The Phenomenology of Indonesian Coastal Students: Are They Ready for Online Blended Learning?

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Abstract: The pandemic case has shifted away from face-to-face teaching to online blended learning. This phenomenon certainly causes various problems in the world of education. The online blended learning is good when applied with good internet connections and complete facilities. However, it differs from Indonesian coastal students who do not have supporting facilities. Therefore, this research aims to analyze the experience and readiness of Indonesian coastal students. It determines the facilities of the process using qualitative research with a phenomenological approach. Purposive sampling was used to collect data from 25 students living in coastal areas in Aceh, Indonesia. Furthermore, in-depth interviews were used to obtain instruments and techniques for data collection, observations, field notes, and audio-visuals. Data analysis was carried out qualitatively by reducing, displaying, drawing conclusions, and verifying data. The data processing was conducted using NVivo 12 plus software. The kappa coefficient is used to check the accuracy of the data since there was no bias during coding. The analysis results show that Indonesian coastal students are not ready to conduct the online blended learning process. Furthermore, it is recommended that future research focus on coastal students' development. A Hypothetical Learning Trajectory design should be created to assist in independent learning and lessen their readiness.

Keywords: *Pandemic, Indonesian coastal students, online learning, online blended learning, phenomenology.*

Introduction

Indonesia consists of 34 provinces from Sabang to Merauke, and it is divided into five islands, namely Sumatra, Kalimantan, Papua, Java, and Sulawesi (Tan et al., 2020). Furthermore, Aceh is the westernmost part of Sumatra, consisting of several cities, namely Banda Aceh, Sabang, Lhokseumewa, Subussalam, and Langsa. Langsa City has wide beaches, and most residents work as fishermen. It is a rural area with a junior and elementary school educational background. The area around the coast also has schools from elementary to junior high school levels. After school, the majority assist their parents in becoming fishermen. Even though the parents are assisted, they continue to attend school with enthusiasm and zeal, as well as similar ideals as other students. They do not have to worry about housing or employment regarding their post-secondary goals. Various learning processes at school continue to be carried out in the same manner as other students in the city.

However, the pandemic that arrived at the end of 2019 and entered Indonesia in early 2020 dampened students' expectations. Indonesia will cease face-to-face classrooms in early 2020. Classrooms filled with students' and teachers' voices are increasingly becoming virtual places (Chandra, 2021), and face-to-face teaching has evolved into online blended learning (Phillips, 2021). This model is maintained due to the annual growth in Coronavirus disease (COVID-19) patients. From 2020 to 2022, the adoption of online blended learning has entered its third year. This is a solution for implementing learning during a pandemic (Li, 2022; Segbenya et al., 2022), facilitating online learning (Wahjono et al., 2021), and addressing future educational difficulties. Therefore, this model should be familiarized in schools as Baloran (2020) stated that students and teachers should be accustomed to online blended learning to face future challenges. The process will continue due to positive benefits for future education and as an option for current school learning (Lapitan et al., 2021).

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Every school uses blended learning online since the government promoted the method. It provides a positive environment with various online and offline forms of communication (Geng et al., 2019; Mohamed, 2022). Additionally, it has a positive side when applied in urban schools, which mostly have good internet connections and facilities that support learning. For example, consider one of the schools in Langsa City, specifically the State 1 Langsa junior high school, which is a school for all parents and students. It has very supportive facilities for the online blended learning process and a good internet connection. In Indonesia, similar schools are located in the middle of big cities such as Jakarta, Bandung, Medan City, and others. These big cities have good school facilities with easy and fast internet connections, and they quickly implement online blended learning (Cattaneo et al., 2022; Habibi et al., 2020; Safdar et al., 2022; Zhao et al., 2022).

This is different from students on the coast of Indonesia especially in rural areas, one of which is in Langsa. They are not as lucky as those with good facilities and fast internet connection support (Clemen et al., 2021; Dube, 2020; Ruiz-Martinez & Esparcia, 2020). Education in coastal areas is also low (Rönnlund et al., 2017) hence students and teachers experience internet difficulties (Coman et al., 2020; Dube, 2020). This is because rural (Purbo, 2019) mountainous, and coastal areas, which are still in the digital development stage, lack internet connection (Mazya & Kolopaking, 2021). It was found that coastal areas are in the digital era transformation stage (Mazya & Kolopaking, 2021). Meanwhile, online blended learning remains a government policy in teaching during the pandemic. Whereas every child has equal opportunities in education, the absence of exclusion and inequality in obtaining an education (Hadjeris, 2021; Leacock et al., 2020; United Nations Educational, Scientific and Cultural Organization [UNESCO], 2022). Every student in both village and city can get a quality education. This process uses various platforms in learning, such as WhatApp Group, Zoom, Google Classroom, Siakad, Google meet, Edmodo, Moodle, and others (Jebbour, 2022; Mithhar et al., 2021). It causes stress, difficulty, fear, and anxiety (Aristovnik et al., 2020; Chaturvedi et al., 2021; Goldberg et al., 2022; John et al., 2021; Jonathan et al., 2020; Kee, 2021; Mridul et al., 2021) in both parents and students. As a result, students who were initially happy with face-to-face learning suddenly diverted to online. This diversion will result in significant obstacles (Khan et al., 2021), such as changes to the teaching process, and impact on the environment (Lopes et al., 2021) making students uncomfortable to learn. Peñalver and Laborda (2021), stated that until now the online learning process has made students uncomfortable because of the lack of adequate communication. Discomfort in the learning process causes a lack of motivation and the inability to learn independently They are still having trouble learning online (Alexa et al., 2022; Atlam et al., 2022; De Coninck et al., 2022).

