Jurnal Teknologi Pendidikan, August 2022, 24 (2), 184-196
DOI: http://dx.doi.org/10.21009/JTP2001.6
p-ISSN: 1411-2744 e-ISSN: 2620-3081
Accredited by Directorate General of Strengthening for Research and Development
Available online at http://journal.unj.ac.id/unj/index.php/jtp

Facilitation Strategies in Online Group Work from the Perspective of Community of Inquiry

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Received : February 16, 2022
Revised : August 8, 2022
Accepted : August 9, 2022

Abstract

This study aims at investigating how teaching presence is put into practice when managing online group work. The COVID-19 pandemic has resulted in disruptions in many aspects of our lives, including language education. Teaching and learning have been done remotely using various online learning platforms and educational technologies. While one of the foci of 21st-century skills is collaboration, how to design and manage group work in online courses remains a challenge for language educators. The Community of Inquiry (CoI) framework, which consists of teaching presence, cognitive presence, and social presence, has been widely employed in designing an effective online course. Thus, through online questionnaires and interviews, this descriptive qualitative research explored the experiences of seven university lecturers from two private universities in Jogjakarta to know how teaching presence was realized in coping with online group work. The results show how the participants have implemented a variety of facilitation strategies to maintain student engagement through different modes of communication, learning models, progress monitoring, and peer feedback. This research is also expected to shed a light on the challenges and strategies taken by lecturers to ensure that collaboration occurs in their classes.

Keywords: group work, online learning, the community of inquiry, teaching presence

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How to Cite: Harendita, M. E., & Kristianto, I. I. (2022). Facilitation Strategies in Online Group Work from the Perspective of Community of Inquiry. JTP - Jurnal Teknologi Pendidikan, 24(2), 184-196. https://doi.org/10.21009/jtp.v24i2.26073

INTRODUCTION

The rapid development of information technology and the COVID-19 pandemic have forced higher education institutions to incorporate life and career skills in their courses in order to tackle an uncertain future. In this volatile world, students need to develop life and career skills accompanied by learning and innovation skills (4Cs + 3Rs) strengthened by information, media, and technology skills. Nurtanto et al, (2020), Chalkiadaki (2018), and Tican & Deniz (2018) asserted the importance of instilling these skills. Furthermore, these skills are key subjects appropriate for 21st-century themes. Thus, lecturers need to devise standards and assessments, curriculum and instruction, professional development, and learning environments (Qadir et al, 2020).

One of the activities during the COVID-19 pandemic selected by lecturers to develop students' life and career skills is group work. Previous studies reveal groupwork's advantages. Groupwork during the COVID-19 pandemic is one of the main activities in online asynchronous classes which encourages discussions to

develop 4Cs and 3Rs (Trammel & La Forge, 2017). Moreover, group work may facilitate students coming from different cultural backgrounds.Yeboah (2018) and Kalgren et al (2020) suggested that group work establishes cross-cultural collaborative online learning.

However, managing group work in online classes remains a challenge for both the instructors and the students themselves. Several studies discovered that the challenges for students were limited interaction, setting schedule, and time zone differences (LaBeouf, Griffith, & Roberts, 2016; Trammel & LaForge, 2017). While prompt responses to questions and timely feedback from lecturers during group work were considered desirable by the students (Martin, Wang, Sadaf, 2020), little is known about how lecturers perceive and manage group work assigned in their class.

Based on the previous background, this research tries to explore the experiences of some university lecturers in facilitating group work in their online classes. In obtaining the objective, this research employs the community of inquiry framework (Garrison & Arbough, 2007). This framework has been widely used in online courses. It is made up of three interconnected elements: social, teaching, and cognitive presence. From the point of view of CoI, the intersection of the three types of presences is an integral part, where learning takes place.

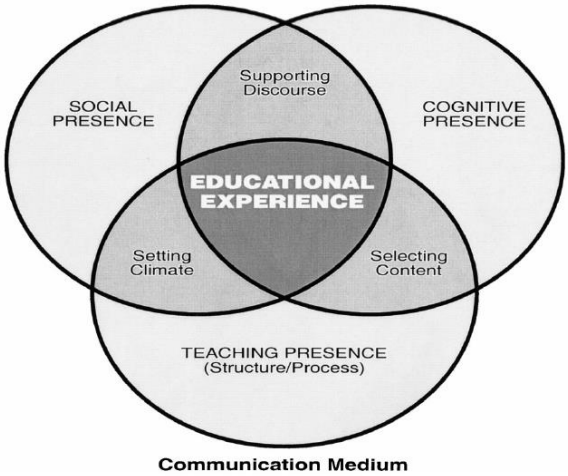

Figure 1. Community of Inquiry Framework (Garrison, Anderson, & Archer, 2000)

The first type of presence, social presence, is the students' ability to project their individual personalities in order to identify and connect with the community and build interpersonal relationships. Cognitive presence is the amount to which learners can construct and confirm meaning through sustained thinking and speech. Finally, teaching presence is the process of planning, facilitating, and directing social and cognitive processes in order to achieve the desired learning results.

