Investigating Student's Learning Style in Learning Activity during Blended Learning Class

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Abstract

Applying technology in teaching and learning activity must be arranged, and vividly combined with the expertise of lecturer/teacher since they have a lot of experience in conventional ways in the classroom. It means that in one time lecturer lectures in online, and in other time is through offline (classroom). This combination can be said as a blended learning. Theoretically, visual, auditory, and kinesthetic are kinds of students learning style. Moreover, this research is taken place to seek the truly learning style existed and its affection on student's achievement. This research is conducted in English Department of Pedagogy and Psychology Faculty at PGRI Wiranegara University. The total number of respondents in this research is 37 students. This research uses qualitative methods whereas the research design used is descriptive. There are three kinds of instruments used, they are; questionnaire, observation, and documentation. Based on the result of an analysis through questionnaire found that there are 6 kinds of learning style, they are; 3 students are in visual learning style, 7 students are kinesthetic learning style, 8 students are visual-auditory learning style, I student is auditorykinesthetic learning style, 10 students are invisual-kinesthetic learning style, and 8 students are in visualauditory-kinesthetic learning style. Meanwhile, from the data gained through documentation as the test form indicates that the group of students with three visual-auditory-kinesthetic learning style had a higher total score with a total score of 432 with an average score of 86,4, secondly, a group of students with kinesthetic learning style who got a total score of 431 with an average score of 86,2, and the third was with a total score of 340 with an average score of 85 was a group of students with visual-auditory learning style. So, it can be concluded that the more learning style existed in a student, the more score is obtained.

Keywords: Learning style; Blended Learning, Learning English

INTRODUCTION

The growth and development of instructional technology which occur nowadays not only because of the need on teaching and learning activity but also the situation makes it possible. Before pandemic Covid-19 spreading in all over the world, teaching and learning activity was conducted in conventional ways. It means that teaching and learning activity is held in the classroom and implemented through traditional models and strategies. During covid-19, not only the teaching and learning activity is banned to be held in the classroom, but also all activities have to be stopped. The impacts of this situation make all activities stuck, and surely educational system also gets its affection. This occurrence insists government and expertise to seek some solutions to make all the things can be overcome.

In teaching and learning activity, moreover must be held through the use of technology. It cannot be avoided for letting the process of teaching and learning activity still holds well and effective. Technology fulfills learners' needs and their need to use practical online technology. It is crucial to the effectiveness of the learning process (Arifani, et al, 2020 and Koehler et al, 2016). The expectancy of applying various technologies is hoped to be able to improve the technological environment in the process of teaching specific topics (Niess, 2005). However, applying technology in teaching and learning activity must be arranged, and vividly combined with the expertise of lecturer/teacher since they have a lot of experience in conventional ways

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in the classroom. It means that in one time lecturer lectures in online, and in other time is through offline (classroom). This combination can be said as a blended learning. Blended learning encourages lecturer and student able to hold teaching and learning activity through the use of technology in online, and offline learning.

Applying blended learning in teaching and learning activity can be categorized difficult. In one side, it relates to the lecturer's or teacher's competency in using technology and the other side, it connects with students who have uniqueness in involving themselves in teaching and learning activity. The uniqueness of students is not only based on their talent, character, motivation, prior knowledge but also their learning style. Learning style is a personal way to obtain information, so that, in principle of learning style is an integral part of the active learning cycle (Mangunsong & Indati, 2006). Every student has its learning style which affects to his/her achievement. Moreover, the uniqueness of student's learning style as personal characteristics influences not only the result of teaching and learning especially in gaining achievement, but also on how to make the teaching activities run effective or not (Wahyuddin, 2012). Somehow, the self-concept, role of experience, readiness for learning and learning orientation lead to the achievement of self-learner (Firmansyah, 2020). Being aware on the student's learning style differences, so lecturer or teacher must select the appropriate media, strategy and technique. The successfulness of student's achievement depends on the right strategy and techniques chosen. However, people do not only tend to one modality, but they also take advantage of certain combinations of modalities that give them certain natural talents and shortcoming (Riding, 2002).

This research was conducted at PGRI Wiranegara University in academic year 2021-2022 in English Department of Pedagogy and Psychology Faculty. This university already held blended learning activity since 2019. Moreover, this research is held to gain an answer from two research questions of what kinds of learning style existed in English department students and also their achievement.

