EFL students’ engagement in the post-pandemic teaching: Does technology matter?

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Abstract

Nowadays, in the post-pandemic educational landscape, it is intriguing to investigate whether technological supports are still relevant and necessary. This article critically summarizes and reviews the effect of technology utilization on students’ engagement presented in a study by Yu et al. (2022). Then, using a mixed-methods design, this study explored English as a foreign language (EFL) students’ engagement with technological tools in the post-pandemic situation. Data were collected by using questionnaires and semi-structured interviews. The questionnaire data were analyzed descriptively to analyze students’ responses from four dimensions of engagement with technological tools. Meanwhile, the interview data were analyzed thematically. The results show that several types of technological tools, ranging from learning management systems (LMS), student response systems (SRS), and social media to gamification tools, are utilized as means to engage students more in Indonesian EFL classrooms. Additionally, it can be revealed that the utilization of technology has positive impacts on students’ engagement levels, with the behavioral domain showing the highest value. In essence, this study provides a roadmap for educators and policymakers to harness technological advancements strategically, fostering enhanced student engagement and meaningful learning outcomes in the ever-evolving landscape of education in the post-pandemic era.

Keywords: EFL students’ engagement; gamification tools; learning management systems (LMS); mobile technologies; post-pandemic teaching and learning; student response systems (SRS); technological tools
Introduction

The COVID-19 pandemic has made significant changes to how teaching and learning are carried out, particularly in English language teaching (ELT). The use of technology in ELT has become more crucial than ever before, and it will certainly remain an indispensable resource for English language instructors in the post-pandemic era. With the pandemic, many schools and language centers have switched to online teaching. In the post-pandemic period, online classes are likely to continue as an essential part of ELT. Teachers can use video conferencing tools like Zoom, G-Meet, or Skype to deliver live online classes in synchronous or hybrid learning settings (Nikou, 2021; Suppiah et al., 2023). Hybrid learning appears as a new term for the condition of combining online and onsite learning. English language teachers use multimedia-based technology to design the teaching materials in the current teaching-learning process because they feel it is more effective than not using it (Syamdianita & Cahyono, 2021). They can also use learning management systems (LMS) like Canvas, Moodle, or Rain Classroom to share digital learning materials with their learners (Fauzi et al., 2020; Li et al., 2022; Yu et al., 2022). The use of LMS in the post-pandemic era has been widely studied, with a focus on its effectiveness, features, and user satisfaction. Haryani and Poniam (2021) found that Canvas LMS positively impacted user satisfaction and pedagogical quality, particularly in teaching, interactivity, and student understanding. Teachers still use some social media platforms, such as WhatsApp or Chat, to effectively communicate with their students (Susilawati & Supriyatno, 2020; Yu et al., 2022). As we navigate the post-pandemic era, understanding the impact of technology utilization on student engagement has become an urgent imperative. The remarkable uptake of remote and online learning methods underscores the need for a thorough investigation into how diverse technological approaches affect student engagement and academic involvement. It is also necessary to address issues of equity and
accessibility by assessing whether specific demographic groups encounter obstacles in leveraging technology to attain educational benefits.

The utilization of technology has been linked to students' engagement because of its ability to increase the level of participation, the sense of belonging as well as the learning outcomes (Yu et al., 2022). Marks (2000) conceptualizes student engagement as "a psychological process, specifically, the attention, interest, investment, and effort students expend in the work of learning" (pp. 154-155). Student engagement plays a vital role in improving low academic achievement, boredom in the classroom, alienation, and high dropout rates (Fredricks et al., 2004). Among the important educational outcomes that have been shown to be positively connected with student engagement are academic success, perseverance, contentment, and a sense of community (Hughes et al., 2019). These connections have led scholars to refer to student engagement as "an educational bottom line" (Coates, 2006, p. 36) and "the holy grail of learning" (Sinatra et al., 2015, p. 1). However, many students do not participate in their own education, which has a negative impact on academic performance, high attrition, and low enthusiasm or motivation (Rumberger & Rotermund, 2012). Compared to the old times when technology still had a minor role in education, especially in dealing with students' disengagement, teachers definitely need different treatment to overcome the problem. Today's generation of students is so reliant on multimedia that "they think it's all part of the natural landscape" (Tapscott, 2010, p. 2). Hence, the use of technology seems to be a preferable choice to deal with the problem of disengagement in the teaching and learning process at the present time (Tapscott, 2010).

