

# Schoology-based Blended Learning in Academic Writing Class during the COVID-19 Pandemic

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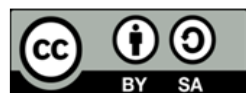
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## ABSTRAK

COVID-19 merupakan penyakit global yang berdampak sangat besar pada hampir semua bidang, termasuk bidang pendidikan. Pergeseran pembelajaran tatap muka ke blended learning selama pandemi COVID-19 membutuhkan perangkat teknologi untuk mendukung proses pembelajaran. Oleh karena itu, penelitian ini bertujuan untuk mengeksplorasi penerapan Schoology sebagai sistem manajemen pembelajaran di kelas penulisan akademik selama krisis COVID-19. Metode campuran sekuensial diterapkan dalam penelitian ini dengan menganalisis data secara kualitatif dan kuantitatif. Semua siswa di kelas menulis akademik dipilih sebagai peserta menggunakan teknik total sampling. Metode yang digunakan untuk mengumpulkan data yaitu observasi, wawancara, dan kuesioner. Selanjutnya, instrumen penelitian terdiri dari wawancara terbimbing dan kuesioner tertutup yang disebarakan menggunakan google form. Teknik yang digunakan untuk menganalisis data yaitu analisis deskriptif kualitatif dan kuantitatif. Hasil penelitian menunjukkan bahwa Schoology bermanfaat untuk diinfuskan dengan blended learning. Platform Schoology merangsang siswa yang memiliki kesiapan belajar online yang memadai untuk merasakan pengalaman belajar mereka secara positif menggunakan blended learning berbasis Schoology. Namun, intervensi kelembagaan harus dilaksanakan untuk memberikan pelatihan kepada siswa untuk meningkatkan kompetensi digital, strategi menjadi pembelajar mandiri, dan manajemen waktu.

## ABSTRACT

COVID-19 is a global disease that significantly impacts almost all fields, including education. The shift from face-to-face learning to blended learning during the COVID-19 pandemic requires technological devices to support the learning process. Therefore, this study aims to explore the application of Schoology as a learning management system in academic writing classes during the COVID-19 crisis. The sequential mixed method was applied in this study by analyzing the data qualitatively and quantitatively. All students in the academic writing class were selected as participants using a total sampling technique. The methods used to collect data are observation, interviews, and questionnaires. Furthermore, the research instrument consisted of guided interviews and closed questionnaires distributed using a google form. The technique used to analyze the data is descriptive qualitative, and quantitative analysis. The results showed that Schoology is beneficial to be infused with blended learning. The Schoology platform stimulates students who have adequate online learning readiness to experience their learning positively using Schoology-based blended learning. However, institutional interventions must be implemented to provide training to students to improve digital competence, strategies to become independent learners, and time management.

## 1. INTRODUCTION

The COVID-19 is a global disease that has an enormous impact on almost every field, including the educational sector. Closures of schools and universities are implemented as part of the physical separation scheme (Abumalloh et al., 2021; Handayani et al., 2020; Sahu, 2020). Regrettably, this policy has a significant impact on the educational sector, especially schools and universities (Abumalloh et al., 2021; Jiang et al., 2021). Closures of schools and colleges result in a significant change from offline to online classrooms. This situation causes severe problems for both students and lecturers (Hutauruk &

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Sidabutar, 2020; Windhiyana, 2020). They need to adjust to the new learning structure, which requires students to study from home for nearly six months using an online learning system. In addition, several studies have identified learning loss problems in the absence of face-to-face learning (Clark, A., Nong et al., 2021; Rachmat & Krisnadi, 2020; Turner et al., 2020).

While no one can pretend to be a teaching expert during a pandemic, teachers and lecturers must adjust their ICT competencies during this period (Hutauruk & Sidabutar, 2020; Windhiyana, 2020). This situation necessitates the use of an online teaching toolkit that facilitates the teaching-learning process. Online learning, which was used during the pandemic, is broadly consistent with the change in teachers' positions as facilitators and information navigators rather than knowledge transmitters, emphasizing learning rather than teaching (Jiang et al., 2021; Singh & Thurman, 2019). However, several recent studies have indicated that incorporating online learning with face-to-face learning, or so-called blended learning, is the best way to go (Andujar & Nadif, 2020; Evans et al., 2020; Wong et al., 2020; Zimba et al., 2021).

