Teachers' perceptions of online challenges in Junior Secondary Schools teachers in South Sulawesi, Indonesia

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1. Introduction

The spread of COVID-19 has sent shockwaves across the globe. In order to control the spread of the virus, lockdowns were put into effect. UNESCO (2020) released data showing the peak in school closures was registered at the beginning of April 2020, when around 1.6 billion learners were affected across 194 countries, accounting for more than 90% of total enrolled learners. Consequently, schools and universities were closed down, and alternatives to traditional schooling should be devised and implemented immediately.

Since the suspension of all types of face-to-face activities during the pandemic, colleges, secondary schools, and elementary schools have adopted the strategy of online education. As a result, teachers and students have used online teaching and learning on an unprecedented scale. Online learning or e-learning has been assumed to be a significant tool for effectively continuing the teaching-learning process during the lockdown. Teachers and students have had to quickly alter their teaching and learning strategies, regardless of whether they were experienced in and prepared for online education, an environment with electronic devices and online applications. Despite the innumerable potentials and benefits of online learning, such as cost-effectiveness, promoting self-paced learning, better retention, and catering to learners' needs, teachers may not readily make the most and get the full benefits of online learning. Some studies have shown that learning achievement in online learning is lower than in traditional face-to-face learning. The present study explores the teachers' perception of the use of digital technology in their online instruction and challenges or problems they face when implementing online learning instruction. Besides, this study will discuss the teachers' measures to respond to and cope with the problems.

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asynchronous or synchronous, with the instructors delivering the information, facilitating learning, answering questions, and providing feedback. At the same time, individual students can take the initiative to ask questions or to contact the instructor for extra help or specific needs. The interactions among students allow them to exchange information and ideas among themselves. This can occur between individual students, in group projects and group discussions, in case studies, etc., and can stimulate collaboration, sharing of knowledge and skills, and student learning. Student-content interaction refers to how students get information and course materials, which can be in texts, videos, audio, computer programs, or web resources. Kevin et al. (2007) categorized the purposes of interactions into instrumental and social-emotional. Instrumental purpose primarily relates to "seeking and giving assistance, with either academic questions related to course materials and content or inquiries about assignments and the structure of the course." (p.205). Social-emotional purposes primarily relate to "seeking and giving reassurance and assistance, with social or emotional questions/issues related to studying the course" (p. 205).

The massive abrupt migration from the traditional methods of learning to impart education through online means requires further enhancement of new skills related to e-learning. Unfortunately, even in the pre-pandemic crisis, "most teachers new to online teaching begin with little to no training or preparation specific to this deliver mode" (Crawford-Ferre & Wiest, 2012, p. 13). Studies have found that most online faculty have not received adequate training and support from their institutions (e.g., Crawford-Ferre & Wiest, 2012; Gabriel & Kaufleld, 2008). E-learning is not an add-on to existing teaching and learning practices and disciplinary differences must be considered. Although it is a necessary step, the provision of hurriedly set up workshops to enhance the skill gaps of teachers cannot replace the need for sustained training in both the pedagogical and technical areas.

Inadequate training and support received by the teachers would certainly pose some problems in implementing online instruction. Among the problems that Fauzi and Khushuma (2020) identified in their survey of 45 elementary school students are 1) the availability of facilities, 2) network and internet usage, 3) the planning, implementation, and evaluation of learning, and 4) collaboration with parents. The authors expected that online learning would be helpful to teachers during the COVID-19 pandemic, but their study indicated poor outcomes of online learning, with 80% of teachers reporting that they felt dissatisfied with online education. Some studies have reported similar major problems (Purwanto, 2020), including internet connection (Agung et al., 2020; Basuony et al., 2020; Mahyoob, 2020), limited cooperative and collaborative learning opportunities (Baczeck et al., 2021; Yates et al., 2021), information technology equipment (Niemi & Kuosa, 2020; Baczeck et al., 2021; Putri, 2020), decreased learning motivation (Basuony et al., 2020); Niemi & Kuosa, 2020), increased learning burden (Niemi & Kuosa, 2020), students’ deficiency of proper learning attitude and incapability of self-discipline (Brazendale et al., 2017).