In their article, Yu et al. (2022) investigated the effectiveness of incorporating technologies to promote students' engagement and learning results. They conducted quasi-experimental research involving 101 students. The students worked in 3 groups. For one semester, each group learned English, supported by a mobile learning platform (Rain Classroom), a social media platform (WeChat), and the conventional multimedia projection system. A mixed-method research design was implemented by conducting two different stages: qualitative and quantitative. First, they carried out the experimental phase to find out the effectiveness of Rain Classroom and WeChat in enhancing the students' engagement and improving their learning outcomes. Furthermore, Yu et al. (2022) employed the framework proposed by Wang et al. (2016) to gain a deeper understanding of the effect of technology implementation on students' engagement domains, including cognitive, behavioral, emotional, and social aspects. It is interesting to discuss since the study was conducted during the
pandemic in China, which employed Rain Classroom and WeChat as the most common and preferred educational tools (Yu et al., 2022).

This article is going to discuss Yu et al.’s (2022) research report on the effectiveness of cutting-edge technology on student engagement and learning outcomes in Chinese students by employing Wang et al.’s (2016) framework and correlating it to the Indonesian context, especially in the post-pandemic era. This study has identified a number of research gaps. Firstly, limited research focuses on the implementation of technology integration and its impact in the Indonesian context. Secondly, there is a lack of comprehensive studies that assess the effectiveness of various technological tools on enhancing student engagement in specific subject areas, such as English language learning, especially in the context of English as a foreign language (EFL). Existing research overlooks factors that influence the adoption of technology in education in Indonesia. By addressing these research gaps, this study seeks to contribute valuable insights into the successful integration of technological tools in Indonesian classrooms to foster student engagement and ultimately improve learning outcomes. In order to fill the gaps, the current study will expose the benefits of technology utilization as an effort to find a solution to disengagement in the EFL classroom. Second, it will reveal the aspects of engagement influenced by technology utilization in EFL classrooms using Wang et al.’s (2016) framework. Third, it will uncover the types of technological tools used by Yu et al. (2022) and compare them to the recent trends in the EFL Indonesian context, especially regarding their strengths and limitations. By doing so, this study provides recommendations to teachers who want to use technologies to engage students in learning. Two research questions are put forward to guide the implementation of this study:

1. What types of technological tools do the EFL students use in the post-pandemic?
2. How are technological tools used to promote the students’ engagement?

**Literature review**

**Role of students’ engagement in mobile English language learning outcomes**

At the initial stage of the paper, Yu et al. (2022) try to illustrate the condition in China when conventional classroom-based learning was forced to shift to distance learning through Rain Classroom and WeChat platforms due to the pandemic. The sudden switch requires educators to adjust to the new learning environment involving technology-enhanced learning and the use of social networking sites. With the rapid development of mobile technologies, the
importance of mobile learning has emerged (Nestel et al., 2010). With mobile technologies, English learners no longer need to commute to school daily, nor do they need to spend an excessive amount of money on mobile English learning. Currently, when the situation has reversed to the normal days as the days before the pandemic, it is necessary to keep using educational technologies to bridge the gap between pre- and post-pandemic outbreak to improve the teaching and learning activities in EFL classrooms. In the Indonesian context, in particular, where both technological support and resources are scanty, mobile devices remain the only viable option to at least keep students engaged (Cahyono et al., 2023).

According to some scholars, student engagement is a construct with multidimensional interpretations. Yu et al. (2022) divided students’ engagement domains into four dimensions: cognitive, behavioral, emotional, and social engagements. The first three dimensions were initiated by Fredricks et al. (2004), and the fourth component was proposed by Wang et al. (2016). Each of the four dimensions has specific characteristics that significantly impact the amount of student participation. Cognitively engaged students will invest their efforts in their education. Then, behaviorally engaged students would typically follow behavioral standards like attendance and involvement and show no signs of acting out or negatively. Next, emotionally involved students would feel affective responses like interest, delight, or a sense of belonging. Lastly, the focus of social engagement is on students’ readiness to interact socially with classmates, instructors, and materials, as well as their readiness to uphold personal connections (Wang et al., 2016).

