

Students' Learning Styles in Higher Education

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Abstract

This research aims to find the dominant students' learning style and their opinion about online class. It is descriptive study. 42 students were taken as sample by purposive sampling technique for they have online class during COVID-19. This result show that the most dominant learning style is visual learning style (78.4%). And they mostly have negative opinion about online class. (75.6%) of the students do not like it and (78.04%) are not motivated on online class. The most dominant reason is that it is hard to understand the instruction and material. Besides that, they feel that online classroom does not accord to their learning styles (85.36%). Somehow, 95.12% of the students were active on online class and 21.9% are motivated for students feel free/not ashamed in online class than in real class. So most of the students are visual learner and most of them have negative perspective toward online class.

Keywords

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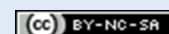
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Introduction

Learning style means the way how to perceive something better than the other way. Learning style is used by someone to learn something based on the dominant sensory. It utilizes someone to enhance their skill or knowledge maximally. A person may like to study individually but the other may like to study together. It depends on their learning style. Indeed each student has certain learning style.

Generally learning style can be known by someone's tendency in learning. A student may study well by listening which means that he or she an auditory learner. He or she may like to read loudly in reading text. Besides that another students may like to read silently and study best by her/his visual sensory. It means that he or she is visual learner. While the other one may like to do something in learning which means that he/she is kinesthetic learner. Briefly, in a class there may be visual, auditory, or kinesthetic learners.

There are some benefits of knowing learning style. Firstly, for the students knowing learning style can raise the students' awareness of their learning style preferences. It can inform them about their preferences so they can use it to improve their ability. Secondly, it can encourage students to expand their learning style repertoire. The last, it can be used to help students know each other and foster respect for and awareness of diversity in learning styles. Meanwhile knowing learning style for teacher can contribute to choose the best method in teaching and learning process. Of course it can boost the learning activity in the classroom. Knowing the students' learning style may benefit for teachers and students. Teachers can use appropriate way in teaching which can maximize their teaching learning process in classroom. It effects to their success in teaching. While for the students it will benefit for their achievement in learning. By using appropriate learning style they can maximize their capability in learning something.

In era 4.0 teachers and learners not only can attend the class in a room but also on virtual class. They will get the material on online explanation or merely based on slide, video, and e-book. In this case, the students really have independent learning and it depends on their ability in understanding online material either on google-classroom, Whats-app, Zoom, or other online applications. Of course virtual classes are different from daily class. But some situations may force the teacher to teach online on virtual class. Students may have preferences in learning in the classroom.

Related to the learning style, students may have their own opinion about virtual class. We want to see the students' response toward virtual class. This research aims to find out the dominant learning style of the fourth semester students and find out the students' opinions about online class. It provides information for the students about their learning styles to maximize their ways in learning and it also provides information for lecturers about the students' learning styles so they can consider the best design in teaching English.

1. Learning style

Learning style relates to the way of someone to learn. Keefe in Moussa (19: 2014) specified several dimension of learning styles that were considered to be the most relevant to the improvement of learning process. By knowing the students' learning styles teacher may enhance the teaching and learning process in the classroom. Brown in Gilakjani (105:2012) defines learning styles as the manner in which individuals perceive and process information in learning situations. It seems that individuals have own certain and special manner to process information as the process of learning. They have the best way to perceive knowledge which can boost their achievement.

DePorter in Munir et al (2017) adds that if the teacher has a visual learning style, he will tend to be a visual teacher too, and this happens naturally. It is obvious that learning style remain to be used all the time until a teacher are aware that he needs to change the way of teaching based on the students 'preferences. Rahmah (2018) found that only about 30% of the students are visual learners in Senior high school. It means that teachers cannot use only visual teacher as the students are different in learning style. Arifin (2015) concluded

that one factor which can lead to the success of a language teaching-learning process is the match between students' learning styles and the teaching methods used by the teachers.

2. Types of Learning Style

Commonly there are three kinds of learning style such as visual learner, auditory learners, and kinesthetic learners. Shah (2013:222) explains that visual learners prefer the use of symbolic devices such as diagrams, graphs, flow chart, and models that represent printed information. Auditory learners prefer 'heard' information and thus learn better through discussion, lectures, tutorials, and talking through material with themselves or others. Kinesthetic learning employs a combination of sensory functions: such as learners have to feel or live the experience to learn as simulations, real practices and experiences.