Before the pandemic, Cole, Shelley, and Swartz (2014) reported their three-year study of graduate and undergraduate students' level of satisfaction with online instruction. The study revealed that the students rated their online instruction as moderately satisfactory, with hybrid or partially online courses as somewhat more satisfactory than fully online courses. Most students cited "convenience" as the reason for satisfaction and "lack of interaction" as the reason for dissatisfaction. Mothibi (2015) carried out a meta-analysis study of the relationship between e-learning and students' academic achievement in higher education. The findings indicate that e-learning has a significant positive impact on students' educational overall academic achievements. Another meta-analysis study by Yuwono and Sujono (2018) comparing learning outcomes of online and conventional learning reveals a mixed result. Some studies indicate that the learning outcomes of e-learning are better than those in conventional learning. However, some other studies show insignificant differences. Another review of various journal articles relating to online learning implementation during the pandemic was conducted by Lestari and Gunawan (2020). They found that the digital platform at primary and secondary school levels shows better, more effective and enjoyable education sphere when the teachers are more innovative and creative in developing teaching materials and methods that attract students' engagement and enthusiasm. Pham (2021) claims that students' online learning outcomes are affected by learner characteristics, perceived usefulness of the technology used, course content, course design, ease of use, and faculty capacity.

Prestiadi (2020) conducted a meta-analysis study on the implementation of e-learning in Indonesia. He reported one of the weaknesses of online learning is that the students have difficulty understanding the materials and interacting with the teacher, which could result in poor learning achievement. Kuhfeld et al. (2021) conducted a large-scale survey comparing students' achievement before and during the COVID-19 pandemic of approximately 5.5 million 3rd-8th grade students in 12,500 US public schools. They found that all students' academic achievement in fall and winter 2020 and spring 2021 was lower than in a typical year. The reading achievement scores of the primary and secondary school students in the fall, winter, and spring terms before the pandemic (2018-2019 academic year) were higher than during the pandemic (2020-2021 academic year).

Despite the innumerable potentials and benefits of online learning, such as cost-effectiveness, promoting self-paced learning, better retention, and catering to learners' needs, teachers may not readily make the most and get the full benefits of online learning. It is evident by various empirical studies that have been discussed above. The tendency that learning achievement in online learning is lower than the traditional face-to-face learning may be due to various problems of online learning identified by some research mentioned previously. The present study aims to explore the teacher's perception of the use of digital technology in their online instruction. Specifically, this study identifies the online learning platforms frequently used by teachers and describes the teachers' perception of the ease and usefulness
of the frequently used learning platforms. Besides, this study aims to identify the problems the teachers and students face in their online learning implementation and the measures that the teachers take to respond to and cope with the problems.

2. Method

This survey questionnaire was adapted from Davies’ Technology Acceptance Model (TAM) (Davies, 1985). The questionnaire was used to collect information about the online teaching platforms often used by the teachers and their perception of the ease and usefulness of the technology for their online instructions. The questionnaire was administered online to five Working Groups of Junior High School Teachers of English (MGMP).

These MGMP members voluntarily filled out the questionnaire and were allowed to forward it to their colleagues in other districts. Besides, interviews were conducted to gather data and information about problems the teachers encountered in their online teaching and learning processes and the measures they took to cope with the problems. The interviews were done in the form of focused group discussion through MGMP in five districts, i.e., Makassar, Takalar, Gowa, Maros, and Pinrang. The number of teachers that completed the questionnaire was 173, as presented in Table 1.

3. Results and Discussion

Davis’ research on Technological Acceptance Model (1989) was adapted and used to gauge perceived ease of use and usefulness with additional factors, including attitudes and effectiveness on teachers' perception when using online platforms in the classroom. Respondents revealed that social media is the most used application, among others. This goes in line with Rauniar et al. (2014) that Facebook, among other social media mentioned in this research survey, is a system for perceived ease of use for its flexible interaction, easy-to-sign-up, ease to use, and clear features.

3.1. Online Platforms Used in Online Learning

The availability of various digital platforms and applications has eased teachers in teaching. The following shows the frequency of using several online platforms.

From Figure 1 above, social media, including WhatsApp (WA), Facebook (FB), Instagram, and Telegram, ranked first being the most used. Google Classroom/Google Meet came second. It is then followed by Quizizz, Zoom, and Microsoft Team. Other unpopular applications exist Quizlet, Quipper, Kahoot, and Hot Potatoes.

