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### Students' Learning Difficulties in Blended Learning: A Case Study

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**Abstract:** Blended learning is a flexible learning environment that could enhance learning. However, its implementation has not been entirely successful, as many students still face difficulties in learning and adapting to this learning environment. This research aims to understand why students experience learning difficulties in blended learning. The research approach used is qualitative research with a case study design. The results of the study show that the learning difficulties experienced by accounting students in blended learning environment are caused by low self-regulated learning, inadequate family support, poor internet connectivity, lack of immediate feedback, communication barriers, and students dissatisfaction with online learning session.

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## INTRODUCTION

Blended learning is a learning environment that combines face-to-face and online learning activities. Blended learning utilizes technological advancements with direct social interaction between teachers and peers to achieve optimal learning outcomes (Bersin, 2004; Garrison & Vaughan, 2008; Stein & Graham, 2014; Thorne, 2003).

Blended learning can enhance learning more deeply when compared to other learning environments, such as face-to-face learning and fully online learning (Stein & Graham, 2014), due to its flexibility (Rajab, 2018; Zhang, 2008). Blended learning can encourage students to grasp the subject matter more comprehensively. Students have the opportunity to explore interesting content through the internet before attending face-to-face meetings and receive additional explanations from teachers during class (Banyen et al., 2016). Blended learning is also effective in continuously improving individual learning quality (Fazal & Bryant, 2019). This is particularly beneficial for academically challenged students. The personalized nature of blended learning can motivate students to keep progressing. Additionally, student learning outcomes have been proven to be better in blended learning compared to traditional learning

methods (Banyen et al., 2016; Ceylan & Elitok Kesici, 2017; Jou et al., 2016; Kazu & Demirkol, 2014; Kiviniemi, 2014; Prifti, 2022; Vo et al., 2017; Vo et al., 2020).

Learning difficulties refer to a situation where students struggle when learning new concepts (Lodge et al., 2018). Difficulties are valuable in the learning process as they can support students in improving their knowledge. However, unresolved difficulties can cause frustration and ultimately leading to low academic performance. Therefore, it is important for teachers and schools to create a learning environment that supports students overcome their difficulties. Regardless of the learning environment - face-to-face learning, online learning, blended learning - students will inevitably encounter learning difficulties, as difficulties are a response to students' thought processes when learning new concepts (Lodge et al., 2018). In face-to-face learning, students learn within limited time and space. Discussions between students and teachers could occur quickly without delay (Asarta & Schmidt, 2017; Bali & Liu, 2018), however they have time limitation (Rajab, 2018). In online learning environments, if discussions are conducted in writing, there will be a delay in receiving responses to questions, potentially leading to loss of knowledge (Qiu & McDougall, 2013). Moreover, some students feel that they require direct guidance from teachers in their online learning (Zhang, 2008). Although online synchronous learning is possible, it requires scheduling adjustments to accommodate all students. Ultimately, online learning without accompanying face-to-face activities can lead to unresolved learning difficulties or confusion. A well-designed blended learning, which involves both online and face-to-face activities, is an appropriate learning environment (Kintu et al., 2017).

The researcher conducted initial observations to accounting students during the implementation of blended learning. It was discovered several students admitted to struggling to adapt to the blended learning environment, with the assignment tasks and test scores below the minimum criteria. Based on this data, there was an indication that students faced learning difficulties in blended learning. Considering the issues that have arisen, the researcher was interested in understanding the reasons behind students' learning difficulties. This contradicted previous studies that reported positive effects of blended learning on student learning outcomes (Banyen et al., 2016; Ceylan & Elitok Kesici, 2017; Jou et al., 2016; Kazu & Demirkol, 2014; Kiviniemi, 2014; Prifti, 2022; Vo et al., 2017; Vo et al., 2020).

