

Students' Learning Styles: How Does It Affect Students' Understanding of the Materials in an Online Academic Article Writing Class?

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ABSTRACT

The COVID-19 pandemic affects the learning process in the world that must be done online without direct teaching. Student learning situations may be different from direct learning; therefore, students must adapt again to this online learning system that can influence their learning styles. There have been numerous studies examining students' learning styles, but the information on whether learning styles influence their new online learning adaptation is not sufficient. Thus, this present study is important in analyzing students' learning styles and how learning styles affect students' understanding of the materials given by the teacher in an online Academic Article Writing class. This research used the descriptive qualitative method while the data were collected by distributing a questionnaire and conducting a structured interview. The subject of this research was 21 students who took the Academic Article Writing course of the English Education Department at UIN Sunan Ampel Surabaya. The result showed that most of the students possessed visual learning styles, the second position was auditory learning styles, and the least were students who had kinaesthetic learning styles. Additionally, the result of the questionnaire and interview shows that there are several reasons that do affect students' understanding of the material presented in Academic Article Writing's online classes. Almost all students have a visual learning style and according to the teaching method when in this AAW online class.

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Due to the presence of the COVID-19 pandemic crisis, nearly all school operations must be carried out remotely. The tasks that are actually carried out in face-to-face education are now carried out online. Students who used to study in the offline class now must learn to study at home online. This unprecedented situation forces students to adapt to online learning activities through which students will likely adjust their learning styles that may affect their understanding too. Currently, since the situation is not yet possible to carry out direct face-to-face learning, all subjects are conducted online without exception, one of which is English subjects that teach four skills, that are two productive skills where students need to produce language, speaking, and writing, as well as two receptive skills, that are listening and reading. Apart from the need for direct practice to develop these skills, in current conditions students are required to be able to study independently at home without direct teacher assistance. In a learning situation like today, student understanding cannot always be good because after all the experience gained during online learning is very different from learning when offline learning or face-to-face directly. Students are individuals who come from various backgrounds, learning styles, and the ability to understand different materials. Each student has their own learning style to help them receive and understand the material presented by the teacher during online learning.

Learning practices from one individual to other individuals are different, and this may affect the students' learning comprehension. Students' learning patterns are one of the keys to successful learning, since knowing the learning style possessed by an individual will be able to adjust the learning situation (Prashign, 2007). Additionally, according to Porter & Hernacki (1999), students' learning styles are divided into three types: there are students with auditory, visual, and kinesthetic learning styles. Visual learning styles have a strength that lies in students' eyesight since they will learn by seeing and observing the materials given by the teacher. In the auditory learning styles, students will be more dominant in using their sense of hearing. Further, students with kinesthetic learning styles will prioritize their physical movement since in the learning process students will always need practice in order to make it easier for them to catch the material conveyed by the teacher well.

Learning style can be defined as the students' perspective on learning and their responses to the learning environment (Brown, 2000). Learning styles is one of the prominent aspects to know in teaching and learning activities. Being able to recognize students' learning styles will have an impact on the success of teaching and learning activity itself since teachers can adjust what treatments or strategies should be applied when learning takes place. Demirkan (2007) stated that different learning styles may be more effective, but they only can apply under special conditions, that is when considering the characteristics of different subjects. Hence, there are several factors that may affect the differences in student learning styles. Other than the subjects, gender, age, and also learning aptitude are factors that cause differences in each students' learning style.

Some preliminary works were carried out several years ago about learning styles and their effects on students. The result of Sreenidhi's (2017) research of VAK learning style can help the teacher to decide what strategies to apply to convey the materials in a teaching and learning process, so students can understand well the materials given in class. In Addition, Gokalp (2013) found that learning styles truly impact students' academic success, and it was also explained about the appropriateness of each learning type possessed by students with the material given by teachers. The study of Chetty, et al, (2019) generates the result that there is an impact in academic performance where the students' learning styles and teaching styles are not in line. Alrabah, et al (2018) states that most of EFL college students in Kuwait had an ability to engage in a social activity such as discussion with their learning styles.