Blended learning drew interest in the educational technology and online learning fields at the turn of the twenty-first century. It has evolved and been widely accepted by organizations over the last ten years. In addition, in 2014, blended learning became the industry norm for undergraduate education (Dziuban et al., 2018; Kimkong Heng & Koemhong Sol, 2020). There are many forms of blended learning, including face-to-face, independent, and online learning, learning with technology, learning with successful learning, and learning with teachers and parents as facilitators and supporters (Sahin, 2010; Wulandari et al., 2020). Blended learning applies to online learning with a learning management system (LMS) and multiple offline meetings in this report.

Online learning readiness (OLR) is an absolute requirement for students to be able to participate in online learning. OLR is viewed as simply related to student competence in using technology for learning activities (Buzdar et al., 2016; Tang et al., 2021). OLR is crucial for the implementation of online learning (Alsoud & Harasis, 2021; Cigdem, 2014). On the other hand, OLR is influenced by appropriate strategies for independent learning, including students' abilities in time management, regulation, direction, and self-motivation (Engin, 2017; Fuad et al., 2020). Educators need to ensure that students' OLR conditions are at an appropriate level to be able to take part in online learning, which is highly dependent on OLR.

Online learning has most likely become a standard part of education. However, when online learning is needed for university students in a remote area due to a pandemic, a problem arises. Lecturers must be able to adapt to the use of technology because it will affect the learning process (Coman et al., 2020; Jiang et al., 2021; Mardiana, 2020). While many students were happy and excited to experience themselves with online learning, as they have said as the digital native, those of remote area students who are less proficient in using the technology and lack support of internet connection are burdening this policy. Previous research has looked at the topic of digital inequality and found that students who live in rural areas with limited ICT connectivity have a substantially different educational experience than those who live in urban areas (Lembani et al., 2020; Oyedemi & Mogano, 2018; Timmis & Muhuro, 2019). Students at Universitas Musamus in Merauke experienced similar circumstances. Universitas Musamus is an Indonesian state university in Papua. Papua's education level, both primary and higher education, is commonly known as still lagging behind other parts of Indonesia due to its position as its easternmost region, which is also one of the most remote. Inadequate learning facilities and infrastructure and students' low learning motivation are all major obstacles to improving the region's standard of education. The COVID-19 pandemic, with all of its implications, appears to increase the educational burden in this region.

This university incorporated blended learning in addition to the situation mentioned above (Lapitan et al., 2021; Pitaloka et al., 2020). The offline meetings were held in response to the government's "new normal" strategy. It was achieved by imposing a stringent health policy, including using a face mask and rearranging the students' physical distancing schedule. Blended learning has the potential to increase student motivation and problem-solving abilities (Effendi & Hendriyani, 2020; Suma et al., 2020). In terms of online learning, a lecturer at this university taught English academic writing using Schoology. Schoology has been suggested as one of the most effective blended-learning-integrated technology platforms (Hasyim & Eldiana, 2020; Resty et al., 2019). Schoology is a free web-based educational program that uses a learning management system (LMS) to enable teachers or lecturers to deliver teaching materials, track and assess the learning process (Helsa et al., 2021; Jayanti & Rahayuningsih, 2020). The application of LMS is proven to be a solution for implementing and improving student learning quality (Febrianty et al., 2020). Anyone may enroll in the course through Schoology by selecting one of three account types: student, instructor, or parent. Schoology can be viewed on a computer at [www.schoology.com](http://www.schoology.com), or downloaded from the PlayStore or Appstore on a smartphone.

Previous researches as regards Schoology and blended learning has been performed around such themes. Those studies compared the learning outcomes of blended learning based on Schoology and

problem-based learning, hypothesized the benefits and drawbacks of using Schoology as an online learning platform, investigated students' learning motivation and the effectiveness by using Schoology (Irawan & Sutadji, 2017; Rosalina, 2018; Rosy et al., 2018). However, only limited research has looked at how a lecturer used a blended learning-governed Schoology to successfully achieve learning goals during the COVID-19 pandemic period. This research tries to elaborate research within the blended learning framework by investigating the use of Schoology to incorporate integrated learning to reduce students' anxiety in the modern age. The research result are merely demonstrated the opportunities and obstacles they face as a result of their engagement in this blended learning. In conclusion, the students' perceptions of the lecturer's success on the blended-learning-governed Schoology were useful to examine to develop further action.