RESEARCH METHODS

The research was conducted during pandemic occurred. The method used a qualitative research that accentuated to case study especially in descriptive design. It was taken because this research tried to describe the incidence and activity occurred naturally in class learning activity during blended learning was implemented in reading subjects. The respondents of this research were the second-semester students of the English Education Study Program 2021 academic year at PGRI Wiranegara University. There were 5 males and 32 females, of which the total number of 37 students consisted in the classes. This research used two kinds of instruments, they are; observation, documentation, and questionnaires. The observation was taken because the researcher wanted to find out the real evidence of student's learning style during blended learning implemented in learning class activity. Documentation was score reading test result which was gained from lecturer, meanwhile, in the questionnaire, researcher prepared 30 questions that must be replied/ chosen by students. The questions consisted of some questions about their learning self style, they are; 10 statements about visual, 10 statements about auditory, and 10 statements about kinesthetic. It was functioned to determine student's learning style themselves. Then, the data gained from the questionnaires were analyzed by using a formula adopted from Arikunto (2010) as below:

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 $P = \frac{N}{T} \times 100\%$

P: The percentage

N: The count participants T: The total participants

RESULTS AND DISCUSSION

The result of the research was derived from instruments, they are; questionnaire, observation and documentation.

Questionnaire

In this phase, the researchers distributed questionnaire before the researcher attended the learning activity. It was conducted to recognize the chosen learning style from students themselves. Based on the data obtained, the researchers found that there were six types of learning styles in the second-semester students of English Education, as below (see pie chart for the percentage):

First, visual learning style

Based on the selection of students in understanding inferential reading subjects with visual learning styles, there are 3 students with a percentage of 8%. Based on filling out the questionnaire, two students not only have a visual learning style but are dominated by an auditory learning style that is higher than kinesthetic. For one student who has a visual learning style, it is dominated by a kinesthetic learning style which is higher than auditory.

Second, kinesthetic learning style

Here the kinesthetic learning style has 19% or equal to 7 students who choose kinesthetic as their learning style to understand inferential reading courses. From the results of the questionnaire, two students have the dominance of three learning styles sequentially, namely, visual-auditory-kinesthetic and the other two students were dominated by auditory and visual learning styles which were higher than their kinesthetic choices. The remaining three students who chose the kinesthetic learning style were proven that from the questionnaire they filled out, the kinesthetic statement was more dominant than visual or auditory.

Third, visual-auditory learning style

Based on the results of the choice of learning style according to each individual, there are 8 students with a percentage of 21% who feel that they have two learning styles, namely visual auditory. Moreover, from the result on filling out the questionnaire, they have a tendency toward three learning styles. In the results of the acquisition of filling out the questionnaire, there are three students who have a tendency to visual learning style. Likewise, there are four students who have a tendency towards auditory learning styles. In addition, there is one student who chooses the visual-auditory learning style, but based on the results of filling out the questionnaire, the tendency for the kinesthetic learning style is dominance.

Fourth, auditory-kinesthetic learning style

In the results of the selection of auditory-kinesthetic learning styles, only 3% were chosen by one student. Based on filling out the questionnaire with thirty statements, the researcher found that this student had a tendency towards auditory-visual learning styles. Statements about visuals are chosen more than kinesthetic. So the researcher concluded that there was a discrepancy in the choice of learning style.

Fifth, visual-kinesthetic learning style

This visual-kinesthetic learning style was chosen by 10 students or 27%. Based on the results of the questionnaire, the researcher found a tendency of 10 students in the visual-kinesthetic

learning style with a dominant auditory learning style. The researcher found that 7 students who had a tendency toward visual-auditory learning styles were more dominant than kinesthetic. There is also one student who has a tendency towards kinesthetic learning styles dominated by visual and auditory learning styles and the other two students have a tendency towards auditory learning style with the dominance of visual-kinesthetic learning style. So, the researcher found a discrepancy between the choices and the results of the respondent's questionnaire.

Sixth, visual-auditory-kinesthetic learning style

The researchers found that not only two learning styles were chosen by students, but there were also those who chose three learning styles at once to understand inferential reading courses. Based on the results of the questionnaire, there were 8 students with a percentage of 22% who chose visual-auditory-kinesthetic as their learning style. The researchers found that the results of the student questionnaire had a visual tendency, dominated by auditory and kinesthetic. The researchers also found that the students' tendency toward auditory learning style was dominated by visual and kinesthetic. Likewise, students who had a tendency towards kinesthetic learning styles were dominated by visual and auditory.