Earlier studies have examined the learning styles effects on students' academic success Gokalp (2013) and the learning style that can help teachers to determine strategies for their students Sreenidhi (2017), then the relationship between students' learning styles and the teacher styles towards academic performance by Chetty, et al (2019), and Alrabah, et al (2018) who discovered the profiles of learning styles and multiple intelligences among Kuwaiti EFL college students. However, the past studies have not yet addressed the adjustment of students' learning styles in the online mode of learning during the COVID-19 pandemic, and how they help students to understand the materials in English lessons. By conducting research about students' learning styles in a pandemic situation or using online mode, it is hoped that it can help the learning process by understanding the character of students. Previous research has not examined how the influence of student learning styles on understanding material during online classes, therefore, further research is needed to analyze how student learning styles affect them in understanding the material in English online classes.

This present study tries to investigate how the students adjust their learning styles in online Academic Article Writing classes during the pandemic, and how these affect their understanding. This study used a qualitative method with descriptive types. This study is suitable to use qualitative methods because researchers will find out and analyze how students' learning styles can affect their understanding of an online Academic Article Writing class.

METHOD

This study used descriptive qualitative research because it was provided a description of a phenomenon that is obtained qualitatively. This descriptive qualitative approach is described in a natural context without manipulations. Qualitative research deals with the data that is served in the form of words, sentences, also pictures rather than in the form of numbers or statistics (Ary, et.al., 2010). The subject of this research is the sixth-semester students of the Academic Article Writing class of the English Language Education Department. The total number of subjects is 21 students. Researchers have selected them to be a participant of this study since they are students who take the Academic Article Writing class and are experienced as students who carry out online learning.

Scoring Procedures

Directions: Place the point value on the line next to the corresponding item below.
Add the points in each column to obtain the preference score under each heading.

OFTEN = 5 points SOMETIMES = 3 points SELDOM = 1 points

VISUAL		AUDITORY		TACTILE	
NO.	PTS.	NO.	PTS.	NO.	PTS.
2		1		4	
3		5		6	
7		8		9	
10		11		12	
14		13		15	
16		18		17	
19		21		20	
22		24		23	
VPS =		APS =		TPS =	
VPS = Visual Preference		APS = Audio Preference		TPS = Tactile Preference	

Figure 1. Questionnaire Scoring Procedures

To answer the research questions researchers used questionnaires to classify students' learning styles in online learning. Harmer (2011) stated that the beneficial research instrument is a questionnaire since it can be used for collecting information from a survey and being able to manage without the presence of the researchers. The questionnaire adopted from https://bit.ly/LearningStye_Inventory. The questionnaire consisted of 24 statements, each statement has a value to be calculated and will later be totaled to determine the student's learning style.

The questionnaire is used to determine the type of learning style of each student in the online Academic Article Writing class. There are three types of student learning styles studied, namely visual, auditory, and kinaesthetic. The questionnaire which contains 24 statements is divided into three parts as shown in Figure 1 above where there are 8 statements each for each student's learning style. In the next step after finding the total points from each student questionnaire, the researcher counted how many students had significant learning styles and then grouped them according to the three learning styles studied, namely visual, auditory, and kinaesthetic.

Then, researchers also did a structured interview with some of the participants as a follow-up activity from the questionnaire. Participants who are targeted for interviews or as interviewees are those who have high points on their questionnaires on certain learning styles. Interviews were conducted by asking participants five questions related to their perception of the implementation of online learning, then related to the advantages and constraints experienced by participants when they became students in online learning, after that there were questions related to whether this online learning affected students' understanding in accepting material in the online Academic Article Writing class, and lastly, the researcher asked about students' expectations of learning in the AAW (Academic Article Writing) class. These questions are intended and are expected to answer the research question, that is whether students' learning styles affect students' understanding of the material given in AAW online classes.

In analyzing data the first step is that researchers analyzed the questionnaire by calculating the scale for each participant to find their learning styles. Second, after the researchers calculated the score on each student or participant's questionnaire, the researchers found the learning styles possessed by the students, then classified them. After finishing with the questionnaire, the third step was to make an interview guideline with the transcriptions of the interview answer. In the next step, researchers reduced some information that researchers did not expect to answer or that was not related to the topic. The last researchers interpreted the result by summarizing participants' answers in the interview. Additionally, for the questionnaire, researchers analyzed the data by calculating the scale.

