Student-student interaction in online learning during the covid-19 pandemic

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Abstract - Despite numerous studies investigating various aspects of online learning amidst the Covid-19 pandemic, the empirical findings reporting on the student(s)-student(s) interaction in the micro-level of the language teaching-learning process is inadequately documented. Thus, this current study was in an attempt to address this void by exploring how the students interact in online learning and identifying the perception of the student about student-student interaction in online learning for effectiveness in the online learning English teaching process. Framed in a case study, 5 students of a public University in West Nusa Tenggara participating in the Teaching English for Young Learner (TEYL) course were purposefully recruited to participate in this study. The data were garnered from a series of semi-structured interviews and a 4-month virtual classroom observation and were analyzed using thematic analysis. The findings elucidate that students enjoyed their online learning interactions and they perceived that their language skills and knowledge increased significantly. The teacher was seen to have a pivotal role in facilitating students to have effective interactions by providing various activities, prepared materials, and support. Practically, this study proposes some suggestions for teachers and students on how to establish effective student-student interaction in a language online classroom.

Keywords: online learning, sociocultural perspective, student-student interaction

1. Introduction

Online learning has been very popular in the world of education, especially in universities because it is one of the tools or alternatives used by teachers in learning media in providing learning materials for their students (Artino & Stephans, 2009). Online learning will also make an active learning process because students can independently explore self-study materials via the Internet. So, it exercises students' independence honing their abilities and being responsible for their own learning or commonly referred to as autonomous learners (Khotimah et al, 2019; Liaw et al, 2007).

During the Corona Virus outbreaks, almost all countries in the world have been implementing some physical restrictions such as lockdown and social distancing, to take precautions to prevent the spread of the virus (Khachfe, et al., 2020). This surely impacted on the countries' economy as well as education (Schulten, 2020). Therefore, in education context, online learning by its nature has been the most considered platform to facilitate teaching learning in addressing this unprecedented condition (Hodges, et al., 2020; Ministry of Education of China, 2020a).

In the micro level of teaching learning, interaction has considerable influence on students' learning outcome and is unduly linked to the success of educational practices. It is anchored from the sociocultural perspective believing that human beings can influence each other such as the change of thinking patterns (Vygotsky, 1896).

In this respect in the classroom context between students and students, students and teachers also affect each other through the interaction. The interactions could be personal to social life. Bates (2019) argues that through sociocultural theory, "knowledge and interactions are constructed through social interactions with families, friends, teachers, and peers". Sociocultural theory not only reflects the view that learning and development is a process of increasing mental sophistication, but is also mediated through social and cultural interactions (Nagel, 2012). Students are thought to be active to independently interact, share ideas, discuss things as well as offer solutions to problems in their learning processes. Sociocultural theory is based on the assumption that learning occurs not through interaction but in the interaction itself (Ellis, 2000). In the sociocultural theory, teachers and students are particular factors that have a relationship to help a student learn and achieve the goals of learning. The relationships help social interaction and active participation in the classroom even though this takes place through the online processes. The teachers encourage students to communicate, interact, discuss with their peers to make them productive and active in online learning activities. Therefore, online learning will not monotonous, passive, and boring. So, it is highly recommended that teachers avoid handling unmeaningful online learning where students have nothing, the student attends the online classroom without getting feedback from the teachers or having less input and limited insight from what have they learned.

Also, it is very helpful for students when they have found online learning as a source of knowledge and a good medium to share experiences. Teachers facilitate online learning very well and strongly encourage the student to communicate actively in the online interactions. This beneficial situation will help students express their ideas and opinions more comfortably especially when they have the English Specific Purposes class. So, it is claimed that the lower the level of communications or interactions among students in the learning process, the less opportunity to get a satisfying learning attainment. *Journal of Applied Studies in Language*, Volume 6 Issue 1 (Jun 2022), p. 37—45 p-issn 2598-4101 e-issn 2615-4706 © Politeknik Negeri Bali http://ojs2.pnb.ac.id/index.php/JASL

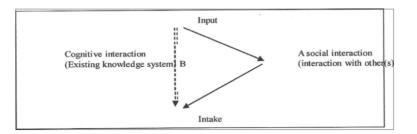


Figure 1 The Role of Interaction (Lier in Sundari, 2017: 148)

The relationship between the constructs of this research can be seen in figure 1. Interactions in online learning involve teachers and students as interactants use the target language. The teacher facilitates and encourages the student to be active and give feedback as a sign that students understand what is being learned. On the other hand, the students will actively interact with other students to discuss and collaborate as well as negotiate among them to solve the problems during their learning process. So, the goals of learning will be achieved, and the result of this research will contribute to a new perspective of knowledge resources available to enhance the learning experiences.

