanwhile, students used two learning style preferences namely kinesthetic-visual, kinesthetic-auditory, visual-read/write, visual-auditory, and auditory-read/write learning style. There were 2 students with a percentage of 7% kinesthetic-visual. There was 1 student with a percentage of 4% kinesthetic-auditory. There was 1 student with a percentage of 4% visual-read/write. There was 1 student with a percentage of 4% visual-auditory. There was 1 student with a percentage of 4% auditory-read/write. The total of students that used two types of learning styles was 28 students. From the results above, it can be seen that not all ESL students use only one learning style preference, but they also use two learning style preferences. The following was a summary of ESL students who used one learning style preference (uni-modal) or used two learning style preferences (bi-modal).

Modal	Frequency	Percentage	
Uni-modal	22	79%	
Bi-modal	6	21%	
Total	28	100%	

The result of the modal of students' learning style in the pie chart is s follows:

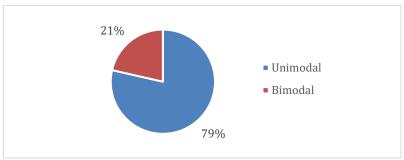


Figure 1. Pie chart the modal of students learning style.

In addition, researchers measure the level of learning tendencies of each of the 4 types of learning styles according to three criteria. Each aspect will be measured and explained as follows:

Visual Learning Style

Table 5. Level tendency students' visual learning style

Level	Frequency	Percentage	
Low	2	7.1%	
Medium	15	53.6%	
High	11	39.3%	

The level tendency of students who used the visual learning style was medium.

Auditory Learning Style

Table 6. Level tendency students' auditory learning style

Level	Frequency	Percentage	
Low	0	0.0%	
Medium	19	67.9%	
High	9	32.1%	

The level tendency of students who used the auditory learning style was medium.

Read/Write Learning Style

Table 7. Level tendency students' read/write learning style

Level	Frequency	Percentage	
Low	1	3.6%	
Medium	16	57.1%	
High	11	39.3%	

The level tendency of students who used the read/write learning style was medium.

Kinesthetic Learning Style

Table 8. Level tendency students' kinesthetic learning style

Level	Frequency	Percentage	
Low	1	3.6%	
Medium	14	50.0%	
High	13	46.4%	

The level tendency of students who used the kinesthetic learning style was medium.

What is the dominant learning style employed by the students in *Sekolah Indonesia Kuala Lumpur*, Malaysia?

After categorizing the tendency level of learning style, the researcher continues to determine the dominant used by ESL students in learning styles in learning English at *Sekolah Indonesia Kuala Lumpur*, Malaysia.

Table 9. The dominant type of students learning style

Interval Score	Frequency	Percentage
Kinesthetic — Visual	2	7%
Kinesthetic	17	61%
Kinesthetic — Auditory	1	4%
Auditory	1	4%
Read/Write	4	14%
Visual — Read/Write	1	4%
Visual — Auditory	1	4%
Auditory — Read/Write	1	4%
Total	28	100%

The result of the dominant type of learning style in the pie chart is as follows:

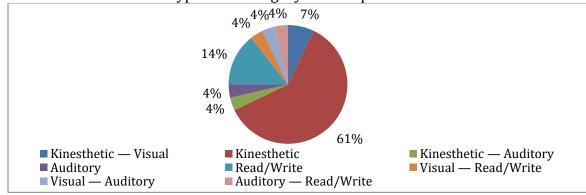


Figure 2. Pie chart the dominant type of learning style.

From the table and pie chart above, the dominant learning style used by ESL students in SIKL was kinesthetic. There was the frequency of students in kinesthetic was 17 out of 28 students with a percentage was 61%.

DISCUSSION

The results of this study are that ESL students at SIKL tend to have different learning styles which can be classified as; unimodal is an acronym for one learning style mode, bimodal two learning style modes, trimodal three learning style modes, and quadrimodal which has four learning styles (Chen et al., 2022; Kurniawan et al., 2019; Leasa et al., 2018; Renuga & Vijayalakshmi, 2013). In research on ESL students at *SIKL*, they have a preference for unimodal and bimodal learning styles.