This research is important as an effort to improve the quality of blended learning as a current learning environment in Indonesia. This research is expected to provide both theoretical and practical benefits. Theoretically, the results of this study will contribute to the literature related to the Complex Adaptive Blended Learning System (CABLS) developed by Wang and Han (2015), as well as students' learning difficulties in blended learning. CABLS is a theoretical framework that outlines six elements guiding the design of effective blended learning. This theory can serve as a guideline or instruction for educators and curriculum administrators regarding the pivotal components influencing the effectiveness of blended learning. Based on this framework, the study will examine whether these interrelated elements of blended learning have been well-implemented. Practically, the study's findings will guide teachers and curriculum managers in designing blended learning environments that need improvement, helping students overcome their learning difficulties

## **LITERATURE REVIEW**

### **Blended Learning**

Blended learning combines online and face-to-face learning (Thorne, 2003). Bersin (2004) defines blended learning as a mix of learning "media"—technologies, activities, and events—such as online learning with direct teacher guidance or face-to-face learning with electronic facilities, creating an optimal learning design. Garrison and Vaughan (2008) define blended learning as combining spoken communication in face-to-face learning with textual communication in online learning to create a rich educational experience. In summary, blended learning combines the benefits of face-to-face and online learning.

There are various reasons why blended learning improves learning (Stein & Graham, 2014). First, blended learning allows individual learning. Students will have several chances to identify their strengths

and limitations and learn accordingly. Secondly, blended learning provides additional instructor guidance. Although teachers can evaluate students' tasks from time to time, they don't have to wait for face-to-face sessions to comment. Thirdly, blended learning increases student engagement. Students with low self-esteem may find face-to-face interactions uncomfortable. Blended learning allows students to start discussion online without feeling constantly watched.

Previous research also has shown that blended learning improves learning. Blended learning help students understand the content better because they can learn something interesting online before meeting with the teacher in class (Banyen et al., 2016). Blended learning enhances learning and information literacy more than traditional learning. For lower academic students, blended learning also accelerates learning (Fazal & Bryant, 2019). Blended learning will also encourage students with limited learning autonomy to improve (Uz & Uzun, 2018). Several studies contrasted traditional and blended learning outcomes, and they found that students performed better in blended learning than in traditional learning (Banyen et al., 2016; Ceylan & Elitok Kesici, 2017; Jou, 2016; Kazu & Demirkol, 2014; Kiviniemi, 2014; Prifti, 2022; and Vo et al., 2017).

In Indonesia, the implementation of blended learning became an option during the Covid-19 pandemic. Schools and universities in high Covid-19 case areas adopted fully online learning, while those in low case areas used blended learning. In its implementation, blended learning has various combinations of face-to-face and online activities. According to Staker and Horn (2012), there are four models of blended learning: rotation model, flex model, self-blend model, and enriched virtual model. The rotation model emphasizes more face-to-face activities, while the enriched virtual model has a greater emphasis on online activities. The other two models, flex model and self-blend model, balance face-to-face and online activities. The majority of educational institution in Indonesia implemented the rotation model for blended learning, dividing each class into two groups. Each group alternates between face-to-face and online schedules on a weekly basis.

### **Complex Adaptive Blended Learning System (CABLS)**

CABLS is a theoretical framework that serve as a guideline or instruction for educators and curriculum administrators regarding the pivotal components influencing the effectiveness of blended learning (Wang & Han, 2015). The essential components include the students, the teachers, the content, technology, the learner support, and the institution

Students are crucial to blended learning. They must be an active learner. Students who believe blended learning is beneficial will have a positive attitude towards learning and perform well on their learning. Students will get the potential of blended learning if they obtain support from their family and friend. The support can be informational support, instrumental support, emotional support, and affirmative support (Munich, 2014).

Teachers have a role as facilitator, mentor, and moderator in blended learning. Teachers should facilitate learning with relevant learning tools. Teachers must coach, educate, and advise students to adjust their learning behaviour to meet learning objectives. Blended learning requires teachers and curriculum administrators to organise content that allow students to experience deep learning rather than shallow learning. The content must be collaborative, interactive, problem-based, and allow individual and in-depth learning. While technology in blended learning is used in-person and online, asinkron and sinkron. To support effective and efficient blended learning, schools and teachers must determine the suitable technology, such as LMS, learning media, and technical tools.

Learner support includes academic support and technical support. Academic support is important to help students develop effective learning strategies like time management and collaboration, as well as the other usual academic support around understanding content and assignment. Technical support aims to help students learn how to use technological tools to complete specific learning tasks, including material access and technology troubleshooting.

