

THE ROLE OF CLASSROOM INTERACTION IN ONLINE LEARNING: VOICES FROM THE STUDENTS

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Abstract: The importance of classroom interaction in learning has been widely researched. Through the lens of sociocultural theory, classroom interaction could be seen as mediation for learning where learners develop their knowledge and understandings through collaborative activities and dialogic processes which take place during the learning process in class. This paper qualitatively explores the types of classroom interaction that take place in an online learning environment to analyze factors that impacted and shaped classroom interactions. Further, how students perceive each type of interaction and how it might contribute to learning and learners' satisfaction were also discussed. The study highlights the importance of balancing the use of both synchronous and asynchronous interaction modes to allow maximum classroom interaction. While technology might be a potential tool in encouraging learners to interact more actively and engage in interaction within a less threatening condition, instructors should think carefully about the design of learning activities to create positive classroom interaction with learners, among learners, and between learners and the course materials.

Keywords: classroom interaction, synchronous learning, asynchronous learning, sociocultural theory, students' learning

INTRODUCTION

The use of telecommunication technology to provide information for education and training is known as e-learning. Generally, e-learning is associated with activities that include computers and interactive networks simultaneously (Tsai & Machado, 2002). The term e-learning is often used interchangeably with the phrase 'online learning' which both refer to a variety of contexts, ranging from the delivery of course

materials via the Internet and the use of the Internet as a learning resource to the use of Computer-Mediated Communication (CMC) as a supplement to learning (Fung, 2004). While it is required that technology (i.e., computers) is significantly involved in the learning activity, e-learning does not require learning materials to be delivered by computer. On the other hand, online learning emphasizes how contents and materials are easily available and accessible on computer-based learning tools. For the sake of practicality, this paper will use both terms interchangeably to refer to any learning activities which take place with the mediation of computers and networks.

With the advancement of information and communication technologies, e-learning is quickly becoming the standard for modern education. The asynchronous and synchronous learning network model of e-learning liberates interactions between learners and instructors, and among learners, from the constraints of time and location (Katz, 2002; Trentin, 1997). This allows for flexibility for both instructors and learners to communicate with each other and is expected to maximize the quality and quantity of classroom interaction. A number of studies have pointed out the importance of classroom interaction in the learning process and that the degree of classroom interaction might be indicative of learning and satisfaction (Li & Walsh, 2011; Miyazoe & Anderson 2010; Swan, 2001, 2002).

As synchronous and asynchronous internet communication is increasingly used to supplement or even replace face-to-face teaching approaches in a variety of formal educational contexts, these digital spaces could be considered social spaces (Walsh & Li, 2013). Through interaction and dialogic process in these social spaces, learners will engage in learning activities including discussion, and argument building as they collaboratively and actively develop their understandings via encounters with others who may be more experienced. Learners would gain these benefits of the e-learning design by making use of opportunities through and in interaction in the social spaces created in the educational context.

LITERATURE REVIEW

Classroom Interaction and Sociocultural Theory

Researchers have identified three types of classroom interaction, including learners' interaction with instructors, learners' interaction with their peers, and learners' interaction with content (Anderson, 2003; Baber, 2020; Moore, 1989). Learners' interaction with their instructors refers to

the ability of learners to communicate with and receive feedback from their instructors; learners' interaction with peers is the ability of learners to communicate with each other about content to create an active learning community; and learners' interaction with content is the ability of learners to access, manipulate, synthesize, and communicate content information. Anderson and Garrison (2003) developed this three-type interaction model of interaction, which may also occur between teacher-teacher, teacher-content, and content-content interaction to result in deep and meaningful learning (see figure 1 below). Moore's original three types of interaction have also inspired the development of the Transactional Distance theory which analyzes the efficacy of using the virtual classroom environment to generate quality discussion and investigate how internal and external structural aspects contributed to classroom learning (Moore, 2013). The present study will look at Moore's theory of the three types of interaction as this theory serves as the foundation of other related concepts in explaining classroom interaction. In addition to that, Moore's framework put equal focus on the three elements of interaction (i.e., the teacher, the learner, and the content), whereas Anderson's appeared to give a greater emphasis on the teacher as it looks at the interaction occurred between teachers and between teacher and content as well. As the data for the study was also collected in a particular setting from the perspective of the students, Moore's interaction framework is more appropriate as it focuses on the learners, while also looking at how the teacher and the content influence the interaction.

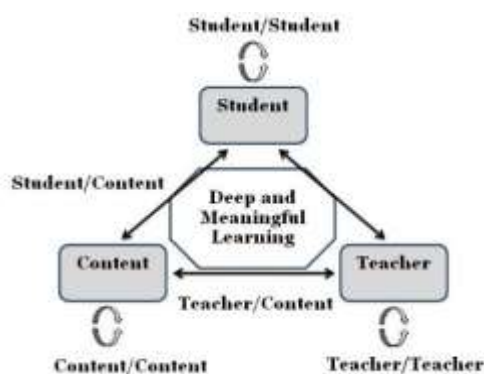


Figure 1. The interaction theory typology (Garrison & Anderson, 2003).