Interestingly, the learning styles of ESL students in SIKL can be seen from several which fall into the unimodal category and variations in learning styles for students who fall into the bimodal category (Table 3). The most important majority of ESL students' learning styles were unimodal learning styles (79%) which were considered the most important learning style preferences. Then almost (21%) ESL students in *SIKL* prefer to used two modes of learning styles was bimodal (Table 4).

This research is in line with several (Shanti Manipuspika, 2020; Widharyanto & Binawan, 2020) found that the preference for learning styles in Indonesian EFL students' is the learning mode with one stylistic or unimodal in their students. This may be due to the geography, culture, and learning methods given to Indonesian students. So that Indonesian students' ESL and EFL learning styles tend to be the same learning style.

Based on table 9, the researcher concluded that ESL students in *SIKL* have the most preferred kinesthetic learning style with a percentage (61%). Leasa et al., (2017) also in their findings students in Indonesia found that the most prominent was kinesthetic. This may be because students are used to directing physical activity during the learning process. Active activities such as experiments, moving, playing roles or drama, and making handicrafts are activities that are liked by kinesthetics (Ariastuti & Wahyudin, 2022; R. Gholami, 2014; Kamal et al., 2021; Syofyan & Siwi, 2018).

The relationship between kinesthetic characteristics and ESL in the learning process is very close, allowing students to change language to make it easier to understand (Corrales, 2008). The kinesthetic characteristics of ESL are student involvement in learning English such as role-playing to help students understand advanced concepts (Shah et al., 2013). In the learning process many learning styles are combined to help improve the teaching and learning process in the classroom (Shuib & Azizan, 2015).

Based on the results of research on the learning styles of ESL students in *SIKL*, it was concluded that all types of learning styles have moderate criteria. In this learning style preference, it was found that students liked the unimodal and bimodal learning styles, but the most prominent was the unimodal preference. In addition, researchers found that ESL students in *SIKL*, dominantly used it in learning English, namely kinesthetic learning style. Kinesthetic learning styles are more effective in the learning process in class than visual, auditory, or read/write in the ESL context. Therefore, ESL students need to consider their preferred learning style to help them understand the subject matter presented in class.

From this, it can be seen that students prefer to carry out the learning process by doing something meaningful in their learning process. Even though ESL is contextual because they are Indonesian children living in Malaysia, they have the same characteristics in learning style preferences. In addition, from these findings, there was no significant difference between Indonesian ESL students in *SIKL* and other findings about Indonesian EFL students in determining learning style preferences when learning English.

CONCLUSION

The conclusion from this study was an attempt to explore students' learning styles in learning English and the discussion is visual, auditory, read/write, and kinesthetic which can affect SIKL student achievement. Several findings can be noted based on the results of research that has been done. First, efforts to explore student learning styles using various methods. Second, exploring the learning styles of ESL students in learning English at SIKL was challenging. This study has several challenges: lack of student motivation, many students do not know their learning style indirectly, and still use the main language in learning English. These challenges hinder students from exploring learning styles to the fullest. Then there are several suggestions for several parties, namely: first, for students, it is suggested to better understand the characteristics and explore learning styles better so that they can help in improving learning achievement. Second, teachers can adapt the learning process to student learning styles so that the learning process can run smoothly. Third, parents can support students and pay more attention to students while studying at home and try to find out student learning styles while studying. The results of this study are useful for teachers in understanding the characteristics of student learning styles in class. Theoretically, the results of the research that has been carried out can be used as a reference in the problem of student learning styles in learning English and practically, can be used to evaluate student learning styles in learning English for ESL students. This study has limitations, namely limitations in the number of students as well as limited issues regarding student learning styles. Therefore, it is suggested for further research to cover the problems of other learning styles during English learning, especially the learning styles of ESL students because there is still little research on this matter.