Furthermore, institutions/schools should provide necessary support especially digital infrastructure for the successful of blended learning. Just as physical structures, desks, lighting, and other

amenities are required for classroom-based instruction, digital infrastructure is required for blended learning.

## METHODS

This research utilizes a qualitative approach. Qualitative research is an approach that studies social phenomena, where events, actors, and places occur naturally without manipulation (Creswell & Poth, 2018). The specific qualitative research design employed is a case study. A case study involves an in-depth analysis of a real-life case through various data collection activities such as interviews, observations, and documentation (Creswell & Poth, 2018). In this study, the case under investigation is the learning difficulties of students in blended learning.

The participants in this study are 6 accounting students and one accounting teacher. The participants were purposively selected. Six students were chosen from the accounting class based on their low average scores in the accounting subject during a semester of blended learning implementation. As a majority of students obtained low scores in accounting, the participants were randomly selected from the three existing accounting classes, with two students sampled from each class. Additionally, one accounting teacher was selected to participate in this study.

Data for this case study were collected through interviews. Interviews involve conversations between two individuals aimed at exchanging information through questioning and answering (Creswell & Poth, 2018). The interview questions are semi-structured to allow the researcher to gain in-depth responses while maintaining focus on predetermined key points. The interview questions are formulated based on the CABLS framework (Kintu et al., 2017; Munich, 2014).

This study employs the data analysis techniques developed by Creswell and Poth (2018) to analyze interview data and observational notes. There are five stages of analysis, including managing and organizing the data, reading and memoing emergent ideas, describing and classifying codes into themes, developing and assessing interpretations, presenting and visualizing the data. To ensure research validity, triangulation of data sources were conducted. Source triangulation is achieved by collecting data using multiple participants, including students and teacher.

## RESULTS AND DISCUSSION

The data for this study were obtained through interviews with six accounting students experiencing learning difficulties and one accounting teacher. Several themes around the reasons why students experienced learning difficulties in blended learning were obtained from the interview data. The themes are: (1) students' low self regulated learning; (2) lack of family support, (3) poor internet connectivity, (4) lack of immediate feedback during online learning session, (5) communication barriers, and (6) students' dissatisfaction with online learning session.

### ***Students' Low Self-Regulated Learning***

The first factor causing student learning difficulties in blended learning is students' low self-regulated learning. Students explained that their difficulties in blended learning stemmed from receiving less explanation from teachers compared to face-to-face classes. This was highlighted in the following interview excerpts:

*"... I don't understand the learning material, you know, I'm not good at this, if the learning materials aren't explained first by the teacher." (Std1)*

*"I understand better in face-to-face classes, because sometimes in online classes, I'm too lazy to read the learning materials. But in face-to-face classes, it's better, we can get explanations directly from the teacher." (Std4)*

*"For me, I prefer face-to-face classes, because it's easier to understand the materials explained directly by the teacher rather than through typing or voice notes." (Std6)*

From the data presented, most of the students relied too much on direct learning materials explanations from the teacher. They didn't make an effort to learn independently to achieve high learning outcomes. According to Zimmerman (1990), the difference between students without self-regulated learning and those with self-regulated learning lies in their awareness of the importance of independent learning for their learning outcomes and the effort they put in. It seems that most of the students in this study lack self-regulated learning abilities.

Furthermore, the flexibility of online learning session gives students the option to study at their preferred times (Stein & Graham, 2014). However, for some students, this flexibility leads to difficulties in managing their study time at home due to distractions in the home environment. They engage in other activities instead of studying and procrastinate on completing assignments, leading to delayed assignments submissions. Several students do not use effective learning strategies in the midst of an unsupportive learning environment. This further supports the idea that most students lack self-regulated learning skills. According to Zimmerman (1990), self-regulated learning ability can be measured through the use of independent learning strategies, evaluation of these strategies, and the ability to motivate oneself.