The online learning process is compulsory even though students are not ready for the implementation (Khan et al., 2021). Coastal teachers and students were not prepared to learn when diverted to online blended learning. This is in line with Andarwulan et al. (2021) that teachers are not ready to implement online learning policies. Finally, they only gave assignments to students and were taken by the class leader. The assignments were taken from the teacher's house, photocopied, and distributed to the students. This has continued to the third year of the transition from face-to-face to online blended learning, but still not a solution for coastal students. They are still unfamiliar with technology, lack supportive infrastructure, few parents own Android phones, lack internet access in coastal areas, and the majority of the population is lower middle class (Mamolo, 2022; Werang & Radja Leba, 2022). Teachers have been able to communicate with students solely through WhatsApp groups (Adi et al., 2021). However, only a few mobile numbers of parents and students are available, and those that do not have cellphones only receive messages from friends. This problem was also conveyed by Miloshevska et al. (2021) and Yan et al. (2020), where most students experience problems such as unstable internet connections, lack of interaction with peers, which results in social anxiety and confusion in preparing learning platforms.

The situation of coastal students reflects the conditions in Indonesia. Therefore, this research was conducted to analyze the readiness of Indonesian coastal students in facing online blended learning.

Research questions

1. What have Indonesian coastal students experienced during online blended learning?

2. What is the experience and readiness of Indonesian coastal students to learn online blended learning during the school closure case?

Methodology

Research Design

This qualitative research explores in-depth information on individuals or groups by asking questions about the occurring phenomena (Aspers & Corte, 2021; Creswell, 2013). The phenomenological approach was carried out as a design, and according to Gall et al. (2010) and Psathas (1989), the studies explain certain phenomena, a series of processes, situations, or other circumstances. The research focuses on the readiness of Indonesian coastal students in facing online learning. It analyzes the experiences of Indonesian coastal students during the pandemic, the effects of school closure on their experiences and readiness, and the facilities to overcome the difficulties faced. This research has an active role in understanding the situations experienced by seeking in-depth information. Furthermore, this interprets and analyzes the findings obtained in the field.

Participants

The research was carried out in Indonesia, precisely in Aceh Province, with a sample of 25 students aged 13 to 15 years. The samples comprised 16 (64%) female students and 9 (36%) male students with the same characteristics. They came from rural coastal areas with middle socioeconomic levels and were in the forefront, remote, and underdeveloped areas. Therefore, sampling was carried out by purposive sampling with a specific purpose (Gall et al., 2010).

Data Collection and Instruments

In-depth interviews carried out instruments and data collection techniques, observations, field notes, and audio-visuals, such as photos and recordings. A list of questions was already prepared before commencing the research. However, in interviewing students, the process may occur out of order from the questions that have been provided and can be modified and expanded based on the situation as well as conditions in the field. The interview process was conducted by recording all conversations through cellphones to avoid forgetting the essential things conveyed by the respondents.

Observations were completed by looking directly at the condition of students in the field. This was performed in two ways: seeing the situation at school and going directly to the coast where students live to obtain data accuracy in the school environment. Field notes and audio-visual, such as photos and recordings, were carried out to complete the results of interviews and observations. Finally, the entire field situations were photographed for documentation purposes while performing research.

Procedures

The beginning of the research process was conducted by identifying the problems to be observed. This was achieved by understanding several individuals who have the same experience related to online blended learning and determining the sample that fits the research criteria, namely coastal students. After obtaining the sample, all data from each sample who had the same experience from interviews, observations, field notes, and audio-visual were collected. The horizontalization stage conducted the next step, and significant answers were selected from the data collection results that led to research questions. This stage transcribed the recorded interview results and stored them in words. The next stage developed meaning from significant student statements into a theme by coding the Nvivo 12 plus. Field notes were also scanned during coding to understand the emerging themes better, and the results were then stored in nodes.

