

Online Learning and Effective Communication During The Pandemic

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Abstract

It has been reported in the literature that students experience a variety of communication difficulties while participating in online learning, both among themselves and with instructors. During this pandemic, as is widely known, extensive research on online learning has been carried out in order to better understand it. Research on communication between lecturers and students, on the other hand, is still extremely scarce. As a result, the purpose of this study is to determine whether effective communication between lecturers and students has occurred in online learning. The quantitative nature of this study is demonstrated by the use of a five-point Likert scale online questionnaire with six closed-ended questions. An analysis of the data collected from 500 student participants representing public and private universities was carried out quantitatively using the descriptive statistics method. When it comes to online learning environments during the COVID-19 pandemic, the findings show that participants have a generally positive experience with them, according to the findings. The fact that their classes are conducted online does not prevent them from maintaining effective communication and interaction with their classmates and lecturers. This demonstrates the efficiency with which online classroom communication can be conducted. The current study's implications and limitations are also discussed.

Keywords: *online learning, communication, effective communication, pandemic, perception*

Abstrak

Dalam literatur dilaporkan bahwa mahasiswa mengalami berbagai kesulitan komunikasi saat mengikuti pembelajaran daring, baik di antara mereka sendiri maupun dengan dosen. Selama pandemi ini, sebagaimana diketahui, penelitian yang ekstensif mengenai pembelajaran daring telah dilakukan untuk memahaminya secara lebih baik. Namun, penelitian tentang komunikasi antara dosen dan mahasiswa masih sangat terbatas. Oleh karena itu, tujuan dari penelitian ini adalah untuk menentukan apakah komunikasi yang efektif antara dosen dan mahasiswa telah terjadi dalam pembelajaran daring. Penelitian ini bersifat kuantitatif, yang ditunjukkan melalui penggunaan kuesioner daring berbasis skala Likert lima poin dengan enam pertanyaan tertutup. Analisis data yang dikumpulkan dari 500 partisipan mahasiswa yang mewakili universitas negeri dan swasta dilakukan secara kuantitatif menggunakan metode statistik deskriptif. Berdasarkan hasil penelitian, ditemukan bahwa dalam lingkungan pembelajaran daring selama pandemi COVID-19, para partisipan secara umum memiliki pengalaman yang positif. Fakta bahwa kelas mereka dilaksanakan secara daring tidak menghalangi mereka untuk menjaga komunikasi dan interaksi yang efektif dengan sesama mahasiswa maupun dengan dosen. Hal ini menunjukkan efisiensi komunikasi dalam kelas daring. Implikasi dan keterbatasan dari penelitian ini juga dibahas.

Kata Kunci: *pembelajaran daring, komunikasi, komunikasi efektif, pandemi, persepsi*

INTRODUCTION

The COVID-19 pandemic has significantly altered various aspects of life, including education (Ducharme, 2020). Since the World Health Organization (WHO) declared COVID-19 a global pandemic in 2020, traditional face-to-face learning has been largely replaced by online learning environments (Czerniewicz, 2020; Hodges et al., 2020). This shift has had profound implications for the nature and effectiveness of communication between students and lecturers during the learning process (Alawamleh & Al-twait, 2020).

Communication is a fundamental component of education and is defined as the exchange of information between individuals (Dimpleby & Burton, 2020). Effective and efficient communication facilitates the smooth transmission of knowledge and ensures that students are engaged and able to

comprehend the material presented. While both online and offline communication serve the same fundamental purpose (Lieberman & Schroeder, 2020), online communication introduces unique challenges that can impact the effectiveness of teaching and learning (Alawamleh & Al-twait, 2020).

The primary objective of communication in educational settings, whether in traditional or online classrooms, is to transfer knowledge and foster positive relationships between lecturers and students. However, the transition to online learning has posed several communication-related challenges. Unlike face-to-face interactions, online learning environments limit the ability of lecturers to use non-verbal cues such as body language, gestures, and facial expressions to convey meaning and engage students effectively (Alawamleh & Al-twait, 2020). The absence of these cues can lead to misunderstandings, decreased student engagement, and a reduced sense of connection between students and instructors.