Visual learner has to look, notice and write in order to obtain the highest level of understanding and mastery (Dunn, 1993; Zapalska dan Daab, 2002). Visual Learners are those who prefer visual sensory modes to perceive their environment. They are assumed to learn best by visual stimuli such as pictures, graphs, maps, or images, and slide. The best way to study for the visual learners is seeing the real object of information. When teachers teach the students using method that accorded to visual learners, it is not a big problem for the auditory learners as long as somebody can explain the object. Somehow, Shah et al (2013) found that students prefer multimodal and more of kinesthetic learning to meet their needs, a variation in teaching, learning and examinations must be implemented. It means that in learning process the most problematic students is kinesthetic learners. When the students have online class, the materials mostly are served visually. Means et al (2010:3) modern online learning includes offerings that run the gamut from conventional didactic lectures or textbook-like information delivered over the Web to Internet-based collaborative role-playing in social simulations and highly interactive multiplayer strategy games. It means that online classroom closely to transfer information to the students in line without many actual interaction between teacher and students. Few possibilities may accommodate the kinesthetic learners but it needs to be considered. Kinesthetic learning style is a learning style in which learning takes place by the students carrying out a physical activity, rather than listening to a lecture or watching a demonstration (Honey and Mumford in Rachma)

Online classroom means virtual class which uses certain application to do teaching and learning class. The teacher and the students meet online not face to face. Park (2017:216) states that the overall online learning experiences consist of continuous behavioral interactions that are generated while completing a series of learning tasks. It seems that the students' behaviors are measured based on completing task in which they may get experience in exploring information from studying. Oliver, Ron et al (2004) adds that the design and creation of web courses to support authentic activities is not easily accomplished and it undoubtedly requires a great deal more thought and effort than the development of didactic, content based instructions. Stansfield et al (2004:175) explore the issues involved in online learning are

1. Lack of face-to-face contact

The situations of online teachers would appear at first sight to be a difficult one in that they cannot see or hear their students and cannot interact directly with them as in a face to face situation. Of course they cannot observe their students, cannot see and interpret their facial expressions or note signs of inattention and react immediately to rectify matters that may have gone a miss.

2. Role of teachers

Online learning is students-centered and so structured that the course materials are presented in a suitable online format, with learning task, collaborative activities and seminar and tutorial conferences being planned by the teachers but not teacher led and directed. Teachers act as facilitators by the following the flow of the learner dialog.

3. Role of learners

The online environment offers excellent possibilities for placing students at the center of learning.

4. Active learning

Online learning requires that learners take an active part in the learning process and participate by posting their ideas, responding to colleagues and sharing their thought and views. Participation requires such intellectual activities on the part of the learners as: formulating initial ideas in the light of contributions to the discussion. This way will enhance them to refine and adapt the views and perspectives of the original concept.

5. Thinking and reflections

The online learning environment facilitates a learner-centered approach to learning, with the learner as an active participant in the learning process. The approach requires that teachers help learners to direct their own learning in ways that suit their individual learning style and preferred methods of working.

6. Learning motivations

To encourage and support learning, and preserve motivation, course materials have to be of interest to learners, to ensure that they continue to want to learn. Course materials must be carefully written and structured, with the aim of nurturing the learners' interest in the subject matter so that they feel studying to be valuable and rewarding.

Stansfield et al (2004) add that one of the problems facing teachers is the issue of learners not contributing to conferences and tutorials. This may be due to learners feeling anxious about communicating in the conferencing environment or being concerned about their skill in the use of technology.

As learners have different kinds of learning style of course it will influence what they say about online classroom which lack of interaction between teachers and students. The most activity is discussion between student.

Method

The research is quantitative descriptive. It aims to find the students' learning style and what they say about online class. It uses purposive sampling technique. The researcher chose class 4B for this class have online class during pandemic covid-19.