The framework is founded on the notion that knowledge can be built via social negotiation and that dialogue with others - peers or tutors - is the most effective way to learn since it promotes critical thinking and understanding (Amemado & Manca, 2017).

Providing a basis for how online courses might be designed, the Community of Inquiry framework has been widely applied in online or distance education.

Stewart, et al. (2021) conducted a study on how CoI was used as a framework in a writing course to support collaborative writing activities. They found that social presence is made of two distinct elements: social comfort and social learning with social comfort as the dominant one. With regard to the pandemic situation, Tan (2020) looked at the impact of the pandemic on students' motivation and community of inquiry during online classes. The results suggested that students' motivation and learning performance suffered as they employed online learning methods. There was also a shortage of learning infrastructure as well as social support from teachers and fellow students.

Concerning teaching presence, in her qualitative case study, Berry (2017) found that instructors assisted students in developing a sense of community by setting a warm and welcome tone in the classroom and employing technology in a variety of ways to engage all students and provide them with a tailored learning experience. Marshall and Kostka (2020) illustrated that teachers might use the flipped learning strategy to create a teaching presence in online courses. Whereas Dempsey and Zhang (2019) discovered the teaching presence construct should be reconstructed to reflect and measure the construct as it is conceptually defined.

With reference to social presence, Nasir's (2020) study discovered a positive association between social presence and course satisfaction in an online course. In an online learning environment, affective expression, open communication, and group cohesion are important for improving the quality of relationships with peers. Lowenthal and Dunlap (2020) analyzed social presence indicators to establish and maintain a social presence. Furthermore, contextual factors such as group size, instructional task, and previous relationships may have an impact on how social presence is developed and sustained in online courses. In addition, Evans et al. (2019) study showed that the CoI framework's social presence indicators were a useful tool to describe facilitator contributions to asynchronous interprofessional team conversations.

In relation to cognitive presence, in the study conducted by Guo et al. (2021), it was found that on a cognitive level, there were no great expectations for students. Instead, online learning was primarily designed to motivate students to acquire and apply content knowledge. Barbosa et al. (2020) found that some parts of the cognitive presence construct were highly generalizable and transferable across languages. Qiao et al. (2018) uncovered students displayed cognitive presence in group discussions, although only 36% of total communications had evidence of cognitive presence.

Considering the complexities of online group work and the notable contributions of the CoI framework in online learning, this study would like to explore how teaching presence is put into practice when managing online group work. The existence of research regarding the online learning process has often been carried out, but the teacher's strategy in facilitating online working group learning has not yet been carried out, thus, it becomes the focus of research that researchers want to explore to add insight in dealing with the online learning process during a pandemic.

METHODS

This research applied the descriptive qualitative method. This type of research method seeks to explore participants' understanding, including their beliefs, perspectives, and attitudes (Nassaji, 2015). Thus, this type of study was deemed appropriate because this study attempted to investigate lecturers' perspectives and strategies.

The data collection instruments were online questionnaires and interviews. The participants were seven university lecturers from two private universities in Yogyakarta who taught English to first-semester students in online classes during the pandemic. The lecturers were first asked to fill in online questionnaires on Google Forms about their experience in managing online group work. The questionnaires consisted of closed-ended and open-ended questions and were divided into three sections; the first section inquired about the participants' teaching experience, the second section inquired about the participants' strategies in facilitating group work, and the third section inquired about the participants' challenge in facilitating group work.

Based on the responses and consent to do an interview, the researchers invited two participants to be interviewed. The interview was conducted virtually with each of the two participants through Microsoft Teams, a video-conferencing platform. The semi-structured interview consisted of seven open-ended questions. Each interview lasted for 15 – 20 minutes and was done in Bahasa Indonesia to give flexibility for the participants to share their ideas. Yet, the participants were also allowed to mix or switch to English if they felt more comfortable expressing themselves in the language. The interviews were then transcribed before being analysed.