Face-to-face sessions can facilitate discussions about tasks provided online. Although face-to-face discussions can aid understanding, if students have low self-regulated learning abilities, they might not fully grasp the intended knowledge despite the discussions. This is because they might not adequately prepare themselves before attending face-to-face sessions (Rasheed et al., 2020). Teachers also cannot wait for every student to fully master each topic, as they need to move on to cover other topics within the semester's timeframe. However, for one participant, the online learning situation in blended learning actually improved their time management skills. This was revealed in the following interview excerpt:

*"At first, it was difficult for me to adapt, the blended learning system. But over time, I realized that we need to manage our time wisely, and eventually, I learned to do that." (Std2)*

Based on the interview results, it's evident that students' have low self-regulated learning abilities. Hence, the school and teachers should emphasize the importance of self-regulated learning to students and help them develop these skills, as self-regulated learning strategies have a positive impact on student learning outcomes (Anthonysamy et al., 2020). While online learning might not allow quick dialogue discussions, the self-directed learning approach can lead to a better understanding compared to relying solely on teacher explanations.

Uz and Uzun (2018) suggested that appropriate management of the blended learning environment can train and enhance self-regulated learning abilities and student responsibility. With a private and independent learning environment, blended learning provides students ample opportunities to recognize their potential and shortcomings (Stein and Graham, 2014), driving them to develop effective self-directed learning strategies to achieve desired learning outcomes.

Based on the CABLS framework, self-regulated learning emerges as a significant cause of learning difficulties in blended learning, originating from student factors. This aligns with Kintu et al.'s (2017) argument that internal student factors can influence learning outcomes.

### ***Lack of family support***

Another factor contributing to student learning difficulties in blended learning is inadequate family support. The role of family to support student's learning has been outlined in previous studies (Roksa & Kinsley (2019). Family support includes informational, instrumental, emotional, and affirmation support (Munich, 2014). Informational support refers to valuable information that enhances students' learning process. Instrumental support involves practical assistance to overcome learning obstacles, such as family helping with household chores that might otherwise distract students. Emotional support consists of motivation that keeps students enthusiastic and confident in handling learning challenges. Affirmation support entails positive responses when students seek help and make decisions.

For students, family members do not possess the knowledge required to provide effective instructional support, especially for subjects such as accounting. This is depicted in the following interview excerpts:

*"At home, it's not really possible to ask about things we don't understand, because my parents don't know much about accounting. So, we can only ask our friends or the teacher during face-to-face meetings." (Std3)*

*"Actually, if it's not clear, I should be able to ask my parents, but I feel like it's impossible because they don't really understand the material. So, I just think that I should be able to find out by myself, but I can't." (Std5)*

In some cases, parents are supportive but cannot provide the necessary assistance due to their own busy schedules. This is evident from the following interview excerpt:

*"Sometimes my Dad is busy, so I can't ask him. He's busy with work. He knows how to turn on the internet, but if I ask him about the lessons, he doesn't know, and I don't ask either." (Std4)*

Family members' involvement is crucial in motivating students to actively participate in blended learning. Lack of involvement can lead to students being less motivated and reluctant to engage in online learning. This was highlighted in the following interview excerpts:

*"It would be better if our parents could motivate us, especially for us who are lazy and unmotivated. Our parents should motivate us so that we can study independently and not feel bored or tired." (Std6)*

*"Of course, the role of parents is important, Sis. If parents can motivate and supervise us while studying, it will be very helpful." (Std7)*

These interview excerpts indicate that the lack of family support, both in terms of instructional assistance and motivation, can hinder students' success in blended learning. Family members are crucial in maintaining the continuity of students' motivation and enhancing their learning outcomes.

The CABLS framework supports the idea that inadequate family support can contribute to learning difficulties. It falls under the category of external factors affecting students' blended learning outcomes. [Munich \(2014\)](#) states that family support is a key factor affecting students' academic success, and students' academic performance can be directly influenced by the level of support they received from their families.

### **Poor internet connectivity**

In relation to the technology used during blended learning, a factor that causes students to experience learning difficulties is poor internet connectivity. This was explained by one of the participants as follows:

*"For instance, using the LMS or gmeet or zoom, the difficulty lies in the internet. If the internet is slow, the LMS becomes slow as well, and it's a waste of time. Let's say there's a 25-question assignment with only 20 minutes available. If there's an error or it's slow, it wastes time." (Std5)*

Google Meet and Zoom are platforms that facilitate synchronous online learning activities, such as video conferences. Through video conferencing, students and teachers can engage in discussions and receive direct and prompt feedback, unlike discussions through text-based platforms. However, the use of Google Meet or Zoom requires a strong internet connection. This becomes a challenge for students living in areas with poor network coverage, as found in the current study. The issue of poor connectivity hampers the potential for peer-to-peer and teacher-student discussions during online sessions. This issue aligns with the findings of [Rasheed et al. \(2020\)](#), which highlighted internet connectivity as a challenge in distance learning.