In addition, Yu et al. (2022) define English learning outcomes as the English proficiency attained by students after a period of English education aided by mobile technologies (e.g., Rain Classroom) or social media (e.g., WeChat). They mentioned that English proficiency includes communication ability (e.g., listening, speaking, reading, and writing abilities) based on the research of Pontefract and Wilson (2019), the capacity to work across disciplines (e.g., listening, speaking, reading, and writing abilities), English language receptive data (e.g., reading abilities), and English language production (e.g., writing skills). In their study, Yu et al. (2022) administered the TOEFL iBT test as the instrument to measure the student’s proficiency before and after the treatment was given. This is quite substantial since the test covers the expected abilities for an English learner to master. Therefore, the selected test is considered relevant and appropriate.
How technology utilization in EFL classrooms enhances students’ engagement

As digital natives who are inseparable from computers and the Internet, students can now independently access a wide variety of material and discover the answers to their queries with a single click. As a result, technology has become one of the significant elements of education. The remarkable relationship between the use of technology and student engagement in the classroom has thus been embraced by many researchers (Heiberger et al., 2008). In their article, Yu et al. (2022) highlight that student engagement can be seen as a prominent factor in the successfulness of mobile English language learning since it determines how much work and energy students put into learning English. Positive mobile English language learning outcomes can have a favorable impact on student engagement. They provided several empirical studies that focused on the utilization of mobile technology. In education, technology-assisted learning has been shown to be powerful. Several online platforms were incorporated into the teaching and learning activity. One of the online platforms, called BlikBook, enhanced student engagement and promoted academic independence in peer collaboration (Crowder et al., 2019). In addition, anatomy drawing screencasts, an eBook, and a Massive Open Online Course (MOOC) are proven to be effective in enhancing students’ achievement and boosting their engagement in the anatomy curriculum of a medical program (Pickering & Swinnerton, 2019).

Furthermore, the use of technological tools in learning has improved educational outcomes in recent studies. Student involvement in chemistry classes on Zoom was raised by interactive learning environments (Baldock et al., 2021). Additionally, Mobile Augmented Reality has a positive relationship with improving students’ problem-solving skills (Putra et al., 2021). Several key factors that can greatly influence the success of applying mobile learning technologies are the practicality and usability of the tools, students’ preferences, motivation, expenses, and technical supports such as device and Internet connection stability (Butler et al., 2021). Moreover, mobile teaching improved anatomy learning and reduced student anxiety (Bolatli & Kizil, 2021). It could also enhance the teaching of the English language. The use of mobile technologies boosted enthusiasm for learning English and vocabulary retention (Zhai, 2021). To illustrate, the use of e-readers in mobile devices has three perceived benefits, namely episodic learning, easy access to materials, and enhanced enjoyment of mobile-assisted vocabulary learning through electronic textbooks (Xodabande & Hashemi, 2022). Thus, the gap between traditional and mobile pedagogical techniques has the potential to be bridged by the utilization of technological tools to enhance learning.

Conversely, Yu et al. (2022) exposed the challenges of applying a technology-based learning environment. Due to the significant changes in technology-
enhanced educational settings, a learning mode can only succeed for a short-term period and cannot sustain learning. These traits require distant English learning supporting tools to be brief and suitable for quick duration. Some researchers are now looking into the issues with the mobile English learning method. This type of learning method focuses on self-directed and collaborative learning using mobile communication technologies (Atawneh et al., 2020). In general, learning designers and teachers have a tendency to directly transfer the classical onsite learning mode to the mobile environment. In actual distance English teaching, mobile English learning modes have not been widely implemented. Because of the influence of traditional English learning styles, it might be difficult for teachers and English language learners to adjust to new mobile learning situations. Students, particularly those with weak self-regulation, are quickly distracted and interrupted during the interactive mobile English learning process. Therefore, the teacher’s role is vital. They need to be technology savvy and able to select the best tools to be utilized in the classroom in order to gain the maximum level of student engagement and learning outcomes.

**Wang et al.’s (2016) framework of student engagement**

In their study, Yu et al. (2022) employed a quasi-experimental research method by integrating quantitative and qualitative research. The participants were 101 undergraduate students enrolled in English language, translation, linguistics, and other courses related to language. The study was conducted during the 2019 academic year when the COVID-19 pandemic first emerged in China and resulted in the university closure. The students were divided into three groups at random: Group A (N = 35), Group B (N = 33), and Group C (N = 33). Rain Classroom-assisted English teaching was given to Group A, WeChat-assisted English teaching was given to Group B, and traditional pedagogy, i.e., multimedia projecting system-assisted English teaching, was given to Group C. The research instruments were a scale of student engagement and an Internet-based TOEFL (iBT) test, which were administered before and after the treatment. The scale of student engagement was adapted from Wang et al. (2016), comprising four dimensions, i.e., cognitive engagement, behavioral engagement, emotional engagement, and social engagement. Each subscale is accompanied by a 5-point Likert scale, ranging from A (strongly agree) to E (strongly disagree). Furthermore, the interview was conducted to obtain a deeper understanding of self-report student engagement and learning outcomes of the students when attending English class via Rain Classroom and WeChat. The findings indicate that mobile Rain Classroom can enhance student engagement and English learning outcomes better than WeChat. Those technological tools were able to
increase student engagement and learning results more than the typical teaching instrument, a multimedia projection system.