In the context of online learning, the effective interaction is mediated by appropriate use of technology and how the teachers effectively design the learning environment (eg, space where learning occurs) (Bower, 2019; Gonzales et al., 2020; Wang et al, 2013). Practically, when the interaction in the classroom is running well, then the class tends to be active and productive. An active class is created because of the good interaction between teachers and students, students and students, and the achievement of the goals of the learning and learning process (Moore, 2002). Moreover, the importance of interaction in online learning plays as a big determinant of the success of the learning objectives (Merkine et al, 2019).

Establishing effective interaction is indeed deeply correlated with teacher's role. Rashidi & Rafieerad (2010) found that when the teachers can organize a class facilitating effective interaction between teachers and students, the teaching learning process will exert positive influence on the students' learning attainment. For example, as a facilitator, a teacher must be able to facilitate students well and participate actively in the learning process such as in online discussion forums so that students are more focused and feel comfortable during the learning process (Zhang et al, 2007). Students will also have some opportunity to boost their critical thinking (Bishop, 2000) by exchanging ideas with their friends that might come from different level (Woods, 2002). Within the process, teacher ability and competence to provide necessary scaffolding takes fundamental role.

Against this backdrop, investigating classroom interaction especially student(s)student(s) interaction is warranty needed moreover in the context of online learning during the pandemic that empirically underexplored. To address this need, this current study aimed to paint the portrait on how student(s)-student(s) interaction in an online learning happens and to explore students' perception towards it.

2. Method

This study was a case study picturing individual phenomenon (Stake, 1995) and investigating related features of the case without any systematic intervention (Yin, 2018). Situated in a public university in West Nusa Tenggara, Indonesia, this study purposefully recruited 5 students of English department participating in Teaching English for Young Learners (TEYL) course. To get the consent from the participants, researchers employ personal approach by firstly providing adequate information about this current study; the aims, participants' contribution, research contribution and implication and technical details. In addition to the participants' willingness to voluntarily participate in this study, they were recruited based on some criteria: first, the

participants are easier to contact, second, they are enthusiastic and have high interest in TEYL course, and third, they have active participation in online learning process, and fourth, perceived to have ability in expressing and telling feeling and experiences. The detailed demographics of the participants can be seen in table 1. In this respect, the researcher used pseudonyms to keep the virtues of participants' confidentiality and safety.

Table 1 Participants Demographics					
No	Name	Sex	Age	Semester	Characteristic(s)
1	РМ	Male	21	7	Meeting the criteria, participating in online courses, having no previous experience in joining online course.
2	YSK	Female	21	7	Active in joining online course and cooperative discuss with others student.
3	VPC	Female	21	7	Active participation and showed high interest in online course.
4	RAL	Female	22	7	Enthusiastic and highly interested in online course.
5	SO	Female	21	7	Highly motivated, informative in giving feedback, and active in online course.

To collect the data, two types of data collection techniques: observation and semistructured interview were systematically conducted in 4 months starting from September to December 2020 for the observation and in one month (January 2021) for the interview. The observation was carried out to depict student(s)-student(s) interactions in the series of online teaching learning process (16 meetings) either from the synchronous or asynchronous mode. Meanwhile, the semi-structured interview was designed to gather further information about the data taken from the observation and also to delve the data related to students' perception about student(s)-student(s) interaction. The interview was carried out via phone, online media such as WhatsApp, and also face-to-face interview. The interview was done for 15 to 20 minutes for each meeting based on an agreement between the researcher and the participants. The researchers made the interview in relatively short time to avoid boredom and exhaustion.