To address network issues, teachers initiated the use of alternative technologies. Teachers used voice notes on WhatsApp to provide audio explanations of the study material. However, the effectiveness of voice notes in assisting students' learning difficulties was limited, as many students were reluctant to listen to and engage with the recorded explanations:

*"... even when we send voice notes on WhatsApp, students don't always listen." (Teacher)*

According to the CABLS theoretical framework, the source of learning difficulties in blended learning in the current study stems from technology-related factors. Teachers should employ a variety of teaching strategies that utilize technology requiring minimal network strength (Rasheed et al., 2020).

### **Communication Barriers**

Another factor leading to student learning difficulties is communication barriers between students and teachers during online learning sessions. Some students are reluctant to communicate with teachers through social media platforms like WhatsApp. Instead, they prefer seeking assistance from their peers, as evidenced in the following interview excerpts:

*"No, I can't ask the teacher, I'm afraid it's impolite or disruptive, so it's easier to ask my friends." (Std1)*

*"I usually ask my friends, even though sometimes I'm afraid that if the teacher explains through voice notes or messages, I won't understand, and I'll be worried that the teacher might get angry if I ask again." (Std6)*

Teacher also confirmed that only a few students are willing to communicate with them regarding their learning difficulties:

*"the ones who ask any questions are the same students as before, the others don't say anything." (Teacher)*

However, relying solely on peers for answers doesn't always yield the expected outcomes, as expressed by one participant:

*"Sometimes I get solutions from my friends, sometimes I don't. When it's close to the deadline and I can't understand, I have to ask my friends or just copying." (Std1)*

These findings align with Alawamleh et al. (2022), who noted that students find it challenging to communicate with their teachers during online learning session. Effective communication with teachers is crucial because, even though students can discuss with peers online, they still need explanations from teachers to solidify their understanding (Zhang, 2008). In the current findings, communication barriers arise from improper technology use and lack of varied teaching strategies. While the use of Zoom or Google Meet is not feasible due to connectivity issues, teachers should develop alternative teaching strategies to ensure effective communication with students.

In relation to the CABLS theoretical framework, communication obstacles become part of both the teacher and technological factors. According to Kintu et al. (2017), in the blended learning environment, the teacher's role is indeed more complex than in traditional learning settings; one of the aspects is that the teacher must be capable of employing diverse teaching strategies. Communication between students and teachers must persist even though it is more demanding and challenging to accomplish.

### **Lack of immediate feedback during online learning session**

Incorporating immediate feedback is essential in mitigating learning difficulties. The lack of immediate feedback during online sessions is a factor contributing to students' struggles. Immediate feedback is feedback provided directly in response to questions raised during discussions, both from teachers and students (Metcalf et al., 2009; Thurlings et al., 2013). Students admitted that they don't receive teacher responses as quickly as they would in face-to-face interactions, as illustrated in the following interview excerpts:

*"When someone faces difficulty in online sessions, they have to wait, jot down the questions, and can't ask the teacher directly. Technically, they could ask through WhatsApp, but the response time is longer, so it's not as satisfying as asking during face-to-face sessions." (Std2)*

*"The issue is that when we're struggling with material and assignments, if we ask through WhatsApp, we don't know whether the teacher is busy or not. Sometimes the response is slow, and we don't get answers immediately... For instance, if a student doesn't understand and asks a question via WhatsApp, some questions are answered, while others may remain unanswered for days or even weeks." (Std3)*

Teachers also acknowledged their inability to provide immediate responses to student queries:

*"I still reply, even at night. But I can't reply quickly all the time. Since I'm at home, there are always other tasks to complete." (Teacher)*

These findings suggest that the lack of timely feedback is attributed to inappropriate technology usage and insufficient teaching strategy variety. Chat-based discussions do not allow for quick feedback delivery, unlike synchronous technologies like Zoom or Google Meet, instant feedback is achievable (Moorhouse & Wong, 2022). Although these platforms aren't feasible due to connectivity challenges, teachers should devise alternative methods to ensure prompt responses to students' queries.