According to sociocultural theory, social interaction and cultural institutions such as schools, classrooms, and so on, play essential roles in

an individual's cognitive growth and development. Vygotskian's theory defines the source of mediation as either a physical instrument (using a computer); a symbolic system, particularly language; or the conduct of another human being in social contact (Kozulin, 2003). In the classroom context, a teacher, a curriculum, teaching materials, and learning activities may serve as various types of mediation for learners. Unfocused learning behaviours may be changed and modified depending on how learning is mediated, for instance, by carefully designed coursework and carefully selected course materials. Mediation may serve as a tool for cognitive transformation. This mediation might take the shape of a textbook, visual material, classroom discourse patterns, chances for second language contact, or different types of instructor assistance (Donato & McCormick, 1994). Through mediators in the shape of objects, symbols, and people, natural, responses are transformed into higher mental processes such as problem-solving. Hence, the social life of the classroom is critical to the issue of the use of an individual's strategy to participate and internalize the values and behaviour of the learning community in which they took part.

In the language learning context, with the popularity of communicative language teaching, the use of CMC in strengthening the role of social interaction in facilitating language learning could be realized through the pedagogical rationale for educational purposes (Kramsch & Thorne, 2002). Learners may co-construct the 'activity' they engage in when executing a task based on their socio-history and locally decided goals. The sociocultural theory focuses on the dialogic processes (such as 'scaffolding') that may emerge during task performance and influence language usage and learning (Ellis, 2000).

How the online learning environment changes classroom interaction patterns

Research indicates the potential of e-learning in fostering classroom interaction (Bernard et al., 2009; Thorne, 2008, 2016). Various elements including different forms or digitally mediated activities may give learners a sense of freedom, allowing them to say things they would not say in face-to-face interaction. Numerous research indicates that CMC and Internet-based courses allow students to engage and participate in class discussions in higher numbers and with better quality than in traditional classrooms (Harstinski, 2006; Walther, 1992; Zheng & Warschauer, 2015). With online learning, students' participation becomes more explicit, and discussion content becomes available for reflection and evaluation as many online courses review participation on a regular

basis (Macdonald, 2004). Neuwirth et al. (2021) suggest that teachers set up online discussions in the virtual classroom which provides students with the flexibility to interact both synchronously and asynchronously as this flexibility appears to encourage students to participate. More participation, however, does not automatically imply a positive classroom experience. Furthermore, this engagement may be efficient because it is initially more difficult to transmit information and build social relationships (Warkentin et al., 1997). Hence, the role of the instructor to initiate and main positive interaction in the classroom is highly necessary as the technology will not do the work without careful design and monitoring from the instructor.

These claims on the potential of computer and internet-mediated communication should be regarded carefully by looking at aspects and principles of communication. In the current configuration of the online classroom, teachers and students are mostly represented by text on a screen. We could not easily find common features which are present in the traditional face-to-face classroom such as facial expressions and body language that help us evaluate how others are reacting to what is being spoken. We cannot hear voices or tones of speech until we are in a synchronous virtual classroom environment, and so may have trouble communicating emotion. This may lead to a low perception of instructors' social presence or the degree to which a person's presence was attributable during a computer-mediated communication (Piccoli et al., 2001). Numerous research has reminded us of the downsides of e-learning on students' learning motivation and emotional states. Several potential problems of e-learning that have been identified in previous research include a sense of learner isolation, learner frustration, anxiety, and confusion (Brown, 1996; Hara, 2003; Hara & Kling; 2000). In particular, these negative emotions are more frequently found in online learning during the pandemics situation (Yeung & Yau, 2022).

Students' Learning satisfaction variables

A study conducted by Eom, Wen, and Ashill (2006) found that the following six factors: *course structure, self-motivation, learning styles, instructor knowledge and facilitation, interaction, and instructor feedback*, significantly influenced students' satisfaction in online learning. Further, this study also revealed that the students perceived interaction as an important element of their online learning experience, especially when the goal of online interaction is to create a sense of personalization and customization of learning and help students overcome feelings of remoteness. In other studies, the level of learning satisfaction was also

correlated with the frequency of classroom interaction. The majority of students who reported higher levels of contact with the teacher and classmates indicated higher levels of satisfaction and learning (e.g., Swan, 2001). Several prior studies have shown that an interactive teaching style and high levels of learner-to-instructor interaction are highly related to high levels of user satisfaction and learning results (e.g., Arbaugh, 2000; Swan, 2001). It seems that these factors, which contribute to students' learning satisfaction, cannot stand alone. A good course structure should be supported by the course delivery through a sufficient level of classroom interaction to result in the desired learning satisfaction. However, we need to be aware of the background and contextual differences as respondents from different subjects and institutions were found to give significantly different responses when asked to reflect on their overall satisfaction (Fielding et.al., 2010; Langan et.al., 2013). Students' satisfaction is constantly shaped by their university experience where the campus environment appears to be a web of interconnected series of episodes that affect their overall satisfaction (Elliott & Shin, 2002).