3.2. Perceived Ease of Use

Perceived ease of use is how an individual believes that using a particular technology would require less or no effort. In other words, the person's level of belief in a system that can be easily used and understood.
Table 2. Items of Perceived of Use

| Statements                                                                 |
|---------------------------------------------------------------------------|
| I find the application I use for my classroom cumbersome (hard) to use.   |
| Learning to operate (the application I use for my classroom) is easy for me|
| I find it easy to get (the application I use for my classroom) to accomplish what I want to do. |
| Interacting with (the application I use for my classroom) is often frustrating. |
| (The application I use for my classroom) is rigid and inflexible to interact with. |
| It is easy for me to remember how to perform tasks using (the application I use for my classroom) |
| I find it takes a lot of effort to become skillful at using (the application I use for my classroom) |
| Interacting with (the application I use for my classroom) requires a lot of mental effort. |
| I find it easy to do almost all my classroom teaching practices using (the application I use for my classroom) |
| Overall, I find (the application I use for my classroom) easy to use |

Below is the respondents' responses to those statements.

Figure 2. Perceived Ease of Use of the Application for Online Teaching

Figure 2 above shows that most respondents found the application they have been using easy to get the application used during learning to accomplish their goals (item 3) as it is easy for them to remember how to perform tasks using that particular application (item 6). Moreover, most respondents found it easy to do their classroom teaching practices with these platforms (item 9). Despite some still finding difficulties in using the chosen application (item 1) and realizing the efforts required a lot of mental effort (item 8) to be skillful (item 7), overall, most found the application easy to be used. Teachers found it less difficult and frustrating to use their preferred online platform. Also, more than half found it easy to learn, interact, and be skillful towards the favorable application.

3.3. Perceived Usefulness

Perceived usefulness is the person's belief in using such an online application that may bring advantages when carrying out their job. Below are the initial scale items for perceived usefulness adapted from Davies (1989).

Table 3. Items of Perceived Usefulness

| Statements                                                                 |
|---------------------------------------------------------------------------|
| Using (the application I use for my classroom) improves the quality of the work I do. |
| Using (the application I use for my classroom) gives me greater control over my work. |
| (The application I use for my classroom) enables me to accomplish tasks faster. |
| (The application I use for my classroom) supports critical aspects of my job. |
| Using (the application I use for my classroom) improves my job productivity. |
| Using (the application I use for my classroom) enhances my effectiveness on the job. |
| Using (the application I use for my classroom) makes it easier to do my job. |
| Using (the application I often use for my classroom) allows me to accomplish more work than would otherwise be possible. |
| Overall, I find (the application I often use for my classroom) useful in my job. |

Below is the respondents' responses to those statements.

Figure 3. Overall Perceived Usefulness of the Frequently Used Digital Platform for Online Teaching

Figure 3 illustrates that most respondents' perceptions of using their preferred application found it useful in their job (item 20). The reasons supporting this are that digital platforms improve the quality of work (item 1), provide greater control over work (item 2), and enable one to accomplish the task faster (item 3). As a result, respondents' productivity (item 5), job performance (item 6), and job effectiveness increased (item 7).

According to Davis (1989), the five indicators to assess perceived usefulness is the positive impact when adopting practical technology and quickening a task. This will then bring optimal productivity of users (teachers in this context) and increase effectiveness and job performance.
3.4. Attitude
The next essential factor is understanding the respondents’ attitudes toward the prevalence of using applications in the classroom.

Below is the respondents’ responses to those statements.

![Figure 4 Attitude of the Use of Technology for Online Teaching](image)

Figure 4 indicates that the respondents showed positive attitudes toward the idea of using technology in the classroom (item 21), which results in intention to use the application (item 22) and will continue to take advantage in improving the effectiveness of their classroom practices (item 23). Attitude guides an individual’s behavior, which can have positive or negative effects that align with his feelings and thoughts (Semerci & Aydin 2018).

3.5. Perceived Effectiveness
Perceived effectiveness here is the likelihood that the application chosen by the teachers in implementing online learning will have a persuasive impact.

![Table 4. Perceived Effectiveness](image)

5. Conclusion
In this technological era, it is inevitable to live without experiencing evolving teaching and/or learning online applications. Thus, understanding and being able to use those platforms become a demand. According to the results of our study, social media are the most frequently used programs for teachers’ online instruction (asynchronous). Furthermore, teachers perceived social media positively regarding ease of use, usefulness, attitude, and effectiveness. Synchronous learning provides more trouble since the internet connection is very often unstable, and students’ access is limited to their budget availability. Although the technology is considered suitable for the teachers to deliver their materials, they realize that the students cannot meet the intended learning objectives.

Despite most teachers finding that online platforms were easy to use, useful, and effective, several limitations should be covered in future work. Firstly, further investigation into the acceptance level of using online platforms. Secondly, there is a need to investigate to what extent the intended learning objectives were being achieved. Finally, experimental studies could help understand how teachers can utilize the preferred digital platform for their classrooms.

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