**The present study: Revealing the Indonesian EFL students’ perspective on the implementation of technology to promote students’ engagement**

Stepping from the findings of Yu et al. (2022), it is intriguing to see the phenomenon of utilizing technological tools as a means to escalate Indonesian EFL students’ engagement in the post-pandemic era. Thus, by employing Wang et al. ‘s (2016) proposed framework, the current study aimed to examine EFL students’ perception of the use of technology to boost their engagement in the post-pandemic era. To do so, we explored various technological tools and strategies that can be employed to enhance student engagement and learning outcomes in a remote, hybrid, or onsite learning environment. More specifically, this study identified types of engaging technological tools used by EFL students in the Indonesian context and how these tools promoted student engagement by exploring four domains of student engagement proposed by Wang et al. (2016).

**Method**

**Research design**

This study utilized mixed methods, particularly the sequential explanatory design. In this design, the study combined quantitative data from the questionnaire and qualitative data from the interview (Creswell, 2012). Through questionnaires, the study identified the types of engaging tools used by EFL students in the Indonesian EFL learning environment. In addition, the level of the student’s engagement in each domain would also be obtained from the questionnaires. The interview data were used to support the findings from the questionnaires. By employing this research design, we want to describe the characteristics or phenomena of how the utilization of technology can boost EFL students’ engagement in the Indonesian context, especially after the pandemic has come to an end. Based on Leavy (2020), this study recognizes that words can come from numbers or ideas to give detailed descriptions of phenomena. The data were analyzed descriptively to give a clear picture of the current use of technological tools in the Indonesian context of education in the post-pandemic period.
Participants

This study involved 26 freshmen in the Pharmacy Department of a reputable private university in Malang City, Indonesia. The students were in the second semester of Pharmacy major which consisted of 23 females and 3 males. They took Foreign Language for Specific Course (FLSP) as a compulsory subject for the first-year students of all departments. The choice of this class primarily stemmed from the apparent disengagement issue observed within the group. The prevalent disconnection in this classroom is evident, with students often expressing feelings of being detached from the FLSP course. This disengagement is attributed to the considerable workload imposed by other pharmacy-related courses, leading to a lack of focus. Table 1 shows the demographic information about the participants.

Table 1
Participants’ demographic information

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>23 females</td>
</tr>
<tr>
<td></td>
<td>3 males</td>
</tr>
<tr>
<td>Age</td>
<td>18-19 years old</td>
</tr>
<tr>
<td>Educational level</td>
<td>Freshmen</td>
</tr>
<tr>
<td>Technological proficiency</td>
<td>• They are digital natives.</td>
</tr>
<tr>
<td></td>
<td>• They are familiar with various types of technological tools.</td>
</tr>
<tr>
<td>Access to technology</td>
<td>• They own their own device (laptop/PC and smartphones)</td>
</tr>
<tr>
<td></td>
<td>• They can access the Internet (at home and on campus)</td>
</tr>
<tr>
<td></td>
<td>• Their class has an LCD projector and speaker</td>
</tr>
</tbody>
</table>

When the data were collected, these first-year students were enrolled in an English for Specific Purposes (ESP) class where the disengagement issue was most likely to occur since ESP subject is considered a minor subject compared to other content-related subjects they learned in the semester. Therefore, they were selected as the participants to capture the phenomenon in the use of technological tools to boost students' engagement from their perspectives. To ensure that their rights, autonomy, and privacy are respected, several procedures were taken into account, such as providing a brief overview of the research to the students, telling the students that it is voluntary to be the participants, gaining consent, and assuring them that their responses will be treated with strict confidentiality and it has no impact on their score for ESP subject. They were also informed that they could complete the questionnaire in about 5 minutes.
**Data collection**

The current study used a questionnaire adapted from Wang et al. ‘s (2016) framework. It has two sections. The first section covers four open-ended questions used to explore technological tools utilized in the classroom. This section is added to obtain information about the types of technological tools used in EFL classrooms in the Indonesian context. The four questions include: (1) What learning management systems (LMS) have been used in the teaching and learning process? (2) What student response systems (SRS) have been used in the teaching and learning process? (3) What social media have been used in the teaching and learning process? and (4) What gamification platforms have been used in the teaching and learning process?