The research was conducted to understand Indonesian coastal students' online blended learning experiences amid the pandemic's school closures. The results of questions one and two can provide a solution to the third research question, as seen in Figure 1 below.
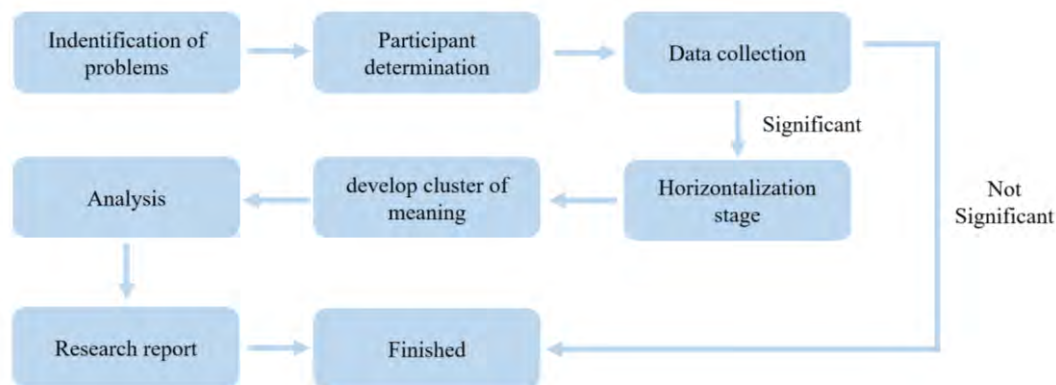

Figure 1. Research Procedure

Analyzing of Data

Based on the results of data collection, a qualitative descriptive analysis was carried out on the phenomena that occurred. The analysis was performed by reducing, displaying, drawing conclusions, and verifying data (Miles & A. Huberman, 1994) using Nvivo 12 plus (Bazeley & Jackson, 2013). The file was initially imported into Nvivo before the data analysis. The interview file was obtained by transcribing the audio recording. Transcribing was conducted by playing a recorded file that has been inputted into Nvivo. The audio playback process can be edited and transcribed into the required interview results to avoid unnecessary or biased interviews. Codes were created to match the theme of the research after the transcription procedure was completed. The coding results were stored in nodes as research themes. The display of the interview transcript process using Nvivo 12 plus can be seen in Figure 2 below.

Figure 2. Student Interview Transcript Process

Before the analysis, the data above were validated for accuracy using the kappa coefficient to ensure that no bias occurred during coding. The standard of accuracy of the Kappa coefficient was ≤ 0 no agreement, $0,01 \leq 0,02$ poor agreement, $0,21 \leq 0,40$ less agreement, $0,41 \leq 0,60$ good agreement, $0,61 \leq 0,80$ very good agreement, $0,81 \leq 1,00$ perfect agreement (Haley & Osberg, 1989; Rigby, 2000; Roldan-Nofuentes & Regad, 2021; Verberk et al., 2022). Kappa coefficient results based on calculations using NVivo 12 plus were obtained at 0.83, which means perfect agreement. This gives a perfect sense of reliability; therefore, coding can be used.

Findings

What Have Indonesian Coastal Students Experienced During Online Blended Learning at the Time of the Pandemic?

The following results show the situations experienced by coastal students during the process. They are classified into ten aspects, including the learning environment, availability of technological tools, internet connection, ability to use technology, the readiness of students in online blended learning, communication between teachers and students, the process of receiving subject matter and collecting assignments, understanding the material, preferred learning process and costs incurred. Figure 3 below shows student responses to ten aspects they experienced during the online blended learning.
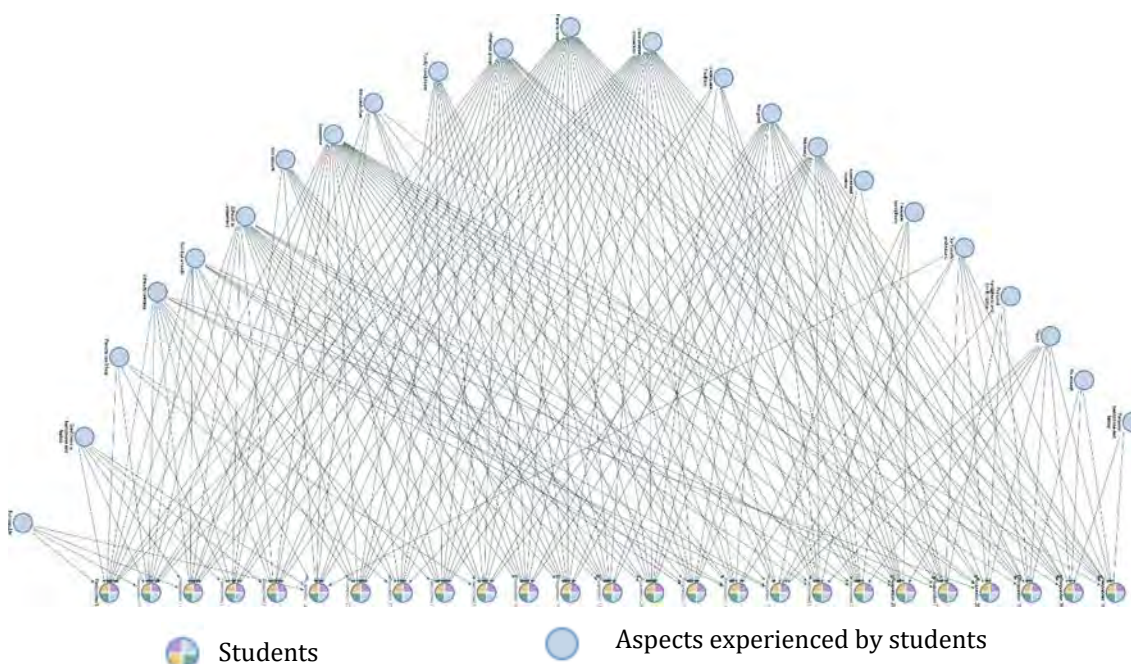