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REFERENCES

- Abante, M. E. R., Almendral, B. C., Manansala, J. E., & Manibo, J. (2014). Learning Styles and Factors Affecting the Learning of General Engineering Students. *International Journal of Academic Research in Progressive Education and Development*, 3(1). https://doi.org/10.6007/ijarped/v3-i1/500
- Aisyah M.S. (2017). Challenges in Teaching English Faced by English Teachers at MTsN Taliwang, Indonesia. *Journal of Foreign Languange Teaching and Learning*, *2*(2), 54–67. https://doi.org/10.18196/ftl.2223
- Albeta, S. W., Haryati, S., Futra, D., Aisyah, R., & Siregar, A. D. (2021). The Effect of Learning Style on Students' Learning Performance During the Covid-19 Pandemic. *JTK: Jurnal Tadris Kimiya*, 6(1), 115–123. https://doi.org/10.15575/jtk.v6i1.12603
- Ariastuti, M. D., & Wahyudin, A. Y. (2022). Exploring Academic Performance and Learning Style of Undergraduate Students in English Education Program. *Journal of English Language Teaching and Learning (JELTL)*, 3(1), 67–73. http://jim.teknokrat.ac.id/index.php/english-language-teaching/index
- Baihaqi, Y., Siagiyanto, B. E., & Pamungkas, R. A. (2020). Learning Style In Learning

- Pronunciation of EFL Learner: A Case Study. *Premise: Journal of English Education and Applied Linguistics,* 10(1), 78–93. https://doi.org/http://dx.doi.org/10.24127/pj.v10i1.3030
- Bakri, R. A., Rahman, M. A., Jabu, B., & Jassruddin. (2019). Exploring the impact of vak learning style on teenager level language learners in indonesia. *Journal of Language Teaching and Research*, 10(4), 807–814. https://doi.org/10.17507/jltr.1004.17
- Balasubramaniam, G., & K, I. (2016). A Study of Learning Style Preferences among First Year Undergraduate Medical Students Using VARK Model. *Education in Medicine Journal*, 8(4), 15–21. https://doi.org/10.5959/eimj.v8i4.440
- Bire, A. L., Geradus, U., & Bir, J. (2014). Pengaruh Gaya Belajar Visual, Auditorial, Dan Kinestetik Terhadap Prestasi Belajar Siswa. *Jurnal Kependidikan*, 44(2), 168–174. https://doi.org/https://doi.org/10.21831/jk.v44i2.5307
- Chen, A., Nur, S., Mohd, W., Nazrin, A., & Nazri, A. (2022). Unimodal & Kinaesthetic Learning Styles Predominate in Both Science and Non-Science University Students in. *Journal of Academia*, 10(1), 61–71. https://myjms.mohe.gov.my/index.php/joa/article/view/14608
- Choudhary, R., Dullo, P., & Tandon, R. V. (2011). Gender Differences in Learning Style Preferences of First Year Medical Students. *Pak J Physiol*, 7(2), 42–45. http://www.pps.org.pk/PJP/7-2/Raghyveer.pdf42
- Cook, D. A. (2005). Reliability and validity of scores from the index of learning styles. *Academic Medicine*, 80(10 SUPPL.). https://doi.org/10.1097/00001888-200510001-00026
- Corrales, K. (2008). Getting your hands on learning: Manipulative tools in content ESL/EFL instruction. *Latin American Journal of Content and Language Integrated Learning*, 1(1), 60–65. https://doi.org/10.5294/laclil.2008.1.1.7
- Creswell, W. J., & Creswell, J. D. (2018). Research Design: Qualitative, Quantitative adn Mixed Methods Approaches. In *Journal of Chemical Information and Modeling* (Vol. 53, Issue 9). https://lccn.loc.gov/2017044644
- Dunn, R., Beaudry, J. S., & Klavas, A. (2002). Survey of research on learning styles. *California Journal of Science Education*, 2(2), 75–98. https://digitalcommons.usm.maine.edu/sehd-faculty-publications/218/
- Ehrman, M. E., Leaver, B. Lou, & Oxford, R. L. (2003). A brief overview of individual differences in second language learning. *System*, *31*(3), 313–330. https://doi.org/10.1016/S0346-251X(03)00045-9
- Faisal, R. A. (2019). Influence of Personality and Learning Styles in English Language Achievement. *Open Journal of Social Sciences*, *07*(08), 304–324. https://doi.org/10.4236/jss.2019.78022
- Farman, F., Arbain, A., & Hali, F. (2021). Learning Style Preferences Based on Class and Gender. *AL-ISHLAH: Jurnal Pendidikan*, 13(1), 164–172. https://doi.org/10.35445/alishlah.v13i1.368
- Federico, P. A. (2000). Learning styles and student attitudes toward various aspects of network-based instruction. *Computers in Human Behavior*, *16*(4), 359–379. https://doi.org/10.1016/S0747-5632(00)00021-2
- Fleming, N. D. (1995). I'm different; not dumb. Modes of presentation (VARK) in the tertiary classroom. *HERDSA*, *18*, 308–313. https://serc.carleton.edu/resources/40571.html