Against these backdrops, the researchers are interested in researching the following questions:

- What types of classroom interaction were found in this learning context?
- How do students perceive classroom interaction concerning their learning satisfaction?

METHOD

The study uses a qualitative approach to gain insights into the types and patterns of classroom interaction taking place in the research context. This study attempts to provide a detailed description of the experiences of individuals within a particular setting, hence, the design used is a qualitative case study to help explore a phenomenon that occurred within a particular context to reveal the meanings of the issues being investigated. In the field of English Language Teaching, a case may refer to a person, either a learner or a teacher, or an entity, such as a school or a university, a classroom, or a program (Faltis, 1997). With this approach, the researcher attempts to reveal important patterns or meanings from the data. Qualitative research would be useful for understanding how patterns of interaction emerge and how learning occurs inside these courses, as well as for looking for generalizable patterns across courses to create richer, more generalizable theories

(Arbaugh, 2000). Data were gathered from an online questionnaire sent to the students of semesters 2, and 4 of the English Education study program at Universitas Islam Kadiri. These comprised four classes which were considered to be affected most by the online classes' situation under the pandemic of COVID-19, as these students were in their first- and second-year college when classes were switched online. By the end of the submission period, there were 74 responses out of 105 students in total. The questionnaires consisted of a combination of close-ended and open-ended question items, comprising 4 open-ended questions in which respondents should answer on their own, 8 open-ended questions in which respondents were provided with options but were able to select 'other' and type their answers, and the remaining 6 questions were closed-ended. The use of closed-ended questions was meant to highlight students' references to utilizing the online learning platforms in class and to capture the students' perception of how much they think they engaged in each type of classroom interaction. Their responses were further elaborated through the use of open-ended question items, in which they added more depth and description to the responses given through the closed-response items. The open-ended response items were analyzed and coded based on salient or repeated keywords and ideas. As the written responses might at times be too short or lack details, the interview with five selected participants helped to clarify the responses and add more descriptions which were significant in the interpretation process. During the semi-structured informal interview with the students, the researchers explored students' experiences of classroom interaction during their online class by asking several follow-up questions related to the indicated responses obtained in the questionnaires, such as when respondents suggested that it was important for the lecturers to encourage classroom interaction, then the researcher would ask "*What encouragement or support do you expect to get from the lecturer?*" The interview stage helped the study gains more insights into how the students perceive their experience in classroom interaction.

FINDINGS AND DISCUSSION

The present study aims to discuss three types of classroom interaction (teacher-student, student-student, and content-student) in the context of online learning and how the students in the studied context perceive the role and importance of classroom interaction in particularly related to their perceived learning and learning satisfaction. The findings

present the participants' responses obtained from the questionnaire and follow-up interviews with the students.

Instructor-Student Interaction

The first type of classroom interaction presented here is that which occurs between an instructor and students. During students' interactions with instructors, there are opportunities for learners to communicate with and receive feedback from their instructors. Previous studies have revealed that instructor-student interaction serves as a strong predictor of the success and satisfaction of online learning (Kuo et al., 2013; Swan et al., 2010). Instructors are arguably playing the central role in creating how much and in what forms of classroom interaction will happen during learning and teaching activities.

A range of responses was elicited in response to the section of the questionnaire on how these students perceive their interaction with instructors, a range of responses was elicited. In general, these students felt that interaction is important, with only 3 students thinking that it was either not important or somewhat important. Although the majority of the students are aware of the importance of instructor-student interaction, most of the students reported that the frequency of the interaction they have with their instructors in class is not very often. Almost half of the total respondents (48.6%) think they only interacted with their lecturer occasionally. Their responses are shown in the chart below.



Figure 2: Respondents' perception of the frequency of teacher-student interaction

The next section of the question items asked the respondents to select the type of activity they encountered when interacting with their instructors. In response to this, the students reported that the interaction between students and instructors occurred mostly through the following activities: Q & A during class discussions, feedback giving, mentoring/consultation outside class, class announcement, or information provision. Interestingly, the majority of the students find

that most of the interaction they have with the lecturers occurred during class discussions as numerous studies underscore the significance of dialogs and discussion in creating positive classroom interaction (Eom, Wen, and Ashill, 2006; Moore, 2013; Swan, 2001, 2002).