Previous studies have highlighted that students encounter various communication challenges in online learning environments, affecting both their interactions with peers and their engagement with lecturers. For instance, Dilmaç (2020) and Mahyoob (2020) found that communication barriers in online learning can lead to reduced student participation, difficulties in comprehending course materials, and an increased sense of academic isolation. Similarly, Knight (2020) and Morgan (2020) noted that students often struggle to establish social connections with their classmates, which negatively impacts the effectiveness of group work and academic discussions.

Moreover, research by Miller et al. (2021) and Schafer et al. (2021) suggests that these communication difficulties are exacerbated by the absence of nonverbal cues, such as body language and vocal intonations, which play a crucial role in face-to-face interactions. Pokrovskaja et al. (2021) further emphasized that students frequently encounter challenges in understanding instructors' directions in online settings, particularly when there is a misalignment between the teaching methods and students' preferred learning styles. Schiavio et al. (2021) additionally stressed that, in higher education contexts, communication constraints in online learning can hinder the development of critical thinking and collaborative skills, both of which are essential components of the academic experience.

Overall, findings from these studies indicate that communication barriers in online learning not only impact students' academic performance but also affect their psychosocial well-being. Therefore, it is imperative to implement more effective strategies to address these challenges, such as integrating interactive technologies, enhancing lecturer engagement in online discussions, and fostering social interaction within digital learning environments.

These difficulties often lead to information being ineffectively conveyed, resulting in gaps in students' understanding and learning outcomes (Adnan, 2020). Additionally, students may feel isolated or disengaged due to a lack of direct interpersonal interaction, which further impacts their ability to communicate effectively with lecturers.

Despite these challenges, advancements in communication technology have played a crucial role in mitigating some of the barriers associated with online learning. Video conferencing platforms such as Zoom, Microsoft Teams, and Google Meet have enabled real-time interaction between lecturers and students, allowing for more dynamic and engaging discussions. Online discussion forums, email communication, and instant messaging tools have also provided alternative means for students to seek clarification and engage in academic discussions.

However, the effectiveness of these technological tools in facilitating communication depends on several factors, including digital literacy, access to reliable internet connectivity, and the ability of lecturers to adapt their teaching strategies to an online format. Research has indicated that students with limited access to digital resources or those unfamiliar with online learning platforms face greater difficulties in communicating effectively with their lecturers (Miller et al., 2021; Pokrovskaja et al., 2021).

While extensive research has been conducted on the broader aspects of online learning during the COVID-19 pandemic, studies specifically examining the communication dynamics between

lecturers and students remain scarce. Understanding how effective communication can be achieved in online learning settings is critical to improving students' learning experiences and academic performance.

This study aims to explore whether effective communication between lecturers and students in online learning has been successfully maintained. It will examine the challenges faced by both parties, the strategies employed to enhance communication, and the overall impact of these factors on the quality of education delivered in an online format.

METHOD

This study employed a quantitative research approach, which is suitable for systematically measuring and analyzing communication and interaction in online learning environments. The paradigm adopted was positivism, a research approach that emphasizes objectivity, measurement, and statistical analysis to understand social phenomena. By applying this paradigm, the study aimed to quantify students' communication experiences and interactions in online classrooms, allowing for empirical conclusions based on numerical data.

The research method utilized was a survey-based design, which is widely used in quantitative research to collect standardized data from a large number of respondents. Structured questionnaires were employed as the primary data collection instrument, enabling the study to systematically capture students' perceptions and experiences related to communication and interaction in online learning settings. The data were gathered through an online questionnaire created using Google Forms, a cloud-based survey tool that allows for efficient data collection and management. The questionnaire comprised six closed-ended questions, specifically designed to evaluate two key dimensions of communication in online learning: student-to-student communication and interaction in the online classroom, as well as lecturer-to-student communication and interaction, which reflects the dynamics between students and their instructors. These dimensions were adapted from the framework proposed by Parsazadeh et al. (2013), with several modifications to suit the context of the study.