Figure 3. Students' Readiness to Face Online Blended Learning

Figure 3 above shows student responses to online blended learning. The more lines are directed at students, and the more problems are experienced. This line shows that various problems occur during online blended learning, and according to Figure 3, each student has more than one problem. Details of the aspects they experienced can be seen in Figure 4 below.
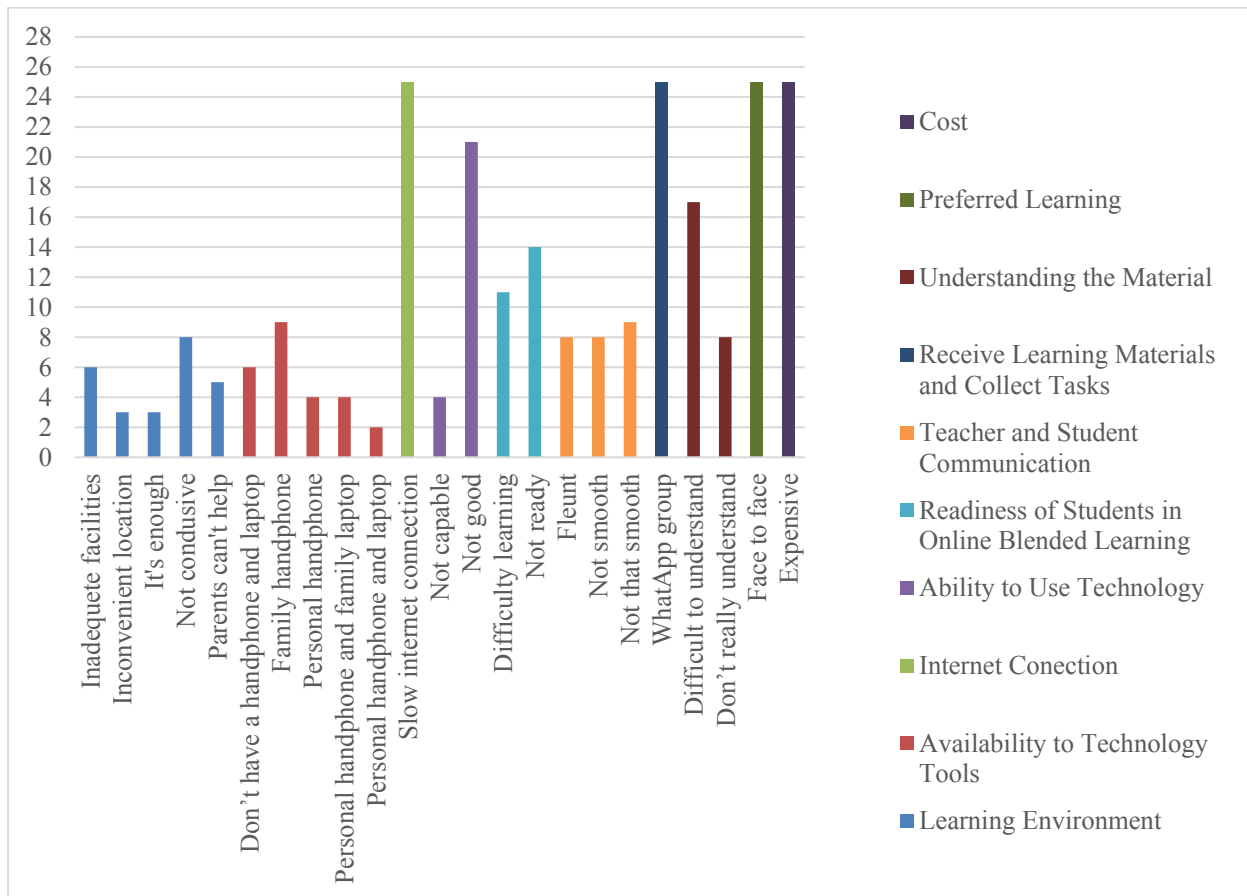

Figure 4. Aspects Experienced by Students While Facing Online Blended Learning

Figure 4 is the result of 10 aspects experienced by students. The learning environment has four aspects: inadequate facilities, inconvenient locations, non-conducive learning processes, and parents who cannot help their children during the learning process. The availability of technological tools shows that nine students do not have cellphones or laptops. Only four had their cellphones, while others used their family's phone. Furthermore, the students said the internet connection was slow. The use of technology shows that four students cannot use technology, and 24 are less able. The aspect of student readiness in online blended learning shows that 14 students are not ready, and 11 others have difficulty. Meanwhile, the aspects of communication by teachers and students run less smoothly. Aspects of receiving subject matter and submitting assignments are all conducted through WhatsApp groups. Understanding the material shows that most students have difficulty and prefer face-to-face learning. The costs incurred for the learning are also expensive based on the acquisition of the aspect.

What Is the Experience and Readiness of Indonesian Coastal Students to Learn Online Blended Learning During the School Closure Case?

