

Teacher's Experiences with Online Learning in Pulau Sebatik, Sabah

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Abstract

The COVID-19 pandemic has disrupted worldwide education systems, causing many students to turn to online learning as a substitute for traditional classroom instruction. The purpose of this study is to investigate the difficulties encountered by teachers at SMK Wallace Bay in Pulau Sebatik, Sabah, Malaysia while conducting a lesson using an online platform. Qualitative research approaches were used to gather in-depth information from respondents' perspectives based on the realities of teachers' actual experiences with problems while teaching online. The data show that internet access, motivation and moral support, and digital inequality are the major problems that teachers face when conducting online classes. Educational institutions should provide digital devices and comprehensive teacher training to enhance online learning, improve education quality, and ensure equity.

1. Introduction

The COVID-19 pandemic has fundamentally changed global education institutions, making online learning a secondary method of acquiring necessary knowledge and skills [1], allowing for physical distance while reducing the spread and impact of COVID-19.

In Malaysia, the Sabah state government ordered the immediate temporary closure of schools where there have been outbreaks of COVID-19 clusters. Almost 18 months into the pandemic, schools in Sabah were still unprepared for online teaching and learning. Sabah, the second-largest state in Malaysia after Sarawak, is a land of diverse landscapes and cultures but grapples with persistent challenges that hamper the development of education [2]. In some remote districts, teachers and students must walk on muddy roads to reach school, with journeys sometimes taking hours [3]. Compounding these difficulties, some schools have crumbling infrastructure that fails to provide a conducive learning environment.

During the COVID-19 pandemic, the digital divide has remained a significant issue, with many students and teachers unable to access the necessary technology for online learning [4]. According to Women in Sabah's Expression (WiSE), the state of Sabah lacks essential ICT infrastructure and various basic facilities compared to urban schools. This includes unreliable high-speed internet, insufficient digital devices, and inconsistent electricity supply, which hinder the integration of educational technology [5, 6]. Thus, these challenges have impeded teachers' efforts to manage online learning effectively due to inadequate infrastructure and various basic facilities [7].



Fig. 1 Location SMK Wallace Bay, Pulau Sebatik, Sabah, Malaysia

Therefore, this study aims to explore the challenges of online learning for teachers in SMK Wallace Bay at Pulau Sebatik, Sabah. Despite the benefits of online learning, many teachers in rural areas of Sabah have struggled to adapt to this new method of online and teaching method effectively [8].

2. Teacher’s Challenges Conducting Online Classroom

Conducting online learning presents several challenges for teachers, including difficulties in student engagement, digital infrastructure, limited technology devices, and the struggle to maintain a classroom environment conducive to learning [9]. Teachers may also find it hard to provide personalized feedback and support compared to in-person classes, and they often need to adapt their teaching methods to suit the virtual format. This paper will explore three key challenges faced by online learning, particularly in rural areas, as illustrated in Fig 2. Each challenge will be discussed in detail, highlighting the unique obstacles that rural students and educators encounter in a virtual learning environment.

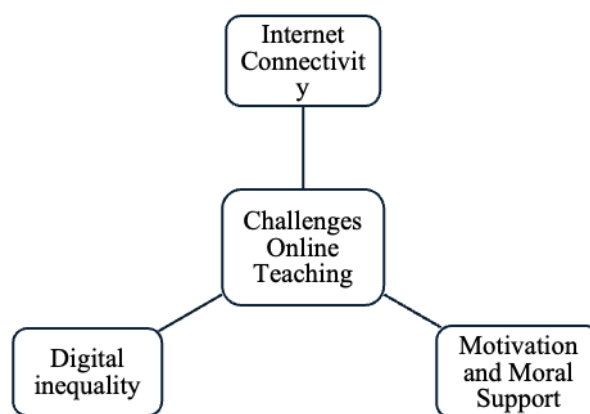


Fig. 2 The challenges faced by teachers when conducting online learning in the rural area

2.1 Internet Connectivity

Information and communications technology (ICT) plays a vital role in bridging the digital divide between rural and urban areas, as well as improving living circumstances in rural communities. High-quality digital infrastructure is required for the effective delivery of online education; thus, without these resources, students' development and performance in online education might suffer dramatically. Unfortunately, this approach has

made it more difficult for teachers to adapt to new norms (COVID-19), particularly in rural areas in Sabah [10]. There are several challenges when it comes to their use in rural areas; One major challenge is the digital divide, with poor and rural communities struggling to access internet connectivity, which can impede their ability to attend online classes and complete assignments [11]. This issue is particularly acute in interior and rural schools in Sabah, where internet signals are disrupted or partially blocked by the region's extensive mountainous terrain. According to [12], rural schools often face educational obstacles due to the lack of various basic facilities compared to schools in urban areas. These include unreliable high-speed internet, insufficient digital devices, and inconsistent electricity supply, which hinder the integration of educational technology and academic outcomes [13].