- Fleming, N., Developer, E., Baume, D., & Consultant, H. E. (2006). Educational developments. *Journal of the Royal Institute of Chemistry*, 82(AUGUST), 566–568. https://doi.org/10.7748/ns.6.2.51.s64
- Ghaedi, Z., & Jam, B. (2014). Relationship between learning styles and motivation for higher education in EFL students. *Theory and Practice in Language Studies*, *4*(6), 1232–1237. https://doi.org/10.4304/tpls.4.6.1232-1237
- Gholami, R. (2014). Language Learning Style Preferences: A Theoretical and Empirical Study Language Learning Style Preferences: A Theoretical and Empirical Study. *Advances in Asian Social Science (AASS)*, 2(2), 441–451. https://www.researchgate.net/publication/229088682
- Gholami, S., & Bagheri, M. S. (2013). Journal of Language Teaching and Research. *Journal of Language Teaching and Research*, *4*(4), 700–706. https://doi.org/10.4304/jltr.4.4.700-706
- Hawk, T. F., & Shah, A. J. (2007). Using Learning Style Instruments to Enhance Students Learning. *Decision Sciences Journal of Innovative Education*, 5(1), 1–2. https://doi.org/10.1007/978-3-642-11486-1_13
- Hendry, G. D., Heinrich, P., Lyon, P. M., Barratt, A. L., Simpson, J. M., Hyde, S. J., Gonsalkorale, S., Hyde, M., & Mgaieth, S. (2005). Helping students understand their learning styles: Effects on study self-efficacy, preference for group work, and group climate. *Educational Psychology*, *25*(4), 395–407. https://doi.org/10.1080/01443410500041706
- Jumrah, et al. (2022). Students learning style by using neil fleming's vark model and inventory. *Journal of Language Testing and Assessment*, 2(1), 79–86. https://doi.org/https://doi.org/10.56983/jlta.v2i1.71
- Kamal, I., Karim, M. K. A., Kechik, M. M. A., Ni, X., & Razak, H. R. A. (2021). Evaluation of healthcare science student learning styles based vark analysis technique. *International Journal of Evaluation and Research in Education*, 10(1), 255–261. https://doi.org/10.11591/ijere.v10i1.20718
- Khalid, M., Akhter, M., & Hashmi, A. (2017). Teaching Styles of Secondary School English Teachers and Learning Styles of Their Students and Relationship of Teaching Learning Style Match with Students' Achievement. *Bulletin of Education and Research*, *39*(3), 203–220. https://files.eric.ed.gov/fulltext/EJ1210136.pdf
- Kurniawan, Y. I., Rahmawati, A., Chasanah, N., & Hanifa, A. (2019). Application for determining the modality preference of student learning. *Journal of Physics: Conference Series*, 1367(1), 2. https://doi.org/10.1088/1742-6596/1367/1/012011
- Leasa, M., Batlolona, J. R., Enriquez, J. J., & Kurnaz, M. A. (2018). Determination Of Elementary Students' Learning Styles Reviewed From Gender Aspects. *Journal of Education and Learning (EduLearn)*, 12(3), 478–486. https://doi.org/10.11591/edulearn.v12i3.8978
- Leasa, M., Corebima, A. D., Ibrohim, & Suwono, H. (2017). Emotional intelligence among auditory, reading, and kinesthetic learning styles of elementary school students in Ambon-Indonesia. *International Electronic Journal of Elementary Education*, 10(1), 83–91. https://doi.org/10.26822/iejee.2017131889
- Marcy, V. (2001). Adult Learning Styles: How the VARK© Learning Style Inventory Can Be Used to Improve Student Learning. *The Journal of Physician Assistant Education*, *12*(2), 117–120. https://doi.org/10.1097/01367895-200107000-00007
- Maryani, I., Fatmawati, L., Erviana, Yuli, V., Kartika, D., Wangid, M. N., & Mustadi, A. (2017).