The second section included the scale of students’ engagement (adopted from Wang et al., 2016) consisting of four sub-scales representing the four dimensions of engagement, i.e., cognitive engagement (4 statements), behavioral engagement (5 statements), emotional engagement (4 statements) and social engagement (4 questions). Each of the statements is provided with five options, varying from Strongly Disagree (SD), Disagree (D), Neither Agree nor Disagree/Neutral (N), Agree (A), to Strongly Agree (SA). To establish the content validity of the instrument, ELT experts were asked to evaluate the questionnaire’s alignment with the research objectives. Additionally, pilot testing on several students was conducted before collecting the data to enhance the reliability of the questionnaire.

Following the collection of the quantitative data from the questionnaire, a semi-structured interview was held with 4 participants. The four participants were selected as the interviewees as they reached the highest scores in their response to the second section of the questionnaire, which explores their cognitive, behavioral, emotional, and social engagement. The four participants were all female students whose pseudonyms were Anita, Grace, Truly, and Zola. The semi-structured interview was based on four questions that represent the highest scores from each of the dimensions of engagement as follows: (1) When you know that you have made a mistake in the English lesson, how would you use technology to correct the mistake? (cognitive engagement), (2) When there is an assignment that you have to do, how will you manage to work well by using technology? (behavioral engagement), (3) When you know that you have achieved a very good grade in a particular assignment, how do you feel about the role of technology you have used? (emotional engagement), and (4) When asked to do an assignment collaboratively by using a technological tool, how would you choose one of your classmates who will work with you? (social engagement).
The interviews were conducted individually with the participants in Bahasa Indonesia, the official language used for communication in Indonesia. Each of the interviews lasted for about 8 to 12 minutes, and it was recorded. Before each of the interviews began, the participant was informed that the interview was conducted voluntarily based on the participant’s willingness and that it would not affect the participant’s grade in the course.

**Data analysis**

Data from the questionnaire were analyzed descriptively based on the students’ engagement scale proposed by Wang et al. (2016). First, the number of responses to the options in each of the statements was calculated. Then, each of the options was given a value from the least favorable response (1 for Strongly Disagree) to the most favorable response (5 for Strongly Agree). The total number of respondents (f) who chose a particular option was counted in percentage (%) to find out the proportion of the responses compared to the other respondents. The degree of the responses for each statement can be known by summing up the values of responses for all of the options in the statement, resulting in 1 as the lowest possible value and 5 as the highest possible value. In the qualitative phase, the transcriptions of the recorded data from the interview results were analyzed following a systematic procedure. The first step involved meticulous transcriptions of the recorded interview to explore the affected domain of students’ engagement when technology is utilized. The transcriptions of these interviews constituted the qualitative dataset for analysis. The process began with familiarization, enabling a comprehensive immersion into the interview content to identify emerging themes. Subsequently, coding was applied to identify the core theme aligned with the research questions. Finally, we compared these qualitative themes with the quantitative results to provide a comprehensive understanding of the relationship between technology use and students’ engagement.

**Findings**

**Types of technological tools the EFL students use in the post-pandemic**

The initial part of the questionnaires asked the students to mention four categories of technological tools used in the English teaching and learning process, namely learning management systems (LMS), student response systems (SRS), social media, and gamification tools. In this case, each respondent may
choose more than one technological tool in each category, resulting in a total number of more than 100% of respondents.

In terms of the LMS category, the most frequently used platform was Canvas (100%), followed by Moodle (3.8%) and other technological tools (3.8%). Meanwhile, Nearpod (73.1%) gained the highest usage value for the SRS category. Nearpod was followed by Ahaslide (26.9%), Peardeck (11.5%), Mentimeter (11.5%), and other platforms (7.7%). The most frequently used social media was WhatsApp (100%), followed by Telegram (3.8%) and Instagram (3.8%). From the gamification category, the most frequently used technological tool was Quizizz (88.5%). Following Quizizz were Nearpod (57.5%), Kahoot (26.9%), and Duolingo (3.8%).