2.2 Digital Inequality

The term digital disparity, sometimes known as the digital divide, has become a major issue in the education industry, particularly during the global COVID-19 outbreak, when educational activities have been suspended to prevent the virus from spreading. Previous study highlighted a critical issue in the context of online learning, noting that approximately 36.9 percent of students lacked personal electronic devices essential for participation in online education [14]. This deficiency disproportionately affected low-income families, who were often ill-equipped to provide their children with the necessary tools for effective engagement in online learning environments. The primary obstacle for these families was the inability to procure adequate electronic devices, leading to the adoption of sharing arrangements [5]. These arrangements involved multiple family members, including students, relying on a single device, which significantly limited access to online education. Similar trends were observed in the current study, where students from low-income households, particularly those in the B40 income group, had to share devices with family members. Sabah Education Director, Dr. Mistirine Radin, also acknowledged that the transition to online learning has been challenging for students who lack internet access and gadgets such as smartphones and computers. This lack of personal devices and the need for sharing posed significant challenges for these students in attending online classes. They often had to miss classes, affecting their attendance, or negotiate with instructors for alternative attendance options, such as viewing pre-recorded lectures.

Furthermore, according to a previous study, students stated that their devices were unable to meet the expectations of online learning, frequently demonstrating performance concerns such as mid-lecture lags or disruptions during assignments [15]. These inadequacies resulted in problems such as overheating, malfunctioning, sluggish performance, and unexpected shutdowns. The use of inadequate devices played a pivotal role in impacting students' motivation for online learning. Inadequate and outdated devices often struggle to efficiently run modern learning applications and platforms, leading to frustrating experiences characterised by slow loading times, software crashes, and technical difficulties. Consequently, these challenges disrupted the flow of learning and eroded students' enthusiasm for their studies. In response to this challenge, the Sabah Education Department has taken measures to ensure that all students have access to learning materials. One of the first steps taken by the teachers was to send textbooks, workbooks, and worksheets to students at home or deliver them to the homes of village heads.

2.3 Motivation and Moral Support

One of the significant challenges faced by teachers during online learning is the difficulty in maintaining student engagement and motivation [16]. In traditional classroom settings, students have opportunities to interact with their friends and build relationships, which can enhance their learning experience and motivation to succeed. However, several factors contribute to this issue, including the lack of face-to-face interaction, and limited opportunities for student participation [6]. Recent data indicates that over 55% of students report a lack of motivation as a challenge when joining online learning classes, a marked increase from approximately 35% in 2020 [17]. This can make it difficult for students to feel connected to their classmates and to the class, which can negatively impact their motivation and engagement in the learning process. This rise can be attributed to prolonged school closures and significantly reduced social interactions with peers.

Teachers are also required to swiftly adapt their teaching methods and materials for the online environment, and institutions must provide additional support and resources to assist students, teachers, and families in navigating this transition. Another major challenge is the lack of social interaction and a sense of community [18]. In traditional classroom settings, students have ample opportunities to interact with peers and build relationships, which enhances their learning experience and motivation to succeed. However, in online learning, students may feel isolated and disconnected from their classmates, negatively impacting their sense of belonging.

Without face-to-face interaction and socialisation, students often feel less motivated and engaged in the learning process. Similarly, teachers may also experience a lack of connection with their students and struggle to establish a sense of community in the virtual classroom, further complicating efforts to maintain student engagement and motivation.

3. Research Methodology

This study uses qualitative research methods to achieve the research objective. The interviews were organised to gather in-depth information from a respondent's point of view based on the reality of teachers' actual experiences with challenges during online learning classes. Interviews were conducted in a peaceful, comfortable, interruption-free environment and took approximately 40 to 90 minutes. The interview was recorded using an audio recorder to improve data collection accuracy and enable the interviewer to focus more on the respondent's dialogue [18]. By using open-ended questions, the respondents were able to provide a range of experiences that could not be captured by closed-ended questions. They were able to narrate their experiences more comprehensively, giving us valuable insights into the phenomenon being studied [19].

Table 1 Overview of the respondent

Name	Position	Subject Teaching	Year of Experience	School Location
R1	Teacher	Mathematics	4	Pulau Sebatik, Tawau
R2	Teacher	Bahasa Malaysia	5	Pulau Sebatik, Tawau

4. Finding and Discussion

The findings were based on the data obtained from the interview and discussion in the following section.