The purpose of this study is to explore the application of Schoology as a learning management system in academic writing classes during the COVID-19 crisis. This research is critical because it offers valuable information for teachers and lecturers about using Schoology as a teaching toolkit to improve their technology pedagogy awareness. Furthermore, this research reveals details on how students feel about using Schoology and explore the students' readiness for online learning during the COVID-19 outbreak. Such data helps to improve the teaching-learning process, especially in Schoology's blended-learning environment. With the existence of blended learning, researchers argue that problems arising from the absence of face-to-face learning can be solved.

## 2. METHOD

A sequential mixed-methods design was used in this research (Riazi & Candlin, 2014). The research used qualitative data to be analyzed first and followed by the quantitative data analysis. The first problem was investigated qualitatively in terms of the implementation of Schoology-based blended learning. Moreover, the second problem was investigated quantitatively regarding the student's interpretation of their learning experience in Schoology-based blended learning and online learning readiness.

The obtained data using these two methods were then used to cross-verify each other to ensure credibility. This research involved an English lecturer and 12 students in an academic writing class in Universitas Musamus. They were chosen by using the total sampling method. This university was chosen to deeply investigate online learning implementation in Indonesia's remote areas since Universitas Musamus is located in Merauke, Papua, known as Indonesia's easternmost area. The lecturer implemented blended learning by using Schoology as the learning management system (LMS) for the online class in academic writing. Furthermore, owing to the COVID-19 pandemic, the offline class was held multiple times this semester.

During the data collection process, the qualitative data was gathered through an in-depth interview with the lecturer about implementing Schoology-based blended learning. The interview was guided by the complex adaptive blended learning system (CABLS) (Wang & Beasley, 2002). The interview was conducted via video calls and telephones. The data were then duplicated and evaluated in the form of a written transcript. Simultaneously, a close-ended questionnaire was used to gather data on students' perception of the learning experience in a Schoology-based blended learning environment and their online learning readiness during the pandemic. The online learning quality index instrument was used to fill out the questionnaire, as it was convenient for evaluating students' impressions of online learning (Gómez-Rey et al., 2016). The questionnaire was made up of 39 measures divided into 11 categories. Moreover, the researcher also employs the online learning readiness scale (OLRS) to investigate students' online learning readiness. The online learning readiness questionnaire was made up of 24 measures divided into five groups. The questionnaires then were distributed using google form at the end of the academic writing class meeting.

In data analysis, the qualitative analysis was carried out using a narrative inquiry approach. The researcher presents critical incidents based on the results of interviews with participants (Clark & Creswell, 2017). Furthermore, the researcher also used descriptive statistical analysis (mean) to link qualitative data with quantitative data. The mean and standard deviation were calculated using SPSS 23. Quantitative data analysis is used to present different perspectives on Schoology-based blended learning implementation in academic writing classes.

## 3. RESULT AND DISCUSSION

### Result

This study's results concentrate on two data areas: the implementation of Schoology-based blended learning and students' perceptions of their learning experience using Schoology-based blended

learning followed by their perception on online learning readiness. The former shows qualitative information, while the latter shows quantitative information. The interview was done by using the guidance of complex adaptive blended learning system CABLS that involves six-dimensional frameworks comprising the learner, instructor, technology, material, learning support, and organization. The coded data were presented through explanation and discussion.

#### The Learner

According to interview data as regards the first-dimensional system of CABLS, namely the learner, it was found that the students become more involved in both the online and offline classrooms during blended learning. The interview transcript is presented in [Figure 1](#).

At first students are unfamiliar with blended learning. However, I have proven that this approach successfully engages students in learning process. Almost every student attends every online class and actively participates in the discussion by asking questions about the material. Furthermore, they became more interested in the offline meeting to explain the information they had learned in the online class. They were also involved in planning community presentations about the English academic writing materials during the offline meeting.