Before distributing the questionnaire to the target respondents, a pilot study was conducted with 70 students to ensure its clarity, comprehensibility, and effectiveness. The pilot test was essential to assess whether the questionnaire items were clearly understood by respondents (Schleef, 2014), evaluate the design and appropriateness of the questionnaire in achieving the study's research objectives (McQuirk & O'Neill, 2016), and identify potential issues, such as ambiguous wording or technical flaws, that could affect data reliability and validity.

The collected data from the closed-ended questions were analyzed using Statistical Package for the Social Sciences (SPSS) version 25 for Windows, a widely used software for quantitative research. The study employed a descriptive statistical analysis method to summarize the participants' responses and identify patterns in their communication and interaction experiences during online learning. This approach provided insights into how students engaged with their peers and lecturers in virtual classrooms, particularly in the context of the COVID-19 pandemic, when online learning became the dominant mode of education. By employing this rigorous methodological framework, the study ensured the reliability, validity, and generalizability of its findings, contributing valuable empirical insights into the communication challenges and dynamics of online learning environments.

RESULTS AND DISCUSSION

A total of 500 undergraduate students from public (51.8%) and private (48.2%) universities in Lampung, Indonesia participated in the current study. They were predominantly female (60.8%) with the remainder (39.2%) being male. They were nearly identical in age, ranging in age from 18 to 27 years with an average of 19.92 years. I informed them of the study's purpose and assured them of their anonymity and confidentiality. By completing the online questionnaire, they consented to the use of the data they provided for research purposes.

The data were collected via an online questionnaire with six close-ended questions using Google Forms, a free cloud-based survey and questionnaire tool. The online questionnaire's closed-ended questions were developed based on a dimension of communication and interaction among students in the online classroom and communication and interaction between lecturer and students, with several modifications (Parsazadeh et al., 2013). The questionnaire was piloted among 70 students prior to being distributed to respondents. It was to ensure that everything was comprehensible, clear, and concise (Schleef, 2014) and to determine its appropriateness and design to ensure that the questionnaire accomplished the research objective (McQuirk & O'Neill, 2016). The data collected from the online questionnaire's closed-ended questions were quantitatively analysed using SPSS 25 for Windows using a descriptive statistics method. The analysis was used to ascertain participants' communication and interaction in their online classroom during the COVID-19 pandemic.

Numerous digital platforms have been extensively utilised in online education during the pandemic. The following is a digital platform for lecturers and students to communicate.

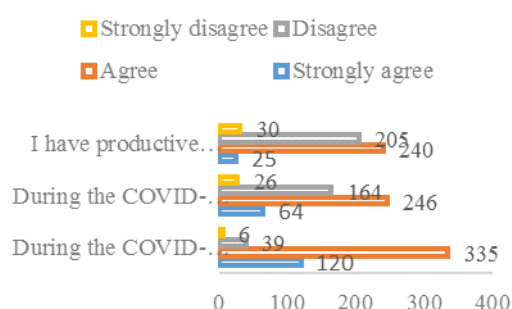


Figure 1. Application most frequently used for online classes

Source: Research Data, 2024

The Figure 1 above illustrates the most frequently used applications for online classes during the COVID-19 pandemic. WhatsApp is unquestionably the most frequently used communication tool in online education (40 percent) during the COVID-19 crisis, followed by Google Classroom (31 percent). With 14% and 12%, respectively, learning management systems (LMS) owned by institutions and video conferencing applications, such as Zoom, follow a similar pattern. Others, such as Google Meet, CloudX, Quizizz, and Edmodo, are among the least frequently used online learning communication tools during this COVID-19 pandemic (3 percent). It is the conclusion of the research conducted, which provides a statement that what is stated in the "Introduction" section has a relationship with "Results and Discussion". In addition, prospects for developing research results and prospects for implementing further studies in the future (based on findings and discussion) can also be added.