Although it was not quite clear who initiate the interaction, one participant commented that the instructor should:

'always invites students to interact such as when explaining a material, the lecturer must also ask questions for students, so that students can interact more and try to understand the material.'
(Student 34, Questionnaire)

From this response, the student stated that there was this expectation that the lecturer would initiate the discussion in a class by inviting students to ask a question and not wait until the students raise questions voluntarily.

The respondents' complete answers are presented below.

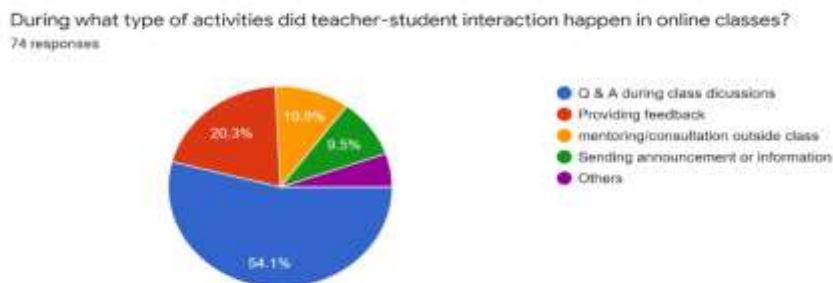


Figure 3: Respondents' activities during teacher-student interaction

From this first type of interaction, the students' responses signify the important role that instructors should play in managing the classroom and designing activities to allow for classroom interaction. Teachers' competency in designing a creative course structure might be one of the determinants of learning success and satisfaction. According to Langan et.al. (2013), the strongest predictor of student satisfaction was the course design which run smoothly, followed by teaching, organization, and academic support. Eom, Wen, and Ashill (2006) also argued that course structure and instructor knowledge and facilitation significantly impact students' satisfaction in online learning. Unfortunately, it might seem that students in this context feel the lack of instructor's support and facilitation. One of the responses from the students is as follows.

*“Giving more or specific explanation is essential for the students before the teacher gives them tasks and giving feedback is needed also for the students to know which area will be improved.”
(Student 48, Questionnaire)*

From this response, we learned that the student expressed the need for clearer instruction from the instructor, as well as constructive feedback on their work. Instructors who respond quickly and provide feedback will likely boost student engagement and compensate for the apparent distance in online learning (Tanis, 2020). If we aim to improve students’ learning success, feedback provision would be a necessary element to enhance learning success and satisfaction.

The use of a combination of asynchronous and synchronous learning should be considered. Although video conference meeting would strengthen the sense of ‘social presence’ during online interaction and is believed to contribute to a more effective online communication (Mehall, 2020), lecturers may also use a variation of one-way (e.g., posting announcements) and two-way exchanges of information (e.g., participating in an online discussion forum) to allow greater presence through both learning modes. This section has laid out the role of instructor-learner interaction, especially in the online learning environment. Hence, it is consequentially essential for instructors to improve their skills in teaching online classes.

Student-Student Interaction

There are two question items on the survey which aim to reveal the frequency and forms of interaction that occur between students. When asked about the frequency of student-student interaction in class, the majority of the respondents (67.6%) reported that they occasionally interacted with their peers. This interaction takes place through various classroom activities including group discussions both during the online meeting or on discussion boards, during questions and answers, and group work outside class hours. The complete responses are provided in the charts below.

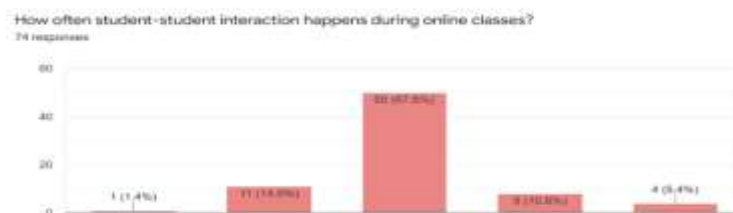


Figure 4: Respondents’ perception of the frequency of student-student interaction

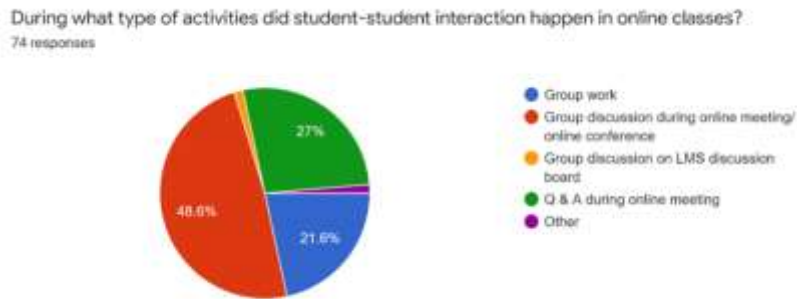


Figure 5: Respondents' activities during student-student interaction

In this context, some respondents expressed the belief that student-student interaction shaped most of the classroom interaction due to the course structure, which involved either a pair or group activity element. Through the responses to the open-ended question item, one of the many responses which reported how many pair and group activities they have in the class commented:

'A lot, and even quite often. They are usually in pairs when there are tasks such as debates, discussions, presentations, and correcting each other's mistakes in their answers'. (Student 25, Questionnaire)

In the same vein of this argument, another student commented:
'There is a lot (of group work) and there are about 5 courses that often give group work. Our task is to find material from topics that have been determined by the lecturer, then each online class meeting is made a presentation per group.'(Student 43, Questionnaire)

Recent educational theories, such as constructivism and active learning, suggest that learners should actively build knowledge and meaning through exploration, inquiry, and the modification and testing of ideas in the actual world (Palloff and Prat, 2007). Throughout the learning process, collaboration shared goals, and cooperation have been significant elements. To attain these goals, group activities, simulations, and the use of open-ended questions seem to be just a few of the activities used. Individuals participate in interactions with knowledge, the learning environment, and other students while the instructor's role is primarily that of a learning facilitator.

It was found that peer feedback was also practiced in this learning context. Students were asked to provide comments or evaluations on

their classmates' works or performances. This is shown by the following comment made by the research respondent:

'Yesterday, we were given the task of making a composition and correcting each other's assignments. We do it in pairs.' (Student B, Interview)

The use of peer feedback in learning has also been supported by numerous studies (Granott, 2005; Zeng & Takatsuka, 2009). Interactional processes such as meaning negotiation and other forms of peer scaffolding, according to Foster and Ohta (2005), will generate possibilities for learners to get access to learning through the practice of peer feedback. Although during the interview students show preferences in receiving feedback from teachers, peer feedback may also be an alternative teaching strategy as well as effective learning support which also improves classroom interaction. Taghizadeh & Hajhosseini (2021) even suggest that universities administering online learning train the teachers' various strategies for online teaching so that quality teaching could be improved.

Student-Content Interaction

The last type of interaction to be discussed here is how students in this context interact with content learning materials used in class. The notion of interacting with content entails learners' ability to obtain, modify, synthesize, and present content information (Moore, 1989). The following percentages describe how much interaction the students have with the lecture materials; 50% stated they occasionally engage with the content; 32.4% stated that they often engage with the content, and 5.4% showed that these students have the highest frequency of interaction with content. Looking at the data, most student-content interaction in this context generally occurs when students read the lecture materials or search for external sources for additional references. A few students reported that they would watch videos related to the course materials posted by their instructors, however, no students stated that they would re-watch the class session recording. When asked why they never re-watch the recorded class session, one student admitted that,

"We are already busy with assignments, and another reason is the video should be downloaded and it takes a lot of internet quota. If it is from Youtube, perhaps I will watch it." (Student A, Interview)

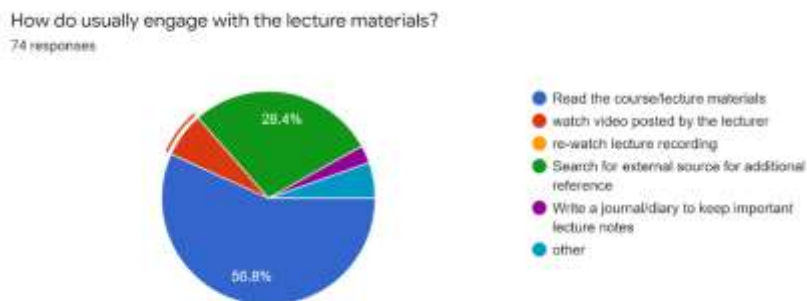


Fig 5. Respondents' activities during student-content interaction

It might seem that in this learning context, students mainly accessed the course materials related to the topics they would learn in class or have learned in class. Due to the constraints in the internet data or internet access, they stated preferences in accessing materials in the forms of readings instead of video materials. Previous research found that students would prefer to view only course resources or materials that they believe are directly related to achieving a good grade and that high access rates are connected with high grades (Murray et.al, 2012). Instructors might also seem to be aware of the fact that achieving good scores is what most students are aspiring to obtain with their courses. Hence, there is this tendency to make them or force them to engage with the course materials by giving students assignments or tasks. However, instructors must also be wise in deciding how much or how often they should give assignments to students, considering that too many assignments would lead to students' becoming overwhelmed with the coursework, so instead of learning from their course materials, students would just take a shortcut to complete the task. Here is what one student said in relation to the assignment he has in his courses.

"It would be nice if the lecturer explained first the purpose of his assignment and then the students were guided. Also, for a given task if it is too difficult then students will find it frustrating. Perhaps the lecturer must give example first." (Student D, Interview)

Online courses that are effective and well-designed encourage and highlight the interaction between students, teachers, and content. In particular, during an asynchronous online course, the interaction between students and content has been found to be very important for learning (Murray et al, 2012). According to Anderson (2003), when

student-content interaction is supported, deep and meaningful learning will likely occur. To enable this high degree of interaction, students' access to course materials should be encouraged and maximized through a well-designed and user-friendly learning platform. In addition to this, self-regulated learning should also be promoted. In this case, human variables (i.e., instructors and academic staffs) have a significant impact on the efficacy of self-regulated learning supports (Wong et.al., 2019).