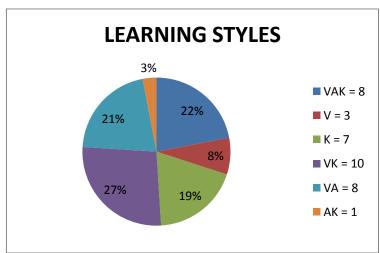


Figure 1. Result of Students' learning Style Observation

In this phase, the researcher did observation four times, started from June 9 until 30, 2022, they are; three times were online (9, 16, and 29 June 2022) and just one time was offline June 30, 2022). Based on the result of observation conducted, it was gained that similarly the lecturer did all learning activities for every meeting not only through online but also offline used of three phase activities, they are; pre-activity, main activity, and post activity.

In pre- activity, the lecturerand students spent 10 minutes doing several kinds of activities. Lecturer asked students to pray, greet andask students to fill out the attendance list at LMS. After that, the lecturer did a brainstorming to students. The lecturer asked the students about the material in the meeting and reminded themof the previous course. And then, the lecturer continued with the main activity.

In main activity, the lecturer conducted online learning in three times using GoogleMeet (online) and in the classroom (offline). After all the students were present, the lecturerasked the students to ask each student to read the material in the PowerPoint. After that, thelecturer opened a discussion session about the material. In this activity, the researcher foundthe strategies used by the lecturer so that the learning process can run effectively, namely bycarrying out several activities, namely: discussion, question and answer, and feedback. In

discussion activities, lecturer and students discussed the material that has been read about thetext exposition material. After discussing, the lecturer and students also conducted a question andanswer session where students would be asked by the lecturer one by one about the material thathas been discussed previously, if the student whose name was mentioned cannot answer, thelecturer would ask other students questions. After the two activities above, the lecturer gavefeedback on the questions given, and the lecturer gave the correct answer. In post activity, the lecturer asked what had been learned, then the lecturer asked what had been learned and the students together concluded what the lecturer and students had learned at the meeting. In addition, lecturer also provided assignments and instructions regarding assignments given to students. After that, the lecturer ended the lesson.

Data from documentation

The data from student's score reading test was taken at the end of the semester from the lecturer. It consisted of two forms, they are: score from assignment, mid and final test. Based on the result of the analysis, it can be said that learning styles differences affected the student's learning outcomes (see figure 2 and table of score). From this figure, First, it was found that the group of students with three visual-auditory-kinesthetic learning styles had a higher total score with a total score of 432 with an average score of 86,4. Secondly, there was a group of students with kinesthetic learning styles who got a total score of 431 with an average score of 86,2. The third waswith a total score of 340 with an average score of 85 was a group of students with visual-auditory learning styles. In the fourth, there was a group of students with visual-kinesthetic learning styles who got a total score of 340 with an average score of 85. The fifth was the group of students with visual learning styles who got a total score of 168 with an average score of 84. Last, there was one student with an auditory-kinesthetic learning style who had a score of 84.

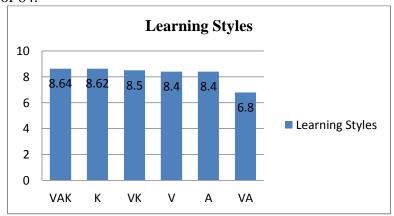


Figure 2 the Score of the Students' Learning Style

The following is a presentation of student value data based on student learning styles

Table 1 score of students' Visual learning style

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No	Name	Task	Mid-test	Final Test	Final score	Notification			
1	DV	80	80	90	84	A-			
2	AK	80	80	90	84	A-			
3	AS	80	80	80	80	B+			

Table 2 Score of students' kinesthetic learning style

	Table 2 Score of students kinesthetic learning style								
No	Name	Task	Mid-test	Final Test	Final score	Notification			
1	K	85	80	100	89	A-			
2	SK	80	80	100	88	A-			
3	ABR	80	80	95	86	A-			

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4	NIN	80	80	90	84	A-
5	ENU	80	80	90	84	A-
6	AF	80	80	80	80	B+
7	FI	80	80	80	80	B+

Table 3 Score of students' Visual Auditory Learning Style

No	Name	Task	Mid-test	Final Test	Final score	Notification
1	Z	80	80	100	88	A-
2	NKF	80	80	90	84	A-
3	DSI	80	80	90	84	A-
4	MHU	80	80	90	84	A-
5	MLU	80	80	80	80	B+
6	BS	80	80	80	80	B+
7	NF	80	75	80	78	B+
8	WAT	75	75	75	75	В