The instruments of this research are questionnaires and interview. Questionnaires consists of 14 multiple choices questions. Choice A is for visual learning style, choice B is for auditory learning style, and choice C is for kinesthetic learning style. If the percentage of two choices is the same, the student may have two kinds of learning styles. the interview consists of eight questions to find the students' responses in learning in virtual classroom.

The data taken are analyzed by counting the dominant tendency of choice A, B, or C to find the learning style of each student based on multiple choices and to analyze the students' opinion toward online classroom, the data of interview are analyzed, transcript, selected, reduced, displayed, and concluded.

Results

A. The Dominant Learning Style

Table 1. Students' Learning Style

No	Types of Learning Style	Frequency	%
1	Visual	32	78.04
2	Auditory	1	2.4
3	Kinesthetic	2	4.8
4	visual and kinesthetic	4	8.16
5	auditory and kinesthetic	2	4.8

The data shows that the dominant learning style among the students is visual 78.04% and followed by visual and kinesthetic (8.16%). It is surprising that auditory is the smallest percentage among the students. The combination between two kinds of learning styles were found as the percentage of both kinds was the same.

B. Student's Perception Toward Online Learning?

a. Question 1

Table 2. Do you like participating on online class?

No.	Answer	Frequency	%
1	yes	10	24.4
2	no	31	75.6

Based on the data most of the students do not like to participating on online class (75.6) and 24.4 % like online class

b. Question 2

Table 3. The platform that students have ever participated on

No.	Platform	Frequency	%
1	GoogleClassroom	40	97.5
2	Whatsapp	17	41.4
3	Edmodo	18	43.9
4	Free Conferences	1	2.4
5	Others	2	4.8

The data shows that most of the students have ever participated on Google classroom, edmodo and whatsapp on online class.

c. Question 3

Table 3. Do you like online class?

No	Answer	Frequency	%
1	Yes	10	24.4
2	no	31	75.6

Most of the students did not like online class. Somehow, 24.4 % liked it. The percentage was constant as the first question. And the following are the positive and negative reasons

Table 4. Reasons

No.	Positive reasons	requency	%
1	flexible, more time to submit task	1	2.4
2	better understand to use technology	1	2.4
3	students can study from home	1	2.4
	Negative reasons		
4	many disturbance	1	2.4
5	more task	2	4.8
6	learning way shifting (independent study)	2	4.8
7	prefer real class to listen directly	2	4.8
8	Not Interesting/getting bored	3	
9	signal issue	10	24.3
10	not understanding well the instruction/material	17	41.46

Based on the data the main reason why the students do not like online class that they do not understand well the instruction and material. Beside that signal issue is also one of main reason for the students.

d. Question 4

Table 4. Are you active on online class?

No.	Answer	Frequency	
1	yes	39	95.12
2	no	2	4.8

The table shows that 95.12% were active on online class

e. Question 5

Table 5 What did you do on online class?

No	Answer	Frequency	%
3	Expressing idea/ answering friends'/ lecturers ' question	24	58.5
4	Asking question	17	41.4
2	Responding teacher/lecturer's comment	14	34.14
1	Responding friends' comment	6	14.6

f. Question 6

Table 6. Were you motivated on online class? Yes/no , mention the reasons?

No	Answer	Frequency	%
1	yes	9	21.9
2	No	32	78.04

Table 7.Students's Reasons on Online Class

No	reason	Frequency	%
1	technology issue/ cannot use te application well	1	2.4
2	no, online class is complicated	1	2.4
3	no, online class focuses on material and task only	2	4.8
4	no, hard to understand the material	11	26.4
5	no, prefer real class, lack of interaction between studens	3	7.2
6	no feedback	1	2.4
7	not effective	1	2.4
8	the class sometimes is not based on schedule	2	4.8
9	Lazy	1	2.4
10	no, being distracted	1	2.4
11	yes, more flexible	3	7.2
12	yes more time to complete task, hard o understand the material and signal issue	1	2.4
13	students feel free/not ashamed in online class than in real class	1	2.4
14	yes, motivated by the lecturer	1	2.4
15	yes, more various media	1	2.4

Based on the data 78.04% of the students were not motivated on online class. The main reason is hard to understand the material.

g. Question 7

Table 8. Does online class accord to your learning way/style?