**Figure 1.** Excerpt 1

#### The Lecturer

The second-dimensional category is the lecturer. Rather than becoming a "spoon feeder" tutor, the lecturer acts as a learning facilitator in this blended learning process. By presenting the topic's framework, the lecturer assists the students in becoming more independent learners. Students, on the other hand, are responsible for doing more in-depth research and self-practice. The lecturer avoids misunderstandings of the study definition. The majority of the discussion for each content is done in Schoology. Additionally, the offline classroom is used to enable students to do group presentations to demonstrate their comprehension of the studied content. The interview transcript is presented in [Figure 2](#).

In this blended learning process, I assist students in becoming more autonomous learners, as they are required to be in this pandemic age. I provided them with the course syllabus as well as the study concepts for each subject. I asked the students to read more and do more self-practice for the rest of the class. The discussion is also available in Schoology, which is part of the LMS.

**Figure 2.** Excerpt 2

#### The Technology

Technology as a third-dimensional platform for conducting online learning is critical in blended learning. In this regard, the lecturer selects Schoology as the online LMS for blended learning because it offers valuable functionality and functions that meet students' needs. In the following interview transcript, the reasons for using Schoology as a mixed learning LMS are presented in [Figure 3](#).

I chose Schoology because I figured it was a more exclusive platform that would better serve our online learning needs. It enables students to access materials immediately after they have been uploaded. Furthermore, we can have an open conversation, and the assessment can be automatically modified. For academic writing class, I use Schoology to share the material in the form of PowerPoint. The students can download and comprehend it. I also attach some pdf files as examples of the topic we are learning. For the task, I ask the student to write their own writing and submit it through Schoology also.

**Figure 3.** Excerpt 3

#### The Content

The lecturer used blended learning by integrating online and offline learning in the fourth-dimensional context, namely information. Every online and offline classroom had eight meetings, according to the syllabus. The materials are tailored to the English academic writing definition and theories. The online meeting will also concentrate on learning concepts and providing a basic introduction to academic writing study. The offline classroom focuses on dialogue and student presentations to assess

their comprehension of the topics being studied. The use of online and online classes by lecturers is shown in the interview transcripts presented in [Figure 4](#).

I developed a syllabus for the English academic writing course, including eight face-to-face meetings for discussions and presentations on academic writing study theory and methodology. Furthermore, the remaining eight meetings are online classes using Schoology, in which I assist students in conducting mini-research.

**Figure 4.** Excerpt 4

### The Learning Support

The lecturer offered to learn support in two ways, according to CABLS' fifth-dimensional framework: academic and technical support. To improve students' collaborative skills, academic support was provided by planning learning activities such as debate, group presentation, and study paper. On the other hand, technical assistance was given by specific instruction in technology use, as some students still lack in digital literacy. Furthermore, a quiz is held during the offline meeting using a sponsored tool such as Kahoot. In the interview transcript, this assistance was defined as follows which is presented in [Figure 5](#).

Blended learning is more difficult for students to adapt cognitively since they must be familiar with the technology. However, in order to perform combined online and offline learning, they must be able to adapt and use their digital literacy. As a result, I offer a brief introduction at the start of the course. Furthermore, this integrated learning encourages students to take responsibility for their assigned assignments both in groups and individually. In this case, I developed classroom activities that encourage students to participate in order to develop their collaborative skills actively.

**Figure 5.** Excerpt 5

### The Institution

Regarding the last dimensional structure, namely the school, the institution's strategy, in this case, the campus's response to the COVID-19 pandemic, is the blended learning held this semester for all courses. Since students are not permitted to attend college full-time, the "new standard" policy allows the school to hold blended learning by enforcing strict health protocols such as wearing a face mask, maintaining physical distance, and routinely washing hands. As a result, assistance is offered, such as a free additional internet quota for online learning. The transcript that illustrates the above is presented in [Figure 6](#).

In reality, in this era of the COVID-19 pandemic, the major shift from face-to-face learning to integrated online and offline classrooms is the condition's response. After the government-mandated a "new standard," the institution has adopted a policy that requires blended learning to be conducted according to strict guidelines. Some amenities are also available, such as a seat arrangement for physical separation and an additional free internet quota for both lecturers and students to use for online learning.