Coastal students enrolled in online blended learning have numerous challenges during the pandemic. These can be seen from the aspect of the learning environment that is inadequate, not conducive, inadequate facilities, parents who are not ready to accompany children to learn, unavailability of technological tools, slow internet connection, poor ability to use technology, student readiness, irregular communication between teachers and students, WhatsApp-only method of receiving subject matter and collecting assignments, and difficulty in understanding the material. These obstacles show the readiness of Indonesian coastal students to implement online blended learning. Readiness is determined by the socioeconomic level, namely the parents' occupation, status, and the level of enjoyment of coastal students in learning using the online blended method. Figure 5 presents the occupation of students' parents.
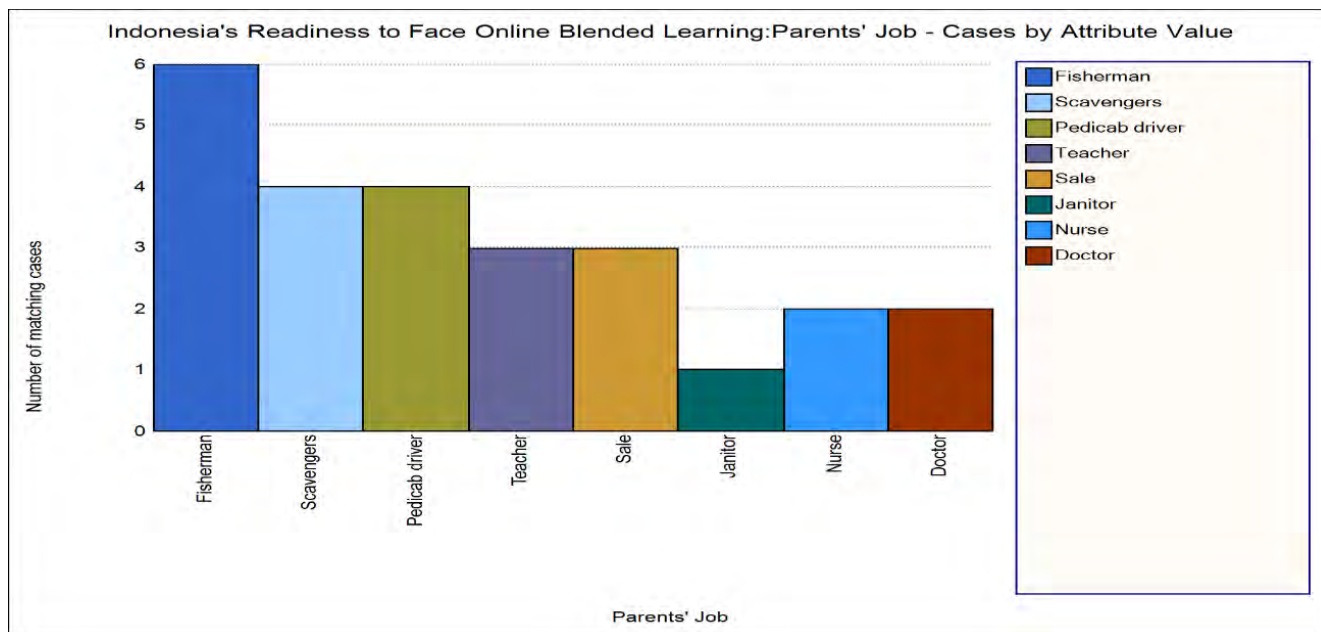
Figure 5. Parents' Occupations

Based on the observations shown in Figure 5, 6 parents work as fishermen, 4 as scavengers, 4 as rickshaw pullers, 3 as teachers, 3 as sellers, 1 as janitor, 2 as nurses, and 2 as doctors. On average, they work as entrepreneurs with irregular incomes. Referring to the parents' occupation above, their status in the community is classified into poor, middle, and rich, as shown in Figure 6.
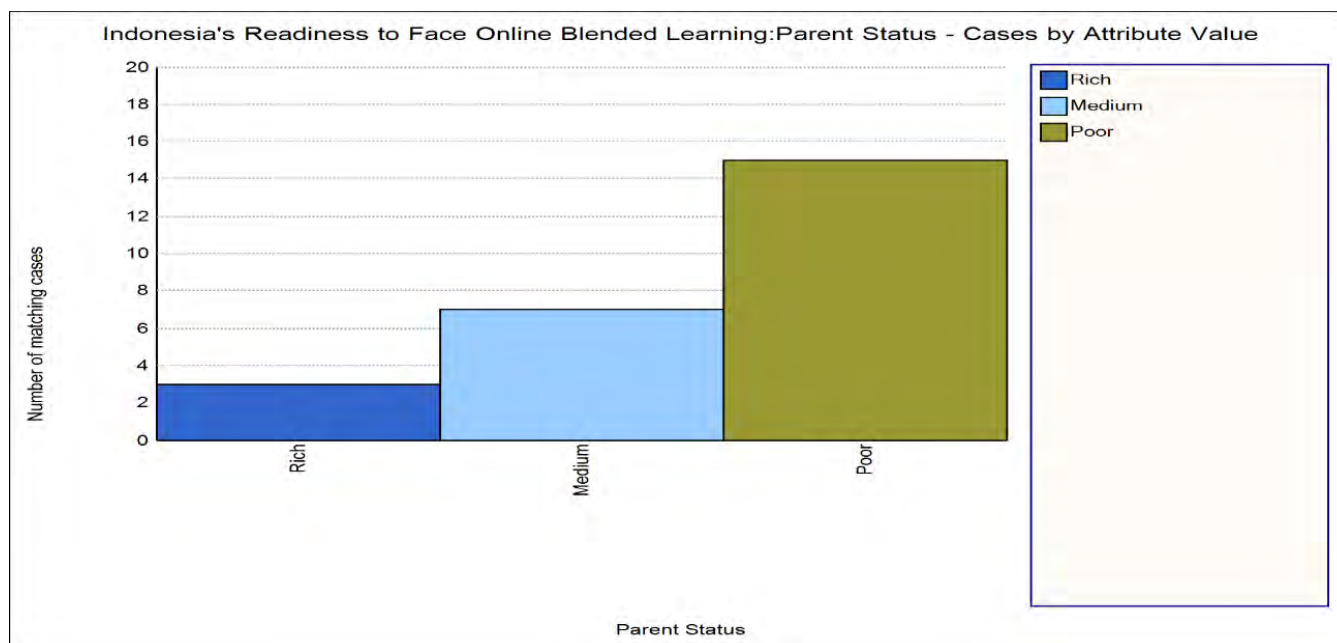
Figure 6. Status of Parents