Thus, from the investigation through Indonesian EFL students’ perspective, there are several additional types of technological tools that have been incorporated into their day-to-day onsite learning, namely Nearpod from the SRS category and Quizizz from the gamification tools category.

**How technological tools are used to promote the students’ engagement**

The results of analysis of the use of technological tools based on the students’ engagement scale of Wang et al. (2016) are shown in Table 2.

**Table 2**

*Use of technological tools as shown in students’ engagement scale*

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I check the work for the English class to make sure everything is in order.</td>
<td>0%</td>
<td>0%</td>
<td>8%</td>
<td>32%</td>
<td>60%</td>
<td>4.54</td>
</tr>
<tr>
<td>2</td>
<td>I consider several alternatives to face problems.</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>42%</td>
<td>58%</td>
<td>4.57</td>
</tr>
<tr>
<td>3</td>
<td>I make an effort to relate what I am learning to what I have already learned.</td>
<td>0%</td>
<td>0%</td>
<td>3%</td>
<td>36%</td>
<td>61%</td>
<td>4.58</td>
</tr>
<tr>
<td>4</td>
<td>When I make a mistake, I try to understand why.</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>29%</td>
<td>71%</td>
<td>4.69</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.60</td>
</tr>
<tr>
<td>5</td>
<td>I remain attentive</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
<td>36%</td>
<td>61%</td>
<td>4.58</td>
</tr>
<tr>
<td>6</td>
<td>I work hard to improve my English.</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>20%</td>
<td>80%</td>
<td>4.81</td>
</tr>
<tr>
<td>7</td>
<td>Even when something is difficult, I keep trying.</td>
<td>0%</td>
<td>0%</td>
<td>8%</td>
<td>31%</td>
<td>62%</td>
<td>4.50</td>
</tr>
</tbody>
</table>
8. I do my assignments punctually. 0% 0% 4% 19% 77% 4.73
9. Outside of the classroom, I enthusiastically discuss English with others. 0% 0% 5% 35% 60% 4.58

Mean: 4.64

Emotional engagement:
10. I enjoy taking English classes. 0% 0% 19% 23% 58% 4.38
11. I like expanding my knowledge of English. 0% 0% 8% 23% 69% 4.54
12. I want to comprehend everything we covered in English class. 0% 0% 0% 39% 61% 4.61
13. When I'm in English class, I feel good. 0% 0% 12% 23% 65% 4.54

Mean: 4.51

Social engagement:
14. I incorporate ideas from others. 0% 0% 8% 32% 60% 4.53
15. In English class, I attempt to comprehend others' ideas. 0% 0% 3% 30% 63% 4.62
16. I aim to collaborate with those who can assist me in English. 0% 0% 0% 29% 71% 4.69
17. I make an effort to assist anyone who is having difficulty with the English language. 0% 0% 12% 26% 62% 4.5

Mean: 4.59

From the results of the questionnaires, it can be revealed that the utilization of technology has positive values in terms of the level of student engagement. The highest value is behavioral engagement. This indicates that the use of several types of technology such as Canvas, Nearpod, and Quizizz has affected their behavioral participation in the classroom, such as how they can stay focused, put effort in understanding the materials, hand in the assignments on time, and show their full enthusiasm towards the class. In addition, their cognitive engagement is also affected significantly, followed by social and emotional engagement. Furthermore, the results are presented to explore more about the engagement with the use of technology from four types: cognitive, behavioral, emotional, and social.

When asked about how the participants use technology to correct mistakes in learning English (cognitive engagement), they agreed that the use of technology gives them flexibility, practicality, and ease to correct mistakes. This is evident from what each of the participants has stated.
Anita: The teaching method using technology in ESP class is very useful. When there are mistakes, we are not reluctant to learn again. So, we continue to learn by utilizing technology such as Quizizz. I like it because I can check my mistakes and redo the exercise. Moreover, it can be reviewed and revisited whenever I have time.

Grace: If I make a mistake in answering a question like on Quizizz and Nearpod, I can immediately know my mistake. Then, for example, in Canvas, we are given the opportunity to repeat the exercise several times. When I make mistakes, I want to know which answer is correct. Canvas can help me review my wrong answer and fix it.

Truly: Usually, from an application like that, we know where the mistake is, so we can repeat it again. Say, the mistake is here, so I can review it again, and it is very helpful.

Zola: In my experience when doing Quiz on Canvas, because I was given the opportunity to do it 2 to 3 times, in the first attempt, I could see my mistake, and I could repeat it again to correct my mistake on the second and third opportunity. Because I can access the quiz again, I can fix mistakes.