To analyze data from observation the researcher took some documentation from group discussion in the form of photos or screenshots and notes. And to analyze data from the interview, the researchers obtained the information to summarize and interpret to understand the topics during the study (Hancock & Algozzine, 2006). The researcher collected the data from observation and interview carefully. Then the researcher was reducing unnecessary information and summarize important information that focusses on the topic of the study. The researcher discussed and interpreted the larger meaning about what the researcher found in the field that was in the interaction between students and students in the online teaching-learning process. After the data discussed and interpreted the researcher concluded from the data has been obtained. The researcher used the technique analysis based on Miles and Huberman (1994) which are data collection, data reduction, display data, and drawing conclusion.

3. Results and Discussion

The findings acquired from observation and interviews were presented in two themes based on research questions: student(s)-student(s) interaction in online learning and students' perceptions about student(s)-student(s) interaction in online learning

Student-student Interaction in online learning

As observed, the lecturer designed the online TEYL course in ways to promote students-centered learning. The design of the class is real-time virtual discussions mediated by Google Meet, WhatsApp group discussion and Moodle. The lecturer organizes the real-time virtual discussions as synchronous meetings to facilitate the students in learning to discuss, exchange their ideas and interact with others. The lecturer provides new insight and skill to the students from the material in online learning. Then the students engaged in WhatsApp group

and Moodle as an asynchronous meeting to discuss the given materials and collaboratively to do some group projects.

Based on the participants' utterances, the group discussion is the avenue for students to interact, communicate, and exchange new ideas. The students had the opportunity to learn from their peers and from the context of learning. It is by the fact closely related to the sociocultural theory arguing that our minds are influenced by the thoughts around us and that learning happens within interaction (Vygotsky, 1896).

Based on the participants' explanation, the lecturer facilitated either synchronous or asynchronous meetings for establishing interaction among students. Asynchronously, there was a forum discussion group what the students call as "a group interaction" that was mediated by Moodle and conducted once a week. In this forum, the discussion was led by a particular group and the other class members should respond, comment, or criticize the topic prompted by the group leader. It made the students in TEYL course very excited and interested in following the learning process even through online learning. It was also a place for students to (re)construct their understanding after individual reading.

The WhatsApp group became a venue for students' discussion to collaboratively prepare the materials and projects that will be discussed in forum group discussion and Google Meet. In this case, the lecturer encouraged the student with written or oral (using voice note) motivation and gave information and guidance respectively.

Whereas, Google Meet was mostly used to discuss and exchange ideas and opinions and also to deliver some modellings, feedback, and enrichment from the lecturer synchronously. To be specific, the students were divided into four groups (A, B, C, D) in which each group to be the expert for particular topic in certain meeting while the other groups were encouraged to raise questions, bring some authentic cases to be collectively discussed with the expert group. This was conducted once every two weeks. The teacher encouraged the student to discuss and interact with each other to train their skills and exchange ideas to get new knowledge, inspiration or skills from other students about the materials being learned.

The students were also engaged in an e-book project requiring them to intensively interact in WhatsApp Group, Zoom Meeting or Google Meet, as well as e-book creator (an App to design an electronic book)

The perceptions of the student about student-student interaction in online learning

The study finds that in general, the students' perceptions about the interaction in TEYL course in online learning is positive. The students tended to appreciate the variation of the platforms and the interaction modes. Specifically, the sense on how teacher tried to help students to be active in the online learning is clearly captured. The students were set in series of activities allowing them to co-construct their understanding with their peers or groups.

"I think the online class is very interesting and the participants are all very active. The learning process is active because both lecturer and students are active in discussions, The interaction through Google meet and whatsapp groups, and other online learning media.". (PM, whatsapp-mediated interview, January 27, 2021)

"I feel very happy as I could ask my friend more frequently without feeling threatened. I feel secure. That is what I have experienced during the online interactions". (SO, face-to face interview, January 29, 2021)

The students perceived that online learning of TEYL course could encourage students to actively participate in the course activities and provide them a safe atmosphere where they felt secure to express their ideas and opinion.