RESULTS

Prior to finding the results of the questionnaire and research interviews in detail, the researcher will report the basic results (in general) from the questionnaire which shows the grouping of students based on their respective learning styles which will later become a reference for determining participants in the interview session.

Table 1. Questionnaire result in general

Participant	Result		
	Visual	Auditory	Kinaesthetic
1		Result is not significant	
2		Result is not significant	
3		Result is not significant	
4	√		
5			√
6		√	
7	√		
8	√		
9		√	
10		√	
11		Result is not significant	
12	√		
13	√		
14	√		
15		Result is not significant	
16		Result is not significant	
17		√	
18		√	
19			√
20	√		
21	√		

Table 1. above shows that 21 participants have completed the questionnaire distributed by the researcher and is intended to determine the learning style of each participant. In the table above there is the term *result is not significant* which means that

the sum of the points on the student questionnaire does not show the highest points that lead to a particular learning style so that the learning style of the participant/student cannot be determined. There were six participants whose learning style could not be determined, and the remaining fifteen participants whose learning style had been determined through the questionnaire.

Questionnaire Result

After analyzing the data, the research found some items that need to be considered. The first part or visual learner characteristics showed that in the first statement there are 71.4% participants who often do the statement, 23% participants choose sometimes, and 4.8% choose seldom. The second statement 81% participants often do it, 14.3% participants sometimes, and only 4.8% participants choose seldom. The next 33.3% participants often with the third statement, 38.1% participants sometimes, while 28.6% choose seldom. There are 38.1% of participants who often choose the fourth statement while 38.2% of participants choose sometimes and 23.8% choose seldom. The fifth statement was chosen by 57.1% of participants as often, 38.1% sometimes, and 4.8% of participants seldom. The sixth statement is chosen by 57.1% as often, 23.8% sometimes do and 19% seldom do it. 33.3% of participants choose often in the seventh statement, 52.4% choose sometimes and 14.3% choose seldom. The last statement contains 47.6% of participants who often do, 42.9% sometimes, and 9.5% seldom do.

The second part or auditory learner characteristics also have 8 statements. The first statements contain 33.3% participants often, 57.1% participants sometimes, and 9.5% participants seldom. 47.6% of participants often with the second statement, 42.9% sometimes, and only 9.5% seldom. 38.1% of participants chose too often in the third statement, while 52.4% of participants were sometimes, and 9.5% of participants chose seldom. The fourth statement has 23.8% participants often, 71.4% participants sometimes, and 4.8% participants seldom. The fifth statement has 47.6% participants who often, 33.3% sometimes, while 9.5% seldom. 47.6% of participants choose often in the sixth statement, 42.9% prefer sometimes, and the rest 9.5% seldom. The seventh statement has 57.1% participants who often do, 28.6% participants sometimes, and 14.3% seldom. The last statement contains 38.1% of participants who often do, 42.9% sometimes, and 19% seldom.

The third part or kinesthetic learning characteristics has 8 statements. The first statement has the same 47.6% participants in the often and sometimes option, and only 4.8% seldom. The second statement has 52.4% participants often, and 23.8% participants in sometimes and seldom options. The third statement contains 61.9% of participants often, 28.6% of participants sometimes, and 9.5% of participants seldom. The fourth statement has 19% participants often, 57.1% participants sometimes. The fifth statement contains 33.3% participants often, 28.6% sometimes, and 38.1% participants seldom. The sixth statement has 38.1% participants in each seldom and sometimes option while the other 23.8% participants are in often option. 52.4% of participants choose sometimes while often and seldom option have the same 23.8% participants. The eight statements had 33.3% participants in the often option, 47.6% choose sometimes, and 19% seldom.