Table 4 Score of students' Visual Kinesthetic Learning style

	Tuble 4 Score of Students 4 Sual Emicentic Learning Style						
No	Name	Task	Mid-test	Final Test	Final score	Notification	
1	AT	80	80	100	88	A-	
2	MR	80	80	90	84	A-	
3	NPH	80	80	90	84	A-	
4	RSDA	80	80	90	84	A-	
5	YRWL	80	80	85	82	B+	
6	AEES	80	80	85	82	B+	
7	VSA	80	80	85	82	B+	
8	TN	80	80	85	82	B+	
9	KA	80	80	80	80	B+	
10	PST	80	80	80	80	B+	

Table 5 Score of students' Auditory-kinesthetic learning style

No	Name	Task	Mid-test	Final Test	Final score	Notification
1	MAB	80	80	90	84	A-

Table 6 Score of students' Visual Auditory Kinesthetic learning style

No	Name	Task	Mid-test	Final Test	Final score	Notification
1	FLS	80	80	100	88	A-
2	IN	80	80	100	88	A-
3	EMM	80	80	95	86	A-
4	EY	80	80	95	86	A-
5	DFA	80	80	90	84	A-
6	BM	80	80	80	80	B+
7	MM	80	80	80	80	B+
8	WLA	80	80	80	80	B+

Theoretically, in general there are three types of learning styles, they are; visual, auditory and kinesthetic, but in fact, the result of an analysis shows that it is not in accordance with the theory. It means that one self has just one dominant learning style or more than one learning

style. The result of an analysis shows that there are 10 students havevisual kinesthetic learning style, 8 students have visual auditory learning style, and there is only 1 student has an auditory kinesthetic learning style. It is truly evidence that sometimes there are children who have more than one learning style (Anwar, 2016). Indeed, the difference of learning style affects on how lecturer or teacher prepares his/her strategy and technique in teaching and learning activity not only in online but also in offline. It needs a deep thought treatment to make the teaching and learning activity runs well. Otherwise, it influences the student's learning achievement. The student learning outcomes are influenced by student learning styles, especially if the learning environment accommodates student learning styles (Eudoxie, 2011).

CONCLUSION

The result of this research is concluded that theoretically the learning style existed in a student not only one learning style, but also two or three of learning styles at once. The difference of learning style existed affects on how the students learn and achieve their achievement. The more the students have learning styles, the more the score is obtained. It can be seen from the result students with three visual-auditory-kinesthetic learning styles which have higher total score with a total score of 432 with an average score of 86,4. However, the lecturer can be said success in teaching and learning activity since the students are able to achieve the passing grade of average determined by the lecturer. It indicates from total number of students who gain A- are 21 students and the rest B+, and B.

REFERENCES

- Anwar, Firdaus. (2016). Perlu Dipahami, Terkadang Anak Bisa Memiliki Lebih dari Satu Gaya Belajar. (Online)
- Arikunto, S. (2010). Prosedur Penelitian Suatu Pendekatan Praktik. Jakarta: Rineka Cipta.
- Arifani, Y., Suryanti S., Wicaksono B. H., and Inayati, N.(2020). EFL Teacher Blended Professional Training: A Review of Learners' Online and Traditional Learning Interactions Quality. *3L: The Southeast Asian Journal of English Language Studies*, 26(3), 124-138.
- Eudoxie, G.D. (2011) "Learning Styles among Students in an Advanced Soil Management Class: Impact on Students' Performance," pp. 137–144.
- Firmansyah, M. Bayu, (2020), "Multimodal Smartphone: Millennial Student Learning Style, "TEST Journal, ISSN: 0193-4120, vol. 82, pp. 9535-9545, Published by: The Mattingly Publishing Co., Inc.
- M. J. Koehler., P. Mishra., &W. Cain.(2017). What is Technological Pedagogical Content Knowledge (TPACK)? Journal of Education, 193(3), 13–19. https://doi.org/10.1177/002205741319300303
- Mangunsong.,and Indianti. (2006). Modalitas Belajar dan Strategi Belajar Efektif Menurut Para Ahli Universitas Psikologi: .https://www.universitaspsikologi.com/2018/06/modalitas-belajar-dan-strategi-belajar.html
- Niess M.L. (2005). preparing teachers to teach science and mathematics with technology: Developing a technology pedagogical content knowledge. Teaching and Teacher Education, 21(5), 509–523. https://doi.org/10.1016/j.tate.2005.03.006

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Email: editorijhess@gmail.com

Riding, R., and Rainer, S. (2002). *Cognitive Style & Learning strategies understanding style differences in learning and behavior*. London: David Fulton publishers.

Wahyuddin, W. (2016). "Gaya Belajar Mahasiswa Al-Qalam, vol. 33, no. 1, pp. 105-120.