"It is important to note that not every online class is effective. Some classes are good and some are not. But in my opinion, the TEYL course in online learning is the best online class: the lecturer was very punctual and active in holding regular meetings, could set effective course design encouraging students to take part more actively in an open discussion to share their *Journal of Applied Studies in Language,* Volume 6 Issue 1 (Jun 2022), p. 37—45 p-issn 2598-4101 e-issn 2615-4706 © Politeknik Negeri Bali http://ojs2.pnb.ac.id/index.php/JASL

knowledge and ideas. So, this made the student participate actively during the online learning." (PM, WhatsApp- mediated interview, January 27, 2021)

In the abovementioned excerpt, students' perception stating that TEYL course as the best course among some other courses implies that they were very pleased with the course presentation. The students appeared to be satisfied with how they were facilitated by the lecturer. In this sense, the lecturer played a pivotal role in establishing student(s)-student(s) interaction in online learning helping them learn better. The lecturer provided videos, articles, illustration, and training how to make an e-book for young learners requiring them to engage in a series of interaction to collaboratively discuss, analyze, negotiate, co-construct their understanding. Scaffolding was also given sufficiently such as: giving feedback and response to students' ideas and learning products and giving insight and direction to respond to students' problems using manuals and oral or written explanation. It was also reported that the lecturer also motivated and encouraged the students to learn better either in the synchronous or asynchronous meetings. Practically, in addition to oral and written motivation, the lecturer was seen as the role model who was committed to the course, punctual, patient, creative, and open to the students' ideas that indirectly bolstered students' motivation.

Akin to teacher's role, the students' role also seemed to have contribution in arising effective student(s)-student(s) interaction. This can be seen from the results of interviews with participants, as follows.

"On WhatsApp group discussion, I shared a real time virtual meeting link, reminded my friends when it's the time for class hours and reminded them to work on projects or other group assignments that had not been completed. It also happened in the smaller WhatsApp groups. In short, a reminder telling "don't forget to do it" helped me engage. (PM, WhatsApp- mediated interview, January 27, 2021)

Based on the explanation of the participants, it can be concluded that students also had a significant role to make active interaction in online learning. The students are reminded and contacted each other.

In a nutshell, the students perceived that the student(s)-student(s) interaction in their TEYL course was effective and positive in which highly mediated by the teacher's role as well as students' role. Nevertheless, despite the positive perceptions, this study also discovered some problems during the teaching of TEYL through online learning platforms. This can be seen from observation and informal conversations with participants, as follows.

"Online learning sometimes has network problems, lack of quota, especially during pandemic conditions. As a result, the communication or interactions is still very limited." (PM, informal conversation, January 27, 2021)

"When learning in real time virtual meeting, sometimes I experienced some Internet problems that make me a little depressed. Especially during the rainy season, the signal was not stable, I could not listen well and even could not join the real time virtual meeting. Also, the quota adequacy was another issue for me" (SO, informal conversation, January 29, 2021).

In this respect, Internet connection was seen as the most salient barrier in online learning hindering and impeding them to learn better. This problem also exerted negative impact on students' psychological aspect such as arousing depression and anxiety. **Student-student Interaction in online learning**

The result of the present research from the data interview showed online learning enhances smooth interactions among students, they tend to avoid demotivating languages and withdrawal. Students enjoy themselves as they really feel safe rather than talk directly which seems to be a bit frightening. As the research showed, one of the participants acknowledged that she "I feel very happy as I could ask my friend more frequently without feeling threatened. I feel secure. That is what I have experienced during the online interactions". The interaction between students and students is also very active because the teacher encourages and facilitates the students well. With a variety of methods and learning materials that are quite complete as well as a detailed discussion and explanation of the material.

In addition, the teacher also facilitates students well, with a regular schedule, with intense meetings and discussions, good material exposure with various teaching materials, and there are goals to be achieved from the online learning process. The teacher encourages students to continue to be active in the learning process so that the class does not become passive and students do not just fill in online absences and then receive material without understanding what is being learned. The teacher will direct students so that during the discussion the material does not come out of the learning topic. That way, the learning process will continue to run well and be active so that it creates good interaction between students and students as well as students and lecturers. It is in accordance (Zhang, Gao, Ring & Zhang, 2007) have found that when the teacher facilitates students well and participate actively in the learning process such as in online discussion forums so that students are more focused and feel comfortable during the learning process.

The perceptions of the student about student-student interaction in online learning

Interaction between students and students also goes well through the assignments given by the teacher to students. Because there is a sense of responsibility that students have to complete the tasks that have been given by the teacher. Nurture was formed by teaching. It is based on the experiences of social and cultural influence on language learners (Mitchell & Myles, 2004). Students with each other will contact and remind each other to complete the task based on the material that has been shared by each respective group. Students will discuss more deeply their material before discussing it with other groups. So that, students must understand very well the material for their respective groups.