Table 2. Questionnaire Result of Visual Learning Style

No.	Statements	Answer		
		Seldom	Sometime	Often
1	I prefer to see information written on a chalkboard and supplemented by visual aids and assigned readings.	4.8%	23.8%	71.4%
2	I like to write things down or to take notes for visual review.	4.8%	14.3%	81%
3	I am skillful with and enjoy developing and making graphs and charts.	28.6%	38.1%	33.3%
4	I can easily understand and follow directions on a map.	23.8%	38.2%	38.1%
5	I can understand a news article better by reading about it in a newspaper than by listening to a report about it on the radio.	4.8%	38.1%	57.1%
6	I think the best way to remember something is to picture it in your head.	19%	23.8%	57.1%
7	I am good at working and solving jigsaw puzzles and mazes.	14.3%	52.4%	33.3%
8	I prefer obtaining information about an interesting subject by reading about it.	9.5%	42.9%	47.6%

After calculating the percentage of the questionnaire that has been filled out by all participants, it can be shown by the table above and also table 1 that of the 21 participants who took part in this study, they are from the sixth semester of the Academic Article Writing class, it shows that most of them have a visual learning style. Almost all of them are more comfortable to get written information and are equipped with visual aids. Students also like to record the material they get when doing the learning process, and it can also be concluded that students can have a better understanding when they read the material rather than listen to the material.

Table 3. Questionnaire Result of Auditory Learning Style

No.	Statements	Answer		
		Seldom	Sometime	Often
1	I can remember best about a subject by listening to a lecture that includes information, explanations and discussions.	9.5%	57.1%	33.3%
2	I require explanations of diagrams, graphs, or visual directions.	9.5%	42.9%	47.6%
3	I can tell if sounds match when presented with pairs of sounds.	9.5%	52.4%	38.1%
4	I do best in academic subjects by listening to lectures and tapes.	4.8%	71.4%	23.8%
5	I learn to spell better by repeating words out loud than by writing the words on paper.	91%	33.3%	47.6%
6	I would rather listen to a good lecture or speech than read about the same material in a textbook.	9.5%	42.9%	47.6%
7	I prefer listening to the news on the radio rather than reading the paper.	14.3%	28.6%	57.1%
8	I follow oral directions better than written ones.	19%	42.9%	38.1%

After the position of the visual learning style which is the first position in the most learning styles owned by students in the Academic Article Writing class, the second position is occupied by the auditory learning style which shows that some students prefer to listen to material or explanations given directly by the teacher rather than having to read the textbooks given by the teacher themselves.

Table 4. Questionnaire Result of Kinaesthetic Learning Style

No.	Statements	Answer		
		Seldom	Sometime	Often
1	I prefer to use posters, models, or actual practice, and other activities in class.	4.8%	47.6%	47.6%
2	I enjoy working with my hands or making things.	23.8%	23.8%	52.4%
3	I can remember best by writing things down.	9.5%	28.6%	61.9%
4	I play with coins or keys in my pocket.	23.8%	57.1%	19%
5	I chew gum, smoke, or snack while studying.	38.1%	28.6%	33.3%
6	I learn the spelling of words by "fingerspelling" them.	38.1%	38.1%	23.8%
7	I grip objects in my hands during learning periods.	23.8%	52.4%	23.8%
8	I feel very comfortable touching others, hugging, handshaking, etc.	19%	47.6%	33.3%

Further, the last learning style that students have at least is the kinaesthetic learning style. There are only two students from the Academic Article Writing class who have this kinaesthetic learning style, where those who have this learning style prefer to do something while learning. They will be more comfortable when the learning process has many sessions for direct practice or doing activities that involve direct movement. Unfortunately, for students who have this kinaesthetic learning style, online learning does not seem to support their comfort in learning.