Therefore, when associated with the CABLS theoretical framework, immediate feedback issues are encompassed within the teacher and technology factors. According to Kintu et al. (2017), in the blended learning environment, the role of the teacher is indeed more intricate than in traditional learning settings; one aspect being that teachers must be capable of employing varied teaching strategies. Immediate feedback is essential when students encounter confusion (Zhu et al., 2021), thereby fostering learning outcomes (Stuart, 2004). Conversely, delayed feedback has the potential to diminish students' knowledge acquisition (Qiu & McDougall, 2013). Therefore, teachers need to provide immediate feedback to students, especially during online learning. Teachers must ensure their communication with students remains effective, enabling students to find solutions to any challenges they face (Lodge et al., 2018).

### ***Student Dissatisfaction with Online Learning Sessions in Blended Learning***

Student dissatisfaction with online learning sessions in blended learning is a factor that contributes to learning difficulties. Students feel that face-to-face learning in school offers a more lively and engaging environment, compared to online learning:

*"It's different in class. The learning atmosphere is more lively when we meet our friends directly. Learning becomes more exciting and motivating, and the learning environment is richer than at home." (Std2)*

These student statements regarding dissatisfaction are corroborated by teachers:

*"... even though we send voice notes on WhatsApp, students sometimes don't listen. It's different during face-to-face sessions. When we explain the material and notice some students not paying attention, we can monitor them and encourage them to listen, prompting them to ask questions or take notes on challenging concepts. It's more impactful..." (Teacher)*

These findings align with Qiu and McDougall (2013), who noted that social presence and social interaction are reduced in online learning. Social presence refers to the feeling of being genuinely connected to others in communication through media (Alsadoon, 2018). Social presence significantly affects students' satisfaction with blended learning (Alsadoon, 2018).

Based on the study by Temizer and Turkyilmaz (2012), several factors influence student satisfaction, including the school's image, the quality of expected and perceived learning, and perceived quality values. The online learning environment did not meet students' expectations, leading to their dissatisfaction with the learning activities. Students desire fully face-to-face learning without any online sessions. Satisfaction can be measured through emotions displayed during the learning process. Satisfied students exhibit positive emotions, enabling them to enjoy learning activities more and interact with peers and teachers with greater enthusiasm (Khajavy et al., 2018).

Students are dissatisfied with blended learning because they are uncomfortable in the learning environment, particularly during online sessions. Students enjoy the face-to-face learning environment. Although the CABLS theoretical framework does not explicitly address this issue, it emphasises the need of creating an optimal learning environment for students during blended learning. The current findings help to further enhance this theoretical framework.

## CONCLUSION

This study concluded that the difficulties faced by accounting students in blended learning are influenced by student, teacher, and technology factors. Student factors include low levels of self-regulated learning and inadequate family support. Teacher factors involve lack of immediate feedback and communication barrier. Technology factor relates to poor internet network connectivity. One difficulty not covered by the CABLS framework is student dissatisfaction with the blended learning environment, especially during online learning sessions at home, that could impact on the face-to-face school session.

To address the low levels of self-regulated learning, teachers can educate students about the importance of self-regulated learning skills for students learning. Additionally, maintaining student motivation is crucial. To enhance communication and feedback among students and between students and teachers during online learning sessions, teachers can schedule online discussion forums through social media that is commonly used by students such as WhatsApp group chats. WhatsApp group discussions eliminate the personal barrier between students and teachers, making students more comfortable asking questions. Furthermore, WhatsApp chatting requires less internet connectivity, aiding students in areas with poor signal coverage.

To address inadequate family support, the school can organize meetings with parents to raise awareness of the challenges faced during blended learning. This will encourage parents to provide the necessary support, especially when students are learning from home.

Future research could address several issues uncovered in previous studies, such as the impact of unresolved learning difficulties on student outcomes in blended learning environments and develop targeted intervention. Also, future research could consider how cultural factors influence the implementation and effectiveness of blended learning in different regions and educational settings.

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