**Figure 6.** Excerpt 6

By using the mixed-method sequential method, this study also carried out a quantitative analysis. The quantitative data were obtained by using two questionnaires. The first is to investigate the students' perception of the implementation of Schoology-based blended learning and the second is to investigate the students' perception of online learning readiness. Based on the results of the first questionnaire given to 12 students in an English academic writing class, the students have a positive perception of their learning experience using Schoology-based blended learning. The data analyzed included dimensions of learning domains reflecting their experiences in learning support, social presence, instruction, learning platform, instructor interaction, learner content, course design, learner satisfaction, knowledge acquisition, and ability to transfer were used to demonstrate their positive responses. The mean of their perception is 3,05, which demonstrates their positive response. The course design domain had the highest mean of 3,31 and the lowest standard deviation of 0,72, while the domain of learner satisfaction had the lowest mean of 2,94 and the highest standard deviation of 0,87. However, the domain's mean meaning



was still graded as positive perception. The highest mean value in the course design domain represented the lecturer's successfully undergone blended learning design.

In addition to the above data, the researcher also conducted other explorations in the dimensions of online learning readiness to provide a comprehensive picture of the application of blended learning. The results of data analysis from a questionnaire used to determine students' perceptions of online reading readiness. Overall, the students also had a positive perception on their online learning readiness which was investigated through some variables comprising self-efficacy of computer/internet, self-directed learning, online learner control, online learning motivation, and self-efficacy of online communication. Each variable achieves the result of more than 3.05 for the mean that reveals that the students has positive perception and evaluation towards their online learning readiness.

## Discussion

Based on the qualitative analysis, the findings of this study are in line with the findings of other studies, which state that the application of blended learning strategies supports students to participate actively in both online and offline classes (Czaplinski & Fielding, 2020; Halverson, L. R. & Graham, 2019). Furthermore, it was found that each student actively participated in the offline meeting because they need to practice English academic writing concepts and theories for a group presentation which are in line with research findings (El Sadik & Al Abdulmonem, 2020; Tjalla et al., 2017). They implied that closer interaction among peers and teachers improved students' interest in pre-class activities and classroom efficiency. The second findings related to the lecturer's role are consistent with the previous study that underline the blended learning depend on how lecturer can act as tutor as well as facilitator to promote autonomous learning, which become one of the educators' roles (B Bervell & Arkorful, 2020; Lapitan et al., 2021). The application of blended learning is the best strategy taken during a pandemic. Students can be forced to improve their ICT skills and also become independent learners. LMS plays a vital role in supporting this learning strategy by allowing facilities to upload material from lecturers to uploading projects from students.

The research result agrees with the findings, in which Schoology-based blended learning effectively facilitates the lecturer and the students in online learning. Schoology is widely practiced worldwide, and previous studies have shown its efficacy in supporting blended learning (Irawan & Sutadji, 2017; Sáiz-Manzanares et al., 2020). This finding is consistent with the current research, which found that Schoology can be effective to be used for online learning in rural areas (Sabowala & Manghirmalani-Mishra, 2020; Sarkar & Biswas, 2021). The offline meeting was deemed necessary to help students adapt to the previous face-to-face teaching process. Other research found that students were equally pleased with online-offline blended learning, which is in line with this report.

Another research result implies that the lecturer's learning support, which includes academic and technical support, is critical to achieving the learning goal. addressed this point and reported that lecturer support increased students' interest in blended learning. Meanwhile, adopting integrated learning in higher education to respond to the COVID-19 pandemic necessitates a significant shift in learning methods and procedures. The current research supports mentoring and new teacher positions in online learning, as suggested by them (Choi et al., 2021; Darling-Hammond & Hyler, 2020). In carrying out the blended learning strategy, students must be accompanied in learning to use Schoology. Students' mastery of LMS for blended learning is highly dependent on their ICT skills (Deshpande & Shesh, 2021; Edem et al., 2020). LMS is also able to condition students to be more active and able to collaborate with the peers (Baragash & Al-Samarraie, 2018; Effendi & Hendriyani, 2020). To be able to implement blended classes, especially in face-to-face learning, the COVID-19 prevention protocol must be strictly applied. By limiting the duration of the meeting is also a strategy implemented in supporting the prevention protocol.