- Validity and Reliability of Learning Style Scale of The Elementary School Students. *Yogyakarta Uuniversity*, 364–382. https://usd.ac.id/seminar/icre/wp-content/uploads/2018/07/364-382_Maryani_ICRE2017.pdf
- Maryono, G. D., & Lengkanawati, N. S. (2022). EFL teachers 'strategies to accommodate students' learning styles in. *Journal on English as a Foreign Language*, 12(1), 159–178. https://doi.org/https://doi.org/10.23971/jefl.v12i1.3130
- Mulalic, A., Shah, P. M., & Ahmad, F. (2015). Learning style preference of ESL students. *Asean Journal of Teaching and Learning in Hihger Education*, 1(2), 9–17. https://www.researchgate.net/publication/41389784
- Mulyadi, M. (2011). Penelitian Kuantitatif Dan Kualitatif Serta Pemikiran Dasar Menggabungkannya. *Jurnal Studi Komunikasi Dan Media*, 15(1), 128. https://doi.org/10.31445/jskm.2011.150106
- N. D. Fleming, & C. Bonwell. (2019). *How Do I Learn Best? a Learner'S Guide To Improved Learning.* 128. https://vark-learn.com
- Norliani, N. (2022). The Analysis of Students' Learning Style in Learning English of English Language Education Study Program STKIP PGRI Banjarmasin. *Lentera: Jurnal Ilmiah Kependidikan*, 1, 28–32. https://doi.org/10.33654/iseta.v1i0.1757
- Nur Ghufron, M., & Suminta, R. R. (2020). Epistemic beliefs on field-dependent and field-independent learning style. *Cakrawala Pendidikan*, *39*(3), 532–544. https://doi.org/10.21831/cp.v39i3.23800
- Payaprom, S., & Payaprom, Y. (2020). Identifying learning styles of language learners: A useful step in moving towards the learner-centred approach. *Journal of Language and Linguistic Studies*, *16*(1), 59–72. https://doi.org/10.17263/JLLS.712646
- Pourhosein Gilakjani, A. (2011). Visual, Auditory, Kinaesthetic Learning Styles and Their Impacts on English Language Teaching. *Journal of Studies in Education*, *2*(1), 104. https://doi.org/10.5296/jse.v2i1.1007
- Renou, J. (2005). A study of perceptual learning styles and achievement in a university level foreigner language course. *Universidad de Puerto Rico*, 1–15. https://crisolenguas.uprrp.edu
- Renuga, M., & Vijayalakshmi, V. (2013). Applying Vark Principles To Impart Interpersonal Skills To The Students With Multimodal Learning Styles. *Life Science Journal*, 10(2), 2671–2677. http://www.lifesciencesite.com
- Sabeh, G., Bahous, R., Bacha, N. N., & Nabhani, M. (2011). A Match or a Mismatch between Student and Teacher Learning Style Preferences. *International Journal of English Linguistics*, 1(1), 162–172. https://doi.org/10.5539/ijel.v1n1p162
- Şener, S., & Çokçalışkan, A. (2018). An Investigation between Multiple Intelligences and Learning Styles. *Journal of Education and Training Studies*, 6(2), 125. https://doi.org/10.11114/jets.v6i2.2643
- Shah, K., Ahmed, J., Shenoy, N., & N, S. (2013). How different are students and their learning styles? *International Journal of Research in Medical Sciences*, 1(3), 1. https://doi.org/10.5455/2320-6012.ijrms20130808
- Shanti Manipuspika, Y. (2020). Learning Styles of Indonesian EFL Students: Culture and Learning. *Arab World English Journal*, 11(1), 91–102. https://doi.org/10.24093/awej/vol11no1.8
- Shuib, M., & Azizan, S. N. (2015). Learning Style Preferences Among Male and Female ESL