In terms of motivation to actively participate in classroom interaction, the results of the study seem to support Murray et al (2012), who found that students would tend to access course materials which are directly related to achieving good scores, and in the same vein, students also seem to be more motivated when the lecturer counts their participation in class by giving them extra points. When asked about what motivated them to contribute and become active in class, 55.4% of all respondents stated that they would interact with their lecturer when they needed to ask questions or clarify something unclear to them. While 35.1% said that they would interact in class if the instructors gave them points for their active participation. Some students mentioned the need to show their instructors and peers that they could follow up the class discussion, hence, they would either share their thoughts in class or participate in class discussions. Other reasons which motivated the students in this context were that they needed to interact with their classmates to complete their group assignments, or because they wanted to avoid silence in class. One student commented:

"Because usually it is silent (in class) after being asked by the lecturer, and I think my friends are afraid to express their opinions." (Student 43, Questionnaire)

The students who participated in this study also mentioned several factors they think are important to support classroom interaction. From their responses, 35% believed that the learning activity design, which requires students to interact in class, is crucial. Instructors should also think about how to create interesting and thought-provoking content or materials, as mentioned by 23% of respondents. 17% of the respondents expressed the importance of giving encouragement and emotional support to the students. Other factors which were revealed by the respondents included the types of digital platforms used by the instructors (14%), and the classroom management strategy employed by the instructors (9.5%). The classroom strategy here refers to class rules and routines, such as the requirement of turning the camera on during

class, and the strategy to avoid silence when no students are willing to answer questions voluntarily. Some comments were made by the students concerning strategies they think could be adopted by the instructors to improve classroom interactions.

"The teachers should light up the situation by making small talk and sharing more than just about the lesson. When the class is full of confusing explanations, surely the students lost concentration and interest easily." (Student 11, Questionnaire)

"Occasionally relate the subject matter to students' life. Not always have to be about the lesson itself, but also inserted some examples from real life. Doing this will make students understand the importance of studying the material provided." (Student 47, Questionnaire)

"I think teachers already do their best, but some students are hard to give an opinion because of shy or afraid that their answer is wrong, some people are just afraid to tell opinion in front of everyone else. Joking in class could also make students feel more comfortable." (Student 42, Questionnaire)

The current study has discussed the importance of engaging students through positive classroom interaction with the support of the instructors in designing course content and learning activities that enable learners to become active and engaged. All three types of classroom interaction are important and somewhat interconnected. When instructors design learning activities that contain interesting content, students will likely become more motivated to access and engage with the content and will feel encouraged to contribute to class discussions. In addition to that, learning designs that have the elements of pair and group work will allow for the creation of student-student interaction. In either case, instructors play a significant role in designing an interactive course structure. However, students should also have motivation and readiness to be able to interact effectively with the instructors, with their classmates, and with the course content.

Although instructors play a significant role in creating and maintaining positive classroom interaction, it is necessary that students are trained to have the awareness of responsibility and autonomy to become active learners in an online learning environment. Several skills which are essential for students to become successful online learners are self-regulation skills, self-discipline, time management, organisation, planning, and self-evaluating (Eom, Wen, and Ashill 2006). Self-regulated students would take charge of their learning, employ

appropriate metacognitive techniques such as planning, and being organized, and Hence, they will likely become successful (Yukselturk & Bulut 2007). Motivation is another key aspect that determines students' success in learning and their desire to engage in the learning process. Motivation in an online setting is found to also increase learner retention and align their efforts with their aspirations (Saade', He, & Kira, 2007).

What was expressed by the participants in the present study is in line with what has been revealed in previous studies, which indicate the role of classroom interaction in providing the students with a community and allowing for dialogue will increase student engagement and connectedness (Baker, 2010), and a lack of interaction with the faculty and with classmates could be the main source of students' dissatisfaction (Cole, Shelley, and Swartz, 2014). Learners' interaction in class is also believed to correlate with perceived learning success (Akyol, 2011), and active learners who engage in-class activities are generally more successful (Palloff & Pratt, 2007).