The result of the Interview

The students' perceptions of the advantages of online learning

Based on the questions given, the respondents mostly answered that online learning has benefits. The benefit of online learning is the integration of technology in learning. Before the pandemic in offline classes, technology was only used at certain times where the rest was done traditionally. Well, for now when online learning, the use of technology is very prioritized where without technology information can not be channeled either through websites, tools, applications, and everything based on IT. In addition, the respondents said that online learning helps them in the teaching and learning process. Here is the learners' perceptions:

P1: *Ada pasti kelebihanannya, salah satu yang paling menonjol dari kelebihan pembelajaran online yaitu pengintegrasian teknologi dalam pembelajaran. Di kelas offline sebelum pandemi, teknologi hanya digunakan pada saat tertentu saja yang mana selebihnya itu dilakukan secara tradisional. Nah, untuk sekarang ketika pembelajaran online, penggunaan teknologi itu sangat diutamakan dimana tanpa teknologi itu informasi tidak dapat disalurkan entah itu melalui website, tools, aplikasi, dan semuanya yg berbasis IT.*

(There are definitely advantages, one of the most prominent of the advantages of learning online, namely the integration of technology in learning. In offline classes before the pandemic, technology was only used at certain times, the rest was done traditionally. Well, for now when learning online, the use of technology is very important where without technology information cannot be channeled whether it's through websites, tools, applications, and everything that is based on IT.)

P2: *Menurutku iya ada, pembelajaran ini kelebihanannya menurutku lebih terstruktur aja, jadi kalau deadline ditentukan sama dosen misalnya sudah disetting gitu ya jadi kita gabisa telah ngumpulinya gitu.*

(In my opinion, yes, there are advantages to this learning, in my opinion, it is more structured, so if the deadline is determined by the lecturer, for example, it has been set like that, so we can't collect it.)

P3: *Menurut saya adalah yang pertama lebih efektif di waktu dan tenaga ya. Kalau dari waktu itu sekarang saya jadi bisa kuliah sambil kerja gitu karena waktunya juga dilakukan di rumah jadi waktu yang lebih fleksibel aja untuk pindah dari kerjaan sekolah dan pekerjaan saya lainnya gitu. Jadi kalau dari waktu itu sih manfaatnya, kemudian tenaga juga pasti*

ya karena ada di rumah jadi ya tenaganya juga bisa dibagi-bagi untuk melakukan hal yang lainnya dan juga lebih enak aja karena semuanya bisa dilakukan di 1 screen laptop gitu.

(In my opinion, the former is more effective in terms of time and effort. From that time on, now I can study while working, because the time is also done at home, so it's a more flexible time to move from school work and my other jobs. So if from that time it was useful, then the energy must also be yes because it is at home, so yes the energy can also be divided to do other things and it's also better because everything can be done on 1 laptop screen like that.)

P4: *Kelebihan dari pembelajaran online menurut saya fleksibel untuk belajar materinya, belajar semuanya sangat fleksibel, juga dapat selalu kita tanyakan pada keadaan apapun jadi karena kita akan belajar online jadi semuanya itu melalui media sosial atau media platform yang sudah disediakan.*

(The advantage of online learning in my opinion is that it is flexible to learn the material, learning everything is very flexible, we can also always ask in any situation because we will learn online so everything is through social media or media platforms that have been provided.)

P5: *Menurut saya ada, salah satunya yaitu, ketika pembelajaran didalam kelas terkadang saya takut untuk mengungkapkan pendapat saya atau memilih diam, karena takut salah. Tetapi dengan adanya pembelajaran online, saya lebih berani menyampaikan pendapat. Mungkin karena kondisi dan situasi ak bertemu secara langsung. Jadi saya lebih bebas menjawab dan mengungkapkan perasaan saya.*

(I think there is, one of which is, when learning in class sometimes I am afraid to express my opinion or choose silence, for fear of being wrong. But with online learning, I am more daring to express my opinion. Maybe because of the conditions and the situation I met in person. So I am more free to answer and express my feelings.)

The problems that students faced in online learning

The problem of online learning is a technicality, such as an internet connection, high quota usage, and the device of the students that do not support the application that is used for online learning. In addition, the problem of the respondents for online learning is the communication between the teacher and the students that are sometimes disturbed by the connection so they have to often make sure again over what is conveyed by the teacher in the class.