- Students in Universiti-Sains Malaysia. *Journal of Educators Online*, 13(2), 105. https://eric.ed.gov/?id=EJ1068392
- Sinha, N., Bhardwaj, A., Singh, S., & Abas, A. (2013). Learning preferences of clinical students: A study in a Malaysian medical college. *International Journal of Medicine and Public Health*, *3*(1), 60. https://doi.org/10.4103/2230-8598.109325
- Sreenidhi, S. K., & Tay Chinyi, H. (2017). Styles of Learning Based on the Research of Fernald, Keller, Orton, Gillingham, Stillman, Montessori and Neil D Fleming. *International Journal for Innovative Research in Multidisciplinary Field*, 3(4), 17–25. https://www.researchgate.net/publication/317305325
- Stephenson, S. S. (2019). Learning Styles Assessment Modalities Preferences Diagnostics (Lamp-D): A Framework Of Accounting Students' Preferred Learning Styles And Course Learning Assessments. *The Accounting Educators' Journal, XXIX*, 81–113. https://www.aejournal.com/ojs/index.php/aej/article/view/593
- Suparman, U. (2022). *Journal of English Language Teaching Innovations and Materials*. 4(1), 119–120. https://doi.org/http://dx.doi.org/10.26418/jeltim.v4i1.33159
- Syofyan, R., & Siwi, M. K. (2018). *The Impact of Visual, Auditory, and Kinesthetic Learning Styles on Economics Education Teaching.* 57, 642–649. https://doi.org/10.2991/piceeba-18.2018.17
- Urval, R. P., Kamath, A., Ullal, S., Shenoy, A. K., Shenoy, N., & Udupa, L. A. (2014). Assessment of learning styles of undergraduate medical students using the VARK questionnaire and the influence of sex and academic performance. *Advances in Physiology Education*, *38*(3), 216–220. https://doi.org/10.1152/advan.00024.2014
- Wehrwein, E. A., Lujan, H. L., & DiCarlo, S. E. (2007). Gender differences in learning style preferences among undergraduate physiology students. *American Journal of Physiology Advances in Physiology Education*, 31(2), 153–157. https://doi.org/10.1152/advan.00060.2006
- Widharyanto, B., & Binawan, H. (2020). Learning style and language learning strategies of students from various ethnics in Indonesia. *Cakrawala Pendidikan*, *39*(2), 480–492. https://doi.org/10.21831/cp.v39i2.28173
- Willingham, D. T., Hughes, E. M., & Dobolyi, D. G. (2015). The Scientific Status of Learning Styles Theories. *Teaching of Psychology*, 42(3), 266–271. https://doi.org/10.1177/0098628315589505
- Willis, S. (2017). Literature Review On The Use of VAK Learning Strategies. *University of Cumbria*, 4(2), 90–94. https://ojs.cumbria.ac.uk/index.php/step/article/view/378
- Zhou, M. (2011). Learning Styles and Teaching Styles in College English Teaching. *International Education Studies*, 4(1), 73–77. http://www4.ncsu.edu/unity/lockers/users/f/felder/public//Papers/ASEE98-LS.pdf