Thematic analysis was employed in analyzing the results of the questionnaire and interviews, which yielded some significant themes. To make it more readable for general readers, the researchers also display the results in pie charts.

RESULTS & DISCUSSION

RESULTS

From the open-ended questionnaires and interviews, some themes were generated, namely: 1). Selection of communication platform, 2). Student-initiated groupings, 3) Active learning design, 4). Pre- and whilst-group work facilitation strategies. The results are presented in pie charts below and supported by the excerpt from the interviews with the participants, Nara and Rani (both are pseudonyms).

1) Communication Platform

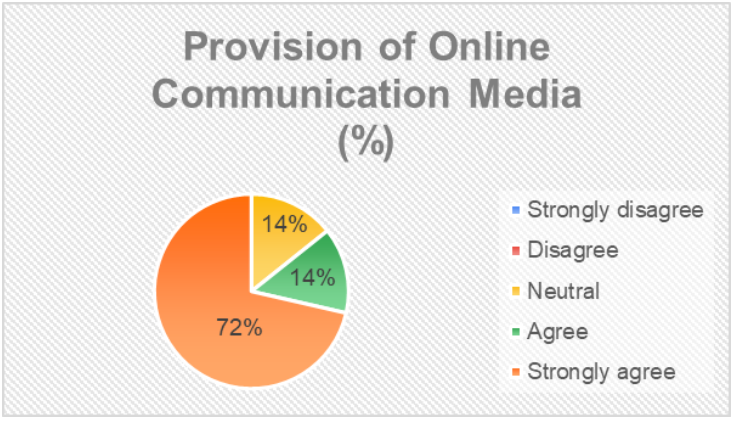

Figure 2. Provision of Online Communication Media

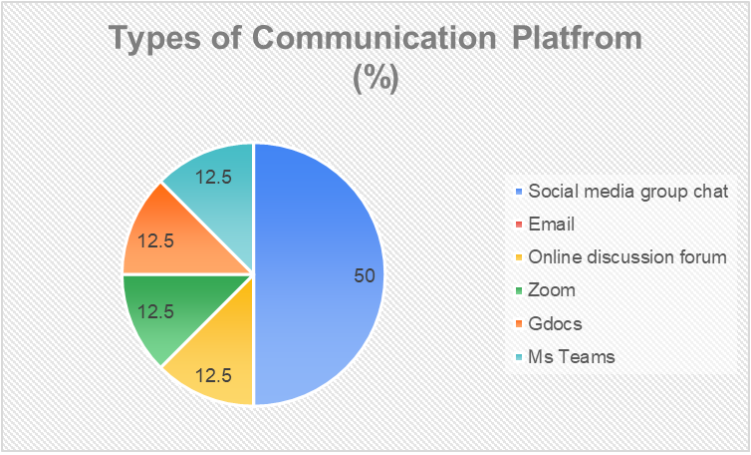

Figure 3. Types of Communication Platform

The above figures illustrate that the lecturers have accommodated communication and discussion, as well as work distribution in groups by providing some platforms to the students. The most used platform was social media group chat, such as *Whatsapp*, *Line*, or *Telegram*. Other media include synchronous ones, such as *Zoom* and *Microsoft Teams*. Some other tools which may accommodate asynchronous discussion were the online discussion forum, which is embedded in the Learning Management System, and *Google Documents*.

One of the participants, Nara, asserted that she used Microsoft Teams in class. The decision was based on the feasibility that the platform had to accommodate group discussion. However, outside of the class, she gave flexibility to the students to choose any feasible media.

> *"In class, I used Microsoft Teams, but outside of class, I let the students use any media. The good thing about using Microsoft Teams was that everything was well-recorded. I could add labels, and open breakout rooms and channels. During the group discussion, I asked students to write the results in Microsoft Word or PowerPoint. The file could be uploaded. Thus there was no reason that the students could not display or present them because they were accessible by everyone."*
>
> *(Nara, interview)*

The notion of flexibility was also highlighted by another participant, Rani, who let students use any communication platforms.

> *"I usually offered the options to the students first. Some prefer the Whatsapp group (WAG). I initially offered Teams chat, but if, for example, they thought that it would be more responsive using Whatsapp, I would use WAG. For communication during class, use the breakout rooms. If it's outside of the class, I left it to them."*
>
> *(Rani, interview)*

Both Nara dan Rani showed that the teachers had pre-determined platforms to facilitate communication among students. The preference was based on the feasibility and availability of *Microsoft Teams*, which was provided by the university. Yet, when it came to outside-of-class interaction, they would let the students choose the most feasible ones for all the group members.