CONCLUSION

The present study finds that both the quantity and quality of classroom interaction are highly crucial for online learning. Findings in this current study pointed out the types of learning activities through which students generally engage when doing classroom interaction, including group discussions, Q & A during class discussions, and feedback is given. We learn from this study the importance of course designs that allow for students' interaction with content and with their peers. To minimize students' reluctance to interact, instructors need to pay attention to several factors, such as selecting interesting and thought-provoking course materials, considering the difficulty level and relevance of the course materials to students' learning needs, and giving the students emotional support in addition to academic or cognitive support. This study also highlights the importance of having a balance in the use of both synchronous and asynchronous learning modes to enhance the social presence in an online learning environment. Also, it is essential that instructors have this awareness that even though technology has many features which would allow for interaction, it is back to the instructors' strategies to maximize the potential of interaction and engagement. Lastly, students should also be trained to be disciplined, They need to be prepared, and accountable for their learning, as online learning requires learners to be self-motivated and independent. As online learning has been and will continue to become

part of our current education landscape, it is hoped that the findings will offer valuable insights for teachers when designing their courses, and for students to be more aware of their role and responsible throughout the learning process, and for the institution when considering educational policy in their context, in particular related to the use of technology and online platforms for learning. While the study drew from relatively homogenous participants -who all studied in the same institution and the same study program, the researchers are aware of the potential for this to result in a lack of diversity in the students' perspectives on the topic. Hence, future research may benefit from studying participants from different contexts to offer alternative results and perspectives.

REFERENCES

- Akyol, Z., & Garrison, R. (2011). Understanding cognitive presence in an online and blended community of inquiry: Assessing outcomes and processes for deep approaches to learning. *British Journal of Educational Technology*, 42, 233-250.
- Baber, H. (2020). Determinants of students' perceived learning outcome and satisfaction in online learning during the pandemic of COVID-19. *Journal of Education and E-Learning Research*, 7(3), 285-292.
- Baker, C. (2010). The impact of instructor immediacy and presence for online student affective learning, cognition, and motivation. *Journal of Educators Online*, 7(1), n1.
- Bernard, R. M., Abrami, P. C., Borokhovski, E., Wade, C. A., Tamim, R. M., Surkes, M. A., & Bethel, E. C. (2009). A meta-analysis of three types of interaction treatments in distance education. *Review of Educational Research*, 79(3), 1243-1289.
- Brown, K. M. (1996). The role of internal and external factors in the discontinuation of off-campus students. *Distance Education*, 17(1), 44-71
- Cole, M. T., Shelley, D. J., & Swartz, L. B. (2014). Online instruction, e-learning, and student satisfaction: A three-year study. *The International Review of Research in Open and Distributed Learning*, 15 (6).
- Donato, R., & McCormick, D. (1994). A sociological perspective on language learning strategies: The role of mediation. *The Modern Language Journal*, 78, 453-464.

- Elliott, K.M. and Shin, D. (2002). Student satisfaction: an alternative approach to assessing this important concept. *Journal of Higher Education Policy and Management*, 24(2), 197-209.
- Ellis, R. (2000). Task-based research and language pedagogy. *Language Teaching Research*, 49: 193-220.
- Eom, S. B., Wen, H. J., & Ashill, N. (2006). The determinants of students' perceived learning outcomes and satisfaction in university online education: An empirical investigation. *Decision Sciences Journal of Innovative Education*, 4(2), 215-235.
- Faltis, C. (1997). Case Study Methods in Researching Language and Education. In N. H. Hornberger & D. Corson (Eds.), *Encyclopedia of Language and Education: Research Methods in Language and Education* (pp. 145-152). Springer Netherlands. https://doi.org/10.1007/978-94-011-4535-0_14
- Fielding, A., Dunleavy, P. J., & Langan, A. M. (2010). Interpreting context to the UK's National Student (Satisfaction) Survey data for science subjects. *Journal of Further and Higher Education*, 34(3), 347-368.
- Foster, P., and Ohta, A. S. (2005). Negotiation for meaning and peer assistance in second language classrooms. *Applied linguistics*, 26(3), 402-430.
- Fung, Y. Y. (2004). Collaborative online learning: Interaction patterns and limiting factors. *Open Learning: The Journal of Open, Distance and e-Learning*, 19(2), 135-149.
- Hara, N. (2003). Students' Distress with a Web-based Distance Education Course: An Ethnographic Study of Participants' Experiences. *Turkish Online Journal of Distance Education*, 4(2), 1-27. <https://doi.org/10.17718/tojde.02638>
- Hara, N. & Kling, R. (2000). Students' distress with a web-based distance education course: An ethnographic study of participants' experiences. *Information, Communication, and Society*, 3(4), 557-579.
- Hrastinski, S. (2006). Introducing an informal synchronous medium in a distance learning course: how is participation affected?. *The Internet and Higher Education*, 9(2), 117-131.
- Katz, Y. J. (2002). Attitudes affecting college students' preferences for distance learning. *Journal of computer assisted learning*, 18(1), 2-9.

Entusiastik & Siregar, Y.D.A., (2022). *The Role of classroom interaction in online learning: Voices from the students*

Kozulin, A. (2003). Psychological tools and mediated learning. *Vygotsky's educational theory in cultural context*, 4(6), 15-38.