The parents' status found that many students came from poor families. There were 15, 7, and 3 students from poor, middle-class, and rich families This impacts the parents' capability to facilitate their children's educational needs using android cellphones and internet quota for online blended learning. The results showed that only 4 students had personal cellphones, while others used their family cellphones to study. This also has an impact on students' enjoyment of online blended learning. The following figure 7 shows the levels of student enjoyment in online blended learning.
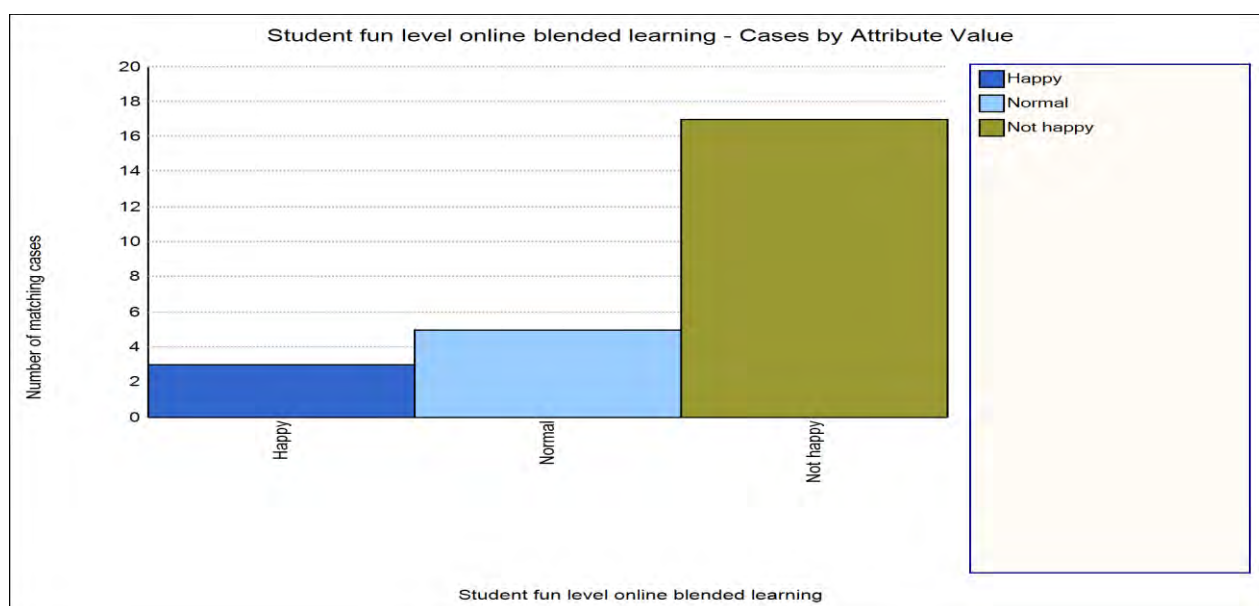
Figure 7. The Level of Enjoyment of Students in Online Blended Learning

Based on the results of students' enjoyment level, most students were not happy to learn online blended learning. For example, as shown in the figure 7 above, 17, 5, and 2 students are not happy, normal, and happy. Interviews with middle lower students show that their disenjoyment was mainly due to the absence of facilities such as laptops or android cellphones as the main support for online blended learning. This makes them unable to use technology properly. Furthermore, interviews with middle-class students showed that they cannot always buy internet quota because of the high cost and unstable connection. Hence, they were hampered and not ready to participate in online blended learning.