2) Student-initiated Groupings

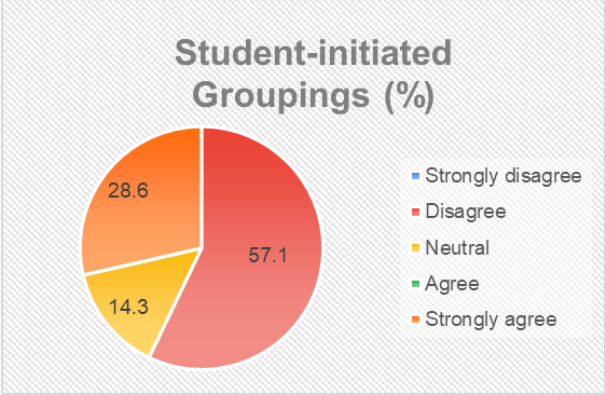

Figure 4. Student-initiated Groupings

When asked whether the lecturers let the students create their own groupings, the majority of the lecturers (57.1%) objected to the idea. Only 28.6% of them would let the students do it. Actually, the interviews revealed that the types of groupings were actually based on the nature of the group work and other considerations. For example, for an activity that should be accomplished in a quite long period of time, the preference was to let students select their own group members. For short group work, random assignment was preferred.

> *"It depended on the nature of the task. If it was a project, the group was the same from beginning to end. So students determined their own group members. I facilitated it through chat and channels. But some topics/discussions could be completed in a day. In such cases, random groupings using breakout rooms were done."*
>
> *(Nara, interview)*

Nara's case was somehow different from Rani's. Rani tried to give some space for the students to exercise their autonomy so they would be responsible for their own decision.

> *"I left it to the students: random or student-initiated groupings. So they were responsible for their own choices."*
>
> *(Rani, interview)*

3) Active learning design

The figures below show the types of learning activities assigned to the students. The two types of learning models offered were problem-based and project-based.

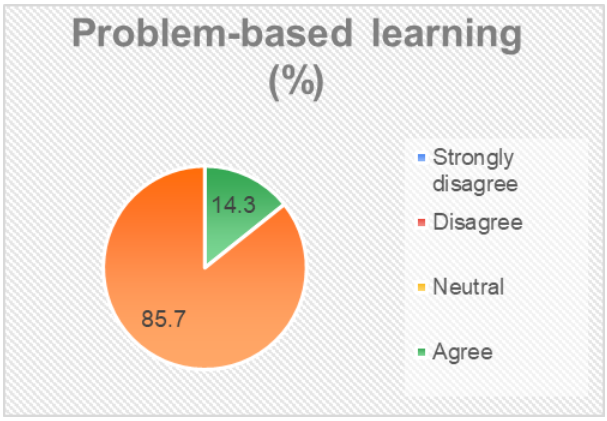

Figure 5. Problem-based learning

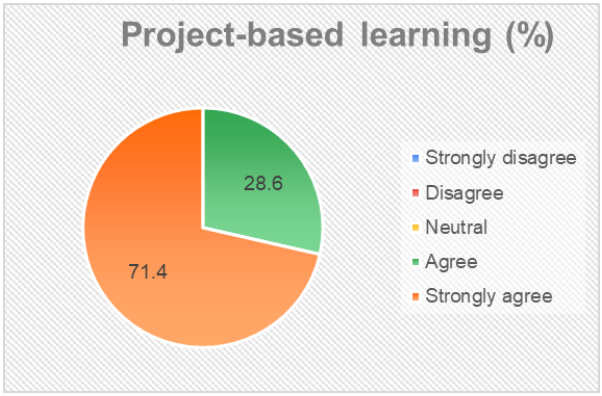

Figure 6. Project-based learning

All of the participants stated that they designed active learning activities for the students by offering students a problem to solve and/or a project to be executed in groups. The time given to complete group work was also based on the types of activities. An example of project-based learning activity was outlined by Nara as follows.

> *"I asked the students to analyze reviews of certain products, goods, or services. For example, reviewing a cafe based on the reviews on Google. Then, they had to analyze the reviews."*
>
> (Nara, interview)

The underlying reason for implementing project-based learning was to make it possible for all personnel to take part in the project with the diverse individual skills that they had. The goal of the learning activity was also tangible because students know what output or product to make.