P1: *Yaitu terkait teknis pastinya, berhubungan dengan connection dan pemakaian kuota yang kurang rasional hanya untuk sekali meeting misal. Kemudian masalah pembelajaran online nya sendiri yaitu yang paling terasa yaitu komunikasi antar mahasiswa dengan mahasiswa, serta dosen dan mahasiswa.*

(That is technically related, related to connections and irrational use of quotas for only one meeting, for example. Then the problem of online learning itself is the most pronounced, namely communication between students and students, as well as lecturers and students.)

P2: *Kendalanya sih ada pada koneksi aja sih, ga ada kendala lain yang sangat berarti gitu dari sistemnya, cuma koneksi sama kuota aja. Kalo untuk sistemnya tidak ada.*

(The problem is in the connection, there are no other significant problems from the system, just the connection, and the quota. If there is no system.)

P3: *Kendalanya ada dua sih yang pertama masalah sinyal, kalau masalah sinyal ini ya kadang-kadang lagi Zoom terus tiba-tiba sinyalnya lagi down gitu, terus ya mengganggu pembelajaran. Terus yang kedua masalah karena tidak ada interaksi dengan siswa lain sih itu menyebabkan jadi kebosanan. Terus yang kedua juga kalau ada kesulitan yang biasanya bisa tanya ke temen langsung itu, Jadi sekarang enggak bisa langsung tanya gitu jadi ya kendalanya dari psikologinya kayak kurang bisa ngobrol sama temen itu si itu juga berpengaruh ke konsentrasi pas pelajaran dan pemahaman karena enggak bisa tanya langsung ke temen.*

(There are two problems, the first is a signal problem, if it's a signal problem, sometimes it's Zoom again and suddenly the signal is down, so it disrupts learning. Then the second problem is because there is no interaction with other students, it causes boredom. Then the second one, if there are difficulties, you can usually ask your friends directly, so now you can't ask them directly, so the problem is that the psychologist is not able to talk to that friend, that also affects concentration during lessons and understanding because you can't ask straight to friends.)

P4: *Susahnya untuk memahami materi yang terkadang itu kita dalam kelas online ketika dalam (video) teleconference terdapat sinyal yang mengganggu. Kemudian kadang kita juga kelelahan karena selalu di depan layar, itu sangat mengganggu konsentrasi jadi untuk yang pertama itu kendalanya adalah terkadang kita lelah karena selalu di depan layar yang kedua kendala karena internet dengan ketika mungkin dari device nya sendiri itu kendala.*

(It's difficult to understand the material that sometimes we are in an online class when in a (video) teleconference there is a disturbing signal. Then sometimes we are also tired because we are always in front of the screen, it really disturbs our concentration, so for the first time, the problem is that sometimes we are tired because we are always in front of the screen. The second is a problem because the internet with when possible, from the device itself is a problem)

The students' solution to overcome the problem

To overcome the problems, they cover the technical obstacle with using wifi or provider that has a good internet connection and for the communication between the students and the teacher, they mostly recheck again by contacting the teacher through WhatsApp or directly asking in the class.

P1: *Untuk masalah technical issue, saya pribadi memilih provider yang berasa kuat dan juga mau tidak mau harus merelakan pemakaian kuota internet itu tidak semestinya atau semisal kita sedang melakukan zoom meeting yang mana melakukan kuota yang cukup banyak biasanya saya meminimalisir penggunaannya dengan menonaktifkan kamera. Kemudian untuk kendala terkait pembelajaran onlinenya yang saya sebutkan tadi terkait dengan komunikasi antar mahasiswa itu saya*

menyiasatinya itu dengan sering-sering melakukan telepon entah itu video call atau hanya sekedar telpon baik itu via WA atau discord yaitu untuk mendiskusikan beberapa hal terkait dengan pembelajaran secara langsung dan dua arah. Untuk komunikasi antar dosen biasanya dengan dosennya biasanya untuk memvalidasi apa yg saya dapat, saya bertanya terlebih dahulu kepada teman saya apakah ini yang disampaikan oleh dosennya atau bukan kemudian menanyakannya ke dosen saya secara langsung.