Discussion

The ten aspects of obstacles experienced during the learning process are:

Learning Environment Aspects

The findings showed that the student environment did not support online blended learning. This can be seen from the inadequate facilities such as cellphones and laptops. The location where they live is also not comfortable, where the majority were fishermen, and the atmosphere in the learning environment was noisy. The learning process is also not conducive because many students still do not have the needed facilities. Previous research also found that students experience environmental obstacles, such as a noisy and disruptive learning environment as well as lack of workspace (Sumalinog, 2022). This is because their weak knowledge of technology and education makes them unable to accompany their children while studying at home. This is supported by previous research that parents do not master the use of technology media in accompanying children during online blended learning (Rahimah et al., 2021). As a result, students learn independently with their limited knowledge. In addition, Iqbal et al. (2022) explained that their environment did not support online blended learning. An unfavorable learning environment becomes an obstacle in online blended learning (Joshi & Vinay, 2020).

Availability of Technological Tools Aspects

Online learning requires minimal mobile phone technology. However, many students still do not have or use a family cellphone after researching. The absence of technological tools causes them to be unable to attend when studying. Kapasia et al. (2020) stated that many students cannot attend online learning because of the absence of technology for learning. A significant requirement for online study is the use of technology. Students are expected to meet with their friends and search for information to obtain material or homework assigned by the teacher. A key issue in rural Indonesia is a lack of technical instruments for education (Kusuma, 2022).

Internet Connection Aspect

The findings showed that the internet connection in coastal areas, where the students live is not good. This supports the previous research that poor internet connection is experienced during online blended learning (Sumalinog, 2022). Those with cell phones are not very clear about receiving lesson information from their teachers. Furthermore, when the teacher utilizes the zoom on rare occasions, the sound is sometimes cut off due to the slow internet connection. Lassoued et al. (2020) also stated that the internet speed is weak in remote or rural areas. This results in students

being dissatisfied with online learning. Kapasia et al. (2020) and Maqableh and Alia (2021) stated that slow internet connections cause students to be dissatisfied with online learning. Therefore, Internet access is a significant problem that should be resolved (Kusuma, 2022) and internet connection is a major problem in online blended learning (Lwin et al., 2022).

Ability to Use Technology Aspects

Most coastal students cannot afford technological devices because they do not have cellphones. Their inability to use technology can cause significant obstacles in online learning. Previous research also stated that a lack of skills in using technology can hinder the online learning process (Jebbour, 2022; Purwanto et al., 2020). Inability and unpreparedness can jeopardize education (Essa et al., 2020). Furthermore, the success of online learning, especially in Indonesia, is primarily determined by the readiness to use technology (Rasmitadila et al., 2020).

Student Readiness in Online Blended Learning Aspects

The results showed that Indonesian coastal students were unprepared for online blended learning. This is caused by many factors, such as an inadequate learning environment, slow internet connection, lack of adequate technology, insufficient use of technology, expensive quota fees, and assistance to poor parents (Dinh & Nguyen, 2020). Febrianto et al. (2020) stated that rural or coastal students are not ready to learn online since they are comfortable with face-to-face learning. The obstacles that occurred include social, economic, cultural factors, inadequate facilities, internet connection, expensive quota fees, and the majority of the lower-middle-class population.

Communication between Teachers and Students Aspects

The findings showed that communication between teachers and students is not running smoothly because a slow connection makes it difficult for students to listen to the teacher when occasionally using the zoom. Communication is one-way, and their lack of interaction makes learning difficult. Previous research also stated that teacher and student communication is difficult due to a lack of interaction (Coman et al., 2020), when bad communication is experienced (Baticulon et al., 2021).

Process of Receiving Study Materials and Collecting Assignments Aspects

The process of receiving subject matter and collecting assignments tends to use WhatsApp groups that the teacher has prepared for each class unit. The provision of materials and assignments was conducted by sending materials in portable document format (PDF), youtube links on the internet, taking photos of the assignments given, and sharing them to WhatsApp groups. Students who do not have mobile phones, no quota, or slow networks can get the file from the class leader. The file was printed and copied to be distributed to students in need.

Understanding Material Aspect

Students have difficulty understanding the subject matter presented by the teacher. Likewise, they had difficulty understanding the material during online blended learning (Rahimah et al., 2021). Coman et al. (2020) and Magson et al. (2021), stated that students experience difficulty in online blended learning, negatively affecting knowledge acquisition.

Aspects of Learning that Students Like

Students prefer face-to-face traditional leaning method because they directly interact with the teacher. This is not a one-way, where students typically download and study material supplied by the teacher. In addition, face-to-face learning makes students more enthusiastic and motivated in learning. Likewise, Adarkwah (2021) stated that traditional method is preferable even though online blended learning is a good initiative and research by Mok et al. (2021) stated that students prefer to learn face-to-face because online learning makes them less active (Baczek et al., 2021). Satisfaction is also higher than in online blended learning (Dinh & Nguyen, 2020).