4.1 Teachers' Challenges in Online Learning

Teaching through online platforms provides a significant challenge for teachers who have to spend their entire careers in the classroom. In this study, there were a few problems with how teachers in rural areas implemented online learning. The response from respondent 1 mentions:

"Internet connectivity is one of the issues that teachers run into while implementing online learning; it is particularly challenging to deploy in remote locations. Teachers will find it challenging to present learning modules, engage students in learning activities, and gather feedback from them on the subject due to a lack of an internet connection. We had to cope with this issue as well, and we were concerned that our pupils might lag in their academics." R1

High internet connectivity, Wi-Fi, and broadband connections that enable high-speed internet are not established since they are not required regularly by individuals living in rural areas. Some people cannot afford it because of the high cost. As a result, the researcher feels that internet connectivity is one of the most significant challenges teachers encounter in online learning, as mentioned by Respondent 2:

"As we all know, an internet connection is critical for online learning. However, not all teachers and students have easy access to the Internet. This issue makes it difficult for teachers to provide learning materials to their students. This also makes teachers at this school try to get in touch with the parents of their students to make sure they don't miss any lessons." R2.

In addition, some of the students don't have any gadgets and share phones or computers with their siblings to sit online lessons. This is because families with lower financial ability are less able to provide devices for their children's joining online classes. Respondents 1 mention these issues during the interview session.

"It's common for students to share phones with their siblings, but there are also students whose families can't afford smartphones." R1.

During the COVID-19 pandemic, parents who engage in their children's learning activities will result in more achievement for their children than parents who do not make the effort to encourage their children. Respond from Respondent 2:

"Some students find that their parents are unable to provide the encouragement and support they need during their time spent studying online. Because of this, students can't concentrate on their work, and their grades suffer" R2.

In addition, there are students in high school who don't have any gadgets and share phones or computers with their siblings to take online lessons. This is because families with lower financial ability are less able to provide devices for their children's online learning. The respondents for this study also focused on these issues during the interview session.

Also, in this study, respondent number two said that some students don't get support and motivation from their parents while they are learning online. During the COVID-19 pandemic, parents who engage in their children's learning activities will result in more achievement for their children than parents who do not make the effort to encourage their children. In support of this [20], recognise that parental involvement in online learning at home strengthens the parent-child relationship, which in turn boosts the academic achievement of children. According to [21], parents may facilitate and direct their children's learning at home through active participation. During the COVID-19 pandemic lockdown, this is true for students who are learning online at home. Parents should participate in cognitively stimulating activities such as reading with their children and observing their online learning sessions [22]. According to [23], if parents keep a careful check on their children while they study online at home, it may increase their desire to learn and improve their academic performance.

"Some students find that their parents are unable to provide the encouragement and support they need during their time spent studying online. Because of this, students can't concentrate on their work, and their grades suffer" R2.

In support of this recognise that parental involvement in online learning at home strengthens the parent-child relationship, which in turn boosts the academic achievement of children. However, teachers also took a plan to ensure that their students continued to get an excellent education despite the pandemic. The academic achievement of students at these schools may be improved in a variety of different ways. Teachers put up their utmost effort to guarantee that the students will not be overlooked.

"Various attempts are made to address this issue, including sending teaching materials to students and collecting them again to be checked by teachers for students who are unable to fully participate in online learning. The same is true for students' complete usage of textbooks. Also, students who aren't fully committed to online learning do better when they study with educational TV." R1

5. Conclusion

In conclusion, this study has identified three significant challenges faced by secondary school students and teachers in Sabah in the context of online learning methods. The issues of internet connectivity, motivation, moral support, and digital inequality emerged as critical barriers. Addressing these challenges is essential for improving the effectiveness and inclusivity of online education. Ensuring robust and reliable internet access, providing adequate motivational and moral support, and reducing digital inequality through equitable access to necessary electronic devices are vital steps towards enhancing the online learning experience for all students and teachers in Sabah. These measures will contribute to a more supportive and accessible educational environment, fostering better educational outcomes and greater equity in remote learning settings. Educational institutions should provide digital devices and comprehensive teacher training to enhance online learning, improve education quality, and ensure equity. Therefore, the government must implement and continuously intensify infrastructure development policies to meet current needs, particularly in Sabah.

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Conflict of Interest

The authors declare that there is no conflict of interests regarding the publication of the paper.

Author Contribution

The authors confirm contribution to the paper as follows: **study conception and design, analysis and interpretation of results, and draft manuscript preparation:** Izzah Afifah Robert, Mohd Affendi Ahmad Pozin, Nuraini Abdullah, Nur Tasnem Jaaffar. All authors reviewed the results and approved the final version of the manuscript.

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