(For technical issues, I personally choose a provider that feels strong and also inevitably has to give up the use of internet quotas that are not appropriate or for example we are doing a zoom meeting which does quite a lot of quota, usually I minimize its use by turning off the camera Then for the obstacles related to online learning that I mentioned earlier related to communication between students, I work around this by frequently making calls whether it's a video call or just a phone call either via WA or discord, namely to discuss several things related to learning directly and two-way direction. For communication between lecturers, usually with their lecturers, usually to validate what I got, I first asked my friend whether this was conveyed by the lecturer or not then asked my lecturer directly.)

P2: *Ya karena kesulitanku ada di koneksi, jadi aku harus cari provider yang kuat di daerahku, di rumahku gitu. Terus untuk kuota ya solusinya lebih menghemat aja gitu.*

(Yes, because my difficulty is in connection, so I have to find a strong provider in my area, at my house. Then for quota, the solution is to save more, just like that)

P3: *Solusi untuk mengatasi kendala mungkin kalau yang masalah sinyal Ya saya beli kayak data gitu paketan data jadi misalkan wifi lagi down ada backup-nya terus kalau misalkan ke teman mungkin solusinya ya bisa diganti ke voice call jadi nggak ketemu langsung mungkin ya bisa lewat telepon gitu.*

(The solution to overcome the problem maybe if it's a signal problem. Yes, I bought it like data, so it's a data package, so, for example, the wifi is down, there is a backup, if for example to a friend, maybe the solution can be changed to a voice call, so you can't find it directly, maybe you can by telephone)

The effect of online learning with students' understanding of the AAW material

Online learning influences their understanding of this material because in online learning students are required to learn independently, so sometimes it is difficult when doing tasks and understanding the materials taught. In addition, the teacher just explains and the students listen to material from teachers through zoom meetings, google meet WhatsApp.

P4: *Pembelajaran online mempengaruhi pemahaman iya sih kayaknya, Apakah pengaruhnya baik atau buruk kayaknya gimana ya 50/50 sih kalau pengaruh baik Apa pengaruh baiknya ya jadi sekarang tuh materi semua bisa diulang-ulang sendiri karena yang ada rekamannya. Terus materi materinya juga kan Lengkap ada di Google class dari yaitu itu sih jadi bisa aku ulang-ulang, jadi ya pemahamannya jadi lebih apa yang bisa di crosscheck lagi jadi lebih baik gitu.*

(I think yes, whether the effect is good or bad I think is 50/5. The good effect is students can repeat the materials themselves because of the existing recording. Continuing the material is also complete in Google class. Thus yes I can understand more by reading and watching the materials.)

P5: *Ada. Karena pembelajaran online siswa dituntut belajar secara mandiri, jadi terkadang saya merasa kesulitan ketika mengerjakan tugas dan memahami materi yang diajarkan. Karena tidak fleksibel seperti offline class.*

(Because online learning students are required to learn independently, so sometimes I find it difficult when doing tasks and understanding the materials taught. Because it is not as flexible as offline classes.)

P6: *Sebenarnya paham. Tapi beberapa ada yang miss karena tidak fokus sama pembelajaran dan terlalu banyak distraksi. Sehingga pembelajaran online saya pikir mempengaruhi pembelajaran.*

(Actually, I understand. But some miss it because they don't focus on learning and get too distracted. So online learning I think affects learning.)

Student expectations regarding the appropriate way of learning AAW

The students expected that they need more practice and a more face-to-face learning process. Because this material is very complex, students need to do a lot of writing practice so that students can understand the material that has been given by the teacher deeply.

P1: *Terkait dengan pemahaman materi yang bagus, mata kuliah AAW ini kan bisa dikatakan sebagai mata kuliah yang sangat kompleks ya, complicated. Mungkin untuk penyampaian materinya tidak hanya sebatas chat via grup tapi bisa dilakukan entah itu via teleconference atau hanya audio conference saja dimana baik mahasiswa dan dosen itu bisa menyampaikannya secara real secara langsung sehingga apa yang disampaikan itu bisa langsung tersampaikan dan juga itu lebih bisa memotivasi mahasiswa, maksud saya, saya pribadi karena jujur saja ketika materi penyampaian dilakukan secara via teks itu sedikit men-discourage motivasi saya untuk mencoba memahami materi yang disampaikan, begitu*