No	Answer	Frequency	%
1	Yes	6	14.6
2	No	35	85.36

Based on the data 85.36% of the students said that online class accord to your learning way/style somehow they provide suggestions as follows:

1. Audio visual media to explain material
2. Work in group
3. Brief material and few ask
4. More time to submit task
5. Based on schedule and internet subsidy
6. Financial support to access internet
7. Zoom app
8. Detail instruction
9. Appropriate strategy in teaching
10. Raising the new way of studying

Discussion

Based on the data, the most dominant learning styles of the fourth semester students of English department is visual (78.4%) and combination of visual and kinesthetic. The next is kinesthetic and the combination of auditory and kinesthetic, meanwhile, auditory places on the minority of the students' learning styles. Related to what they say about online class, most of the students did not like online classroom (75.6%) and they were not motivated on online class (78.04%). Even they felt that online classroom does not accord to their learning styles. But, the research also found 95.12% of the students were active on online class for responding friends' comment, sharing idea/ answering friends'/ lecturers' question, responding teacher/lecturer's comment, asking question. It is contrary to 75.6 % of the students who did not like to participate on online class that becomes unexpected result.

Shah (2013:222) explains that visual learners prefer the use of symbolic devices such as diagrams, graphs, flow chart, and models that represent printed information if it is related to the result that most of the students have visual learning styles. It seems that online class should not have any problem for the most of students as 97.5% of the students have participated on Googleclassroom in which visual media may be best on this application. Means et al (2010:3) modern online learning includes offerings that run the gamut from conventional didactic lectures or textbook-like information delivered over the Web to Internet-based collaborative role-playing in social simulations and highly interactive multiplayer strategy games, but unfortunately only 14.4% students consider that online classroom are accorded to their way of studying. The main reason is that it is hard to understand the material 26.4% that make them unmotivated and not understanding well the instruction/material that makes them do not like online class. Online class requires the students' own learning management and creativity of lecturers in designing material. Stansfield et al (2004:175) state that to encourage and support learning, and preserve motivation, course materials have to be of interest to learners, to ensure that they continue to want to learn. Course materials must be carefully written and structured, with the aim of nurturing the learners' interest in the subject matter so that they feel studying to be valuable and rewarding. Of course it is a challenge or the teachers and lecturers to design material and instructions on online class in which they have less interaction. Ron et al (2004) adds that the design and creation of web courses to support authentic activities is not easily accomplished and it undoubtedly requires a great deal more thought and effort than the development of didactic, content based instructions. Online classroom makes the students' way of studying sifted spontaneously. The students need to study independently, so the students need to adapt to the new way of learning as Park (2017:216) states that the overall online learning experiences consist of continuous behavioral interactions that are generated while

completing a series of learning tasks. So the material display is the most important thing on online class to draw the students' interest.

The students may have negative opinion about online class for they cannot understand the material or instruction well and need such similar face to face interaction between lecturers and students, in this case video call or online conferences may be one solution. Zoom is considerable application as 2.4% of the students suggest it but all students cannot participate for 24.3% of the students have signal issue on online class. Of course it is not fair for the students who are struggling on that circumstance.. Beside that other negative reasons are not interesting/getting bored, prefer real class to listen directly, learning way shifting (independent study), more task, many disturbance. It seems that the reason may be less related to the students' learning style but it tends to relate to the students' circumstances. Moreover, 85.36% are sure that online class does not accord to their learning styles. Do they know their learning style? 2.4% student suggests raising information how to learn in new way.

Data shows 78.04% of the students are not motivated on online class. This research will classify into three parts that may less related to students' learning styles. First, it is related to circumstance: the class sometimes is not based on schedule, the students are being distracted, online class is complicated, technology issue/ the students cannot use the new application well, and lack of interaction between students. Second, related to students themselves, it is hard to understand the material, they feel lazy, being distracted and the students prefer real class. And third, lectures: there is no feedback; online class focuses on material and task only. In this case the students provide suggestions such as more time to submit task, work in group, audio visual media to explain material, detail instruction on teaching, and brief material. Once again if we relate to students' learning style audio visual may be best for auditory. So the best solution on online class is providing material on visual media such as document, power point, or pdf document and complete with audio or audio visual media. On online class media is the important thing as interaction are less. The lecture should involve more students' participation than only providing material and inform them as Stansfield et al (2004:175) add the online learning environment facilitates a learner-centered approach to learning, with the learner as an active participant in the learning process. The approach requires that teachers help learners to direct their own learning in ways that suit their individual learning style and preferred methods of working.