Communication and interaction among students in the online classroom.

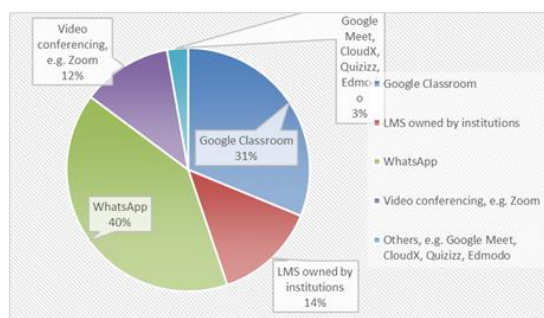


Figure 2. Online class interaction among students

Source: Research Data, 2024

Figure 2 illustrates how students communicated and interacted online during the COVID-19 pandemic. As can be seen, 335 students (67%) and 120 students (24%) agree and strongly agree that they can interact with their classmates in their online classes, while only 39 students (7.8%) and 6 students (1.2 percent) disagree and strongly disagree. In terms of student communication, interaction, and discussion, there is a nearly identical pattern in terms of the percentage of students who agree with these two statements. It is clear that 246 students (49.2 percent) and 240 students (48 percent) agree that students interact actively and have quality discussion sessions with their classmates in their online classes, while only 64 students (12.8 percent) and 25 students (5 percent) strongly agree with the statements. Additionally, they disagree that they have high-quality discussion sessions and active interaction, with a total of 205 (41%) and 164 (32.8%) students, respectively. Less than 6% of them, 30 students and 26 students, strongly disagree that they have quality discussion sessions and active interaction with their classmates in their online classes.

Online class communication and interaction between lecturer and students.

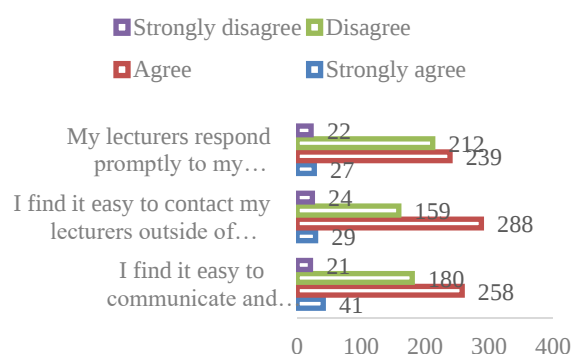


Figure 3. Online class communication and interaction between lecturer and students

Source: Research Data, 2024

Figure 3 details online classroom communication and interaction between the lecturer and students during the COVID-19 pandemic. Only 41 students (8.2 percent) strongly agree that they find it easy to interact with their lecturers in their online classes. A total of 258 students (51.6 percent) agree that they find it easy to communicate and interact with their lecturers in their online classes. 180 students (36%) and 21 students (4.2%), on the other hand, strongly disagree with this statement. Concerning contacting or communicating with lecturers outside of online classes, 288 students (57.6%) and 29 students (5.8%) agree and strongly agree that it is easy to contact lecturers outside of online classes, while only 159 students (31.8%) and 24 students (4.8%) disagree and strongly disagree with this statement. Additionally, students believe that their lecturers respond quickly to their messages or emails, with 239 students (47.8%) and 27 students (5.4%) expressing agreement and strong agreement with this statement, respectively. However, nearly half of them, 212 students (42.4 percent), disagree with this statement, while 22 students (4.4 percent) strongly disagree.

Discussion

WhatsApp overtakes Google Classroom as the most frequently used communication tool for online classes, with 40 percent of students utilizing it compared to 31 percent for Google Classroom. This finding is consistent with Anhusadar's (2020) research, which highlights the growing preference for WhatsApp as a digital communication tool in educational settings. Furthermore, as all in-person classes transition to an online learning mode, there is a significant challenge in ensuring that computer servers can accommodate a large number of users simultaneously, as noted by Bao (2020). This finding

also aligns with previous research indicating that WhatsApp can be effectively used as a communication tool in team-based activities, where its perceived utility enhances students' attitudes toward teamwork and educational goals (Urien et al., 2019; Zulkanain et al., 2020).