When asked about how the participants use technology to manage their work well (behavioral engagement), they stated that the utilization of technology gives them the opportunity to manage their work well because it is more effective and efficient compared to the conventional way of teaching and learning. This is evident from what each of the participants has mentioned.

Anita: Yes, it is very helpful. We can do tasks anywhere and anytime using our smartphones. When using paper, it will usually be difficult and impractical.

Grace: In my opinion, the existence of this technology is very helpful because we can repeat material. When there is free time, we can access the material again and can be more flexible in repeating material that we don’t understand. For example, if we are still busy, we can wait for it first, then we can watch it (the material) again. If we don’t understand a particular part, we can repeat the part we don’t understand.

Truly: It helps. Because if we use technology, we can do it anytime and anywhere. We can learn and do activities more flexibly and more easily.

Zola: Because with technology, for example, when we watch videos on Canvas, we are happier; we can learn without feeling tense. When doing quizzes, it also helps us because we can immediately know our scores so we can work even better.
When asked about how they feel about the role of technology in learning ESP (emotional engagement), they stated that the utilization of technology gives them positive feelings because they check their score individually and they can monitor their progress along their learning journey when using technological tools. This is evident from what each of the participants has stated.

Anita: Yes, it affects my feelings. When every score came out, and you gave me the opportunity several times, I felt happy because I could know my achievements.

Grace: For me, for example, the questions I answered were purely my own efforts; I feel proud. But if I cheat or I'm still browsing while answering, I don't feel proud (of my achievements).

Truly: Yes, definitely. Because when I get good grades, I feel very happy. I can also know when I have made progress. So, it really affects my feeling.

Zola: Yes, Miss, it's quite influencing. That's why I feel enthusiastic about learning ESP using those technological tools. Knowing the rank 1, 2, or 3 can motivate us to be even better.

When asked about how they use technology to collaborate with their peers (social engagement), they stated that the use of technological tools, especially social media, is very helpful in choosing a partner and discussing the lesson because it is more practical and effective. This is evident from what each of the participants has stated.

Anita: Sometimes, when working in groups, I also use WhatsApp to contact my closest friends to discuss what the correct answer is.

Grace: If, for example, there is an online assignment, of course, we need to contact our friends. Usually, I contact friends via WhatsApp. I will contact friends who are close to me. Or, when in a class group, we negotiate whether we want to be randomized or choose our own friends. I choose friends who are nice to talk to and can work with.

Truly: Sometimes, I choose my close friends. Because they are cooperative, and I can feel comfortable when I am working.

Zola: Usually, I choose the closest friend who sits around me. Sometimes, I also use WhatsApp and choose a friend who is close to me so that I feel comfortable working with them.
Discussion

As mentioned earlier, in China, the most well-known social media tool, WeChat, and the most widely used mobile learning technology, Rain Classroom (Yu & Yi, 2020), have been commonly utilized in schools and institutions. We can conclude that each country has its own tendency to use specific types of social media based on several factors, such as accessibility, familiarity, and practicality.

The results of the present study support Yu et al. (2022) as they found that after the implementation of Rain Classroom and WeChat, the students' engagement improved in the four types of engagement. Learners' cognitive engagement can be enhanced. In terms of behavioral engagement, the students could make them invest more time and effort in learning English than the multimedia projecting system could. Additionally, because students could easily access learning resources, mobile learning tools could help them unwind and even entertain themselves while learning English. They could also enjoy a wealth of knowledge. It shows that emotional engagement has been affected by using those tools. Last but not least, they could facilitate peer interactions in class. Peer collaboration on the WeChat platform could also make students who have trouble in class feel more at ease. To conclude, the incorporation of technological tools in English classrooms can have a significant influence on the students' engagement in the four domains: cognitive, behavioral, emotional, and social engagement. Both in Chinese and Indonesian contexts during the pandemic and in the post-pandemic periods, respectively, they have a vital role in enhancing the student's participation in the classroom, which leads to success in achieving the instructional objectives.