It is interesting that few students like online class. Firstly it is flexible/more time to submit task. Online class can be done sooner or later based on class agreement. Even it can be also done on holiday but of course it is not recommended. Secondly, better understanding of new technology. Online classes sometimes forces the students download and use new application so they should be able to use it to participate on online class. Third, students can study from home. Students do not need to attend in classroom on online class as long as they have good signal and internet access. Even they feel motivated 21.9% for students feel free/not ashamed in online class than in real class. We can conclude that online class has also benefit for silent student. And it is also one consideration to use expensive application on teaching as few students need financial support to access internet.

The conclusions are the most dominant students are visual learners, most do not like online class and they are not motivated. The most dominant reason is that it is hard to understand the instruction and material. Most of the students state that online class does not accord to their way of learning but they are active on online class for sharing ideas and answering the question of friends or lecturers. It is better to provide more opportunity for the students to participate on online classes (students-centered learning). They may not know their own learning styles so they cannot boost their highest level of understanding. So lecturers need to design material that can accord to all types of learners. Brief or simplify the instruction can be also one way to lessen the students' misunderstanding. Somehow they suggest the lecturers to use audio visual media in conveying the material. It is interesting that 21.9% are motivated for students feel free/not ashamed in online class than in real class. We can conclude that online class has also benefit for silent student. And it is also one consideration to use expensive application on teaching as few students need financial support to access internet.

Conclusion

This research concludes that the most dominant learning style is visual learning style (78.4%). And they mostly have negative opinion about online class. (75.6%) of the students do not like it and (78.04%) are not motivated

on online class. The most dominant reason is that it is hard to understand the instruction and material. Besides that, they feel that online classroom does not accord to their learning styles (85.36%). Somehow, 95.12% of the students were active on online class. Somehow 21.9% are motivated for students feel free/not ashamed in online class than in real class.

References

- Arifin, Zainal. 2015. Analyzing the Learning Style of Junior High School Students and the Implication to English Teaching: A case Study at SMPN 1 Dagangan Madiun online www.journals.ums.ac.id accessed on 9 May 2020
- Gilakjani, Pourhossein Abbas et. al. 2012. *Visual, Auditory, Kinaesthetic Learning Style and Impacts on English Language Teaching*. Iran: Islamic Azad University journal online www.Brainbutter.au retrieved on 9th June 2018
- Means, Barbara et al. 2010. Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online learning Studies online e-book finalreport.pdf
- Moussa, Nahla M. 2014. The Importance of Learning Styles in Education. Auburn University journal online, <https://www.auburn.edu> retrieved on 08th June 2018
- Park, Sanghoon. 2017. Analysis o Time-on-Task, Behavior Experiences, and Performance in Two Online Courses with Different Authentic Learning Task online journal EJ1138775.pdf accessed 30 March 2020
- Rachma, Nita Sitta et al The Effect of Learning Style on Students' Reading Comprehension Achievement online journal stkipsingkawang.ac.id retrieved on 9 May 2020
- Rachmah, Ajeng Elvia. 2018. A preferred Learning Styles of the Students of SMK Muhammadiyah 2 Surakarta online journal ARTICLE_PUBLICATION_ajeng.pdf accessed on 9 May 2020
- Shah, Kanchi et al. 2013. How Different Are the Students and Their Learning Style? Online journal www.researchgate.net accessed on 9 May 2020
- Stansfield, Mark et al. 2004. Enhancing Performance in Online learning and Traditional face-to-Face Class Delivery online journal v3p173-188-037.pdf accessed 30 March 2020
- Oliver, Ron. 2004. Authentic Activities and Online Learning online www.researchgate.net accessed 30 March 2020