> *If it's just a verbal discussion, the results will not be tangible. But if it's a project, each one could contribute. Those who were good at design could help design; those who were good at speaking would handle the group presentations. Everyone could contribute according to their individual skills.*
>
> (Rani, interview)

4) Pre- and whilst- group work facilitation strategies

The results questionnaires and the interviews revealed that all the participants have demonstrated some pre-and whilst-group work facilitation strategies by giving clear procedures, monitoring progress, and providing time for the class to do group consultation with the lecturers.

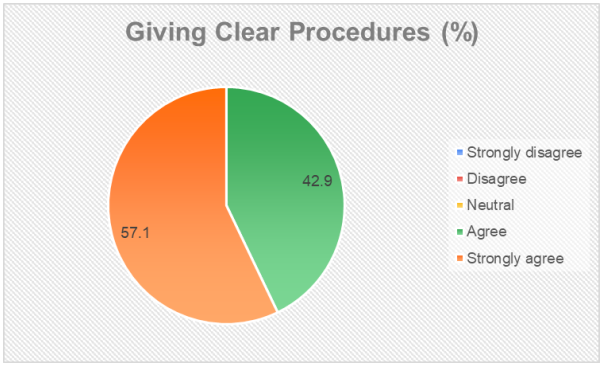

Figure 7. Giving Clear Procedures

From the above figures, it appears that the participants perceived that clear procedures had been given before the students worked in groups and there was also time allotted for group consultation. From the interviews, Rani and Nara stated a similar thing about how the procedures were clearly communicated to the students both in written and oral forms. They used *Microsoft PowerPoint* to display the procedures and instructions. Then, while having an online class, the procedures were also elaborated orally.

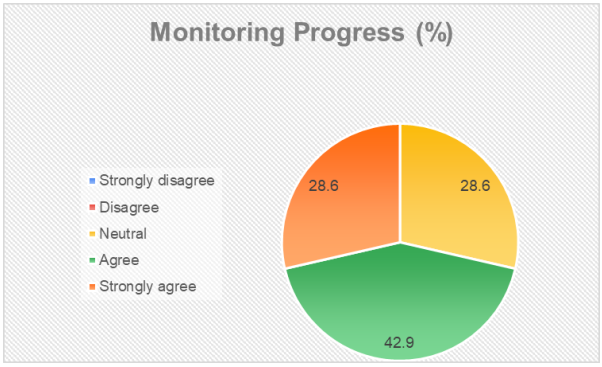

Figure 8. Monitoring Progress

However, not all seemed to monitor the students' progress as almost 30% of them chose "neutral". Nara highlighted the challenge she faced when monitoring progress. She admitted that it was not easy to always visit each group while they were having discussions. Yet, she also required students to submit or present the written report as proof that they were working together.

> *"It was challenging (to monitor the students' progress). The first thing I did was to visit the break-out rooms. If they seemed silent, I would give one or two questions to trigger answers from them. Furthermore, there must be a written result, especially when they had to have a short discussion. It didn't have to be a report in long sentences. It could be just a picture or PowerPoint slide(s) to show."*
>
> (Nara, interview)

The same issue was also addressed by Rani, stating that the meeting time allotment was too short for her to check the progress of each group. Thus, she tried to monitor the progress through group chats instead of visiting the breakout rooms.

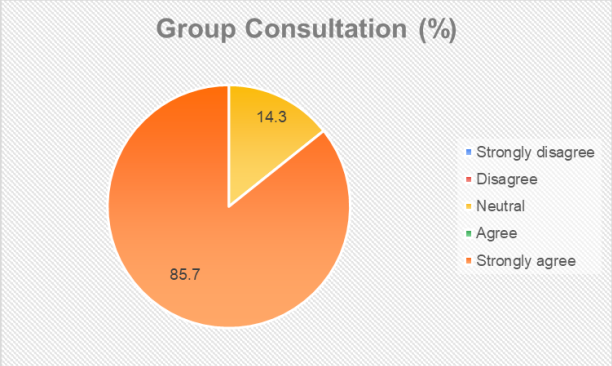

Figure 9. Group Consultation

All participants perceived group consultation as essential. The group consultation was facilitated in and outside the class. Different ways of facilitating were outlined by the interviewees.

> *"The week before the project presentation, I held a full consultation session. I checked how each group was going and they shared their progress. If they still had questions, they could ask them outside of class, through Whatsapp."*
>
> *(Rani, interview)*
>
> *"I visited the breakout rooms. At the beginning of the class, I said "If you have any questions, please write them on the channels and tag my name. Outside the classroom, you can use Teams and Whatsapp."*
>
> *(Nara, interview)*

5) Challenges and Coping Strategies

From the questionnaires, managing online group work did pose some challenges to the lectures. The summary of the challenges and coping strategies is presented below.