The second research result dimension is quantitative analysis. The quantitative data demonstrating the value of students' perception towards their learning experience using Schoology-based blended learning revealed that students had a positive perception. The highest mean value obtained by the course design as much as 3,31. The lecturer used various teaching methods, including group presentations, online forums, and research writing. It is consistent with report, which suggested course design for immersive, blended learning (Alkhatib, 2018). In turn, the learner satisfaction domain's lowest mean value of 2,94 reflects the psychological component of students adapting to online learning as a new teaching process. The meaning, however, is still considered optimistic. In terms of the presence of digital inequality, this research revealed that, surprisingly, a different finding from the previous study portrayed online learning as burdening students in a rural area (Lembani et al., 2020; Prifti, 2020). Learning content and teacher interaction had the same mean value of 3,08 as the second-highest value, indicating that the lecturer's facilitator function is critical to the success of blended learning. It showed that the students had a favorable opinion of the lecturer's blended learning approach (Berga et al., 2021; Siregar & Manurung,

2020). As a result, the institution, politicians, and lecturers can continue to assess and analyze the quality of this new teaching approach to improve future teaching-learning quality. It aligns with the previous research stated that facilitative learning can increase students' learning creativity (Evans et al., 2020; Mulyanto et al., 2020).

The total mean score of online learning readiness indicates that students have a positive score on OLR. Online learner control has the highest value based on the results of data analysis. The learner control dimension is essential for students in OLR because they have the freedom and flexibility in carrying out online learning (Ghulam Murtaza Rafique et al., 2021; Rasmitadila et al., 2020). Furthermore, learner control also affects student performance in learning, especially those using online / web-based learning media (Brandford Bervell et al., 2020; Wang & Beasley, 2002). Online learning motivation has the second-highest value. Online learning during the pandemic period is a new experience for students in recent years. In online learning, student motivation plays an important role and provides space for students to freely choose the learning they want (Bordoloi et al., 2021; Bouilheres et al., 2020; Ryan & Deci, 2020). The finding which is the anomaly with the lowest mean is the self-efficacy of online communication. This finding is in line with previous research, which revealed that students have low self-efficacy in online discussions (Rafique et al., 2021).

With the various advantages presented by blended-learning, there are several findings that suggest drawbacks from blended-learning. Several studies have revealed that blended learning is less effective compared to face to face learning so that it has the potential to increase the dropout rate on the blended learning course (Deschacht & Goeman, 2015; Koch & McAdory, 2012). Another problem that arises from the application of blended learning is that students have to readjust / adapt to psychological factors related to differences in learning strategies (Szeto & Cheng, 2016). Finally, the biggest inhibiting factor from implementing blended learning is the ability of students to use technology (Kintu et al., 2017).

However, the findings above fail to make an attempt that considering the contextual factors that influence the blended learning implementation. During the COVID-19 pandemic, students have no choice but to use technology to be able to carry out learning. The blended method was chosen as a logical solution in carrying out learning during the COVID 19 pandemic. If lecturer choose online classes throughout the semester, students will face a phenomenon of zoom fatigue. On the other hand, if lecturer choose the application of face to face learning, the spread of COVID-19 will increase. With conditions in Merauke, which is a green zone for the spread of COVID-19, blended learning is the most appropriate strategy to be implemented. Researcher argue that blended is needed especially to reduce learning loss phenomenon that haunts the learning process during the COVID-19 pandemic (Clark, A., Nong et al., 2021).

#### 4. CONCLUSION

Interactive Blended learning, which combines offline and online meetings using the LMS Schoology, has been successfully introduced by the lecturer. This research also provides the students' perspectives about their learning experience using Schoology-based blended learning and their online learning readiness during the COVID-19 pandemic. It is shown that students can well receive the blended learning style. In this case, the learning management system, Schoology, also supports online learning readiness (OLR) in the dimensions of online learner control and online learning motivation.

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