(Associated with a good understanding of the material, this AAW course can be said to be a very complex course, yes, complicated. Maybe the delivery of the material is not only limited to chat via group but can be done either via teleconference or just audio conference where both students and lecturers can convey it in real life so that what is conveyed can be conveyed directly and also it can motivate students more. I mean, personally, because to be honest, when the material was delivered via text it slightly discourages my motivation to try to understand the material presented)

P3: *Cara seperti apa yang bisa diterapkan dalam pembelajaran aaw dan bisa membawa memiliki pemahaman materi yang bagus, mungkin kalau acara seperti apa yang bisa diterapkan mungkin tipe-nya bisa kayak workshop gitu ya jadi tiap pada materi itu tuh langsung disuruh siswa kerja terus waktu buat dicek jawabannya gitu karena selama ini ya emang*

ada tugas sih yang kayak workshop cuman kurang dicek lagi sih kayaknya. Jadi menurut saya sih kalau modelnya dibikin kayak workshop gitu bakal lebih pemahaman materi yang lebih bagus.

(What kind of method can be applied in learning aaw and can bring a good understanding of the material, maybe if what kind of event can be applied, maybe the type can be like a workshop, so each time the students are asked to work on the material and check the answers That's because all this time, there have been assignments that are like workshops, but they are not checked anymore, I guess. So in my opinion, if the model is made like a workshop, it will give a better understanding of the material.)

P5: *Antara siswa dan guru bisa melakukan collaborative learning, sehingga pembelajaran tidak perlu dilakukan secara terus menerus melalui zoom namun juga siswa bisa melakukan kegiatan secara mandiri atau sebaliknya. Siswa juga perlu didampingi ketika pembelajaran mandiri sehingga seimbang.*

(Between students and teachers can do collaborative learning, so learning does not need to be done continuously through zoom but also students can do activities independently or vice versa. Students also need to be accompanied when independent learning so that it is balanced.)

DISCUSSION

How does a student's learning style affect their understanding of the materials in an online Academic Article Writing class? The present study examines this issue by determining whether online learning affects student's learning or not. The previous study has the same topic as the student's learning style but the present study discusses the situation of online learning. The present study also has different places where it discusses in an academic article writing class.

The result of the questionnaire shows the variety of student's learning styles in an academic article writing class but there are some who include it as not significant because the result of the questionnaire has the same score in certain learning styles. The major learning style in academic article writing class is visual. It can be seen from the result of the questionnaire where 8 students are having a visual learning style, 5 students are auditory, 2 students are kinaesthetic and the rest 6 students are not significant.

The interview is conducted with the six students who have the highest score in each learning style based on the result of the questionnaire. The result shows that most of the students assume that online learning gives them benefits in learning and understanding the materials. The results show that online learning gives them both benefits and problems. For the benefits, the students can repeat the materials all the time because the materials are submitted at Google Classroom and also there is a recording of the online class. Besides that, the students also face problems but mostly technicalities, such as an internet connection, quota, and device problems.

CONCLUSION

As students' learning styles are very important to be known by educators and students themselves, it is also necessary to find out how the influence or effect of these learning styles on students' understanding of English material in online classes. This needs to be known because it will affect the actions that will be taken by educators when conducting online teaching and learning activities. By using teaching methods or strategies and applying appropriate learning methods to students according to their respective learning styles, the activities carried out will be more effective. The results of this study were obtained from distributing questionnaires and conducting interviews with respondents who have different learning styles. From these data, it can be seen that each different learning style will affect students' understanding of Academic Article Writing material during online classes. Various respondents who have a visual learning style will easily understand and remember the material if they write it in their notebooks. While respondents who have an auditory learning style will understand more if they often share their opinions and discuss them with others. The last is respondents who have a kinesthetic learning style. To understand the material, students who have this style must be helped by doing other activities such as playing ballpoint or doodling on their book. Hence, it can be seen that students' learning styles will affect their understanding of catching the material during online classes.

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