Kramsch, C., & Thorne, S. L. (2002). *Foreign language learning as global communicative practice* (pp. 93-110). Routledge

Langan, A. M., Dunleavy, P., & Fielding, A. (2013). Applying models to national surveys of undergraduate science students: What affects ratings of satisfaction? *Education Sciences*, 3(2), 193-207.

Li, L., & Walsh, S. (2011). 'Seeing is believing': Looking at EFL teachers' beliefs through classroom interaction. *Classroom discourse*, 2(1), 39-57.

Macdonald*, J. (2004). Developing competent e-learners: the role of assessment. *Assessment & Evaluation in Higher Education*, 29(2), 215-226.

Mehall, S. (2020). Purposeful Interpersonal Interaction in Online Learning: What Is It and How Is It Measured? *Online Learning*, 24(1), 182-204.

Miyazoe, T., & Anderson, T. (2010). Empirical Research on Learners' Perceptions: Interaction Equivalency Theorem in Blended Learning. *European Journal of Open, Distance and E-Learning*.

Moore, M. G. (1989). Editorial: Three types of interaction. *American Journal of Distance Education*, 4(2), 1-6.

Moore, M. G. (2013). The theory of transactional distance. In *Handbook of distance education* (pp. 84-103). Routledge.

Murray, M. C., Pérez, J., Geist, D., & Hedrick, A. (2012). Student interaction with online course content: Build it and they might come. *Journal of Information Technology Education: Research*, 11(1), 125-140.

Neuwirth, L. S., Jović, S., & Mukherji, B. R. (2021). Reimagining higher education during and post-COVID-19: Challenges and opportunities. *Journal of Adult and Continuing Education*, 27(2), 141-156.

Palloff, R. M., & Pratt, K. (2007). *Building online learning communities: Effective strategies for the virtual classroom*. John Wiley & Sons

Piccoli, G., Ahmad, R. & Ives, B. (2001). Web-based virtual learning environments: A research framework and a preliminary assessment

of effectiveness in basic IT skills training. *MIS Quarterly*, 25(4), 401-425.

- Rios, T., Elliott, M., & Mandernach, B. J. (2018). Efficient instructional strategies for maximizing online student satisfaction. *Journal of Educators Online*, 15(3), n3.
- Saade', R. G., He, X., & Kira, D. (2007). Exploring dimensions to online learning. *Computers in Human Behavior*, 23, 1721-1739.
- Swan, K. (2001). Virtual interaction: Design factors affecting student satisfaction and perceived learning in asynchronous online courses. *Distance education*, 22(2), 306-331.
- Swan, K. (2002). Building learning communities in online courses: The importance of interaction. *Education, Communication & Information*, 2(1), 23-49.
- Swan, K., Shea, P., Fredericksen, E., Pickett, A., & Maher, G. (2000). Course design factors influence the success of online learning. In *WebNet World Conference on the WWW and Internet* (pp. 513-518). Association for the Advancement of Computing in Education (AACE).
- Taghizadeh, M., & Hajhosseini, F. (2021). Investigating a blended learning environment: Contribution of Attitude, interaction, and quality of teaching to satisfaction of graduate students of TEFL. *The Asia-Pacific Education Researcher*, 30(5), 459-469.
- Tanis, C. J. (2020). The seven principles of online learning: Feedback from faculty and alumni on its importance for teaching and learning. *Research in Learning Technology*, 28.
- Tsai, S., & Machado, P. (2002). E-Learning basics: Essay: E-learning, online learning, web-based learning, or distance learning: unveiling the ambiguity in current terminology. *eLearn*, 2002(7), 1-5.
- Walsh, S., & Li, L. (2013). Conversations as space for learning. *International Journal of Applied Linguistics*, 23(2), 247-266.
- Wong, J., Baars, M., Davis, D., Van Der Zee, T., Houben, G. J., & Paas, F. (2019). Supporting self-regulated learning in online learning environments and MOOCs: A systematic review. *International Journal of Human-Computer Interaction*, 35(4-5), 356-373.
- Yeung, M. W., & Yau, A. H. (2022). A thematic analysis of higher education students' perceptions of online learning in Hong Kong

Entusiastik & Siregar, Y.D.A., (2022). *The Role of classroom interaction in online learning: Voices from the students*

under COVID-19: Challenges, strategies, and support. *Education and Information Technologies*, 27(1), 181-208.

Yukselturk, E. & Bulut, S. (2007) 'Predictors for student success in an online course', *Journal of Educational Technology & Society*, vol. 10, no. 2, pp. 7183.XXX

Zeng, G., & Takatsuka, S. (2009). Text-based peer-peer collaborative dialogue in a computer-mediated learning environment in the EFL context. *System*, 37(3), 434-446.

Zheng, B., & Warschauer, M. (2015). Participation, interaction, and academic achievement in an online discussion environment. *Computers & Education*, 84, 78-89.