Students and students actively interact through group discussions given by the teacher. Both through virtual meetings (synchronous meeting) and group discussions (asynchronous meeting). Many discussions conducted by students, it will generate enthusiasm for learning, a sense of comfort, and an increase in knowledge because they get new knowledge from every other student. With a regular schedule and regular discussions, students feel the atmosphere of learning even when studying from home or studying online. With several types of forms used in online learning with various methods that make student interaction more diverse. The quantity and the quality of interactions in the classroom are influenced by the climate of communication (Barker, 1982). Some have gone through a virtual meeting for students to discuss and answer questions with other students, there is a project for students to collaborate well to complete their project assignments together through group discussions, video calls on WhatsApp, and other online media. One student said that she liked the group discussion method as given by her teacher. Because it makes the class more active and less bored. Other students help each other to explain and provide understanding to other students who ask questions. This becomes fun because one student and another student is connected and chimed in so that the interaction in the online class becomes active.

On the other hand, several problems occur in online learning based of the student perception. The first, network problems that are very disturbing during the online learning process. Because not all students have a good network or are in city areas so that network constraints are also very disturbing during the learning process. The second, the problem is the limited quota that students have because not all students install Wireless Fidelity (Wi-Fi) at home. The third, the limited time in online learning. There is a merger of classes which makes online classes contain many members in one meeting, thus making online classes swell, seize, and less effective. Because when the discussion is taking place, the time they have for discussion is so limited because they have to share with other groups.

Based on the result above, there are several things that the teacher must do to help the class become more active through student expectations. The hope is for other online classes to be more active so that the learning process does not become passive. The teacher preserved

active class with existing methods and with each assignment that makes up a portfolio and answer questions. And it makes the class active, not monotonous so that the material is not only fed by the lecturers. Virtual meetings conducted through Google Meet are already active. So, every student has the opportunity to interact not only with the same person but it is just that virtual meetings are more activated, but because several obstacles that cannot be avoided such as limited quota and network constraints that make it impossible. The students already get knowledge with assignments made by the lecturer. And when discussing through virtual meetings, the members are minimized because even in offline classes when there are many members in the class, the class becomes ineffective. Especially when online, many students in the class make the class ineffective. And the expectation of students that the campus and government also facilitate student needs in online learning by providing a free quota thoroughly to students and provide the best service and facilities.

4. Conclusion

This present study explores the students' online learning interactions during the Pandemic Covid-19. The aims of this study are to explore how the student interacts in online learning especially student(s)-student(s) interaction is warranty needed moreover in the context of online learning during the pandemic that empirically underexplored, identify the perception of the student about student-student interaction in online learning for effectiveness in online learning English teaching process.

This research reveals that the interactions that occur in online learning in the Teaching English for Young Learners course are very good and effective. The students enjoyed their online learning interactions and their language skills and knowledge increased significantly. Students get many benefits and new knowledge even though the learning and teaching process is done online. The students feel that they are learning even though they are at home. With teachers who facilitate and encourage students so well with various methods and clear goals in the learning process. So that, students can interact well with other students and create effective classes even though online media is not face-to-face-based. Interaction and knowledge run through social interactions by following the sociocultural interaction theory. How can one student influence and communicate with each other so that good interaction is created through discussions given by the teacher who is responsible for the class.

On the other hand, although the various problems that arise cannot be avoided and they occur accidentally, they can still be minimized so that online learning continues to run well. Students enjoy the online learning process and get new experiences. Students also stay connected to other friends even though they are at different places and times. Furthermore, the perception of students about student-student interaction in online learning is the best in English for Specific Purposes online class. Because the process of learning and teaching is quite good with teachers who encourage and facilitate the students well so that the creation of active interactions between students and other students.

Although not as good as face-to-face but in such a situation, this learning process is well run. The teacher as a facilitator has been running her duties well. The teacher creates an active and conducive class, where students and students can interact well, exchange their respective ideas and opinions. Students experience increased knowledge and smoothness in a speech in online learning. However, the student expects that the campus or government can provide better facilities by providing a free quota thoroughly for students in order to online learning can run well.

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