Moreover, studies suggest that students are more engaged with assignments that integrate WhatsApp into their structure (Dahdal, 2020). WhatsApp's effectiveness as an educational tool is attributed to various factors, including its convenience, ease of communication, user-friendly interface, and capability for material and information sharing (Alubthane & AlYoussef, 2021). The ability to seamlessly exchange messages, files, and multimedia content in real-time allows students to stay connected and engaged with their coursework. Additionally, WhatsApp fosters a high level of acceptance among students due to key drivers such as motivation, social connectedness, perceived usefulness, and the availability of learning support (Mulyono et al., 2021).

On the other hand, Google Classroom remains a significant online communication tool due to its simplicity, usefulness, ease of use, and interactive learning features (Al-Marooof & Salloum, 2021; Kumar et al., 2020). Through Google Classroom, lecturers can provide personalized attention to students, mitigating feelings of boredom and enhancing time efficiency in online learning (Gupta & Pathania, 2021). Furthermore, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) recommends both WhatsApp and Google Classroom as essential digital platforms for facilitating learning during the COVID-19 pandemic (UNESCO, 2020). These platforms play a crucial role in ensuring continuity in education by offering flexible and interactive communication channels.

In terms of student interaction and communication, nearly all students (67%) agree, and an additional 24% strongly agree, that they can effectively interact with their classmates in online classes. Regarding the quality of communication, interaction, and discussion, a similar pattern emerges, with 62% and 53% of students, respectively, agreeing or strongly agreeing that they experience active engagement and high-quality discussions with their peers. These findings suggest that online learning can enhance social interactions, leading to more enjoyable and effective educational experiences (Muilenburg & Berge, 2005; Yates et al., 2021).

Additionally, more than half of the students (59.8%) agree or strongly agree that communicating and interacting with their lecturers in online classes is not difficult. A comparable pattern is observed in that 63.4% of students agree or strongly agree that contacting and communicating with their lecturers outside of online class hours is easy. However, only 53.2% believe that their lecturers respond promptly to their messages or emails. This highlights the importance of educational environments in shaping the quality of communication and interaction, which can vary depending on the lecturers' responsiveness and the technology used (Shim & Lee, 2020).

Strong communication skills among lecturers are essential for fostering a positive learning environment, as effective communication strategies enable educators to influence students positively (Alawamleh & Al-Twait, 2020). As a result, clear and efficient communication between students and lecturers is a critical determinant of student success in online classrooms (Jurik et al., 2014). The ability to establish an open and engaging dialogue between students and instructors can significantly enhance the learning experience, ensuring that students remain motivated and receive the necessary academic support.

Overall, while WhatsApp has emerged as the most frequently used communication tool for online classes, both WhatsApp and Google Classroom offer unique benefits that contribute to an effective online learning environment. By leveraging these platforms strategically, educators can optimize student engagement, improve communication, and enhance the overall quality of online education.

CONCLUSION

The current study's findings indicate that the investigated participants have a generally positive experience with an online learning environment during the COVID-19 pandemic. Despite the fact that their classes are conducted online, they maintain effective communication and interaction

with their classmates and lecturers. This demonstrates the effectiveness of online classroom communication. The findings of this study suggest that the participants generally had a positive experience with the online learning environment during the COVID-19 pandemic. Although traditional face-to-face interactions were replaced with virtual communication, students were still able to effectively engage with their peers and lecturers. The results indicate that online platforms facilitated meaningful discussions, collaboration, and academic support, helping students adapt to remote learning. This highlights the effectiveness of online classroom communication in maintaining engagement and fostering a productive learning atmosphere, even in challenging circumstances. Furthermore, the positive experiences reported by participants suggest that online learning can be a viable and efficient alternative to traditional classroom settings when implemented with appropriate tools and strategies.

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