From the result of Yu et al.'s (2022) study and the study conducted in the EFL Indonesian context, the various types of engaging technological tools have been uncovered. Numerous technological breakthroughs have been integrated into online EFL classrooms to cater to the inability of teachers and students to interact in person during the COVID-19 pandemic and in the post-pandemic. Yu et al. (2022) incorporated Rain Classroom and WeChat because these two tools are considered the most common educational technologies used in China. They show some strengths and weaknesses of each tool. Meanwhile, the trend in the Indonesian EFL context shows different preferences for technology utilization in the teaching and learning process. It was found out that WhatsApp and Canvas are more commonly used than Rain Classroom and WeChat. In China, the most popular social media tool is WeChat, and the most frequently used mobile learning technology is Rain Classroom (Yu & Yi, 2020). In contrast, in Indonesia, WhatsApp is preferable to WeChat, and Rain Classroom is not commonly used. The educational tools can be categorized into several groups, namely learning
management systems (LMS), student response systems (SRS), social media, and gamification tools.

Those tools have several strengths and limitations. Therefore, ELT practitioners need to explore those technological tools by knowing their main functions and useful features that can assist them in engaging students as well as in reaching the maximum learning outcomes. Firstly, Rain Classroom and Canvas are categorized into LMS. It is a software application that integrates technological and pedagogical features into a well-developed virtual learning environment (Cavus, 2011). During the pandemic, teachers can effectively plan and manage the online classroom using LMS. The key features of LMS are the facilities to plan and manage the classroom, including the organization of the materials, assessments, and the students' learning outcomes, which enable them to monitor their progress throughout the semester. However, LMS also has many limitations, such as limited personal interactions, limited customization, and technical issues that can be affected by slow Internet speed, software glitches, and hardware malfunctions. So, those limitations must be taken into consideration when designing and implementing educational programs.

Another type of technological tool utilized to engage the students is social media. Social media can be a powerful tool to improve student engagement in EFL classrooms. They play an essential role as many educators make use of applications such as WhatsApp, Telegram, Facebook, or WeChat to deliver teaching and learning activities during the pandemic up to now. Several benefits can be obtained by making use of social media in the classroom. For example, teachers can create a private social media group for their class, such as a Facebook or WhatsApp group, where they can share updates, post interesting articles or videos related to the topics they are teaching, and encourage students to ask questions and discuss their thoughts. However, they also have significant limitations that must be considered carefully when they are used as educational tools. Some of the limitations are the possibility of the students getting distracted and educators’ limited control over the content that students will access on social media platforms. Additionally, social media platforms are not always reliable sources of information, and the information shared on these platforms may not be accurate or trustworthy. It also deals with privacy concerns. Educators must be cautious about the information they share and the privacy settings they use to protect their learners. Hence, educators must be mindful of these limitations and design educational experiences that minimize their impact.
Conclusion

The COVID-19 pandemic has intensified the utilization of technology in education. The vast development of educational technology has become a major help in catering to the necessity to carry out distance learning. Now that the pandemic has gradually vanished, we need to bridge the transition from distance learning to hybrid, blended, and onsite learning. In the post-pandemic, schools and universities can continue to leverage technology to enhance students’ engagement. The implementation of these technologies in the post-pandemic can boost students’ engagement and provide new opportunities for educators to create dynamic and interactive learning experiences.

This article sheds light on how to better enact mobile technology in EFL classrooms, especially in the Indonesian context. The findings show that there are several useful technological tools ranging from LMS, SRS, and social media to gamification tools used in EFL classrooms and how they can significantly boost the students' engagement from the students' perspective. Thus, stepping on this phenomenon, technology still has a major role in engaging students in EFL classrooms.

Therefore, it is recommended that EFL teachers: (1) Explore the use of different types of technological tools by considering the technology affordance, accessibility, usability, and sustained technical support; (2) Be mindful of the strengths and limitations of each type of technological tools so that the educators can design educational experiences that maximize their advantages and minimize their potential drawbacks; (3) Be technology savvy and eager to learn and update with the latest advancement of technology because it is necessary for both distance and onsite learning; (4) Apply learning multimodality as the integrative approach to cater the learners’ need and learning styles; (5) Design more personalized learning for the students to be able to track their own progress and increase the sense of belonging. By doing so, it is expected that the students feel more engaged in the classroom; and (6) Encourage collaboration by maximizing the function of educational technologies, especially social media, as the tool to build a learning community.

There are some limitations of this research since it was conducted in a small-scale EFL context. For further research, it is recommended to investigate the types of technological tools across different settings. In the Indonesian context, in particular, such research endeavors might focus on EFL students from different educational backgrounds and involve a larger sample of students that can be accessed through social media groups. In a global context, research may explore the most frequently used technological tools in the post-pandemic by involving students of different nationalities.
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