Table 1. Challenges and Strategies

Challenges		Coping Strategies
1.	Creating groups	a) student-initiated groupings b) random assignment (using web-game, group assigning feature on LMS, using student number)
2.	Giving instructions/procedures	Keeping the instructions short
3.	Technical problems	a) being available to be contacted via communication media (e.g. Whatsapp) b) using more than 1 device to stay connected with the students
4.	Maintaining students' motivation	a) monitoring progress b) giving appreciation to students

The participants tried to tackle the challenges by doing some strategies. Some of the challenges were tackled using more than 1 strategy. It shows how the

participants made some efforts in handling the challenges to ensure that the group work ran smoothly.

The interviews, however, suggested another notable challenge that was highlighted by both participants, which was ensuring that each group member contributed equally to the group work. To tackle this problem, Nara and Rani applied different strategies.

> *"If there were complaints saying that a particular student did not contribute, I would ask the other students to exclude the name in the report. However, I asked them to notify that particular student and me first."*
>
> *(Nara, interview)*

Rani's approach was different. She applied "peer feedback" where each student could evaluate their friends' participation in accomplishing the project.

> *"I used peer feedback. In addition to the product (the result of the project), I shared a Microsoft Excel file where they could assess their friends. If the score was low, I sent that student a private message."*
>
> *(Rani, interview)*

DISCUSSION

In an online learning environment, it seems that students feel a stronger sense of community when there are discussions where participation from all the students is encouraged by the instructors (Garrison et al., 2010 as cited in Berry, 2017). The results show how the participants have implemented a variety of facilitation strategies as a realization of teaching presence. Echoing Stewart, et al. (2021), this study also found that facilitation strategies can be established through course design and organization, as well as by facilitating student-student and student-content engagement. The participants have provided different communication platforms for students to interact with, for example, social media group chat and personal chat. A synchronous mode of communication through Zoom and Microsoft Teams has also been offered. By doing so, the students were expected to be able to maintain their engagement with the course, peers, and content. In CoI, dialogue with others (peers or instructors) may also promote critical thinking and understanding (Amemado & Manca, 2017)

Another indication of how teaching presences took place is by designing learning models which lead students to active learning, such as problem-based and project-based learning. This corroborates with Stewart, et al. (2021) who state that a high level of teaching presence establishes clear expectations in a simple-to-navigate learning environment that encourages active learning.

In addition, another notable element in both teaching and cognitive presences is how learning is regulated (Garrison, Anderson, & Archer, 2000). Rani's approach by asking the students to independently set their own timeline for accomplishing the group project was one of the examples. Giving options on the types of groupings and leaving it to the students were also an indication of how teachers encouraged students to be responsible for their own decisions in learning. In terms of monitoring strategies done by the lecturers, although it seemed challenging for them, some efforts have been made to provide students with prompt feedback during the meeting or by scheduling another meeting for consultation and progress reports. In

her research, Wong (2020) argues that lack of feedback and supervision from teachers may diminish students' "arousal", which is one of the four basic learner needs. "Arousal" is a condition of being psychologically attentive and aware. In the context of education, "arousal" may take place when learners are engaged in an activity, and positive arousal allows for continued effort and participation in learning. A positive physical environment, affective factors, motivation, attention, and cognitive evaluators can all contribute to positive arousal (Wong, 2020).

The facilitation strategies were also portrayed in the types of assignments given to the students. The results of the study show that peer feedback was also used as a way to keep the students engaged and connected. This is in line with the study conducted by Waycott et al. (2013), where peer-knowledge sharing was accommodated to enhance a sense of community. Nasir (2020) also emphasizes that instructional tasks are one of the factors that may influence how social presence is maintained in online courses.

CONCLUSION

Despite the challenges and complexities in dealing with online group work, this study has demonstrated how university teachers have thrived to continue to facilitate students to maximize their online learning experience, particularly through the assignment of online group work. The results show how the participants have implemented a variety of facilitation strategies to maintain student engagement through different modes of communication, learning models, progress monitoring, and peer feedback. Through a number of strategies, the lecturers have attempted to realize the teaching presence in the CoI framework, which is one vital element that will contribute to an ultimate learning experience.

CONFLICT OF INTEREST

Concerning the research, authorship, and publication of this paper, the author(s) reported no potential conflicts of interest.

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