Cost During Online Blended Learning Aspects

The costs incurred for online blended learning are expensive, and even though some students have cell phones, they cannot afford to purchase quotas daily. Most problems during online blended learning are the extra financial burden of internet quotas (Amir et al., 2020). However, the rapid consumption of quotas for each research impedes internet access (Jebbour, 2022). Even though the government once divided the quota at the beginning of COVID-19 in 2020, it was uneven and did not reach coastal students. Moreover, most parents' status is poor; therefore, online learning worsens things. The high internet bill (Purwanto et al., 2020) makes them unable to follow the learning process. Furthermore, the poverty factor adds to the problem and worsens the process (Kapasia et al., 2020).

Based on the aspects and experiences above, Indonesian coastal students are not ready to adopt online blended learning. Sari and Nayır (2020) found that students were not ready for online blended learning. Other research stated that they have difficulty accessing the internet, inadequate technological tools, insufficient experience, expensive quota fees, and difficulty focusing on learning for a long time (Amir et al., 2020; Deng & Sun, 2022; Le et al., 2022; Lestiyanawati & Widyantoro, 2020; Prabawangi et al., 2021; Prasetyanto et al., 2022; Sifat, 2021; Sumalinog, 2022). Furthermore, judging from experience, the parents mostly graduated from elementary and junior high school. Therefore, they do not know about technology and parents do not understand the concept of studying at home (Churiyah et al., 2020) to assist their children in applying the learning procedures. Teachers also cannot directly take advantage of various technologies and platforms widely available and support online blended learning (Azhari & Fajri, 2022). The coastal students are in a village with a slow internet network, and research by Febrianto et al. (2020) conducted in a village in Madura also stated that rural areas had difficulties accessing the internet. This makes students obtain information from friends manually. Hence, it is necessary to have supporting facilities during online blended learning.

Support for the success of the learning process can be conducted by preparing a conducive learning environment and learning facilities. Previous research found that technological facilities play an important role in the online teaching and learning process (König et al., 2020) and resolve barriers to online blended learning (Adarkwah, 2021). Several elements contribute to the success of this teaching strategy, including the availability of internet access, socialization opportunities, and financial aid for children from lower-middle-class families. The provision of internet infrastructure and further training on the skills of teachers in online teaching throughout the country will be a new lesson in the future (Chung et al., 2020). Furthermore, it also requires support and cooperation from all education stakeholders, from the very bottom, namely the community to the government (Rasmitadila et al., 2020; Tanujaya et al., 2021). Rasmitadila et al. (2020) stated that success is determined by the readiness of technology in line with the curriculum and the cooperation of all stakeholders. According to Ahmed and Opoku (2021), online blended learning will open up new possibilities when students employ an effective learning style, are proficient with technology, and are able to overcome the technical obstacles of a slow connection.

Conclusion

Coastal students in Indonesia experience ten aspects of situations during online blended learning, including the learning environment, availability of technological tools, internet connection, ability to use technology, student readiness, communication between teachers and students, the process of receiving subject matter and submitting assignments, understand the material, the preferred procedure and the costs incurred. They lag behind technology-based education, and their location prevents access to internet connections. This is a lesson that needs to be applied to all regions in Indonesia, especially when there are emergency cases. Furthermore, it needs to be continued since this learning will someday become permanent in the face of future educational challenges. Therefore, policymakers and educators need to study, pay attention to the problems of coastal students and provide facilities for online blended learning in the future. This research contributes to a future in which teachers will be able to create answers for education by developing designs that support online blended learning. They can prepare android-based electronic modules for online and offline usage. Therefore, it does not require an internet quota in learning, and students can study freely after downloading the material. Teachers can also make video recordings explaining the subject matter, and video recordings can be shared with WhatsApp groups or on YouTube. Besides teachers, schools can also prepare facilities such as android phones for students. A comfortable learning environment, facilities, fast Wifi, socialization, workshops on the usage of platforms, and specific quota aid for students from the lower middle class should also be provided.

Recommendations

This research has identified various situations experienced by Indonesian coastal students during the pandemic, knowing their experiences and readiness at school closure cases, and knowing the facilities that need to be prepared for the process. The results are expected to be a solution for coastal students. However, it is recommended for further research to determine the development of coastal or rural students with difficulty in online blended learning. A Hypothetical Learning Trajectory (HLT) design can help children learn autonomously when problems persist, and policymakers or schools provide no remedy.

The Hypothetical Learning Trajectory (HLT) design can be a substitute when teachers and students have difficulty learning online. The HLT design can make students learn independently because the learning process is from concrete and semi-concrete to abstract. Therefore, students can easily learn and understand the lesson. Additionally, teachers can also carry out blended learning processes using online and offline methods.

Limitations

This research was only conducted on the coast of Indonesia in the Aceh province, and can further be carried out in other coastal or rural areas. It analyzes the problems in remote areas regarding the difficulty of implementing online

blended learning and can provide future education solutions. This research was only carried out in Aceh because of limited funds during the pandemic situation.

Acknowledgments

Authorship Contribution Statement

Fitriani: conceptualization, design, the manuscript, data analysis/interpretation, statistical analysis and writing. Herman: conceptualization, design, manuscript drafting, data acquisition, critical revision, supervision, and final approval. Fatimah: editing/reviewing, data acquisition, and critical revision of the manuscript.

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